

The Disciples' Inspection of the Empty Tomb

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

There are three alternatives concerning the relation of Luke and John's stories of the disciples' inspection of Jesus's empty tomb: (1) Luke is dependent upon John, (2) John is dependent upon Luke, or (3) Luke and John are dependent upon a common tradition. (1) is not a plausible hypothesis because in light of Luke 24:24, a later scribe borrowing from John would have had another disciple accompany Peter. (2) is not plausible in view of the non-Lukan elements in 24:12 which are characteristic of Johannine tradition. Moreover, good grounds exist for positing pre-Lukan tradition. (3) is most plausible in view of its ability to explain all the relevant data, the improbability of Luke's dependence on John, and the improbability of John's dependence on Luke.

Source: "The Disciples' Inspection of the Empty Tomb (Luke 24, 12. 24; John 20, 1-10)," in *John and the Synoptics*, pp. 614-619. Edited by A. Denaux. Bibliotheca Ephemeridum Theologicarum Lovaniensium 101. Louvain: University Press, 1992.

The brief story of the disciples' inspection of the empty tomb (Lk 24,12.24; Jn 20,1-10) has been touted as "the most impressive test case" for the relationship of John and the Synoptics.^{1} According to both Luke and John, Peter and at least one other disciple, upon hearing the women's report, ran to the empty tomb and, stooping to look (or, peering) in, saw Jesus' graveclothes there; then they returned home. In this short paper, my primary interest is to explore the interrelationship between Luke and John with regard to this text by examining the arguments advanced by two exponents of opposite persuasion.

Most critics today would hold that regardless of whether John knew the Synoptics, there probably lies a common tradition behind Lk 24,12.24 and Jn 20,2-10. Of course, as with almost all questions of this sort, there is ample room for disagreement. At the simplest level, there are three alternatives with regard to this story: (I) Luke is dependent upon John, (II) John is dependent upon Luke, or (III) Luke and John are dependent upon a common tradition.

I

The first alternative is exemplified by Westcott and Hort's characterization of Lk 24,12 as a Western "non-interpolation" based on John's account. However, the presence of this verse in the later discovered P75 has convinced an increasing number of critics of its authenticity. Still, Robert Mahoney disputes the authenticity of the verse on the basis of internal criteria{2} :

(A) Grammatico-verbal evidence indicates a link between John and Luke. Mahoney notes that: (1) "Peter" is at the beginning of each verse. (2) Peter runs to the tomb. (3) both mention *υννηεῖον*. (4) Both use the aorist participle *παράκϋ* (5) Both use the historical present *βλέπει*. (6) Both have the same object of *βλέπει*, *ᾧθόνια*. (7) The phrase, found elsewhere only in LXX Num 24,25, *ἀπῆλθεν πρὸς ἑαυτόν*, shows contact between the verses.

But these phenomena are equally well-explained if Luke and John share a common tradition. Moreover, against the hypothesis of a Johannine-based interpolation stand the Lukan characteristics also evinced by 24,12: the pleonastic use of *ἀναστάζ* (nine times in Lk, 19 times in Acts); *θαυμάζων* (12 times in Lk, five times in Acts); *τὸ γεγονός* (four times in Lk, three times in Acts). Mahoney lays great weight on the historical present *βλέπει* to prove borrowing from John. But while the point has weight, Luke does have ten historical presents in verbs of saying, as well as historical presents in 8,49; 16,23; 24,36. This historical present in 24,12 could, like the historical present in 24,36, another Western non-interpolation, be traditional.

(B) Context argues against the inclusion of 24.12. Mahoney adduces as evidence: (1) Lk 24,12 could be removed without disturbing the narrative. (2) It is awkward after *ἡπίστουν αὐταῖς*. (3) it is superfluous in light of 24,24. (4) The oldest tradition is of the first appearance to Peter, not of his visiting the tomb.

But these reasons seem weak. If Lk 24,12 is an independent piece of tradition inserted here by Luke, then (1) and (2) are satisfactorily explained. As for (3), 24,12 is presupposed, rather than rendered superfluous, by 24,24. (In this sense, [1] is false). What especially weakens Mahoney's case is the fact that in light of 24,24 a later scribe who knew John would definitely have made someone else accompany Peter. Mahoney's response to this counter-argument is faltering. He claims (a) the Beloved Disciple is left out as Johannine, while the unnamed companions are mentioned in 24,24 and (b) in this way the faith of the Beloved Disciple is left out. But the point is surely that a scribe would make disciples go to the tomb precisely *because of* the presence of the Beloved Disciple and those mentioned in 24,24. One could easily leave out the Beloved Disciple's cognomen and even his faith without excising this other person from the narrative altogether. Finally, as for (4), Peter's role in seeing Jesus is not mutually exclusive with his inspection of the tomb, which was, in any case, less important.

(C) Other Western non-interpolations are inauthentic. Mahoney argues that 24,3.6 and 24,36.40 are likewise inauthentic. But in so doing he passes over 24,51-52 and 21,19b-20. But

pari passu if these non-interpolations are authentic, the aura of authenticity is lent to the others as well. Although time does not permit us to examine Mahoney's reasons for omitting the verses he disputes, they do not seem to me compelling-the interested reader may judge for himself.

The failure of Mahoney's extensive argument against the authenticity of 24,12 makes it plausible that John is not the source of Luke's story.

II

Borrowing in the other direction has been more recently defended by F. Neirynck^{3}. His contention is that the postulate of a common tradition which is almost identical with Lk 24.17 becomes "an unnecessary hypothesis" if Johannine dependence on Luke is envisioned. But this claim is, of course, trivially true; the really interesting question is whether this alternative is more plausible than a shared tradition. Neirynck rebuts two possible objections to Johannine borrowing:

(1) If there is Johannine dependence, why do the Lukanisms in 24,12 not appear in Jn 20,2-10? Neirynck answers that the pleonastic *ἀναστάζ* is never used in John and may have been omitted or replaced by *ἐξῆλθεν*. The *θαυμάζων τὸ γεγονόζ* may have been the basis of the Beloved Disciple's *ἐπίστευσεν*.

I think we must say that this answer is certainly possible, though there is no positive evidence in its favor, and the phrase *θαυμάζων τὸ γεγονόζ* would have fit very nicely, indeed, at the end of Jn 20,10. So it seems to me that the objection does count against Neirynck's hypothesis, but not heavily.

(2) if there is Johannine dependence, whence the non-Lukan elements of 24,12 that are characteristic of the Johannine tradition? Neirynck answers that the phrase *παρπκύψαζ βλέπει ... τὰ ὀθόνια* in Jn 20,5 is identical with Lk 24,12 and there is probably no other traditional basis for the second use of the verb in 20,11 or for references to the *ὀθόνια* in 20,6,7; 19,40. Although *ἀπέρχεται πρόζ* is alleged to be Johannine (Jn 4,47; 6,68; 11,46; 20,10), only in 20,10 does *ἀπέρχομαι* appear with *πρόζ αὐτούζ*, an un-Johannine expression which is borrowed from Lk 24,12. As for *βλέπει*, the historic present is not distinctively Johannine and could come from pre-Lukan tradition.

These answers are less convincing. The point about *ὀθόνια* is not whether John has a traditional basis for the word, but rather that its singular appearance in Lk 24,12 in the Synoptics, which everywhere else speak of the *σινδών*, and its multiple use in John are more plausibly explained on the basis of a shared tradition than by John's borrowing this anomalous word to the complete exclusion of the *σινδών* and then spreading it throughout his narrative. Again, we may agree that *ἀπῆλθον πρόζ αὐτούζ* would not be typical of John, who would probably prefer *πρόζ* (or *εἰς*) *τα ἰδία* as in 1,11; 16,32; 19,27; but if this expression is "foreign to John's style", as Neirynck agrees, then why did he not omit or replace it along with the pleonastic *ἀναστάζ* and the *θαυμάζων τὸ γεγονόζ*? The argument cuts both ways. Moreover, although *πρόζ ἐαυτόν/-ούζ* in the sense of "home" is multiply attested in Josephus, the expression *ἀπῆλθεν πρόζ ἐαυτόν* is rare, as we have seen, and as uncharacteristic of Luke as of John. The most plausible explanation of its appearance in the story is that it belongs to the shared tradition. Finally, if one is ready to posit pre-Lukan

tradition for the *βλέπει*, then one might as well say that John knew a generically similar tradition.

In order, then, to show that John is solely dependent upon Luke for this story, Neirynck goes on to argue that Lk 24,12 is a Lukan editorial composition, so that John's dependence on Luke becomes "an unavoidable conclusion" {4} . He argues for a Lukan origin on the basis of the story's similarity of pattern to that of Luke's empty tomb story, the story's Lukan traits, and the story's function in the chapter's composition.

Concerning the story's pattern, Neirynck draws three parallels between Peter's visit and the women's visit to the empty tomb:

12a ἀναστὰς ἔδραμεν ἐπὶ τὸ μνημεῖον
b καὶ παρακύψας βλέπει τὰ ὀθόνια μόνα
c καὶ ἀπῆλθεν πρὸς ἑαυτόν

24,1 ἐπὶ τὸ μνῆμα ἦλθον
3 οὐχ εὑρον τὸ ζῶμα τοῦ κυρίου Ἰησοῦ
9□ καὶ ὑποστρέψασαι. . .

He takes these parallels to show that Luke has constructed the story of Peter's inspection on the model of the women's visit.

Now I must confess that I find this argument extremely unpersuasive. For the elements of the pattern are either tautological or not really parallel. The first element is tautological, for any story of a visit to an empty tomb must by definition include that the parties involved went to the tomb! The second element is not parallel, since one story focuses on the positive observation of the graveclothes, while the other mentions only the negative fact that the body was not found (that both stories imply that the tomb was empty is again tautological in any such story). That leaves the third element as a weak parallel between the stories. These similarities afford no grounds for an inference to Lukan composition of 24,12 on the basis of his empty tomb account.

By Lukan traits, Neirynck seems to mean elements of Luke's storytelling style which are found in 24,12; for example, compare Peter's arising and running with Mary's arising and going with haste (1,39), his stooping and looking corresponds with (not) finding in 24,2.3, the historic present of seeing finds a parallel in 16,23, and the returning home is a typical Lukan motif (1,56; cf. 1,23; etc.).

This is a better argument, but there is a danger of over-estimating the force of one's evidence. Apart from the admittedly Lukan pleonastic ἀναστὰς, it seems fanciful to see a connection with 1,39. Similarly, though Luke sometimes uses εὐρίσκειν as a replacement for *verba videndi* (cf. Lk 8,35; Mk 5,15; Lk 9,36; Mk 9,8; Lk 24,2; Mk 16,2), that does not support the reverse conjecture that Peter's seeing is derivative from the women's not finding. The historic present in 16,23 could well be traditional, as well as the *βλέπει* in 24,12. To claim that *βλέπει* is derived from ἀναβλέψασαι θεωροῦσιν (Mk 16,4) is pure speculation. The returning home motif is a Lukan favorite, but the language is not Lukan and so may indicate tradition. This argument for Lukan composition is thus inconclusive.

Concerning the story's function in the chapter, Neirynck seems to mean that it is a verification story similar to Lk 1,39-56; 2,16-20; 8,34-36. But the first two of these have nothing to do with verification at all; the third could be so construed, but is in fact taken from Mark. So I see no convincing evidence of a Lukan compositional function here. Indeed, against Lukan editorial composition stands the awkwardness of the insertion of v. 12, noted by Mahoney, into the narrative{5} .

Thus, the case for Lukan composition of 24,12 is inconclusive. Against Lukan invention of the story stands (1) the improbability of Luke's wholesale fabrication of this story{6} , (2) the probability that in John's account we encounter eyewitness reminiscences of the incident{7} , (3) the intrinsic plausibility of the story in light of the women's discovery of the empty tomb and the disciples' remaining in Jerusalem over the weekend{8} , and (4) the fact that John's using Luke as his source is less plausible than shared tradition, as seen above. It follows that 24,12 is probably not a Lukan composition.

III

In summary, it therefore seems more plausible to posit common tradition rather than interdependence for Luke and John's story of the disciples' inspection of the empty tomb. This alternative is supported by (i) its ability to explain all the relevant data without bruising them, (ii) the improbability of Luke's dependence on John, and (iii) the improbability of John's dependence on Luke.

William L. CRAIG.

{1} . F. Neirynck, *John and the Synoptics: 1975-1990*, paper presented at the Colloquium, in this volume, pp. 3-61.

{2} . R. Mahoney, *Two Disciples at the Tomb* (Theologie und Wirklichkeit, 6), Bern, 1974, pp. 41-69.

{3} . F. Neirynck., *John and the Synoptics: The Empty Tomb Stories*, in *NTS* 30 (1984) 161-87. See also *idem*, *ΑΠΗΛΘΕΝ ΠΙΠΟΣ ΕΑΨΤΟΝ* (Lc 24,12 et Jn 20,10), in *ETL* 54 (1978) 104-18; *The Uncorrected Historic Present in Lk XXIV.12*, in *ID.*, *Evangelica: Gospel Studies* (BETL, 60) Leuven, 1982, pp. 329-334

{4} . *ID.*, *Empty Tomb Stories* (n. 3), p. 175. See also *ID.*, *John and the Synoptics*, in *Evangelica* (n. 3), pp 391-395. For if Luke made the story up, then obviously there were no prior traditions behind it. It could find its way into John's gospel only if John borrowed it from Luke. Hence, Luke is John's only source for the story.

{5} . Neirynck contends that the association of ἀπιστῆω and θανυμάζω (cf. v 41) connects vv. 11 and 12, that v. 12 prepares for the appearance to Peter, and that it picks up the omitted reference to Peter in Mk 16,7. But the two verbs do not seem linked here as they are in v. 41, and Mk 16,7 is picked up in v. 34, not v. 12. The passage in Luke seems much less an integral part of the whole story than it does in John.

{6} . A neglected issue in this debate is whether Luke's invention of this story would not be what Neirynck calls "an unlikely editorial liberty taken by the evangelist", especially by one who is so self-consciously writing a historical account. Neirynck says no, for Luke develops Mk 15,47 into an independent story in Lk 23,54-56a. But there is no comparison between such extrapolations or embellishments and the wholesale invention of Peter's inspection of the tomb. Note by contrast Luke's refusal to build an appearance to Peter story out of the meager tradition of v. 34, a reserve which Dodd believed showed Luke's integrity as a historian (C.H. Dodd, *The Appearances of the Risen Christ: A Study in form criticism of the Gospels*, in ID., *More New Testament studies*, Manchester, 1968, p. 126).

{7} . See my discussion in *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus* (Studies in the Bible and Early Christianity, 16), Lewiston, 1989, pp 232-37. I contend that the Fourth Gospel fills out the common tradition of Peter and another disciple's inspection with the reminiscences of the Beloved Disciple and, hence, the additional Johannine details. I agree with Neirynck that Lk 24,24 is not the primary focus of tradition and 24,12 Luke's redactional adaptation. But Luke could include in 24,24 an element he left out in 24,12. The plural in 24,24 is not a vague generalization, but as Neirynck himself, quoting Dodd, notes, is entirely appropriate in the context of conversation with a total stranger. For another example of Luke's obliquely referring to persons he has left out, see Lk 5,4.6.7. Neirynck's complaint that there the phenomena occur in the same story whereas 24,12.24 occur in different stories seems utterly ineffectual, since Luke is freely writing in the Emmaus story and so could easily include his oblique reference there.

{8} . Most scholars acknowledge the historical credibility of the women's discovery of Jesus' empty tomb. According to Kremer, "By far, most exegetes hold firmly... to the reliability of the biblical statements about the empty tomb ..." and he furnishes in support a list of 28 scholars, to which his own name may be added (J. Kremer, *Die Oster- evangelien-Geschichten um Geschichte*, Stuttgart, 1977, pp. 49-50). I can think of at least 16 more whom he neglected to mention. Moreover, von Campenhausen has rightly dismissed the flight to Galilee hypothesis as a fiction of the critics (H. F. von Campenhausen, *Der Ablauf der Osterereignisse und das leere Grab* [Sitzungsberichte der Heidelberger Akademie der Wissenschaften], Heidelberg, 1966, pp.44-49. Cf. J. Weiss, *Der erste Korintherbrief* [KEKNT, 5], Göttingen, 9 1910, p. 350: "I cannot convince myself of the scholarly legend that the apostles fled to Galilee"; M. Albertz, *Zur Formgeschichte der Aufsetsrehungsberichte*, in ZNW 21 [1922] 269: "a critic's legend"). Given the disciples' continuing presence in Jerusalem during this time, it seems entirely plausible that, in response to a report by the women of Jesus' tomb's having been evacuated, one or more of them should verify this report by an inspection of the tomb.

Barrow and Tipler on the Anthropic Principle vs. Divine Design

Dr. William Lane Craig

Barrow and Tipler's attempt to stave off the inference to divine design by appealing to the Weak Anthropic Principle is demonstrably logically fallacious unless one conjoins to it the metaphysical hypothesis of a World Ensemble. But there is no reason for such a postulate. Their misgivings about the alternative of divine design are shown to be of little significance.

Source: *British Journal for the Philosophy of Science* 38 (1988): 389-395.

NOTE: Dr. Craig uses logic symbols in this document. For users with Macintosh computer systems, for best results please set your browser to view this document using Western MacRoman encoding. In Netscape 3, use Options | Encoding and choose Western MacRoman. For Netscape 4, use View | Encoding and choose Western MacRoman.

In their massive study *The Anthropic Cosmological Principle*, [1986]{1} John Barrow and Frank Tipler provide the most comprehensive analysis to date of the so-called Anthropic Principle and its relation to the classic teleological argument for a Divine Designer of the cosmos. According to their analysis, the Anthropic Principle evolved out of the traditional design argument for God's existence, particularly one version of that argument, the eutaxiological version, which was based on the presence of discernable order and mutual harmony in nature in abstraction from any anthropocentric purpose being in view. Although Barrow and Tipler believe that the Darwinian theory of evolution undermined biological, anthropocentric versions of the teleological argument, they contend that contemporary science has only served to accentuate the delicate balance, perceived in the eutaxiological version of that argument, of highly improbable necessary conditions for the evolution and sustenance of intelligent life which obtain in the universe, and the bulk of their book is devoted to surveying the fields of physics and astrophysics, classical cosmology, quantum mechanics, and biochemistry to illustrate their point. These supply the evidence for what F. R. Tennant [1930], who coined the term *anthropic*, called 'wider teleology'.

Not that Barrow and Tipler are endorsing a design argument; on the contrary, although scientists hostile to teleology are apt to interpret their work as sympathetic to theism and although I have already seen this book cited by two prominent philosophers of religion in support of the teleological argument, the thrust of the book's argument is in the end anti-theistic. As Barrow and Tipler employ it, the Anthropic Principle is essentially an attempt to complete the job, begun by Darwinian evolution, of dismantling the teleological argument by showing that the appearance of design in the physical and cosmological quantities of the universe is just that: an *appearance* due to the self-selection factor imposed on our observations by our own existence. If Barrow and Tipler are correct, then the wider teleological argument of Tennant proves no more effective than the narrow teleological argument of his predecessors.

That brings us to a consideration of the Anthropic Principle itself. Barrow and Tipler distinguish several versions of the Principle, the most basic and least disputable being the Weak Anthropic Principle (WAP):

WAP: The observed values of all physical and cosmological quantities are not equally probable, but they take on values restricted by the requirement that there exist sites where carbon-based life can evolve and by the requirement that the Universe be old enough for it to have already done so. (p 15)

Barrow and Tipler regard WAP as 'in no way speculative or controversial' (p. 16), since it is 'just a restatement . . . of one of the most important and well established principles of science: that it is essential to take into account the limitations of one's measuring apparatus when interpreting one's observations' (p. 23). For example, if we were calculating the fraction of galaxies that lie within certain ranges of brightness, our observations would be biased toward the brighter ones, since we cannot see the dim ones so easily. Or again, a ratcatcher may say that all rats are bigger than six inches because that is the size of his traps. Similarly, any observed properties of the universe which may initially appear astonishingly improbable can only be seen in their true perspective after we have accounted for the fact that certain properties could not be observed by us, were they to obtain, because we can only observe those compatible with our own existence. 'The basic features of the Universe, including such properties as its shape, size, age, and laws of change must be *observed* to be of a type that allows the evolution of observers, for if intelligent life did not evolve in an otherwise possible universe, it is obvious that no one would be asking the reason for the observed shape, size, age, and so forth of the universe' (pp. 1-2). Thus, our own existence acts as a selection effect in assessing the various properties of the universe. For example, a life form which evolved on an earthlike planet 'must necessarily see the Universe to be at least several billion years old and ... several billion light years across,' for this is the time necessary for production of the elements essential to life and so forth (p. 3).

Now, we might ask, why is the '*observed*' in the quotation in the above paragraph italicized? Why not omit the word altogether? The answer is that the resulting statement:

1. The basic features of the universe must be of a type that allows the evolution of observers

is undoubtedly false; for it is not logically or nomologically necessary that the universe embrace intelligent life. Rather what seems to be necessarily true is

2. If the universe is observed by observers which have evolved within it, then its basic features must be of a type that allows the evolution of observers within it.

But (2) seems quite trivial; it does nothing to explain why the universe in fact has the basic features it does.

But Barrow and Tipler contend that while (2) appears to be true, but trivial, it has 'far-reaching implications' (p. 2). For the implication of WAP, which they seem to interpret along the lines of (2), is that no explanation of the basic features of the universe need be sought. This contention seems to be intimately connected with what is appropriate to be *surprised at*. The implication of WAP is that we ought not to be surprised at observing the universe to be as it is, for if it were not as it is, we could not observe it. For example, 'No one should be surprised to find the Universe to be as large as it is' (p. 18). ' . . . on Anthropic grounds, we should expect to observe a world possessing precisely three spatial dimensions' (p. 247). Or again,

We should emphasize once again that the enormous improbability of the evolution of intelligent life in general and *Homo sapiens* in particular does *not* mean we should be amazed we exist at all. This would make as much sense as Elizabeth II being amazed she is Queen of England. Even though the probability of a given Briton being monarch is about 10^{-8} , *someone* must be. Only if there is a monarch is it possible for the monarch to calculate the improbability of her particular existence. Similarly, only if an intelligent species does evolve

is it possible for its members to ask how probable it is for an intelligent species to evolve. Both are examples of WAP self-selection in action.¹¹⁰

¹¹⁰ F. B. Salisbury, *Nature* 224, p. 342 (1969), argued that the enormous improbability of a given gene, which we computed in the text, means that a gene is too unique to come into being by natural selection acting on chance mutations. WAP self-selection refutes this argument, as R. F Doolittle in *scientists confront creationism*, L. R. Godfrey (Norton, NY 1983) has also pointed out (pp. 566, 575).

Here we have a far-reaching implication that goes considerably beyond the apparently trivial WAP. Accordingly, although Barrow and Tipler conflate WAP and the implications thought to follow from it, I want to distinguish these sharply and shall refer to these broader implications as the Anthropic Philosophy. It is this philosophical viewpoint, rather than WAP itself, that, I believe, despite initial impressions, stands opposed to the teleological argument and constitutes scientific naturalism's most recent answer to that argument. According to the Anthropic Philosophy, an attitude of surprise at the delicately balanced features of the universe essential to life is inappropriate; we should expect the universe to look this way. While this does not explain the origin of those features, it shows that no explanation is necessary. Hence, to posit a divine Designer is gratuitous.

Now it needs to be emphasized that what the Anthropic Philosophy does *not* hold, despite the sloppy statements on this head often made by scientists, is that our existence as observers explains the basic features of the universe. The answer to the question 'Why is the universe isotropic?' given by Collins and Hawking, '... the isotropy of the Universe is a consequence of our existence' (Collins and Hawking [1973], p. 317) is simply irresponsible and brings the Anthropic Philosophy into undeserved disrepute, for literally taken, such an answer would require some form of backward causation whereby the conditions of the early universe were brought about by us acting as efficient causes merely by our observing the heavens. But WAP neither asserts nor implies this; rather WAP holds that we must *observe* the universe to possess certain features (not that the universe must possess certain features) and the Anthropic Philosophy says that therefore these features ought not to surprise us or cry out for explanation. The self-selection effect affects our observations, not the basic features of the universe itself. If the Anthropic Philosophy held that the basic features of the universe were themselves brought about by our observations, then it could be rightly dismissed as fanciful. But the Anthropic Philosophy is much more subtle: it does not try to explain *why* the universe has the basic features it does, but contends that no explanation is *needed*, since we should not be surprised at observing what we do, our observations of those basic features being restricted by our own existence as observers.

But does the Anthropic Philosophy follow from the Anthropic Principle, as Barrow and Tipler claim? Let us concede that it follows from WAP that

3. We should not be surprised that we do not observe features of the universe which are incompatible with our own existence.

For if the features of the universe were incompatible with our existence, we should not be here to notice it. Hence, it is not surprising that we do not observe such features. But it follows neither from WAP nor (3) that

4. We should not be surprised that we do observe features of the universe which are compatible with our existence.

For although the object of surprise in (4) might at first blush appear to be simply the contrapositive of the object of surprise in (3), this is mistaken. This can be clearly seen by means of an illustration (borrowed from John Leslie): suppose you are dragged before a firing squad of 100 trained marksmen, all of them with rifles aimed at your heart, to be executed. The command is given; you hear the deafening sound of the guns. *And you observe that you are still alive*, that all of the 100 marksmen missed! Now while it is true that

5. You should not be surprised that you do not observe that you are dead,

nonetheless it is equally true that

6. You should be surprised that you do observe that you are alive.

Since the firing squad's missing you altogether is extremely improbable, the surprise expressed in (6) is wholly appropriate, though you are not surprised that you do not observe that you are dead, since if you were dead you could not observe it. Similarly, while we should not be surprised that we do not observe features of the universe which are incompatible with our existence, it is nevertheless true that

7. We should be surprised that we do observe features of the universe which are compatible with our existence,

in view of the enormous improbability, demonstrated repeatedly by Barrow and Tipler, that the universe should possess such features.

The reason the falsity of (7) does not follow from (3) is that subimplication fails for first order predicate calculus. For (3) may be schematized as

$$3'. \sim S: (x) ([Fx \times \sim Cx] \supset \sim O x)$$

where S: is an operator expressing 'we should be surprised that', F is 'is a feature of the universe', C is 'is compatible with our existence', and O is 'is observed by us'. And (7) may be schematized as

$$7'. S: (x) ([Fx \times Cx] \supset O x)$$

It is clear that the object of surprise in (7') is not equivalent to the object of surprise in (3'); therefore the truth of (3') does not entail the negation of (7').{2 }

Therefore, the attempt of the Anthropic Philosophy to stave off our surprise at the basic features of the universe fails. It does not after all follow from WAP that our surprise at the basic features of universe is unwarranted or inappropriate and that they do not therefore cry out for explanation. But which features of the universe should thus surprise us?-those which are necessary conditions of our existence and which seem extremely improbable or whose coincidence seems extremely improbable. Thus, we should amend (7) to read

7*. We should be surprised that we do observe basic features of the universe which individually or collectively are excessively improbable and are necessary conditions of our own existence.

Against (7*), both the WAP and the Anthropic Philosophy are impotent. But which features are these specifically? Read Barrow and Tipler's book. Once this central fallacy is removed, their volume becomes for the design argument in the twentieth century what Paley's *Natural Theology* was in the nineteenth, viz., a compendium of the data of contemporary science which point to a design in nature inexplicable in natural terms and therefore pointing to the Divine Designer.{3}

Now Barrow and Tipler will no doubt contend that I have missed the whole point of WAP. For (7*) is true only if the basic features of our observable universe are co-extensive with the basic features of the Universe as a whole. And it may well be the case that the Universe at large does not in fact display the apparent features of design which our segment does. Barrow and Tipler endorse the Many-Worlds Interpretation of quantum physics, but one could also appeal to inflationary models or oscillating models of the Universe in order to generate multiple worlds. If such a wider Universe exists, then it might be argued that all possible universes are actualized and that WAP reveals why surprise at our being in a universe with basic features essential to life is not appropriate.

Objections can be raised against each of the theories proposed for generating many worlds; but even if we conceded that a multiple universe scenario is unobjectionable, would such a move succeed in rescuing us from teleology and a cosmic Designer? This is not at all obvious. The fundamental assumption behind the Anthropic philosopher's reasoning in this regard seems to be something along the lines of

8. If the Universe contains an exhaustively random and infinite number of universes, then anything that can occur with non-vanishing probability will occur somewhere.

But why should we think that the number of universes is actually infinite? This is by no means inevitable, not to mention the paradoxical nature of the existence of an actually infinite number of things. And why should we think that the multiple universes are exhaustively random? Again, this is not a necessary condition of many-worlds hypotheses. In order to elude the teleological argument, we are being asked to assume much more than the mere existence of multiple universes.

In any case, the move on the part of Anthropic philosophers to posit many worlds, even if viable, represents a significant concession because it implies that the popular use of the WAP to refute teleology in a universe whose properties are coextensive with the basic features of our universe is fallacious. In order to stave off the conclusion of a Designer, the Anthropic philosopher must take the metaphysically speculative step of embracing a special kind of multiple universe scenario. That will hardly commend itself to some as any less objectionable than theism.

We appear then to be confronted with two alternatives: posit either a cosmic Designer or an exhaustively random, infinite number of other worlds. Faced with these options, is not theism just as rational a choice as multiple worlds?

Barrow and Tipler demur, maintaining that 'careful thinkers' would not today 'jump so readily' to a Designer, for (i) the modern viewpoint stresses time's role in nature; but since an unfinished watch does not work, arguments based on omnipresent harmony have been abandoned for arguments based on co-present coincidences; and (ii) scientific models aim to be realistic, but are in fact only approximations of reality; so we hesitate to draw far-reaching conclusions about the nature of ultimate reality from models that are at some level inaccurate (p.30). But Barrow and Tipler seem unduly diffident here. A careful thinker will not readily jump to any conclusions, but why may he not infer a Divine Designer after a careful consideration of the evidence? Point (i) is misleading, since the operations of nature always work; at an earlier time nature is not like an *unfinished* watch, rather it is just a *less complex* watch. In any case, the most powerful design argument will appeal to both present adaptedness and co-present coincidences. Point (ii) loses much of its force in light of two considerations: (a) this is a condition that affects virtually all our knowledge, which is to say that it affects none of it in particular, so that our only recourse is simply to draw conclusions based on what we determine most accurately to reflect reality; fortunately, the evidence at issue here is rather concrete and so possesses a high degree of objectivity. (b) Barrow and Tipler do not feel compelled to exercise such restraint when proposing metaphysically speculative but naturalistic accounts of the universe's basic features, *e.g.*, their defense of the 'many worlds' interpretation of quantum physics or scenarios for the origin of the universe *ex nihilo*, which leads one to suspect that a double standard is being employed here.

Hence, the Anthropic Principle notwithstanding, I see no reason why a careful thinker may not, on the basis of the teleological argument, rationally infer the existence of a supernatural intelligence which designed the universe.

REFERENCES

Barrow, John and Tipler, Frank (1986): *The Anthropic Cosmological Principle*. Clarendon Press.

Collins, C. B. and Hawking, S. W. (1973): 'Why is the Universe isotropic?' *Astrophysical Journal* 180, 317-34.

Craig, William Lane (1987): Critical review of *The Anthropic Cosmological Principle*. *International Philosophical Quarterly*. 27, 437- 47.

Tennant, F. R. (1931) *Philosophical Theology*. 2 vols. Cambridge University Press.

NOTES

{1} For a more wide-ranging review of this book see Craig [1987].

{2} Similarly, the falsity of (6) does not follow from the truth of (5), for (5) may be schematized as $\sim S: \sim (\$x) ([Mx \times \sim Ax] \times Ox)$, where M is 'is me', Ox is 'is observed by me',

and A is 'is alive'. From this it does not follow that $\sim S: (\$x) ([Mx \times Ax] \times Ox)$, which is the negation of (6).

{3} Once the central fallacy is thus removed, Barrow and Tipler's argument in the lengthy quotation in the text seems to amount to little more than the old objection that *any* state of affairs is highly improbable and therefore the obtaining of the actual state of affairs requires no special explanation. But this objection is surely misconceived. What unprejudiced and right-minded person could possibly regard a chimpanzee's haphazardly typing out the complete plays and sonnets of Shakespeare as equally probable with any chaotic series of letters? The objection fails to reckon with the difference between randomness, order, and complexity. On the first level of randomness, there is a non- denumerably infinite number of chaotic sequences, *e.g.*, 'adfzwj', each of which is equally improbable and which collectively could serve to exhaust all sequences typed by the ape. But the meta-level of ordered letters, *e.g.*, 'crystalcrystalcrystal ', need never be produced by his random efforts, were he to type for eternity. Even more improbable is the metameta-level of complexity, in which information is supplied, *e.g.*, 'To be or not to be, that is the question.' Hence, it is fallacious to assert that since *some* set of conditions must obtain in the universe, the actual set is in no way improbable or in need of explanation.

The Bodily Resurrection of Jesus

Dr. William Lane Craig

It has been argued on the basis of Paul's testimony that Jesus's resurrection body was spiritual in the sense of being unextended, immaterial, intangible, and so forth. But neither the argument appealing to the nature of Paul's Damascus Road experience nor the argument from Paul's doctrine of the resurrection body supports such a conclusion. On the contrary, Paul's information serves to confirm the gospels' narratives of Jesus's bodily resurrection. Not only is the gospels' physicalism well-founded, but it is also, like Paul's doctrine, a nuanced physicalism.

Source: "The Bodily Resurrection of Jesus," in *Gospel Perspectives I*, pp. 47-74. Edited by R.T. France and D. Wenham. Sheffield, England: JSOT Press, 1980.

There are probably few events in the gospels for which the historical evidence is more compelling than for the resurrection of Jesus. Historical-critical studies during the second half of this century, increasingly freed from the lingering Deistical presuppositions that largely determined in advance the results of resurrection research during the previous 150 years, have reversed the current of scepticism concerning the historical resurrection, such that the trend among scholars in recent years has been acceptance of the historical credibility of Jesus's resurrection.

Nevertheless, there is still one aspect of the resurrection that a great number of scholars simply cannot bring themselves to embrace: that Jesus was raised from the dead *physically*. The physicalism of the gospels' portrayal of Jesus's resurrection body accounts, I think, more

than any other single factor for critical skepticism concerning the historicity of the gospel narratives of the bodily resurrection of Jesus. Undoubtedly the prime example of this is Hans Grass's classic *Ostergeschehen and Osterberichte*. {2} Inveighing against the 'massiven Realismus' of the gospel narratives, Grass brushes aside the appearance stories as thoroughly legendary and brings every critical argument he can summon against the empty tomb. Not that Grass would construe the resurrection, at least overtly, merely in terms of the survival of Jesus's soul; he affirms a bodily resurrection, but the body is 'spiritual' in nature, as by the apostle Paul, not physical. Because the relation between the old, physical body and the new, spiritual body is totaliter- aliter, the resurrection entails, not an emptying of the tomb, but the creation of a new body. Because the body is spiritual, the appearances of Christ were in the form of heavenly visions caused by God in the minds of those chosen to receive them.

It is difficult to exaggerate the extent of Grass's influence. Though few have been willing to join him in denying the empty tomb, since the evidence inclines in the opposite direction, one not infrequently finds statements that because the resurrection body does not depend upon the old body, we are not compelled to believe in the empty tomb. And it is everywhere asserted, even by those who staunchly defend the empty tomb, that the spiritual nature of the resurrection body precludes physical appearances such as are narrated in the gospels. John Alsup remarks that '... no other work has been so widely used or of such singular importance for the interpretation of the gospel accounts. . . as Grass'. . . ' {3} But, Alsup protests, Grass's insistence that the heavenly vision type of appearance underlies the physical appearances of the gospels 'is predicated upon the impossibility of the material realism of that latter form as an acceptable answer to the "what happened" question. . . . Grass superimposes this criterion over the gospel appearance accounts and judges them by their conformity or divergence from it.' {4} As a result, '... the contemporary spectrum of research on the gospel resurrection appearances displays a proclivity to the last century (and Celsus of the second century) in large measure under the influence of Grass' approach. In a sense the gospel stories appear to be something of an embarrassment: their "realism" is offensive.' {5}

What legitimate basis can be given to such a viewpoint? Those who deny the physical resurrection body of Jesus have developed a line of reasoning that has become pretty much stock-in-trade:

The New Testament church does not *agree* about the nature of Christ's resurrected body. Material in Luke and John perhaps suggest this body to be corporeal in nature.⁴³ Paul, on the other hand, clearly argues that the body is a spiritual body. If any historical memory resides in the accounts of Paul's conversion in Acts, he must not have understood the appearance of Christ to have been a corporeal appearance. Most critics identify this conversion with the event referred to in I Cor. 15:8: 'Last of all, as to one untimely born, he appeared also to me.'⁴⁴ The arguments in verses 47-50 of this chapter for the identity between Christ's body and the spiritual body of the resurrection indicate that for the Apostle his Lord rose from the dead in a spiritual body. Most importantly, Paul has equated the appearance of Christ to him with the appearances to the other apostles. The resurrected Christ, as he was manifested to the church is thus a spiritual body

⁴³Luke 24.39-43; John 20.26-38. There are, of course, contradictory elements in the stories which imply the body is more than physical.

⁴⁴... {6}

We can formulate this reasoning as follows:

1. Paul's information is at least *prima facie* more reliable than the gospels.

- a. For he stands in closer temporal and personal proximity to the original events.
2. Paul's information, in contrast to the gospels, indicates Jesus possessed a purely spiritual resurrection body.
 - a. First Argument:
 - (1) Paul equated the appearance of Jesus to him with the appearances of Jesus to the disciples.
 - (2) The appearance of Jesus to Paul was a non-physical appearance.
 - (3) Therefore, the appearances of Jesus to the disciples were non-physical appearances.
 - b. Second Argument:
 - (1) Paul equated Jesus's resurrection body with our future resurrection bodies.
 - (2) Our future resurrection bodies will be spiritual bodies.
 - (3) Therefore, Jesus's resurrection body was a spiritual body.
3. Therefore, Jesus possessed a purely spiritual resurrection body.

In this way the gospel accounts of the physical resurrection may be dismissed as legendary.

Now it is my conviction that this reasoning cannot bear the weight placed upon it by those who would reject the physical resurrection. I shall not in this essay contest the first premise. But I wish to take sharp issue with the second. Neither of the two supporting arguments, it seems to me, is sound; on the contrary, they embody serious misconceptions.

With regard to the first supporting argument, concerning the appearance of Jesus to Paul, it seems to me that both premisses (1) and (2) are highly questionable. Taking the premisses in reverse order, what is the evidence for (2) *The appearance of Jesus to Paul was a non-physical appearance*? Usually appeal is made to the accounts of this incident in Acts, where, it is said, the appearance is to be understood as a visionary experience (Acts 9.1-19: 22.3-16 26.9-23). As a matter of fact, however, the appearance in Acts, while involving visionary elements, cannot without further ado be characterized as purely visionary, since in all three accounts it is accompanied by extra-mental phenomena, namely, the light and the voice, which were experienced by Paul's companions. Grass dismisses these as due to Luke's objectifying tendencies.^{7} This is, however, very doubtful, since Luke does not want to objectify the *post*-ascension visions of Jesus; it is the *pre*-ascension appearances whose extra-mental reality Luke emphasizes. Had Luke had no tradition that included Paul's companions, then we should have another vision like Stephen's, lacking extra-mental phenomena. And secondly, if Luke had invented the extra-mental aspects of the appearance to Paul, we should have expected him to be more consistent and not to construct such discrepancies as that Paul's companions heard and did not hear the voice. These inconsistencies suggest that the extra-mental phenomena were part of Luke's various traditions.

Grass further maintains that Luke had before him a tradition of Paul's experience that could not be assimilated to the more physical appearances of Christ to the disciples and that therefore the tradition is reliable; the extra-mental aspects are the result of mythical or legendary influences.^{8} But one could argue that precisely the opposite is true: that because the appearance to Paul is a post-ascension experience Luke is forced to construe it as a heavenly vision, since Jesus has physically ascended. Grass's anthropomorphic parallels from Greek mythology (Homer *Illiad* a 158; idem *Odyssey* p. v. 161; Apollonius *Argonauts* 4. 852) bear little resemblance to Paul's experience; a genealogical tie between them is most unlikely. Thus, no appeal to the Acts accounts of the appearance to Paul can legitimately be made as proof that that appearance was purely visionary in nature.

Paul himself gives us no firm clue as to the nature of Christ's appearance to him. But it is interesting to note that when Paul speaks of his 'visions and revelations of the Lord' (II Cor 12.1-7) he does *not* include Jesus's appearance to him. Paul and the early Christian community as a whole were familiar with religious visions and sharply differentiated between these and an appearance of the risen Lord. ^{9} But what was the difference? Grass asserts that the only difference was in *content*: in an appearance the exalted Christ is seen.^{10} But surely there must have been religious visions of the exalted Christ, too. Both Stephen's vision and the book of Revelation show that claims to visions of the exalted Christ which were not resurrection appearances were made in the church. Nor can it be said that the distinctive element in an appearance was the commissioning, for appearances were known which lacked this element (the Emmaus disciples, the 500 brethren). It seems to me that the most natural answer is that an appearance involved extra-mental phenomena, something's actually appearing, whereas a vision, even if caused by God, was purely in the mind. If this is correct, then Paul, in claiming for himself an appearance of Christ as opposed to a vision of Christ, is asserting to have seen something, not merely in the mind, but actually 'out there' in the real world. For all we know from Paul, this appearance could conceivably have been as physical as those portrayed in the gospels; and it is not impossible that Luke then 'spiritualized' the appearance out of the necessity of his pre- and post-ascension scheme! At any rate, it would be futile to attempt to prove that either Acts or Paul supports a purely visionary appearance to the apostle on the Damascus road.

But suppose this is altogether wrong. Suppose the appearance to Paul was purely visionary. What grounds are there for believing premise (1), *Paul equated the appearance of Jesus to him with the appearances of Jesus to the disciples*? Usually appeal is made to the fact that Paul places himself in the list of witnesses of the appearances; hence, the other appearances must have also been visionary appearances like his own. This, however, does not seem to follow. First, in placing himself in the list of witnesses, Paul does not imply that the foregoing appearances were the same sort of appearance as the one to him. He is not concerned here with the how of the appearances, but with who appeared. He wants to list witnesses of the risen Christ, and the mode of the appearance is entirely incidental. But second, in placing himself in the list, Paul is not trying to put the appearances to the others on a plane with his own; rather he is trying to level up his own experience to the objectivity and reality of the others. Paul's detractors doubted or denied his apostleship (I Cor 9. 1-2; II Cor 11.5; 12.11) and his having seen Christ would be an important argument in his favor (Gal 1.1, 11-12, 15-16; I Cor 9. 1-2; 15.8-9). His opponents might tend to dismiss Paul's experience as a mere subjective vision, not a real appearance, and so Paul is anxious to include himself with the other apostles as a recipient of a genuine, objective appearance of the risen Lord. By putting himself in the list, Paul is saying that what *he* saw was every bit as much a real appearance of Jesus as what *they* saw. In fact, one could argue that Paul's adding himself to the list is

actually a case of special pleading! At any rate, it is a *non sequitur* to infer that because Paul includes himself in the list of witnesses, all the other appearances must be of the same mode as the appearance to Paul.

Hence, the first argument against Jesus's physical resurrection seems doubly unsound. Not only does the evidence run against a purely visionary appearance to Paul, but there is no indication that Paul equated the mode of the appearance of Jesus to himself with the mode of the appearances to the other disciples.

Let us turn then to the second supporting argument for a purely spiritual resurrection body of Jesus: the argument from Paul's term *σῶμα πνευματικόν*. Premise (1), *Paul equated Jesus's resurrection body with our future resurrection bodies*, is surely correct (Phil 3.21; I Cor 15.20; Col 1.18). But the truth of premise (2), *our future resurrection bodies will be spiritual bodies*, depends upon how one defines its terms. Therefore, before we look more closely at Paul's discussion of the resurrection body in I Cor 15.35-57, a word ought to be said about Paul's anthropological terms *σῶμα*, *σάρξ*, and *ψυχή*.

The most important term in the second half of I Cor 15 is *σῶμα*.^{11} During the nineteenth century under the influence of idealism, theologians interpreted the *σῶμα* as the form of a thing and the *σάρξ* as its substance.^{12} In this way they could avoid the objectionable notion of a physical resurrection, for it was the form that was raised from the dead endowed with a new spiritual substance. Hence, in the old commentaries one finds that the *σῶμα πνευματικόν* was conceived to be a body made out of *himmlischer Lichtsubstanz*. This understanding has now been all but abandoned.^{13} The view of *σῶμα* as merely form and *σάρξ* as its substance cannot be exegetically sustained; *σῶμα* is the body, form and substance. This does not mean, however, that twentieth century theologians take *σῶμα* to mean the physical body. Rather under the influence of existentialism, particularly as adopted by Bultmann, they take *σῶμα*, when used theologically, as the whole person conceived abstractly in existentialist categories of self-understanding. Thus, *σῶμα* does not equal the physical body, but the person, and hence, a bodily resurrection means, not a resurrection of the physical body, but of the person. In this way the doctrine of physical resurrection is avoided as adroitly as it was in the days of philosophical idealism. It is the burden of Gundry's study to show that this understanding is drastically wrong. Even if his exegesis suffers at times from over-kill,^{14} Gundry succeeds admirably in carrying his main point: that *σῶμα* is never used in the New Testament to denote the whole person in isolation from his physical body, but is much more used to denote the physical body itself or the man with special emphasis on the physical body. Gundry's conclusion is worth quoting:

The *soma* denotes the physical body, roughly synonymous with 'flesh' in the neutral sense. It forms that part of man in and through which he lives and acts in the world. It becomes the base of operations for sin in the unbeliever, for the Holy Spirit in the believer. Barring prior occurrence of the Parousia, the *soma* will die. That is the lingering effect of sin even in the believer. But it will also be resurrected. That is its ultimate end, a major proof of its worth and necessity to wholeness of human being, and the reason for its sanctification now.^{15}

The importance of this conclusion cannot be overemphasized. Too long we have been told that for Paul *σῶμα* is the ego, the 'I' of a man. Like a dash of cold water, Gundry's study brings us back to the genuine anthropological consciousness of first century man. The notion of body as the 'I' is a perversion of the biblical meaning of *σῶμα*: Robert Jewett asserts, 'Bultmann has turned *σῶμα* into its virtual opposite: a symbol for that structure of individual existence which is essentially non-physical.'^{16} Hence, existentialist treatments of *σῶμα*, as

much as idealist treatments, have been a positive impediment to accurate historical-critical exegesis of I Cor 15 and have sacrificed theology to a philosophical fashion that is already passé.^{17} To say that σῶμα refers primarily to the physical body is not to say that the word cannot be used as *synecdoche* to refer to the whole man by reference to a part. 'The *soma* may represent the whole person simply because the *soma* lives in union with the soul/spirit. But *soma* does not mean "whole person," because its use is designed to call attention to the physical object which is the body of the person rather than the whole personality.'^{18} Nor does this preclude metaphorical use of the word, as in the 'body of Christ' for the church; for it is a physical metaphor: the church is not the 'I' of Christ. When we turn to I Cor 15 and inquire about the nature of the resurrection body, therefore, we shall be inquiring about a *body*, not about an ego, an 'I', or a 'person' abstractly conceived apart from the body.

I have already alluded to Paul's use of σαρκί, and it will not be necessary to say much here. Theologians are familiar with σαρκί as the evil proclivity within man. This touches sensitive nerves in German theology because the Creed in German states that I believe in the resurrection of the *Fleisch*, not of the *body* as in the English translation. Hence, many theologians are rightly anxious to disassociate themselves from any doctrine that the flesh as a morally evil principle will be resurrected. But they seem prone to overlook the fact that Paul often uses σαρκί in a non-moral sense simply to mean the physical flesh or body. In this morally neutral sense the resurrection of the flesh = resurrection of the body. Now in I Cor 15 Paul is clearly speaking of σαρκί in a physical, morally neutral sense, for he speaks of the flesh of birds, animals, and fish, which would be absurd in any moral sense. Hence, understood in a physical sense, the doctrine of the resurrection of the flesh is morally unobjectionable.

Finally a brief word on the third term ψυχή: Paul does not teach a consistent dualism of σῶμα-ψυχή, but often uses πνεῦμα and other terms to designate the immaterial element of man. In fact in the adjectival form, ψυχικός has a meaning that does not connote immateriality at all, but rather the natural character of a thing in contradistinction to the supernatural character of God's Spirit. Thus in I Cor 2.14-3.3 Paul differentiates three types of men: the ἀνθρώπος ψυχικός or natural man apart from God's Spirit; the ἀνθρώπος πνευματικός or spiritual man who is led and empowered by God's Spirit; and the ἀνθρώπος σαρκινός or carnal man who, though possessing the Spirit of God (I Cor 12. 13), is nevertheless still under the sway of the σαρκί or evil principle in human nature. This makes it evident that for Paul ψυχικός did not have the connotations which we today associate with 'soul.'

With these terms in mind we now turn to Paul's discussion in I Cor 15.35-37. He begins by asking two polemical questions: How are the dead raised? With what kind of body do they come? (v 35; cf. II Bar 49.2-3). Paul's opponents seemed to have been unable to accept the resurrection because the resurrection of a material body was either inconceivable or offensive to their Greek minds (cf. Bultmann's 'resuscitation of a corpse'). Paul's answer steers a careful course between the crasser forms of the Pharisaic doctrine of resurrection, in which the raised will, for example, each beget a thousand children and eat the flesh of Leviathan, and the Platonistic doctrine of the immortality of the soul apart from the body. Paul will contend that the resurrection body will be radically different from this natural body, but that it will nevertheless be a *body*-- Paul contemplates no release of the soul from the prison house of the body. Paul's answer is that the resurrection body will be a marvellous transformation of our present body, making it suitable for existence in the age to come-- a doctrine not unusual in

the Judaism of Paul's day and remarkably similar to that of the contemporary II Bar 50-51, which should be read in conjunction with Paul's argument.^{19} It is highly instructive, particularly if we accept that the author of Luke-Acts was an associate of Paul that Luke specifically identifies Paul's doctrine of the resurrection with that of the Pharisees (Acts 23.6; cf. 24.14; 16.6, 21-23).

In the first paragraph, vv 36-41, Paul searches for analogies to the resurrection of the dead (v 42). The first analogy is the analogy of the seed. The point of the analogy is simply to draw attention to how different the plant is from the seed that is buried in the ground (cf. Matt 13.31-32 for Jesus's use of a similar analogy in another context). It is a good analogy for Paul's purposes, for the sowing of the seed and its death are reminiscent of the burial of the dead man (vv 42-44). To criticize Paul's analogy from the standpoint of modern botany--saying, for example, that a seed does not really die--presses the analogy too far. Similarly some commentators criticize Paul's analogy because he lacked the modern botanical notion that a particular type of seed yields a particular type of plant; Paul thought God alone determined what plant should spring up from any seed that was sown (v 38). But this is quite unreasonable, as though Paul could think that a date-palm would conceivably spring from a grain of corn! He specifically says that God gives 'each kind of seed its own body' (v 38), which harks back to the Genesis account of creation according to kinds (Gen 1.11). At any rate this loses the whole point of the analogy: that from the mere seed God produces a wonderfully different plant.

Paul then appeals to the analogy of different sorts of flesh again in order to prove that if we recognize differences even in the physical world then the resurrection body could also be different from our present body. Paul's analogy may have in mind the creation account, but I think the Jewish distinction between clean and unclean food is closer (cf. Lev 11; animals: 1-8; fish: 9-12; birds: 13-19; insects: 20-23; swarming things: 29-30).^{20} So I do not think σαρξ here is precisely identical with σῶμα. Not only would that reduce Paul's argument to the rather banal assertion that men have different bodies from fish, but it would also entail the false statement that all animals have the same kind of body. Rather in the present connection, σαρξ means essentially 'meat' or 'organic matter.' The old commentaries were therefore wrong in defining σαρξ *tout simple* as 'substance,' for inorganic matter would not be σαρξ; Paul would never speak of the flesh of a stone. To say that the resurrection body has therefore a different kind of flesh than the present body probably presses the analogy too far; all Paul wants to show is that as there are differences among mundane things, analogously the supernatural resurrection body could also differ from the present body.

The third analogy is that of terrestrial and celestial bodies (vv 40-41). There can be no doubt from v 41 that Paul means astronomical bodies, not angels. Again the point of the analogy is the same: there are radical differences among bodies in the physical world, so why should not the body in the world to come differ from the present body? Paul's analogy is particularly apt in this case because as the heavenly bodies exceed terrestrial bodies in glory, so does the resurrection body the natural body (v 43; cf. Phil 3.21).^{21} The δόξα of the heavenly bodies is their brightness, which varies; there is no trace here of *Lichtsubstanz*. When applied to the resurrection body, however, δόξα seems to be honor (v 43). Paul has thus prepared the way for his doctrine of the world to come by three analogies from the present world. All of them show how things can be radically different from other things of the same kind; similarly a σῶμα πνευματικόν will be seen to be radically different from a σῶμα ψυχικόν. Moreover, Paul's analogies form an ascending scale from plant to animal to terrestrial bodies

to celestial bodies; the next type of body to be mentioned will be the most wonderful and exalted of all.

From vv 42-50 Paul spells out his doctrine of the *σῶμα πνευματικόν*. The body that is to be differs from the present body in that it will be imperishable, glorious, powerful, and spiritual; whereas the present body is perishable, dishonourable, weak, and physical (vv 42-44). These are the four essential differences between the present body and the resurrection body. What do they tell us about the nature of the resurrection body?

First, it is sown *ἐν φθορᾷ*, but it is raised *ἐν ἀφθαρσίᾳ*. These terms tell us clearly that Paul is not talking about egos, or 'I's,' but about bodies, for (1) the *σπείρεται–ἐγείρεται* has primary reference to the burial and raising up of a dead man's body, not the 'person' in abstraction from the body and (2) only the body can be described as perishable (II Cor 4.16), for man's spirit survives death (II Cor 5.1-5; cf. Rom 8.10; Phil 1. 23). Rather the disjunction under discussion concerns the radical change that will take place in our *bodies*: Paul teaches personal bodily immortality, not immortality of the soul alone (cf. vv 53-54). Strange as this may seem, the Christian teaching (or at least Paul's) is not that our souls will live forever, but that we will have bodies in the after-life.

Second, it is sown *ἐν ατιμῳ*, but it is raised *ἐν δόξῃ*. Our present bodies are wracked by sin, are bodies of death, groaning with the whole creation to be set free from sin and decay; we long, says Paul, for the redemption of our bodies (II Cor 5.4; Rom 8.19-24). This body, dishonored through sin and death, will be transformed by Christ to be like his glorious body (Phil 3.21). In a spiritual sense we already have an anticipation of this glory insofar as we are conformed inwardly to the image of Christ and are sanctified by his Spirit (II Cor 3.18), but Paul teaches that the body will not simply fall away like a useless husk, but will be transformed to partake of this glory also.

Third, it is sown *ἐν ἀσθενίᾳ*, but it will be raised *ἐν δυνάμει*. How well Paul knew of weakness! Afflicted with a bodily malediction which was offensive to others and a burden to those around him, Paul found in his weakness the power of Christ (Gal 4.13-14; II Cor 12.7-10). And on his poor body which had been stoned, beaten, and scourged for the sake of the gospel, Paul bore the marks of Christ, so much so that he dared to write ' . . . in my flesh I complete what is lacking in Christ's afflictions. . . ' (Gal 1.24). Just as Christ 'was crucified in weakness, but lives by the power of God' (II Cor 13.4) so Paul longed to know the power of the resurrection and looked forward to the day when he, too, would receive the resurrection body (II Cor 5.1-4; Phil 3.10-11).

Fourth, it is sown a *σῶμα ψυχικόν*, but it is raised a *σῶμα πνευματικόν*. By a *σῶμα ψυχικόν* Paul clearly does not mean a body made out of *ψυχή*. Rather just as Paul frequently uses *σαρκικός* to indicate, not the physical composition of a thing, but its orientation, its dominating principle, so *ψυχικός* also indicates, not a composition, but an orientation. In the New Testament *ψυχικός* always has a negative connotation (I Cor 2.14; Jas 3.15; Jude 19); that which is *ψυχικός* partakes of the character and direction of natural human nature. Hence, the emphasis in *σῶμα ψυχικόν* is not that the body is *physical*, but that it is *natural*. Accordingly, *σῶμα ψυχικόν* ought rightly to be translated 'natural body'; it means our present human body. This is the body that will be sown. But it is raised a *σῶμα πνευματικόν*. And just as *σῶμα ψυχικόν* does not mean a body made out of *ψυχή*, neither does *σῶμα πνευματικόν* mean a body made out of *πνεῦμα*. If *σῶμα πνευματικόν*

indicated a body made out of spirit, then its opposite would not be a σωμα ψυχικον, but a σωμα σαρκινον. For Paul, ψυχη and πνευμα are not substances out of which bodies are made, but dominating principles by which bodies are directed. Virtually every modern commentator agrees on this point: Paul is not talking about a rarefied body made out of spirit or ether; he means a body under the lordship and direction of God's Spirit. The present body is ψυχικον insofar as the ψυχη is its dominating principle (cf. ανθρωπος ψυχικος I Cor 2.14). The body which is to be will be πνευματικον, not in the sense of a spiritual substance, but insofar as the πνευμα will be its dominating principle (cf. ανθρωπος πνευματικος-- I Cor 2.15). They do not differ *qua* σωμα; rather they differ *qua* orientation. Thus, philological analysis leads, in Clavier's words, to the conclusion that '... le "corps pneumatique" est, en substance, le même corps, ce corps de chair, mais contrôlé par l'esprit, comme le fut le corps de Jésus-Christ.' {22} The contrast is not between physical body / non-physical body, but between naturally oriented body / spiritually oriented body. Hence, I think it very unfortunate that the term σωμα πνευματικον has been usually translated 'spiritual body,' for this tends to be very misleading, as Héring explains:

En français toutefois la traduction littérale *corps spirituel* risque de créer les pires malentendus. Car la plupart des lecteurs de langue française, étant plus ou moins consciemment cartésiens, céderont à la tendance d'identifier le spirituel avec l'inétendu et naturellement aussi avec l'im-matériel, ce qui va à l'encontre des idées pauliniennes et crée de plus une *contradictio in adjecto*; car que serait un corps sans étendue ni matière? {23} Héring therefore suggests that it is better to translate σωμα πνευματικον as the opposite of natural body (σωμα ψυχικον) as *supernatural* body. Although this has the disadvantage of ignoring the connotation of πνευματικος as 'Spirit-dominated,' it avoids the inevitable misunderstandings engendered by 'spiritual body.' As Héring rightly comments, this latter term, understood substantively, is practically a self-contradiction. By the same token, 'physical body' is really a tautology. Thus, natural body/supernatural body is a better rendering of Paul's meaning here.

Having described the four differences between the present body and the resurrection body, Paul elaborates the doctrine of the two Adams. His statement that the first Adam was εις ψυχην ζωσαν and the second εις πνευμα ζωοποιουν (v 45) must be understood in light of the foregoing discussion. Just as Paul does not mean Adam was a disembodied soul, neither does he mean Christ turned into a disembodied spirit. That would contradict the doctrine of the resurrection of the σωμα. Rather these terms refer once again to the natural body made at creation and the supernatural body produced by the resurrection (cf. v 43b). First we have our natural bodies here on earth as possessed by Adam, then we shall have our supernatural bodies in the age to come as possessed by Jesus (vv 46, 49; cf. vv 20-23). The fact that materiality is not the issue here is made clear in v 47:

ο πρωτος ανθρωπος εκ γης χοικος
ο δευτερος ανθρωπος εξ ουρανου

There is something conspicuously missing in this parallel between το ψυχικον and το πνευματικον (v 46): the first Adam is *from* the earth, *made* of dust; the second Adam is *from* heaven, but *made of*-- ?{24} Clearly Paul recoils from saying the second Adam is made of heavenly substance. The contrast between the two Adams is their origin, not their substance. Thus, the doctrine of the two Adams confirms the philological analysis. Then comes a phrase that has caused great difficulties to many: 'I tell you this, brethren, flesh and blood cannot inherit the kingdom of God, nor does the perishable inherit the imperishable' (v

50.) Does not this clearly indicate that the resurrection body will be immaterial? Jeremias has tried to escape this conclusion by arguing that 'flesh and blood' refers to those alive at the Parousia, while the 'perishable' refers to the dead in Christ: Paul means that neither living nor dead as they are can inherit God's kingdom, but must be transformed (v 51).{25} This, however, is unlikely, for it requires that v 50 go with v 51. But not only does v 50 appear to be a summary statement of the foregoing paragraph, but v 51 introduces a new paragraph and a new thought, as is indicated by the introductory words, 'Lo! I tell you a mystery!' and by the fact that something new and previously unknown is about to be communicated. Neither need one adopt the expedient of Bornhäuser that Paul means flesh and blood will decay in the grave, but the bones will be raised.{26} This falsely assumes Paul is here speaking of anatomy. Rather commentators are agreed that 'flesh and blood' is a typical Semitic expression denoting the frail human nature.{27} It emphasizes our feeble mortality over against God; hence, the second half of v 50 is Paul's elaboration in other words of exactly the same thought. The fact that the verb is in the singular may also suggest that Paul is not talking of physical aspects of the body, but about a conceptual unity: 'flesh and blood is not able to inherit' Elsewhere Paul also employs the expression 'flesh and blood' to mean simply 'people' or 'mortal creatures' (Gal 1.16; Eph 6.12). Therefore, Paul is not talking about anatomy here; rather he means that mortal human beings cannot enter into God's eternal kingdom: therefore, they must become imperishable (cf. v 53). This imperishability does not connote immateriality or unextendedness; on the contrary Paul's doctrine of the world to come is that our resurrection bodies will be part of, so to speak, a resurrected creation (Rom 8.18-23). The universe will be delivered from sin and decay, not materiality, and our bodies will be part of that universe.

In the following paragraph, Paul tells how this will be done. When he says 'We shall not all sleep, but we shall all be changed' (v 51), it is not clear whether he means by 'all' either Christians in general or Christians alive at his time (cf. I Thess 4.15, 17). But in either case, two things are clear: (1) Paul held that the transformation would take place instantaneously at the moment of the resurrection (v. 52). In this he differs sharply from II Bar 50-51 which holds that the resurrection yields the old bodies again which are transformed only after the judgement.{28} Paul's doctrine is that we are raised imperishable and glorified. (2) For Paul the resurrection is a *transformation*, not an *exchange*. Klappert draws the distinctions nicely:

Es geht also in der Auferstehung nach Paulus weder 1. um eine Wiederbelebung, d. h. um eine Neuschöpfung aus (!) dem Alten, noch 2. um eine Schöpfung aus dem Nichts, d. h. um eine Neuschöpfung anstelle (!) des Alten, Sondern 3. um eine radikale Verwandlung des sterblichen leibes, d. h. um eine Neuschöpfung an (!) dem alten. {29}

In the resurrection the 'ego' of a man does not trade bodies. Rather the natural body is miraculously transformed into a supernatural body. The metaphor of the sowing and raising of the body points to this. In fact, the very concept of resurrection implies this, for in an exchange of bodies there would be nothing that would be raised. When Paul says 'We shall all be changed,' he means the bodies of both the *dead* and the *living* alike. Paul's doctrine is that at the Parousia, the dead will rise from their graves transformed and that those who are still alive will also be transformed (vv 51-52; I Thess 4.16-17). The concept of an exchange of bodies is a peculiarly modern notion. For the Jews the resurrection of the dead concerned the remains in the grave, which they conceived to be the bones.{30} According to their understanding while the flesh decayed, the bones endured. It was the bones, therefore, that were the primary subject of the resurrection. In this hope, the Jews carefully collected the bones of the dead into ossuaries after the flesh had decomposed. Only in a case in which the bones were destroyed, as with the Jewish martyrs, did God's creating a resurrection body ex

nihilo come into question. It is instructive that on the question of the resurrection, Jesus sided with the Pharisees. He held that the tomb is the place where the bones repose and that the dead in the tombs would be raised (Matt 23.27; John 5.28). It is important to remember, too, that Paul was a Pharisee and that Luke identifies his doctrine of the resurrection with that of the Pharisees. Paul's language is thoroughly Pharisaic, and it is unlikely that he should employ the same terminology with an entirely different meaning. This means that when Paul says the dead will be raised imperishable, he means the dead *in the graves*. As a first century Jew and Pharisee he could have understood the expression in no other way.

Thus, Grass is simply wrong when he characterizes the resurrection as an exchange, a re-creation, and not a transformation.^{31} He mistakenly appeals to v 50; his statement that Paul has no interest in the emptying of the graves ignores the clear statements of I Thess 4.16 (which in light of v 14, which probably refers, according to the current Jewish idea, to the souls of the departed, can only have reference to the bodies in the graves) I Cor 15.42-44, 52. He attempts to strengthen his case by arguing that the relation of the old world to the new is one of annihilation to re-creation and this is analogous to the relation of the old body to the new. But Grass's texts are chiefly non-Pauline (Heb 1.10-12; Lk 13.31; Rev 6.14; 20.11; 21.1; II Pet 3.10). As we have seen, Paul's view is a transformation of creation (Rom 8.18-23; cf. I Cor 7.31). According to Paul it is *this* creation and *this* body which will be delivered from bondage to sin and decay. Paul, therefore, believed that the bodies of those alive at the Parousia would be changed, not discarded or annihilated, and that the remains (the bones?) of the dead bodies would likewise be transformed.

But this at once raises the puzzling question: what happens to those Christians who die before the Parousia? Are they simply extinguished until the day of resurrection? The clue to Paul's answer may be found in II Cor 5.1-10. Here the earthly tent = σωμα ψυχικόν, and the building from God = σωμα πνευματικόν. When do we receive the heavenly dwelling? The language of v 4 is irresistibly reminiscent of I Cor 15.53-54, which we saw referred to the Parousia. This makes it evident that the heavenly dwelling is not received immediately upon death, but at the Parousia. It is unbelievable that had Paul changed his mind on the dead's receiving their resurrection bodies at the Parousia, he would not have told the Corinthians, but continued to use precisely the same language. If the body were received immediately upon death, there would be no reason for the fear of nakedness, and v 8 would become unintelligible. In short this would mean that Paul abandoned the doctrine of the resurrection of the dead: but his later letters show he continued to hold to it.

In I Cor 15 Paul did not speak of a state of nakedness; the mortal simply "put on" (ἐνδύσασθαι) the immortal. But in II Cor 5 he speaks of the fear of being unclothed and the preference to be further clothed (ἐπενδύσασθαι), as by top-clothing. It is evident that Paul is here describing losing the earthly body as being stripped and hence naked. He would rather not quit the body, but simply be transformed at the Parousia without experiencing the nakedness of death. In this sense, putting on the new body is like putting on top-clothing; namely, one need not undress first. Taken in isolation, this might be thought to imply that the resurrection is an exchange of bodies, not a transformation; but this presses the metaphor too hard. Paul is not trying to be technical, as is evident from his use of the ordinary ἐνδύσασθαι in v 3; and the notion of 'putting on' is not inconsistent with the concept of transformation, as I Cor 15.53-54 makes clear. Indeed, the 'putting on' consists precisely in being transformed. Neither the ἔχομεν nor the αἰώνιον of v 1 indicates that the new body already exists; rather they express the certitude of future possession and the subsequent eternal duration of the new body. The idea that the new body exists already in heaven is an

impossible notion, for the idea of an unanimated σῶμα πνευματικόν, stored up in heaven until the Parousia, is a contradiction in terms, since πνεῦμα is the essence and source of life itself. Rather from I Cor 15 we understand that the heavenly dwelling is created at the Parousia through a transformation of the earthly tent, a point concealed by Paul's intentional contrast between the two in v 1, but hinted at in v 4 (cf. also Rom 8.10-11, 18-23). What Paul wants to express by the metaphor is that he would rather live to the Parousia and be changed than die and be naked prior to being raised.

The nakedness is thus the nakedness of an individual's soul or spirit apart from the body, a common description in Hellenistic literature. This is confirmed in vv 6-9 where Paul contrasts being at home in the body and being at home with the Lord as mutually exclusive conditions. Paul is saying that while we are in this natural body we sigh, not because we want to leave the body through death and exist as a disembodied soul, but because we want to be transformed into a supernatural body without the necessity of passing through the intermediate state. But despite the unsettling prospect of such an intermediate state, Paul still thinks it better to be away from the body and with the Lord (v 8). Christ makes all the difference; for Paul the souls of the departed are not shut up in caves or caskets until the end time as in Jewish apocalyptic, nor do they 'sleep': rather they go to be with Jesus and experience a conscious, blissful communion with him (cf. Phil 1.21, 23) until he returns to earth (I Thess 4.14). This overrides the dread of nakedness.

Paul's doctrine of the nature of the resurrection body now becomes clear. When a Christian dies, his conscious spirit or soul goes to be with Christ until the Parousia, while his body lies in the grave. When Christ returns, in a single instant the remains of the natural body are transformed into a powerful, glorious, and imperishable supernatural body under the complete lordship and direction of the Spirit, and the soul of the departed is simultaneously reunited with the body, and the man is raised to everlasting life. Then those who are alive will be similarly transformed, the old body miraculously changed into the new without excess, and all believers will go to be with the Lord.

This doctrine teaches us much about Paul's conception of the resurrection body of Christ. In no sense did Paul conceive Christ's resurrection body to be immaterial or unextended. The notion of an immaterial, unextended body seems to be a self-contradiction; the nearest thing to it would be a shade in Sheol, and this was certainly not Paul's conception of Christ's glorious resurrection body! The only phrases in Paul's discussion that could lend themselves to a 'dematerializing' of Christ's body are 'σῶμα πνευματικόν' and 'flesh and blood can not inherit the kingdom of God.' But virtually all modern commentators agree that these expressions have nothing to do with substantiality or anatomy, as we have seen. Rather the first speaks of the orientation of the resurrection body, while the second refers to the mortality and feebleness of the natural body in contrast to God.

So it is very difficult to understand how theologians can persist in describing Christ's resurrection body in terms of an invisible, intangible spirit; there seems to be a great lacuna here between exegesis and theology. I can only agree with O'Collins when he asserts in this context, 'Platonism may be harder than we suspect.'^{32} With all the best will in the world, it is extremely difficult to see what is the difference between an immaterial, unextended, spiritual 'body' and the immortality of the soul. And this again is certainly not Paul's doctrine! Therefore, the second supporting argument for Jesus's having a purely spiritual resurrection body also fails.

We have seen, therefore, that the traditions of the appearance of Jesus to Paul do not describe that event as a purely visionary experience; on the contrary extra-mental accompaniments were involved. Paul gives no firm clue as to the nature of that appearance; from his doctrine of the nature of the resurrection body, it could theoretically have been as physical as any gospel appearance. And Paul does insist that it was an *appearance*, not a vision. Luke regarded the mode of Jesus's appearance to Paul as unique because it was a post-ascension encounter. Paul himself gives no hint that he considered the appearance to him to be in any way normative for the other appearances or determinative for a doctrine of the resurrection body. On the contrary, Paul also recognized that the appearance to him was an anomaly and was exercised to bring it up to the level of objectivity and reality of the other appearances. Furthermore, Paul conceived of the resurrection body as a powerful, glorious, imperishable, Spirit-directed *body*, created through a transformation of the earthly body or the remains thereof, and made to inhabit the new universe in the eschaton. The upshot of all this is the startling conclusion that *Paul's doctrine of the resurrection body is potentially more physical than that of the gospels, and if Christ's resurrection body is to be conceived in any less than a physical way, that qualification must come from the side of the gospels, not of Paul.*

So although many theologians try to play off the 'massiven Realismus' of the gospels against a Pauline doctrine of a spiritual resurrection body, such reasoning rests on a fundamental and drastic misunderstanding of Paul's doctrine. One cannot but suspect that the real reason for scholarly scepticism concerning the historicity of the gospel appearances is that, as Bultmann openly stated, this is offensive to 'modern man,' and that Paul has been made an unwilling accomplice in critics' attempts to find reasons to support a conclusion already dictated by *a priori* philosophical assumptions. But Paul will not allow himself to be put to this use; a careful exegesis of Pauline doctrine fully supports a physical resurrection body. And, it must be said, this was how first century Christians apparently understood him, for the letters of Clement and Ignatius prove early wide acceptance of the doctrine of physical resurrection in first century churches, including the very churches where Paul himself had taught. The ground is thus cut from beneath those scholars who object to the historicity of the gospel resurrection narratives because of their physicalism.

But more than that: given the temporal and personal proximity of Paul to the original witnesses of the resurrection appearances, the historicity of the bodily resurrection of Jesus can scarcely be denied. For the physicalism of the gospels cannot now be explained away as a late legendary or theological development; on the contrary, what we see from Paul is that it was there from the beginning. And if it was there from the beginning, then it must have been historically well- founded--otherwise, one is at a loss how to explain that the earliest witnesses should believe in it. Though it is constantly repeated that the physicalism of the gospels is an anti-docetic apologetic, scarcely a single piece of evidence is ever produced in favor of this assertion--and mere assertion is not proof. We have seen that both Paul's personal contact and temporal proximity with the original disciples precludes a late development of the notion of physical resurrection, which is implied by the anti-docetic hypothesis. And Paul's doctrine can hardly be explained away as an anti-docetic apologetic, for it was the crass materialism of the Jewish doctrine of resurrection that Paul's Corinthian opponents probably gaged at (I Cor 15.35), so that Paul found it necessary to emphasize the transformation of the earthly body into a supernatural body. An anti-docetic apologetic would have been counter-productive. Hence, the evidence of Paul precludes that the physical resurrection was an apologetic development of the gospels aimed at Docetism.

But this consideration aside, there are other reasons to think that in the gospel narratives Docetism is not in view: (1) For a Jew the very term 'resurrection' entailed a physical resurrection of the dead man in the tomb. The notion of a 'spiritual resurrection' was not merely unknown; it was a contradiction in terms. Therefore, in saying that Jesus was raised and appeared, the early believers must have understood this in physical terms. It was Docetism which was the response to this physicalism, not the other way around. The physical resurrection is thus primitive and prior, Docetism being the later reaction of theological and philosophical reflection. (2) Moreover, had purely 'spiritual appearances' been original, then it is difficult to see how physical appearances could have developed. For (a) the offense of Docetism would then be removed, since the Christians, too, believed in purely spiritual appearances, and (b) the doctrine of physical appearances would have been counter-productive as an apologetic, both to Jews and pagans; to Jews because they did not accept an individual resurrection within history and to pagans because their belief in the immortality of the soul could not accommodate the crudity of physical resurrection. The church would therefore have retained its purely spiritual appearances. (3) Besides, Docetism was mainly aimed at denying the reality of the incarnation of Christ (I John 4.2-3; III John 7), not the physical resurrection. Docetists were not so interested in denying the physical resurrection as in denying that the divine Son perished on the cross; hence, some held the Spirit deserted the human Jesus at the crucifixion, leaving the human Jesus to die and be physically raised (Irenaeus *Against Heresies* 1.26. 1). An anti-docetic apologetic aimed at proving a physical resurrection therefore misses the point entirely. (4) The demonstrations of corporeality and continuity in the gospels, as well as the other physical appearances, were not redactional additions of Luke or John, as is evident from a comparison of Luke 24.36-43 with John 20.19-23 (it is thus incorrect to speak, for example, of 'Luke's apologetic against Gnosticism'), but were part of the traditions received by the evangelists. Docetism, however, was a later theological development, attested in John's letters. Therefore, the gospel accounts of the physical resurrection tend to ante-date the rise and threat of Docetism. In fact, not even all later Gnostics denied the physical resurrection (cf. Gospel of Philip, Letter of James, and Epistle of Rheginus). It is interesting that in the ending added to Mark there is actually a switch from material proofs of the resurrection to verbal rebuke by Jesus for the disciples' unbelief. (5) The demonstrations themselves do not evince the rigorousness of an apologetic against Docetism. In both Luke and John it is not said that either the disciples or Thomas actually accepted Jesus's invitation to touch him and prove that he was not a Spirit. Contrast the statements of Ignatius that the disciples did physically touch Jesus (Ignatius *Ad Smyrnaeans* 3.2; cf. *Epistula Apostolorum* 11-12). As Schnackenburg has said, if an anti-docetic apology were involved in the gospel accounts, more would have to have been done than Jesus's merely *showing* the wounds.^{33} (6) The incidental, off-hand character of the physical resurrection in most of the accounts shows that the physicalism was a natural assumption or presupposition of the accounts, not an apologetic point consciously being made. For example, the women's grasping Jesus's feet is not a polemical point, but just their response of worship. Similarly, Jesus says, 'Do not hold me,' though Mary is not explicitly said to have done so; this is no conscious effort to prove a physical resurrection. The appearances on the mountain and by the Sea of Tiberias just naturally presuppose a physical Jesus; no points are trying to be scored against Docetism. Together these considerations strongly suggest that the physical appearances were not an apologetic to Docetism, but always part of the church's tradition; there is no good reason to doubt that Jesus did, in fact, show his disciples that he had been physically raised.

And it must be said that despite the disdain of some theologians for the gospels' conception of the nature of the resurrection body, it is nonetheless true that like Paul the evangelists steer a

careful course between gross materialism and the immortality of the soul. On the one hand, every gospel appearance of Jesus that is narrated is a physical appearance. {34} The gospels' unanimity on this score is very impressive, especially in view of the fact that the appearance stories represent largely independent traditions; they confirm Paul's doctrine that it is the earthly body that is resurrected. On the other hand, the gospels insist that Jesus's resurrection was not simply the resuscitation of a corpse. Lazarus would die again some day, but Jesus rose to everlasting life (Matt 28. 18-20; Luke 24.26; John 20.17). And his resurrection body was possessed of powers that no normal human body possesses. Thus, in Matthew when the angel opens the tomb, Jesus does not come forth; rather he is already gone. Similarly, in Luke when the Emmaus disciples recognize him at bread-breaking he disappears. The same afternoon Jesus appears to Peter, miles away in Jerusalem. When the Emmaus disciples finally join the disciples in Jerusalem that evening, Jesus suddenly appears in their midst. John says the doors were shut, but Jesus stood among them. A week later Jesus did the same thing. Very often commentators make the error of stating that Jesus came through the closed doors, but neither John nor Luke says this. Rather Jesus simply appeared in the room; contrast the pagan myths of gods entering rooms like fog through the keyhole (Homer *Odyssey* 6. 19-20; *Homeric Hymns* 3. 145)! According to the gospels, Jesus in his resurrection body had the ability to appear and vanish at will, without regard to spatial limitations.

Many scholars have stumbled at Luke's 'a spirit has not flesh and bones as you see that I have,' claiming this is a direct contradiction to Paul. In fact, Paul speaks of 'flesh and blood', not 'flesh and bones.' Is the difference significant? It certainly is! 'Flesh and blood,' as we have seen, is a Semitic expression for mortal human nature and has nothing to do with anatomy. Paul agrees with Luke on the physicality of the resurrection body. But furthermore, neither is 'flesh and bones' meant to be an anatomical description. Rather, proceeding from the Jewish idea that it is the bones that are preserved and raised (Gen R 28.3; Lev R 18.1; Eccl R 12.5), the expression connotes the physical reality of Jesus's resurrection. Michaelis writes,

Wenn nach Lukas ein Geist weder Fleisch noch Knochen hat, der Auferstandene aber kein Geist ist, so besagt das nicht, dass der Auferstandene, mit der paulinischen Terminologie zu reden, kein "pneumatisches (verklärtes, himmlisches) Soma," sondern ein "psychisches (natürliches, irdisches) Soma" habe. Mit Fleisch und Knochen in der lukanischen Aussage ist vielmehr (wie zugeben werden muss, in einem kräftigen Ausdruck, den Paulus aber nicht unbedingt als "lästerlich" empfunden haben müsste) das ausgedrückt, was Paulus mit dem Begriff "Soma" (Leib, Leiblichkeit) ausdrückt. Durch den Hinweis auf Fleisch und Knochen soll nicht der pneumatische Charakter dieses Soma bestritten, sondern die Realität des Somatischen bezeugt werden. Auch Lukas steht, wie sich zudem aus der Gesamtheit der bei ihm sich findenden Hinweise ergibt (vgl. 24.13ff; Apg. 1.3), unter der Voraussetzung, dass es sich bei den Erscheinungen nur um Begegnungen mit dem Auferstandenen in seiner verklärten Leiblichkeit handeln kann. {35}

The point of Jesus's utterance is to assure the disciples that this is a real resurrection, in the proper, Jewish sense of that word, not an appearance of a bodiless πνεῦμα. Though it stresses corporeality, its primary emphasis is not on the constituents of the body. Thus, neither Paul nor Luke are talking about anatomy, and both agree on the physicality *and* the supernaturalness of Jesus's resurrection body.

In conclusion, we have seen that the critical argument designed to drive a wedge between Paul and the gospels is fallacious. Neither the argument from the appearance to Paul nor the argument from Paul's doctrine of the resurrection body serves to set Paul against the gospels. Quite the opposite, we have seen that Paul's evidence serves to confirm the gospels' narratives

of Jesus's bodily resurrection and that their physicalism is probably historically well-founded, that is to say, Jesus did rise bodily from the dead and appear physically to the disciples. And finally we have seen that the gospels present like Paul a balanced view of the nature of Jesus's resurrection body. On the one hand, Jesus has a body--he is not a disembodied soul. For the gospels and Paul alike the incarnation is an enduring state, not limited to the 30 some years of Jesus's earthly life. On the other hand, Jesus's body is a supernatural body. We must keep firmly in mind that for the gospels as well as Paul, Jesus rises glorified from the grave. The gospels and Paul agree that the appearances of Jesus ceased and that physically he has left this universe for an indeterminate time. During his physical absence he is present through the Holy Spirit who functions in his stead. But someday he will personally return to judge mankind and to establish his reign over all creation.

NOTES

{1} This research was made possible through a generous grant from the Alexander von Humboldt Foundation and was conducted at the Universität München and Cambridge University. The full results of this research will appear in two forthcoming volumes, *The Historical Argument for the Resurrection of Jesus: Its Rise, Decline, and Contribution* and *The Historicity of the Resurrection of Jesus*.

{2} Hans Grass, *Ostergeschehen and Osterberichte* (4th ed.; Göttingen: Vandenhoeck & Ruprecht, 1970).

{3} John E. Alsup, *The Post-Resurrection Appearance Stories of the Gospel-Tradition* (Stuttgart: Calwer Verlag, 1975), 32.

{4} Ibid., 34.

{5} Ibid., 54.

{6} Robin Scroggs, *The Last Adam* (Oxford: Basil Blackwell, 1966), 92-3.

{7} Grass, *Ostergeschehen*, 222.

{8} Ibid., 219-20.

{9} See *ibid.*, 189-207.

{10} Ibid., 229-32.

{11} The outstanding work on this concept, which I follow here, is Robert H. Gundry, *Soma in Biblical Theology* (Cambridge: Cambridge University Press, 1976).

{12} C. Rolsten, *Zum Evangelium des Paulus und des Petrus* (Rostock: Stiller, 1868); Hermann Lüdemann, *Die Anthropologie des Apostels Paulus und ihre Stellung innerhalb seiner Heilslehre* (Kiel: Universitätsverlag, 1872); remarkably so also Hans Conzelmann, *Der erste Brief an die Korinther* (KEKNT 5; Göttingen: Vandenhoeck & Ruprecht, 1969), 335.

{13} See the six point refutation in Gundry, *Soma*, 161-2.

{14} See *ibid.*, 122, 141. Most of Gundry's texts do not support dualism, but merely aspectualism; but when he adduces texts that clearly contemplate the separation of soul or spirit and body at death, then his argument for dualism is strong and persuasive.

{15} Gundry, *Soma*, 50.

{16} Robert Jewett, *Paul's Anthropological Terms* (AGAJY 10; Leiden: E.J. Brill, 1971), 211.

{17} Gundry, *Soma*, 167.

{18} *Ibid.*, 80.

{19} Paul's teaching is essentially the Jewish doctrine of glorified bodies, according to Johannes Weiss, *Der erste Korintherbrief* (9th ed.; KEKNT 5; Göttingen: Vandenhoeck & Ruprecht, 1910), 345; W. D. Davies, *Paul and Rabbinic Judaism* (2d ed; London: SPCK, 1965), 305-8; Ulrich Wilckens, *Auferstehung* (Stuttgart and Berlin: Kreuz Verlag, 1970), 128-31; Joseph L. Smith, 'Resurrection Faith Today,' *TS* 30 (1969): 406.

{20} On the different types of flesh, see Tractate Chullin 8. 1, where the author explains that one cannot cook flesh in milk, unless it is the flesh of fish or of grasshoppers; fowl may be set on the table with cheese, but not eaten with it. See also Davies, *Paul*, 306.

{21} Cf. II Bar 51.1-10 where the glory of the righteous seems to be a literal brightness like the stars'. For Paul the glory of the righteous seems to mean majesty, honor, exaltation, etc., not so much physical radiance, which is a mere analog. See Joseph Coppens, 'La glorification céleste du Christ dans la théologie neotestamentaire et l'attente de Jésus,' in *Resurrexit* (ed. Édouard Dhanis; Rome: Editrice Libreria Vaticana, 1974), 37-40.

{22} R. Clavier, 'Breves remarques sur la notion de σωμα πνευματικον,' in *The background of the New Testament and Its Eschatology* (ed. W. D. Davies and D. Daube; Cambridge: Cambridge University Press, 1956), 361. Despite the philological evidence, Clavier goes for a substantial understanding of spiritual body on two grounds: (1) in the seed/plant analogy, the plant is not numerically identical with the seed, and (2) I Cor 15.50. The first reason is astounding, for the plant certainly is numerically identical with the seed! Pressing the analogy this far supports the continuity of the resurrection body with the earthly body. Clavier sadly misunderstands v 50, as evident from his remark that Paul should have mentioned bones along with flesh and blood.

{23} Jean Héring, *La première épître de saint Paul aux Corinthiens* (2d ed., CNT 7; Neuchatel, Switzerland: Delachaux et Niestlé, 1959), 147.

{24} Or alternatively, the first Adam is made of the dust of the earth; the second Adam is from heaven. The first speaks of constitution, the second of origin. See also *TWNT*, , s. v. πνευμα,' by Kleinknecht, *et. al.*

{25} Joachim Jeremias, "'Flesh and Blood Cannot Inherit the Kingdom of God" (I Cor. XV. 50),' *NTS* 2 (1955-6): 151-9.

{26} Karl Bornhäuser, *Die Gebeine der Toten* (BFCT 26; Gütersloh: C. Bertelsmann, 1921), 37.

{27} It is found in Matt 16.17; Gal 1.16; Eph 6.12; Heb 2.14; see also Sir 14.18 and the references in Hermann L. Strack and Paul Billerbeck, eds., *Kommentar zum Neuen Testament aus Talmud and Midrasch* (5th ed., 6 vols.; München: C. H. Beck, 1969), 1: 730-1, 753. The Semitic word pair *σαρξ και αιμα* is first attested in Ecclesiasticus 14.18; 17.31 and occurs frequently in Rabbinic texts, especially Rabbinic parables, as *בשר ודם*

{28} According to Baruch the old bodies are raised for the purpose of recognition, that the living may know that the dead have been raised. But for Paul, believers, like Christ, emerge glorified from the grave.

{29} Berthold Klappert, 'Einleitung,' in *Diskussion um Kreuz und Auferstehung* (ed. idea; Wuppertal: Aussaat Verlag, 1971), 15.

{30} See Bornhäuser, *Gebeine*; C. F. Evans, *Resurrection in the New Testament* (SBT 2/12; London: SCM, 1970), 108; Walther Grundmann, *Das Evangelium nach Lukas* (8th ed., THKNT 3; Berlin: Evangelische Verlagsanstalt, 1978), 451.

{31} Grass, *Ostergeschehen*, 154.

{32} Gerald O'Collins, *The Easter Jesus* (London: Darton, Longman & Todd, 1973), 94.

{33} Rudolf Schnackenburg, *Das Johannesevangelium* (3 vols., 2d ed., HTKNT 4; Freiburg: Herder, 1976), 3: 383. This goes for both the appearance to the Twelve and to Thomas, he argues.

{34} Although some critics have wanted to construe Matthew's mountaintop appearance as a heavenly vision similar to Paul's, this attempt seems futile. Matthew clearly considered Jesus's appearance to be physical, as is evident from his appearance to the women (Matt 28.9, 10) and his commissioning of the disciples. Even in the appearance itself, there are signs of physicality: the disciples' worshipping Jesus recalls the act of the women in v 9 and does not suit well a heavenly appearance; and Jesus's coming toward the disciples (*προσελθων*) seems to indicate decisively a physical appearance.

{35} Wilhelm Michaelis, *Die Erscheinungen der Auferstandenen* (Basel: Heinrich Majer, 1944), 96.

Divine Foreknowledge and Newcomb's Paradox

Dr. William Lane Craig

Newcomb's Paradox provides an illuminating non-theological illustration of the problem of divine foreknowledge and human freedom. We are to imagine a being with great predictive powers and to suppose we are confronted with two boxes, B1 and B2. B1 contains \$1,000; B2 contains either \$1,000,000 or nothing. We may choose either B2 alone or B1 and B2 together. If the being predicts that you choose both boxes, he does not put anything in B2; if he predicts that you choose B2 only, he puts \$1,000,000 in B2. What should you choose? A proper construction of the pay-off matrix for the decision vindicates the one-box choice. If this is correct, then those who claim that God's knowledge is counterfactually dependent on future contingents foreknown by Him are likewise vindicated.

Source: "Divine Foreknowledge and Newcomb's Paradox," *Philosophia* 17 (1987): 331-350.

Undoubtedly the most provocative and elucidating illustration of the problem of theological fatalism is what has come to be known as Newcomb's Paradox. Originally the brainchild of William Newcomb of the University of California's Lawrence Livermore Laboratory, this puzzle was passed on to the philosophical public by Robert Nozick in 1969 and has generated such debate that one recent disputant speaks of current philosophy's "Newcombmania."^{1}

The Puzzle Conditions

According to Nozick's account, we are to imagine a being in whose predictive powers we have enormous confidence; indeed, this being has never made an incorrect prediction of one's choices. Suppose then that we are confronted with two boxes, B1 and B2. B1 contains \$1,000; B2 may contain either \$1,000,000 or nothing at all. We are given the option of taking the contents either of B2 alone or of B1 and B2 together. Suppose, furthermore, that the following are true:

1. If the being predicts that you will take what is in B1 and B2, he does not put the \$1,000,000 in B2.
2. If the being predicts that you will take only what is in B2, he puts the \$1,000,000 in B2.

Nozick further stipulates that if one randomizes his choice, then the being does not put the \$1,000,000 in B2.

Now what is one to do? There are two "plausible looking and highly intuitive arguments" which require different decisions. ^{2}

According to the first argument, one reasons: if I take what is in both boxes, the being will almost certainly have predicted this and left B2 empty. On the other hand, if I take B2 alone,

he will have put the \$1,000,000 in it. So I shall take B2 alone. According to the second argument, one reasons: The \$1,000,000 is already sitting in B2 or it is not, and which situation obtains is already fixed and determined. If the being has already put \$1,000,000 in B2 and I choose both, then I get \$1,001,000. If he has not, then I get \$1,000. Either way I get \$1,000 more than by taking B2 alone.

Nozick seeks to augment the force of each argument by means of the following further stipulations: With regard to the first argument, suppose that all previous people who chose B2 alone got the \$1,000,000. All the "shrewdies" who followed the recommendation of the second argument wound up with only \$1,000. It would be rational for a third person to bet, giving high odds, that if you take both boxes, you will get only \$1,000. In fact, if the award of the money were delayed, even you ought to offer such a bet! With regard to the second argument, suppose that B1 is transparent so that you can see the \$1,000 sitting there. The \$1,000,000 is already either in B2 or not. "Are you going to take only what is in B2?" asks Nozick. Suppose, furthermore, that B2 has a transparent side facing a third person, who can therefore plainly see whether B2 is empty or not. The money is not going to appear or disappear. "Are you going to take what is only in the second box, passing up the additional \$1,000 which you can plainly see?" Nozick demands. Moreover, whatever the state of B2, this third person is hoping that you will take both boxes, and you know that he must be so hoping. "Are you going to take only what is in the second box," asks Nozick incredulously, "passing up the additional \$1,000 which you can plainly see and ignoring my interally given hope that you take both?" {3} In the face of these two arguments, what should one do?

Theological Implications

Nozick originally presented the paradox as a dilemma within the realm of decision theory, but it is of obvious interest for the metaphysician and philosopher of religion as well. For it is almost irresistible to identify Nozick's "being" with an omniscient God and to construe Newcomb's Paradox as an illustration of the problem of theological fatalism. In a later piece Nozick himself approves of the identification of the Being (now capitalized) with God. {4} Bar-Hillel and Margalit make the connection with fatalism when they assert that if such a being existed, then he would contribute just the kind of evidence that would disprove one's illusion that he can choose arbitrarily between the boxes: ". . . the facts really imply that there is no free choice, but the illusion of free choice remains, and one has to behave as if free choice exists." {5} Similarly Don Locke: ". . . once the Predictor has made his prediction, that prediction becomes fixed and unalterable: having made the one prediction, it is no longer possible for him to make the other. So given that the Predictor is absolutely infallible, it is at the time of choosing equally impossible, and in just the same sense, for the Chooser to make any choice other than that predicted." {6} According to Locke, the fact that the Predictor will no doubt have correctly predicted my choice as he has all others "gives me every reason to think that I have no choice in the matter at all, or that if I do have any freedom, it is a freedom I am unlikely to exercise." {7} Schlesinger, on the other hand, thinks that the fatalistic implications of Newcomb's Paradox succeed in showing that an infallible and omniscient Predictor cannot exist. {8} Similarly, an exultant Isaac Asimov proclaims:

I would, without hesitation, take both boxes . . . I am myself a determinist, but it is perfectly clear to me that any human being worthy of being considered a human being (including most certainly myself) would prefer free will, if such a thing could exist. . . Now, then, suppose you take both boxes and it turns out (as it almost certainly will) that God has foreseen this and placed nothing in the second box. You will then, at least, have expressed your willingness to

gamble on his nonomniscience and on your own free will and will have willingly given up a million dollars for the sake of that willingness-itself a snap of the finger in the face of the Almighty and a vote, however futile, for free will. . . And, of course, if God has muffed and left a million dollars in the box, then not only will you have gained that million, but *far more imponent* you will have demonstrated God's nonomniscience.{9}

Unwilling to abandon either divine foreknowledge or human freedom, Dennis Ahern concludes from his analysis of Newcomb's Paradox that the problem of foreknowledge and freedom remains an unresolved paradox. For it is equally implausible to believe either

3. One has control over God's past beliefs without recourse to the objectionable notion of backward causation

or

4. An action otherwise free becomes not free simply because it is foreknown or predicted.

But the falsity of (3) implies the truth of (4) and the falsity of (4) implies the truth of (3). Thus, if infallible foreknowledge existed, ". . .we should have sound reasons for believing it would not have a bearing on whether an action was performed freely *and* there would be no freedom of action."{10}

What may be said to this purported challenge of Newcomb's Paradox to divine foreknowledge or human freedom? To begin with, it seems that we can safely dismiss Ahern's middle way between the dilemma's horns. For what Ahern has left us with is not a paradox, but an antinomy. If correct, his reasoning has demonstrated that the assumption of divine foreknowledge entails contradictory propositions concerning the freedom of foreknown actions. Therefore, the initial assumption which generated the antinomy must be rejected. Accordingly, Ahern should side with Schlesinger and Asimov in rejecting divine omniscience.

The alleged alternatives, then, with which Newcomb's Paradox confronts us are a denial of divine foreknowledge or a denial of human freedom. The incompatibility of these two assumptions is thought to be demonstrated by the fatalism implicit in the Newcomb game. The issue, therefore, is whether Newcomb's Paradox entails fatalism.

Nozick's Dilemma

Perhaps the best way to get at this issue is to return to the original dilemma posed by Nozick for decision theory. According to the *Expected Utility Principle*, among those actions available to a person, he should perform that action with maximal expected utility. According to the *Dominance Principle*, if there is a partition of states of the world such that relative to it action *a* weakly dominates action *b*, then *a* should be performed rather than *b*. Now these two principles seem to come into conflict in Newcomb's Paradox. We may construct the following pay-off matrix for the Expected Utility Principle:

		Being	
		A	B

		predicts agent will take B ₂ alone	predicts agent will take B ₁ & B ₂
Agent	i. takes B ₂ alone	\$1,000,000	\$0
	ii. takes B ₁ & B ₂	\$1,001,000	\$1,000

According to this principle, we may calculate the expected utility of the agent's respective actions by multiplying each of its mutually exclusive outcomes by the probability of each state's obtaining and adding these products together. Given a probability of .9 for the Being's prediction's being accurate, the expected utility of action (i) is $(.9 \times \$1,000,000) + (.1 \times \$0) = \$900,000$. The expected utility of action (ii) is $(.1 \times \$1,001,000) + (.9 \times \$1,000) = \$101,000$. On this principle, one should choose to do (i). But according to the Dominance Principle, if the world is divided into various states and some action *a* is best in one state and at least equal in all the others, one should choose to perform *a*. But in this case we have such a partition of the world into states *A* and *B*, determined by the Being's predictions. Here action (ii) is strongly dominant, for in either case one acquires \$1,000 more than he would by performing action (i). So one ought to take both boxes.

Now it is often pointed out, for example by Cargile, Olin, and others, that for the Dominance Principle to be valid, the states of the world must be causally and probabilistically independent of the actions to be taken.^{11} That is to say, if performing action (ii) in some way brings about or renders more probable state *B*, for example, then the principle no longer applies. States *A* and *B* are probabilistically independent of actions (i) and (ii) if the probability of *A* given that (i) is taken is the same as the probability of *A* given that (ii) is taken, and likewise for *B*. In the Newcomb situation, however, the probability of *A* or *B*'s obtaining is not independent of whether the agent chooses (i) or (ii). Therefore, the dominance argument fails.

But Nozick is ready with a response.^{12} He furnishes the following example of a situation in which the states are not probabilistically independent of the actions and yet the Principle of Dominance clearly applies. Suppose person *P* knows that either person *S* or *T* was his father. *S* had a fatal hereditary disease, but *T* did not. If *S* was *P*'s father, then *P* will also die of this disease; if *T*, then he will not. Now this disease makes one intellectually inclined. *P* is deciding whether to go on to graduate school or become a baseball player, and he slightly prefers the academic life. Let *w* = *P* is briefly an academic and then dies; *x* = *P* is an academic and *Z* = *P* is briefly an athlete and then dies; *y* = *P* is an athlete and normal. Accordingly we can construct the following matrix, assigning preference values to *w*, *x*, *y*, *z*.

		Father	
		A	B
		<i>S</i> is <i>P</i> 's father	<i>T</i> is <i>P</i> 's father

Son	i. goes to grad school	w (-20)	x (100)
	ii. plays baseball	y (-25)	z (95)

The Dominance Principle tells P to choose (i). But in that case, he probably has the disease. So the Principle of Expected Utility would advise him to choose (ii). But this latter recommendation, says Nozick, is "perfectly wild." The probabilities favor (ii), but which state obtains is already fixed and determined and does not depend on P's action. By choosing (ii), P does not make it less likely that S is his father nor make it less likely that he will die of the disease. Thus, ". . . in situations in which the states, though not probabilistically independent of the actions, are already fixed and determined, where actions do not affect whether or not the states obtain, then it *seems* that is legitimate to use the dominance principle. . . "{13} Yet even then it is not so much the fact that the states are fixed and determined that is critical, he adds, but whether one's actions affect which one is actual. For in the Newcomb situation, the prediction could be made and the choice taken and only then the money placed in the boxes on the basis of the prediction. "This suggests that the crucial fact is *not* whether the states are already fixed and determined, but whether the actions *influence* or *affect* which state obtains". {14} Where such influence exists, one should always maximize utility.

Divine Foreknowledge and the One-Box Strategy

Now in the conditions originally laid down in Newcomb's Paradox, no such influence exists. That is to say, contrary to the impression given by several writers, the being of Newcomb's Paradox did not make his predictions on the basis of precognition. On Nozick's formulation, Newcomb's Paradox is analogous to the situation described in the case of P's deciding to study or play sport. The decision is wholly independent of the state which obtains. But once the Being is identified with God, the picture changes radically: for God's prediction is based on precognition of the decision, or in the language of theology, foreknowledge. In this case the actions and the states are not independent, for God predicts what He knows one will do. Hence, Nozick admits, ". . . if one believes that the way the predictor works is by looking into the future; he, in some sense, sees what you are doing, and hence is no more likely to be wrong about what you do than someone else who is standing there at the time and watching you, and would normally see you, say, open only one box, then there is no problem. You take only what is in the second box." {15} In fact, as Plantinga observes, {16} in the case of divine foreknowledge there is a logically demonstrative argument for the one-box strategy of the form $A \Box \rightarrow B$; $(A \& B) \Box \rightarrow C$; therefore $A \Box \rightarrow C$:

5. If one were to take B1 and B2, then God would have believed that one would take B1 and B2.
6. If one were to take B1 and B2 and God believed that one would take B1 and B2, then God would have put nothing in B2.
7. If one were to take B1 and B2, then God would have put nothing in B2.

A parallel argument proves that if one were to choose B2 alone, God would have put \$1,000,000 in B2. Thus, given the puzzle conditions, the only rational choice is to choose B2 alone.

Objections to the One-Box Strategy

Backward Causation

Now several philosophers, such as Mackie and others, have Objected that such an account of the Being's predictive ability entails the dubious thesis of backward causation.{17} According to Mackie, taking only one box would be justified if there occurs an extreme form of backward causation according to which the causal lines are drawn backward in time from the choice to the prediction and then forward from the prediction to the placing of the contents in the box. This analysis, however, seems to rest upon a misunderstanding in which the causal relation between an event or thing and its effect is conflated with the semantic relation between a true proposition and its corresponding state of affairs. For if at *tn* I choose B2 alone, then the proposition "*W* chooses B2 alone" is true at *tn* because of the semantic relation which obtains between a true proposition and the corresponding state of affairs which makes it true; by the same token "*W* will choose B2 alone" is true prior to *tn*. "*W* chose B2 alone" is true subsequent to *tn*, and "*W* chooses B2 alone at *tn*" is omnitemporally true. The relation obtaining between a true proposition and its corresponding state of affairs is semantic, not causal. Now God, knowing all true propositions, therefore knows the true future contingent proposition concerning my choice of the boxes. Again no causal relation obtains here. Hence, the charge of backward causation seems entirely misconceived: we have simply the semantic relation between true propositions and their corresponding states of affairs and the divine property of knowing all true propositions. Nozick remarks that he employed terms such as "influence," "affect," and so forth, without paying much attention to technical precision.{18} Now we can see more clearly that in the case of divine foreknowledge the "influence" exercised by the agent's choice over the Being's predictions is not a retro-causal influence, but rather the supplying of the truth conditions for some of the future contingent propositions known by God. Since the Being's predictions are made on the basis of his knowledge of such future contingent propositions, states *A* and *B* are not independent of actions (i) and (ii) and therefore the Principle of Dominance is in this case invalid.

Backtracking Counterfactuals

Objections to Backtracking Counterfactuals

It may still be objected that such an analysis is counterintuitive and paradoxical. It is incredible that something one does now could affect what God believed in the past such that were one to act differently God would have believed differently and that given that God did believe that one will do something one is nonetheless free to do something else. The problem here lies with (5) and its parallel

8. If one were to take B2 alone, then God would have believed that one would take B2 alone.

Ahern regards this as paradoxical because in choosing B2 alone one is giving up, from the perspective of past facts, a sure \$1,000. For in choosing B2 alone, one *knows* that there is in fact \$1,001,000 in the two boxes. Choosing B2 alone is the right strategy, but one must live with the "uncomfortable knowledge" that at the time of choosing B2 alone God's belief is "unalterably tucked away in the past" and there is really \$1,001,000 in the boxes.{19} After choosing B2 alone one must be prepared to say, "If I had chosen both boxes, I would not have gotten the \$1,001,000. " But an opponent might retort, "Of course you would have, since it was there! Therefore, you must not have been free to choose both." This is in fact precisely

the reaction of Schlesinger, who claims that the one box strategy is self-contradictory.{20} He reiterates Nozick's argument concerning the well-wisher who can see the contents of the boxes and sincerely hopes that one will choose both. If the one box strategy is correct, it is not in my best interests to follow the advice of a sufficiently intelligent and well-informed well-wisher. But if a well-wisher is someone who invariably advises me to do what is in my best interests, then this amounts to saying that it is not in my best interests to do what is in my best interests, which is self-contradictory. Moreover, one may argue that the choice of both boxes is a better choice because the Predictor himself, having sealed the contents inside, knows the choice of both boxes is superior.{21} He knows that the chooser cannot place himself in a less favorable position by choosing both. If asked, "Would the chooser lose anything should he attempt to choose both?" the Predictor would have to say, no. He may believe, however, that choosing both "is not open" to the chooser and assert correctly that "If the agent were to choose both, he would be better off."

Backtracking Counterfactuals and an Inerrant Predictor

Now if we assume that God's precognitive beliefs are merely actually infallible, that is, inerrant in the actual world, then the adjudication of this issue will depend on whether we follow David Lewis in insisting on a standard resolution of vagueness in comparing the possible worlds in which the various counterfactuals involved in Newcomb's Paradox are true, or whether we will allow so-called "backtracking" counterfactuals in our resolution of vagueness. According to Lewis's point of view, the standard method of resolving vagueness in assessing similarity between possible worlds involves preserving as intact as possible the same past history in the respective worlds; thus there is a temporal asymmetry in counterfactual dependence: if the past were different, present or future events might be otherwise in the closest possible world, but if the present or future were different, we cannot say that the closest worlds are ones in which past events would be otherwise.{22} Lewis acknowledges that some contexts may require a special resolution of vagueness, but he elsewhere makes clear that the Newcomb situation is not one of them.{23} In that situation backtracking counterfactuals are not allowed; accordingly it is true that

9. If I took only one box, I would be poorer by \$1,000 than I will be after taking both.

According to Lewis, the "essential element" here is the fact that whether or not I get the \$1,000,000 is causally independent of what I do now.{24}

Horgan, on the other hand, argues that the Newcomb situation is precisely one in which a special resolution of vagueness employing backtracking counterfactuals should be employed.{25} The one box solution gives top priority to maintaining the Being's accuracy in the nearest possible world. The closest world in which I take both boxes instead of one will be a world in which the being correctly predicted this and therefore left B2 empty. This means that the past history of that world will be slightly different from that of the actual world, in which I choose B2 alone; but it is more important to preserve the Being's accuracy than a perfect historical match in specifying the closest possible world. Under the special resolution of vagueness, (9) is false; on the contrary (5) and (8) are true.

Horgan attempts to break the deadlock between these two competing resolutions of vagueness by arguing that only the special resolution is pragmatically appropriate in this situation. Given my overwhelming conviction of the being's predictive accuracy, I am virtually certain that the actual world is a world in which the being has accurately predicted what I shall do. Hence,

worlds in which the being errs ought to be regarded as irrelevant for the purposes of decision-making. Thus, the special resolution is pragmatically appropriate because the closest world in which I do action (i) is one in which A obtains and the closest world in which I do action (ii) is one in which B obtains. No corresponding meta-level argument exists for the standard resolution. All the defender of the standard resolution can do is to appeal again to the intuition that

10. *Either* I would get \$1,001,000 if I chose both boxes and I would get \$1,000,000 if I chose B2 alone, *Or* I would get \$1,000 if I chose both boxes and I would get \$0 if I chose B2 alone.

But (10) is true only if one already accepts the standard resolution. By contrast, the defender of the special resolution has an independent justification for adopting backtracking counterfactuals, namely, I am virtually certain, independent of any beliefs I have concerning whether I shall do (i) or (ii), that a world in which the being errs is not actual. Horgan's defense of backtracking counterfactuals in this connection would seem all the more conclusive when the being is God. For now are absolutely certain that the prediction is not in error.

Isaac Levi has, however, objected to Horgan's reasoning, {26} charging that Horgan fallaciously concludes from

11. The probability is high that the agent will choose both boxes if the being will so predict to

12. The probability is high that if the agent will choose both boxes, then the being will so predict.

Levi grants that we should choose B2 alone if the probability is high that if the agent will pick both boxes, then the being will predict this. But in the original Newcomb's Paradox, one is not warranted in assuming (12). Hence, Levi has been characterized as a "no-boxer, " since on his view the initial conditions laid down in the Newcomb Problem are underdetermined in not specifying whether both sets of conditional probabilities are high, so that neither choice can be judged to be rationally preferable. {27}

In a recent reply to Levi, {28} Horgan concedes that according to the usual formulation of the paradox it is only laid down that most of the being's two-box predictions have been correct, as have most of his one-box predictions, and that the agent knows this; but that this only shows the probability of a two-box choice is high on a two-box prediction and the probability of a one-box choice is high on a one-box prediction. Levi is correct that these probabilities can be high even if the converse probabilities are not both high. But Horgan asserts that he construes the Newcomb situation to involve implicitly some further conditions: (i) that almost all of those who have chosen both boxes in the past have received \$1,000; (ii) that almost all of those who have chosen only the second box have received \$1,000,000; and (iii) that the agent knows these facts. In other words, Horgan takes it to be *built into* Newcomb's Paradox that for the agent the probability is high that if he chooses B2 the being will have predicted this and the probability is high that if he chooses B2 and B2 the being will have predicted that. This is the reasonable and natural way to construe the problem because only then do the paradoxical conflicts arise. In any event, he concludes, "I suppose there is no prior fact of the matter as to whether the implicit conditions just mentioned are part of Newcomb's Problem or not. Very

well, I hereby *stipulate* that the conditions are included, as I used the term 'Newcomb's Problem'." {29}

Campbell complains that if one makes Horgan's stipulations, then Newcomb's Paradox cannot be used to *test* one's decision principle; one simply relies on it. The original underdetermined problem is too indeterminate to argue for either decision principle, and if one makes additional stipulations to remove this indeterminacy, he imposes so much structure on the problem that it can no longer serve as an intuitive confirmation of the principle which one favors. {30} But Campbell's dilemma seems dubious to me. In the first place, even if one makes Horgan's stipulations, the success of the one-box argument is going to depend on the cogency of Horgan's meta-level arguments concerning the permissibility of a special resolution of vagueness, and, as we shall see, Horgan himself seems to think there is plenty of room for debate there. (In any case, Campbell's point would not affect the importance of Newcomb's Paradox for the philosopher of religion, as opposed to the decision theorist, for our interest in the problem concerns its implications for theological fatalism.) But, secondly, is it in fact the case that these stipulations were not included in Nozick's original formulation of the problem? A good case can be made that they were. As for conditions (i) and (ii), Nozick explicitly states that the being has never made an incorrect prediction of one's choices. He himself stipulates that all previous people who chose B2 alone got the \$1,000,000 and that all the "shrewdies" who chose B1 and B2 wound up with only \$1,000. And as for condition (iii), the very puzzle arises because the agent is aware of the being's enormously successful previous track record. Hence, Nozick asserts that it would be rational for the agent himself to offer a bet, giving high odds, that if he takes both boxes he will get only \$1,000. Thus, it would seem that the Newcomb Problem is not underdetermined after all. Of course, no-boxers may find the underdetermined version of the paradox more intriguing (though finally inconclusive), and that is a philosopher's privilege; but he ought not then to claim that he is discussing the genuine Newcomb Problem, for his version would seem to be an attenuation of the original.

Now even given these conditions, the success of the one-box strategy is going to depend on the admissibility of a special resolution of vagueness; for invariant two-boxers like Lewis and Gibbard and Harper insist that the rational choice is to choose both boxes even if one knows that in so choosing he will get only \$1,000, since it is also true that if one were to choose only one box, he would be \$1,000 poorer than he shall be after choosing both. But Horgan claims to have offered a meta-level argument for preferring a non-standard resolution of vagueness so that the two-boxer's counterfactual claim is false. Eells has, however, charged that Horgan's argument for a one box choice is as circular as the two-boxer's appeal to (10). {31} For in stating that I am virtually certain, independent of any beliefs I have concerning whether I shall do action (i) or action (ii), that a world in which the being errs is not actual, I presuppose the backtracking resolution of vagueness. For the independence spoken of here must mean that the above outcome is counterfactually independent of whether (i) or (ii) is performed, and I can have such certainty only if a backtracking resolution is presupposed. Hence, the argument begs the question. But Horgan responds that Eells has misconstrued the independence spoken of here. {32} Horgan is not saying that my certainty of getting either \$1,000,000 or \$1,000 is counterfactually independent of how I choose, but that it is independent of any beliefs I have about how I shall choose; that is to say, the agent in the Newcomb situation has a set of premisses which implies that it is highly probable that a world in which one receives \$1,000,000 or a world in which one receives \$1,000 will become actual, and this set of premisses includes no propositions about the probability of one's choosing (i) or the

probability of one's choosing (ii). This notion of independence involves no counterfactuals, and so the argument is not circular.

Eells attempts to rehabilitate the two-box argument as well, proposing a new *C*-resolution of vagueness according to which all the differences between a closest world in which one chooses (ii) and the actual world must be causal results of the occurrence of (ii) in the closest (ii)-type world. Under such a resolution, a one-box strategy would require backward causation. So if we give high priority to avoiding backward causation, the two-box choice is always preferred.{33} But surely now it is Eells who is making question-begging stipulations. Why should we adopt a *C*-resolution? Why cannot the closest world include those with some difference due to a non-causal counterfactual dependence upon an action? Why should we construe counterfactual dependence as causal? Why regard a possible world as the closest (ii)-type world only if I would actualize it (in the causal sense) by choosing (ii), rather than regarding a world as the closest (ii)-type world only if it would be actual were I to choose (ii)? As Horgan notes, Eells's argument is not really a meta-level argument at all, but just another ground level proposal without higher justification.{34}

Nonetheless, Horgan now reluctantly admits that the debate between one-boxers and two boxers is a "hopeless stalemate." {35} For the two-boxer can consistently refuse to seek a meta-level defense of the standard resolution which does not itself appeal to counterfactuals. The two-boxer need not accept the normative principle that one ought to adopt a meta-level defense which avoids reference to counterfactuals. He can simply cite (10) in support of the standard resolution, concede that his meta-level normative premiss is equivalent to his ground level premise that one ought to choose both boxes, and then say that he simply regards both these premisses as true.

Now it seems to me that Horgan concedes too much. For he allows the two-boxer to reject the meta-meta-level claim that

13. For purposes of choosing a vagueness-resolution to adopt in practical decision making, one ought to act on the basis of a meta-level normative premiss that makes no appeal to counterfactuals; for the question of how to resolve the vagueness of counterfactuals is precisely what is at issue.

But why let the two-boxer get away with this? It seems entirely reasonable and plausible to accept (13), so why should the two-boxer be exempt? Indeed, Horgan himself provides a striking practical incentive for adopting (13) in envisaging a Newcomb situation in which a two-box choice leads to one's death, so that the two-boxer's refusal to accept (13) results in the adoption of a decision principle which proves personally disastrous. Surely this result suggests that (13) is correct, since refusal to accept it as normative may result in adopting a personally injurious decision principle which has no justification beyond itself. If (13) is correct, then the two-boxer's argument is circular.

But even if Horgan is correct in conceding that the justification of the two-box strategy is not viciously circular, that does not therefore mean that the debate is stalemated. For the normative premisses used to justify the two-box choice could be simply false, if not circular. Given the cogency of the meta-level argument for the one-box strategy, the normative premisses of the two-box argument must be false. And Horgan's reasoning in defense of one-box choice does seem compelling if we reconstruct the payoff matrix used to determine one's choice. For Horgan's analysis closely resembles that of Ferejohn, who argues that in a

decision-theoretic context, the payoff matrix ought to be formulated, not in terms of the being's predicting this or that choice, but in terms of the Being's predictions' being correct or incorrect:

		State of Nature	
		A	B
		Being predicts correctly	Being predicts incorrectly
Agent	i. takes B ₂ alone	\$1,000,000	\$0
	ii. takes B ₁ & B ₂	\$1,000	\$1,001,000

Here there is no dominant choice for the agent; therefore, he must maximize expected utility. Given one's overwhelming conviction of the being's correctness, the proper choice is to take B2 alone. Brams points out that this representation of Newcomb's Paradox depends on the assumption that the being has no control over whether A or B obtains. This is not the same as his being able to correctly predict one's choice, for he almost surely can. Rather (if I understand Brams correctly) it is a matter of whether the being can control when he is correct; perhaps he just is correct most of the time, but not by his design. It just happens that most of his guesses come out right. In such a case, Ferejohn's matrix is the one to use. On the other hand, if the being is able to control whether A or B obtains, then one is not playing against a passive state of nature; therefore, Nozick's matrix is correct, with its conflict between the Dominance and Expected Utility Principles, though it is incomplete because it assigns no preferences for A or B on the being's part. Observing that there is nothing in Nozick's original statement of the paradox which suggests that the Being has control over the correctness of his predictions-that is, his predictions are not based on what the agent will do-Brams asserts that Ferejohn's matrix is appropriate. {36} Horgan's emphasis on preserving the Being's correctness would therefore be justified and the one-box strategy vindicated. This defense of the one-box strategy does not run afoul of Levi's or Lewis's objection because what the being predicts does not enter into the matrix. Therefore, the two-box strategy must be rejected.

Now if the Being is God, Ferejohn's matrix would be appropriate if we take the predictions to represent God's true beliefs, for God presumably entertains solely true beliefs by nature, not by choice. On the other hand, in a game situation God could deliberately give false predictions to make things more interesting. In that case, Nozick's original matrix ought to be used. But then surely we would be justified in assuming that the being in Nozick's original paradox was not trying to give false predictions; his preference was to be correct on every try. If this is the case, then in preferring to give correct predictions and being able to control when he does so, God will predict A only when the agent chooses (i) and will predict B only when the agent chooses (ii). Hence, the one-box strategy is once again vindicated. Whether we use Ferejohn's matrix or Nozick's, then, a special resolution of vagueness is warranted.

In any case, when the predictor is God, the two-box strategy is plainly the wrong answer, since the agent's choice and God's prediction are not unrelated, as in the original Newcomb Problem, but are related by precognition. The predictions are based on foreknowledge of the

choices, and so even invariant two-boxers concerning the original Newcomb's Paradox must concede that since, when the predictor is God, the predictions are determined by the choices, a special resolution of vagueness is in order and the rational choice is to choose one box, even though the contents of both boxes are fixed and determined at the time of choosing.

Applying this analysis to Schlesinger's objections, it becomes apparent that his well-wisher was presupposing a standard resolution of vagueness. Had he been sufficiently well-informed, he would have wished that the agent choose B2 alone. Or rather, seeing the money in B2 he would rejoice that his friend is going to choose B2 alone; or seeing no money in B2 he would regret that his friend is about to blunder by choosing both boxes. In a sense, wishing, except in the sense of regret, is inappropriate for the well-wisher, since a moment's glance informs him what the future will be, and therefore hoping that one will do something has no place. Schlesinger's Predictor, too, presupposes the standard resolution of vagueness. Otherwise, in answer to the query as to whether the agent would lose something by choosing both boxes, he would reply, "Yes, he *would*; but he will not choose both and therefore I have sealed up the \$1,000,000. If he *were* to choose both, he would be worse off because I would not have placed \$1,000,000 in B2. But happily he will not. " In fact, a sufficiently well-informed chooser, were the contents of the boxes exposed also to his view prior to his choice, would realize what his choice will be. Had he resolved to take only one box, he would not upon seeing the contents of both boxes before him suddenly change his mind, tempting as that might be, for he would know that were he to choose both boxes, it would turn out that the million he had seen was, after all, hallucinatory or in some way unreal.

Backtracking Counterfactuals and an Essentially Infallible Predictor

If we hold that the predictor is not merely inerrant, but infallible, then in fact no appeal to a special resolution need be made. For most theists hold that God's foreknowledge is not merely inerrant but essentially infallible. Therefore, worlds in which God's prediction errs are not even possible. On this basis the standard resolution alone suffices to ensure a one-box choice, for the only possible worlds in which I choose two boxes are worlds in which I get only \$1,000. No worlds in which I choose two boxes exist in which the past history of the actual world, in which I choose one box, remains intact. In all worlds in which I choose both boxes, God predicts this and leaves B2 empty. Thus, (5) and (8) are entirely vindicated.

Newcomb's Paradox and Freedom

But does that mean that in the actual world I am not free to choose otherwise, as Ahern alleges? Are we left with the theological fatalism which prompted our inquiry? By now the answer should be clear. It is I by my freely chosen actions who supply the truth conditions for the future contingent propositions known by God. The semantic relation between a true proposition and the corresponding state of affairs is not only non-causal, but asymmetric, The proposition depends for its truth on which state of affairs obtains, not *vice versa*. Were I to choose otherwise than I shall, different propositions would have been true than are, and God's knowledge would have been different than it is. Given that God foreknows what I shall choose, it only follows that I shall not choose otherwise, not that I could not. The fact that I cannot actualize worlds in which God's prediction errs is no infringement on my freedom, since all this means is that I am not free to actualize worlds in which I both perform some action *a* and do not perform *a*. The Newcomb Paradox provides no reason for thinking that from

14. There is \$1,000,000 in B2 because I am going to choose B2

and

15. Were I going to choose B1 and B2, the \$1,000,000 would not be in B2,

it follows that

16. I am not free to choose B1 and B2.

As Cargile puts it, "The player is free-he just cannot escape being 'seen' making his free choice."^{37} Admittedly one may feel uncomfortable about the fact that in choosing B2 alone one commits oneself to the existence of \$1,001,000 in the boxes. In this sense, a feeling of strangeness remains. But discomfort is not paradox, nor does a feeling of strangeness warrant a fallacious inference to fatalism.

Conclusion

Newcomb's Paradox thus serves as an illustrative vindication of the compatibility of divine foreknowledge and human freedom. A proper understanding of the counterfactual conditionals involved enables us to see that the pastness of God's knowledge serves neither to make God's beliefs counterfactually closed nor to rob us of genuine freedom. It is evident that our decisions determine God's past beliefs about those decisions and do so without invoking an objectionable backward causation. It is also clear that in the context of foreknowledge, backtracking counterfactuals are entirely appropriate and that no alteration of the past occurs. With the justification of the one box strategy, the death of theological fatalism seems ensured.

NOTES

^{1} Isaac levi, "A Note on Newcombmania," *Journal of Philosophy* 79 (1982): 337-42. Further indication of the philosophical interest in this puzzle is the very fine anthology edited by Richmond Campbell and Lanning Sowden. *Paradoxes of Rationality and Cooperation: Prisoners' Dilemma and Newcomb's Problem* (Vancouver: University of British Columbia Press, 1985). See especially their comprehensive bibliography.

^{2} Robert Nozick, "Newcomb's Problem and Two principles of Choice," in *Essays in Honor of Carl G. Hempel*, ed. Nicholas Rescher, Synthese Library (Dordrecht, Holland: D. Reidel, 1969), p 115.

^{3} *Ibid.*, p. 116.

^{4} Robert Nozick, cited in Martin Gardiner, "Mathematical Games," *Scientific American*, March 1974, p. 102.

^{5} Maya Bar-Hillel and Avishai Margalit, "Newcomb's Paradox Revisited," *British Journal for the Philosophy of Science* 23(1972): 301.

^{6} Don Locke, "How to Make a Newcomb Choice," *Analysis* 38(1978): 21.

{7} *Ibid.*, p. 23. Cf. Don Locke, "Causation, Compatibilism and Newcomb's Paradox," *Analysis* 39 (1979): 210-11.

{8} George Schlesinger, *Aspects of Time* (Indianapolis: Hackett, 1980), pp. 79, 144.

{9} Isaac Asimov, cited in Gardiner, "Games," p. 104.

{10} Dennis M. Ahern, "Foreknowledge: Nelson Pike and Newcomb's Problem," *Religious Studies* 75 (1979): 489.

{11} James Cargile, "Newcomb's Paradox," *British Journal for the Philosophy of Science* 26 (1975): 235-6; Doris Olin, "Newcomb's Problem: Further Investigations," *American Philosophical Quarterly* 13 (1976): 130-1; Bar-Hillel and Margalit, "Newcomb's Paradox," p. 297.

{12} Cf. Alan Gibbard and William L. Harper, "Counterfactuals and Two Kinds of Expected Utility," in *Foundations and Applications of Decision Theory*, ed. C. A. Hooker, J. I. Leach, and E. F. McClennen, 2 vols., vol. 1: *Theoretical Foundations*, The University of Western Ontario Series in Philosophy of Science 13 (Dordrecht, Holland: D. Reidel, 1978), pp. 129-52. They imagine the case of Solomon, who learns that charismatic kings are not prone to revolts of the people, whereas uncharismatic kings are. Moreover, being charismatic or not is purely genetic. Gibbard and Harper contend that it would be irrational for Solomon to refrain from adultery on the grounds that this would be evidence that he is uncharismatic, even though he would welcome the news that he is about to refrain because that would be evidence that he is indeed charismatic. Refraining from adultery would be evidence that he is charismatic, but to refrain for this reason would be irrational, since refraining does nothing to bring it about that he is charismatic. "The 'utility' of an act should be its genuine expected efficacy in bringing about states of affairs the agent wants, not the degree to which news of the act ought to cheer the agent." (*Ibid.*, p. 140.) The Newcomb problem, however, has the same structure as the case of Solomon. Hence, they conclude, one ought to take both boxes. According to David Lewis, one boxers are convinced by indicative conditionals: if I take one box, I shall be a millionaire; but if I take both boxes I shall not. Two boxers readily admit the truth of these indicative conditionals, but insist that even if the being is infallible, such that one knows that in taking two boxes he will receive only \$1,000, still the rational course is to take both boxes. They take this stand because they are convinced by counterfactual conditionals: if I took only one box, I would be poorer by \$1,000 than I shall be after taking both. Since the prediction and placement of the money is not conditioned by my choice, one cannot legitimately employ a backtracking counterfactual instead of the foregoing normal counterfactual. When confronted with the taunt, "If you're so smart, why ain'cha rich?" Lewis retorts that two boxers are not rich because riches are reserved for the irrational. (David Lewis, "Why Ain'cha Rich?," *Nous* 15 [1981]: 377-80; so also Locke, "Newcomb Choice," p. 23.) Cf. Doris Olin, "Newcomb's Problem, Dominance, and Expected Utility," in *Theoretical Foundations*, pp. 385-98; Daniel Hunter and Reed Richter, "Counterfactuals and Newcomb's Paradox," *Synthese* 39 (1978): 256-8.

{13} Nozick, "Newcomb's Problem," p. 127.

{14} *Ibid.*, p. 132. On the irrelevancy of the prediction prior to the choice, see Robert E. Grandy, "What the Well-Wisher Didn't Know," *Australasian Journal of Philosophy* 55 (1977): 82-90; Andre Gallois, "How not to Make a Newcomb Choice," *Analysis* 39 (1979): 49-

53; David Lewis, "Prisoners' Dilemma is a Newcomb Problem, *Philosophy and Public Affairs* 8 (1979): 236-7. According to Lewis, it is "agreed all around" that what really matters is not the prediction's being made in advance, but its being causally independent of one's choice; this is especially evident in the Prisoner's Dilemma, which is a type of Newcomb Problem, for the prisoners' choices are merely independent, not temporally ordered. This insight seems very relevant to theological debates over the temporal necessity of divine foreknowledge, for this necessity would seem to amount only to the independence of God's foreknowledge and future free choices.

{15} Nozick, "Newcomb's Problem," p 134.

{16} Alvin Plantinga, "Ockham's Way Out," *Faith and Philosophy* 3(1986): 256.

{17} J. L. Mackie, "Newcomb's Paradox and the Direction of Causation, " *Canadian Journal of Philosophy* 7 (1977): 214, 223; Gregory S. Kavva, "What is Newcomb's Problem About?" *American Philosophical Quarterly* 17 (1980): 278; Bar-Hillel and Margalit, "Newcomb's Paradox," p. 299; Cargile, "Newcomb's Paradox," p. 237; Schlesinger, *Time*, p. 76.

{18} Nozick, "Newcomb's Problem," p. 146.

{19} Ahern, "Foreknowledge," p. 484.

{20} G. Schlesinger, "The Unpredictability of Free Choices," *British Journal for the Philosophy of Science* 25 (1974): 209-21.

{21} Schlesinger, *Time*, pp. 78-83.

{22} David Lewis, "Counterfactual Dependence and Time's Arrow, " *Nous* 13 (1979): 456-7.

{23} Lewis, "Rich," p. 377 Lewis, " Prisoners' Dilemma," pp. 236-7. Like Nozick, Lewis uses the notion of causal influence very broadly. Since in the original paradox the being did not make his predictions based on precognition, Lewis points out that nothing I do now will have any effect on whether I get my million or not. Therefore, a backtracking counterfactual is impermissible. If we suppose that God's foreknowledge is determined by one's choice, however, Lewis's objection would no longer be relevant.

{24} Lewis, "Prisoners' Dilemma," pp. 236-7. Like Nozick, Lewis uses the notion of casual influence very broadly. Since in the original paradox the being did not make his predictions based on precognition, Lewis points out that nothing I do now will have any effect on whether I get my million or not. Therefore, a backtracking counterfactual is impermissible. If we suppose that God's foreknowledge is determined by one's choice, however, Lewis' objection would no longer be relevant.

{25} Terence Horgan, "Counterfactuals and Newcomb's Problem," *Journal of Philosophy* 78 (1981): 331-56.

{26} Levi, "Newcombmania," p. 337.

{27} See Richmond Campbell, "Introduction," in *Paradoxes*, p. 24. Levi does agree, however, that if the predictor is inerrant, then the one-box strategy is correct.

- {28} Terence Horgan, "Newcomb's Problem: A Stalemate," in *Paradoxes*. p. 224.
- {29} *Ibid.*
- {30} Campbell, "Introduction," p. 26.
- {31} Ellery Eells, "Causation, Decision, and Newcomb's Paradox," in *Paradoxes*, pp. 206-9.
- {32} Horgan, "Stalemate," p. 226.
- {33} Eells, "Newcomb's Paradox, " pp. 209-11.
- {34} Horgan, "Stalemate," p. 227.
- {35} *Ibid.*, p. 234.
- {36} Steven J. Brams, *Superior Beings* (New York: Springer Verlag, 1983), pp. 46-52; Cargile, "Paradox," p. 237.
- {37} Carlisle, "Paradox," p. 237.
-

Divine Timelessness and Necessary Existence

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

One of Brian Leftow's most important arguments for divine atemporality is his argument from God's necessary existence.{1} According to Leftow, necessary existence entails timelessness, and, since God must have the perfection of necessary existence, He must therefore be timeless.

Formulation of Leftow's Argument

Unfortunately, Leftow's paragraph-length statement of this proof is a summary of reasoning scattered throughout the book which is only vaguely referenced by Leftow. I was unable to find any straightforward argument that whatever exists necessarily is timeless. So far as I am able to reconstruct his argument, Leftow appears to reason that if God is temporal, He is essentially temporal; and that since He is a necessary being, time therefore exists necessarily; but that since time is in fact contingent, God is therefore not temporal. Leftow's argument may be formulated as follows:

1. God exists necessarily. P
2. Time exists contingently. P
3. If God is temporal, God is essentially temporal. P
4. If God exists necessarily, then if God is essentially temporal, time exists necessarily. P
5. If God is essentially temporal, then time exists necessarily. 1,4 (MPP)
6. God is temporal. P
7. God is essentially temporal. 3,6 (MPP)
8. Time exists necessarily. 5,7 (MPP)
9. Time exists contingently and time exists necessarily. 2,8 (Conj.)
10. If God is temporal, then time exists contingently and time exists necessarily. 6-9 (CP)
11. God is not temporal. 10 (RAA)

The crucial premisses in the reasoning are (2) and (3), since we take (1) for granted. Let us examine Leftow's reasons for thinking each to be true.

The Contingency of Time

Premiss (2) is not uncontroversial. Isaac Newton held that time exists necessarily precisely in virtue of God's existence. In Newton's view, time (like space) is an emanative effect of God's being. He explains,

No being exists or can exist which is not related to space in some way. God is everywhere, created minds are somewhere, and body is in the space that it occupies; and whatever is neither everywhere nor anywhere does not exist. And hence it follows that space is an [emanative] effect arising from the first existence of being, because when any being is postulated, space is postulated. And the same may be asserted of duration: for certainly both are dispositions of being or attributes according to which we denominate quantitatively the presence and duration of any existing individual thing. So the quantity of the existence of God was eternal, in relation to duration, and infinite in relation to the space in which he is present; and the quantity of the existence of a created thing was as great, in relation to duration, as the duration since the beginning of its existence, and in relation to the size of its presence as great as the space belonging to it. {2}

Newtonian absolute time and space are thus rooted in the divine attributes of eternity and omnipresence, as Newton explains in the General Scholium to his *Principia*:

He is eternal and infinite . . .; that is, his duration reaches from eternity to eternity; his presence from infinity to infinity He is not eternity and infinity, but eternal and infinite; he is not duration or space, but he endures and is present. He endures forever, and is everywhere present; and, by existing always and everywhere, he constitutes duration and space. Since every particle of space is *always*, and every indivisible moment of duration is *everywhere*, certainly the Maker and Lord of all things cannot be *never* and *nowhere*.{3}

Thus, a theist of Newtonian stripe would deny that God's necessary existence entails His atemporality, since (2) is false.

What justification, then, does Leftow offer for (2)? He presents three brief arguments for time's contingency,{4} but it is doubtful that these would convince a theist of Newtonian stripe, who believes that time is a concomitant of God's existence and therefore necessary. To take his arguments in reverse order: (i) *Time is a physical reality, and a physically empty world is conceivable*. Newton would have agreed that a physically empty world is conceivable, but disagreed that time is merely a physical reality. God's time, absolute time, would continue to flow even in a physically empty world. He wrote, "although we can possibly imagine that there is nothing in space, yet we cannot think that space does not exist, just as we cannot think that there is no duration, even though it would be possible to suppose that nothing whatever endures." {5} So long as God exists, space and time could no more fail to exist than God's ubiquity and eternity, even in a physically empty world. (ii) *The propositions "no time exists" and "no temporal things exist" seem to be possibly true*. This assertion would not impress the Newtonian, however, since he connects the existence of time (and space) necessarily to the being of God as emanative effects of God's existence and therefore regards these propositions as impossible. (iii) *Space-time has a beginning and so must be contingent. If it is rejoined that since time exists at every moment of time and therefore can exist necessarily even though it has a beginning, one may reply that possibly there is a moment prior to the beginning of our time series T, so that possibly there is a time at which T does not exist*. Again, however, the beginning of physical space-time would not in the least faze the Newtonian, who holds that God's metaphysical time preceded any creation on His part of physical space-time. Moreover, even Leftow's answer to the rejoinder is unsatisfactory. Anything that begins to exist within time in a world *W* cannot be necessary because there will be a possible world *W** exactly similar to that segment of *W*'s history during which that thing does not exist. But, paradoxically, no matter how brief its existence, there is in no world a time during which time does not exist and so no means of pointing thereby to a world comprising such void time. Leftow's reply only shows that there are worlds in which T--the actual series of times--does not exist, not that there are worlds in which time does not exist. Even if every time series is contingent, it does not follow that time itself is contingent, just it does not follow from the contingency of every shape of an object that it is contingent that the object have a shape. It does seem bizarre to say that time can be necessarily existent and yet have a beginning, but Leftow needs to say more than he has to refute this position. In sum, Leftow's arguments for time's contingency are ineffectual against the Newtonian position which regards time as a necessary concomitant of God's existence. What is wanted here is some sort of critique of the view that God's existing entails the existence of time (and space).

Leftow does have something relevant to say on this score.^{6} He argues that a temporal God must also be spatial, and he rejects God's spatiality as incompatible with orthodox theism. Since God must be spaceless, it follows that He must be timeless as well. Hence, time cannot be necessary in virtue of God's existence.

Leftow's appeal to the argument from divine spacelessness is curious because that argument constitutes a quite independent justification for divine timelessness which is brought into play here only to rescue the argument from necessary existence. In any case, the appeal to God's spacelessness is ineffectual with respect to the classical Newtonian, since he holds that God does exist in infinite space as well as time. Leftow's rejection of the Newtonian position on the grounds of its incompatibility with orthodox theism appears somewhat Janus-faced, since he himself advocates a theory of divine eternity which seems to be incompatible with orthodox Christian theism.^{7}

But never mind; even if we do reject divine spatiality as incompatible with Christian orthodoxy, what reason is there to think that divine temporality entails divine spatiality? Leftow responds,

something is located in one dimension of a geometry if and only if it is located in all. So if it is correct to represent time as another dimension, it follows that whatever in [*sic*] time is also in space: *only spatial things are temporal* . . . if God is in the time of our world, God is also in space. Any object with a space-time location is a physical object. Hence if the time in which God exists is the same physical time in which we exist, then God is a physical object with a spatial location.^{8}

Since God is not a physical object, He is timeless and, hence, necessarily timeless.

This argument is, however, unsound. In the first place, one could dispute the argument on purely physical grounds alone in that it fails to take sufficient cognizance of the difference between coordinate time and parameter time. It is true that insofar as time plays the role of a coordinate, it is connected with a system of spatial coordinates, so that anything to which a temporal coordinate can be assigned is such that spatial coordinates are assignable to it as well. But insofar as time functions as a parameter, it is independent of space, and something which possesses temporal location and extension need not be held to exist in space as well as time. In Newtonian mechanics time plays the role of a parameter, not a coordinate, and, interestingly, the same is true of Einstein's formulation of the Special Theory of Relativity (STR)--the now familiar space-time formulation derives later from Minkowski. STR can be validly formulated in either way. Moreover, since STR is a local theory only, we must, in order to achieve a global perspective, consider time as it functions in cosmological models based on the General Theory of Relativity (GTR), on which matter Leftow is silent. While time is defined in the standard Friedman models by means of spatial hypersurfaces, the time parameter in the Robertson-Walker line element which describes the space-time metric is distinguished precisely by its independence of space. Moreover, spatio-temporal coordinates in GTR are purely conventional and have no physical significance. Thus, it is not obvious that a being could not exist at a certain moment of cosmic time without being spatially located as well.

But Leftow's argument suffers from a far more serious shortcoming than this. The argument appears to rest upon a crucial presupposition which will affect fundamentally one's theories of time and eternity and which I believe to be profoundly mistaken, namely, the reductionistic

equation of time with *physical* time, that is to say, with time as it plays a role in physics. That this equation is mistaken is obvious from the simple fact that whereas physical time came into existence after the Big Bang singularity, time itself may well have existed prior to the initial cosmological singularity. A succession of mental events in God's mind, His counting, for example, would alone suffice to generate a temporal series in the absence of any physical objects whatsoever.^{9} Thus, it is plainly not the case that something is in time if and only if it is in space--and that metaphysical truth is not negated by the fact that in some physical theories an event which is assigned a temporal coordinate in space-time also has spatial coordinates as well.

Leftow attempts to come to grips with the objection that time as such is not to be equated with time as it plays a role in physics. This objection, Leftow figures, is most plausibly construed to mean that STR does not tell us "the literal truth about the nature of time."^{10} Fair enough; but the anti-reductionist would also deny that the various definitions of time in GTR, Quantum Theory, Quantum Cosmology, and so on, represent the literal truth about time either.

Leftow's response is two-fold. First, one can say that space and time do possess objectively just the structure described in STR. We can generalize Leftow's claim to include other physical theories as well. But clearly this response fails to turn back the force of the objection: at best the response only shows that it is epistemically possible that the structure of space and time is literally described by such theories. But that does not show that it actually *is* literally described by those theories. Indeed, we have seen what I consider to be a knock-down argument that these theories do not give us the literal truth about time: it is impossible to extend physical time through the Big Bang singularity, but God could have created time itself prior to the initial cosmological singularity simply by generating a sequence of mental events. It seems clear then that to be in time is not also to be in space. Now perhaps in fact the physical quantities representing time in scientific theories contingently coincide with or provide accurate measures of time itself. But to claim that whatever is in time is therefore also in space is to confound time and space with their measures.

Leftow's second response to the anti-reductionist objection is that the very fact that the defender of divine temporality is driven to deny the literal truth of STR confirms Leftow's argument that if STR is true, then a spaceless God is timeless. This response is just misconceived. Leftow labors under the misimpression, apparently communicated to him personally by William Hasker, that "What forces us, in our Einsteinian universe, to regard time as a fourth dimension is the relativity of simultaneity."^{11} This, as I have mentioned, is inaccurate, since in Einstein's original formulation of STR time is a parameter, not a coordinate. Nothing in the theory itself requires us to say that whatever is temporal is *ipso facto* spatial. Moreover, we need to keep clearly in view that when Leftow says that he assumes that STR is true, he means much more than the theory's admitted empirical adequacy or even its accuracy in describing physical space and time; he means that physical space and time, as these are defined in that theory, are literally space and time themselves, which is an enormous metaphysical assumption which begs some justification.

It seems to me, therefore, that Leftow has failed to provide any plausible grounds for inferring divine spatiality from divine temporality. The appeal to God's spacelessness thus proves to be unavailing as a demonstration that God cannot be necessarily temporal and so time itself necessary in virtue of God's necessary existence. Hence, the truth of (2) is not justified on the basis of God's spacelessness.

A more thorough analysis of time and space will be necessary to refute Newton's heterodox view of necessary divine temporality. Such a critique would most plausibly appeal to some sort of relational theory of time, according to which time would not exist in the total absence of events. One could then conceive of a world in which God refrains from creation and exists changelessly. Such a static, eventless world would be timeless; hence, it follows that time does not exist necessarily. Given that time exists, it therefore exists contingently, *Q.E.D.* If one finds relational theories of time attractive, then Christian theists, at least, have good reasons to regard (2) as true.

The Essentiality of Divine Temporality

But that takes us to the more controversial premiss (3). In support of this premiss, Leftow appears to argue that a timeless God could not possibly be temporal because "temporal and timeless beings will have to have properties so radically different as to make transworld identification of such beings implausible."[\[12\]](#) What shall we make of this claim?

Conclusion

In conclusion, it seems to me that Leftow's argument for divine timelessness based on God's necessary existence does not succeed. He fails to provide a convincing case for premiss (2), and the most plausible reason for taking (2) to be true, namely, the possibility of God's existing changelessly alone and, hence, timelessly, turns out to undermine the truth of (3), since a temporal God could have refrained from creating and so existed timelessly. Therefore, there is no reason to think that a necessary being could not exist temporally.

EndNotes

[\[1\]](#) Brian Leftow, *Time and Eternity*, Cornell Studies in Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991), pp. 270-71.

[\[2\]](#) Isaac Newton, "On the Gravity and Equilibrium of Fluids," in *Unpublished Scientific Papers of Isaac Newton*, ed. and trans. A. Rupert Hall and Marie Boas Hall (Cambridge: Cambridge University Press, 1962), pp. 136-37. Hall and Hall's translation of the phrase *entis primario existentis effectus emanativus* conceals the bracketed word I have inserted in the text. Space and time are not voluntary creations of God, but, as it were, displacements in being resulting from His existence.

[\[3\]](#) Isaac Newton, *Sir Isaac Newton's 'Mathematical Principles of Natural Philosophy' and his 'System of the World,'* trans. Andrew Motte, rev. with an Appendix by Florian Cajori, 2 vols. (Los Angeles: University of California Press, 1966), 2: 545.

[\[4\]](#) Leftow, *Time and Eternity*, pp. 32-34. Cf. Robert Oakes, "Temporality and Divinity: an Analytic Hurdle," *Sophia* 31 (1992): 11-26, who, though espousing the same general argument as Leftow, admits that he cannot prove time's contingency in the face of a Newtonian opponent. Instead Oakes alleges that making time necessary in virtue of God's existence either compromises the Christian doctrine of God's unique aseity or else divinizes time into an aspect of God. Newton would have regarded this as a pseudo-dilemma. As an emanative effect of God's being, time does not exist *a se*, even though it exists necessarily.

What Newton said of space applies also to time: "it is not absolute in itself [per se], but is as it were an emanative effect of God" (Newton, "On the Gravity and Equilibrium of Fluids," p. 99). Nor should time be thought of as a divine attribute. When Samuel Clarke asserted in his correspondence with Leibniz that "space is a property, in like manner as duration is," of infinite substance or God (Samuel Clarke and G. W. Leibniz, *The Leibniz-Clarke Correspondence*, ed. with an Introduction and Notes by H. G. Alexander [Manchester: Manchester University Press, 1956], p. 121), an alarmed Newton intervened in the publication of the Des Maiseaux edition of the Leibniz-Clarke correspondence by writing anonymously an *Avertissement au Lecteur* in which he advised that when Mr. Clarke referred to space and time as qualities or properties, this was due to "an inevitable imperfection of language" and should be understood to mean that space and time are "modes of existence" and "consequences of the existence of a substance which is really, necessarily, and substantially all-present and eternal" (see Alexandre Koyre and I. Bernard Cohen, "Newton and the Leibniz-Clarke Correspondence," *Archives internationales d'histoire des sciences* 15 [1962]: 63-126). Though God has the properties of being omnipresent and eternal, space and time themselves, as effects of God, are not themselves properties or attributes of God.

{5} Newton, "On the Gravity and Equilibrium of Fluids," pp. 137-38.

{6} Leftow, *Time and Eternity*, pp. 35-36.

{7} Leftow admits that if only spatial things are temporal, then non-spatial entities such as changeable angels or disembodied souls do not exist (Brian Leftow, "Eternity and Simultaneity," *Faith and Philosophy* 8 [1991]: 163). This is by no means insignificant. The doctrine of the intermediate state of the soul after death may prove to be essential to the coherence of the Christian doctrine of eschatological resurrection and final judgement, due to the need to preserve personal identity between earthly and resurrected human beings. Doctrines pertinent to angelology/demonology may have important practical ramifications for Christian spirituality (Eph. 6.12).

{8} Leftow, *Time and Eternity*, p. 36.

{9} Thus, I agree with Grace Jantzen when she says,

"Time is more basic than space. For instance, the theory of relativity does not of itself solve the problem of whether disembodied persons are possible, persons who, if they had conscious processes . . . would clearly be temporal even though *ex hypothesi* not spatial. The theory of relativity applies to the relationship and measurement of space and time in the physical contents of the universe; it does not address itself to the question whether non-spatial entities might exist, nor whether they would be temporal or non-temporal if they did . . . it might not be possible for us to *measure* the duration of a non-spatial entity or event, but this is not the same as saying that whatever is temporal must be spatial" (Grace M. Jantzen, *God's World, God's Body*, with a Foreword by John MacQuarrie [London: Darton, Longman, and Todd, 1984], p. 44).

See also the remarks of W. Norris Clarke, *The Philosophical Approach to God* (Winston-Salem, N.C.: Wake Forest University, 1979), p. 94, for a time based on "the pure succession of contents of consciousness" in the mind of God, in contrast to the temporal succession based principally on "*the continuous physical* motion going on in our world."

{10}Leftow, *Time and Eternity*, p. 272.

{11}Ibid. (Leftow's citation from personal correspondence with William Hasker).

{12}Ibid., p. 44.

The Existence of God and the Beginning of the Universe

William Lane Craig

*William Craig earned a doctorate in philosophy at the University of Birmingham, England, before taking a doctorate in theology from the Ludwig Maximilians Universität-München, West Germany, at which latter institution he was for two years a Fellow of the Alexander von Humboldt-Stiftung. He is currently a visiting scholar at the Université Catholique de Louvain. He has authored various books, including *The Kalam Cosmological Argument*, *The Cosmological Argument from Plato to Leibniz*, and *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, as well as articles in professional journals like *British Journal for the Philosophy of Science*, *Zeitschrift für Philosophische Forschung*, *Australasian Journal of Philosophy*, and *Philosophia*.*

The *kalam* cosmological argument, by showing that the universe began to exist, demonstrates that the world is not a necessary being and, therefore, not self-explanatory with respect to its existence. Two philosophical arguments and two scientific confirmations are presented in support of the beginning of the universe. Since whatever begins to exist has a cause, there must exist a transcendent cause of the universe.

Source: "The Existence of God and the Beginning of the Universe." *Truth: A Journal of Modern Thought* 3 (1991): 85-96.

Introduction

"The first question which should rightly be asked," wrote G.W.F. Leibniz, is "*Why is there something rather than nothing?*"[1] This question does seem to possess a profound existential force, which has been felt by some of mankind's greatest thinkers. According to Aristotle, philosophy begins with a sense of wonder about the world, and the most profound question a man can ask concerns the origin of the universe.[2] In his biography of Ludwig Wittgenstein, Norman Malcolm reports that Wittgenstein said that he sometimes had a certain experience which could best be described by saying that "when I have it, *I wonder at the existence of the world*. I am then inclined to use such phrases as 'How extraordinary that anything should exist!'"[3] Similarly, one contemporary philosopher remarks, ". . . My mind often seems to reel under the immense significance this question has for me. That anything exists at all does seem to me a matter for the deepest awe."[4]

Why *does* something exist instead of nothing? Leibniz answered this question by arguing that something exists rather than nothing because a necessary being exists which carries within

itself its reason for existence and is the sufficient reason for the existence of all contingent being.[5]

Although Leibniz (followed by certain contemporary philosophers) regarded the non-existence of a necessary being as logically impossible, a more modest explication of necessity of existence in terms of what he calls "factual necessity" has been given by John Hick: a necessary being is an eternal, uncaused, indestructible, and incorruptible being.[6] Leibniz, of course, identified the necessary being as God. His critics, however, disputed this identification, contending that the material universe could itself be assigned the status of a necessary being. "Why," queried David Hume, "may not the material universe be the necessary existent Being, according to this pretended explanation of necessity?"[7] Typically, this has been precisely the position of the atheist. Atheists have not felt compelled to embrace the view that the universe came into being out of nothing for no reason at all; rather they regard the universe itself as a sort of factually necessary being: the universe is eternal, uncaused, indestructible, and incorruptible. As Russell neatly put it, ". . . The universe is just there, and that's all." [8]

Does Leibniz's argument therefore leave us in a rational impasse, or might there not be some further resources available for untangling the riddle of the existence of the world? It seems to me that there are. It will be remembered that an essential property of a necessary being is eternity. If then it could be made plausible that the universe began to exist and is not therefore eternal, one would to that extent at least have shown the superiority of theism as a rational world view.

Now there is one form of the cosmological argument, much neglected today but of great historical importance, that aims precisely at the demonstration that the universe had a beginning in time.[9] Originating in the efforts of Christian theologians to refute the Greek doctrine of the eternity of matter, this argument was developed into sophisticated formulations by medieval Islamic and Jewish theologians, who in turn passed it back to the Latin West. The argument thus has a broad inter-sectarian appeal, having been defended by Muslims, Jews, and Christians both Catholic and Protestant.

This argument, which I have called the kalam cosmological argument, can be exhibited as follows:

1. Whatever begins to exist has a cause of its existence.
2. The universe began to exist.
 - 2.1 Argument based on the impossibility of an actual infinite.
 - 2.11 An actual infinite cannot exist.
 - 2.12 An infinite temporal regress of events is an actual infinite.
 - 2.13 Therefore, an infinite temporal regress of events cannot exist.
 - 2.2 Argument based on the impossibility of the formation of an actual infinite by successive addition.
 - 2.21 A collection formed by successive addition cannot be actually infinite.

- 2.22 The temporal series of past events is a collection formed by successive addition.
- 2.23 Therefore, the temporal series of past events cannot be actually infinite.

3. Therefore, the universe has a cause of its existence.

Let us examine this argument more closely.

Defense of the Kalam Cosmological Argument

Second Premiss

Clearly, the crucial premiss in this argument is (2), and two independent arguments are offered in support of it. Let us therefore turn first to an examination of the supporting arguments.

First Supporting Argument

In order to understand (2.1), we need to understand the difference between a potential infinite and an actual infinite. Crudely put, a potential infinite is a collection which is increasing toward infinity as a limit, but never gets there. Such a collection is really indefinite, not infinite. The sign of this sort of infinity, which is used in calculus, is ∞ . An actual infinite is a collection in which the number of members really *is* infinite. The collection is not growing toward infinity; it is infinite, it is "complete." The sign of this sort of infinity, which is used in set theory to designate sets which have an infinite number of members, such as $\{1, 2, 3, \dots\}$, is $\aleph_0$. Now (2.11) maintains, not that a potentially infinite number of things cannot exist, but that an actually infinite number of things cannot exist. For if an actually infinite number of things could exist, this would spawn all sorts of absurdities.

Perhaps the best way to bring home the truth of (2.11) is by means of an illustration. Let me use one of my favorites, Hilbert's Hotel, a product of the mind of the great German mathematician, David Hilbert. Let us imagine a hotel with a finite number of rooms. Suppose, furthermore, that *all the rooms are full*. When a new guest arrives asking for a room, the proprietor apologizes, "Sorry, all the rooms are full." But now let us imagine a hotel with an infinite number of rooms and suppose once more that all the rooms are full. There is not a single vacant room throughout the entire infinite hotel. Now suppose a new guest shows up, asking for a room. "But of course!" says the proprietor, and he immediately shifts the person in room #1 into room #2, the person in room #2 into room #3, the person in room #3 into room #4 and so on, out to infinity. As a result of these room changes, room #1 now becomes vacant and the new guest gratefully checks in. But remember, before he arrived, all the rooms were full! Equally curious, according to the mathematicians, there are now no more persons in the hotel than there were before: the number is just infinite. But how can this be? The proprietor just added the new guest's name to the register and gave him his keys-how can there not be one more person in the hotel than before? But the situation becomes even stranger. For suppose an infinity of new guests show up the desk, asking for a room. "Of course, of course!" says the proprietor, and he proceeds to shift the person in room #1 into room #2, the person in room #2 into room #4, the person in room #3 into room #6, and so on out to infinity, always putting each former occupant into the room number twice his own. As a result, all the odd numbered rooms become vacant, and the infinity of new guests is easily

accommodated. And yet, before they came, all the rooms were full! And again, strangely enough, the number of guests in the hotel is the same after the infinity of new guests check in as before, even though there were as many new guests as old guests. In fact, the proprietor could repeat this process *infinitely many times* and yet there would never be one single person more in the hotel than before.

But Hilbert's Hotel is even stranger than the German mathematician gave it out to be. For suppose some of the guests start to check out. Suppose the guest in room #1 departs. Is there not now one less person in the hotel? Not according to the mathematicians-but just ask the woman who makes the beds! Suppose the guests in room numbers 1, 3, 5, . . . check out. In this case an infinite number of people have left the hotel, but according to the mathematicians there are no less people in the hotel-but don't talk to that laundry woman! In fact, we could have every other guest check out of the hotel and repeat this process infinitely many times, and yet there would never be any less people in the hotel. But suppose instead the persons in room number 4, 5, 6, . . . checked out. At a single stroke the hotel would be virtually emptied, the guest register reduced to three names, and the infinite converted to finitude. And yet it would remain true that the *same number* of guests checked out this time as when the guests in room numbers 1, 3, 5, . . . checked out. Can anyone sincerely believe that such a hotel could exist in reality? These sorts of absurdities illustrate the impossibility of the existence of an actually infinite number of things.

That takes us to (2.12). The truth of this premiss seems fairly obvious. If the universe never began to exist, then prior to the present event there have existed an actually infinite number of previous events. Hence, a beginningless series of events in time entails the existence of an actually infinite number of things, namely, past events.

Given the truth of (2.11) and (2.12), the conclusion (2.13) logically follows. The series of past events must be finite and have a beginning. But since the universe is not distinct from the series of events, it follows that the universe began to exist.

At this point, we might find it profitable to consider several objections that might be raised against the argument. First let us consider objections to (2.11). Wallace Matson objects that the premiss must mean that an actually infinite number of things is *logically* impossible; but it is easy to show that such a collection is logically possible. For example, the series of negative numbers $\{ \dots -3, -2, -1 \}$ is an actually infinite collection with no first member.[10] Matson's error here lies in thinking that (2.11) means to assert the *logical* impossibility of an actually infinite number of things. What the premiss expresses is the real or factual impossibility of an actual infinite. To illustrate the difference between real and logical possibility: there is no logical impossibility in something's coming to exist without a cause, but such a circumstance may well be really or metaphysically impossible. In the same way, (2.11) asserts that the absurdities entailed in the real existence of an actual infinite show that such an existence is metaphysically impossible. Hence, one could grant that in the conceptual realm of mathematics one can, given certain conventions and axioms, speak consistently about infinite sets of numbers, but this in no way implies that an actually infinite number of things is really possible. One might also note that the mathematical school of intuitionism denies that even the number series is actually infinite (they take it to be potentially infinite only), so that appeal to number series as examples of actual infinities is a moot procedure.

The late J.L. Mackie also objected to (2.11), claiming that the absurdities are resolved by noting that for infinite groups the axiom "the whole is greater than its part" does not hold, as it

does for finite groups.[11] Similarly, Quentin Smith comments that once we understand that an infinite set has a proper subset which has the same number of members as the set itself, the purportedly absurd situations become "perfectly believable." [12] But to my mind, it is precisely this feature of infinite set theory which, when translated into the realm of the real, yields results which are perfectly incredible, for example, Hilbert's Hotel. Moreover, not all the absurdities stem from infinite set theory's denial of Euclid's axiom: the absurdities illustrated by guests checking out of the hotel stem from the self-contradictory results when the inverse operations of subtraction or division are performed using transfinite numbers. Here the case against an actually infinite collection of things becomes decisive.

Finally one might note the objection of Sorabji, who maintains that illustrations such as Hilbert's Hotel involve no absurdity. In order to understand what is wrong with the *kalam* argument, he asks us to envision two parallel columns beginning at the same point and stretching away into the infinite distance, one the column of past years and the other the column of past days. The sense in which the column of past days is no larger than the column of past years, says Sorabji, is that the column of days will not "stick out" beyond the far end of the other column, since neither column has a far end. Now in the case of Hilbert's Hotel there is the temptation to think that some unfortunate resident at the far end will drop off into space. But there is no far end: the line of residents will not stick out beyond the far end of the line of rooms. Once this is seen, the outcome is just an explicable- even if a surprising and exhilarating- truth about infinity.[13] Now Sorabji is certainly correct, as we have seen, that Hilbert's Hotel illustrates an explicable truth about the nature of the actual infinite. If an actually infinite number of things could exist, a Hilbert's Hotel would be possible. But Sorabji seems to fail to understand the heart of the paradox: I, for one, experience no temptation to think of people dropping off the far end of the hotel, for there is none, but I do have difficulty believing that a hotel in which all the rooms are occupied can accommodate more guests. Of course, the line of guests will not stick out beyond the line of rooms, but if all of those infinite rooms *already* have guests in them, then can moving those guests about really create empty rooms? Sorabji's own illustration of the columns of past years and days I find not a little disquieting: if we divide the columns into foot-long segments and mark one column as the years and the other as the days, then one column is as long as the other and yet for every foot-length segment in the column of years, 365 segments of equal length are found in the column of days! These paradoxical results can be avoided only if such actually infinite collections can exist only in the imagination, not in reality. In any case, the Hilbert's Hotel illustration is not exhausted by dealing only with the addition of new guests, for the subtraction of guests results in absurdities even more intractable. Sorabji's analysis says nothing to resolve these. Hence, it seems to me that the objections to premiss (2.11) are less plausible than the premiss itself.

With regard to (2.12), the most frequent objection is that the past ought to be regarded as a potential infinite only, not an actual infinite. This was Aquinas's position versus Bonaventure, and the contemporary philosopher Charles Hartshorne seems to side with Thomas on this issue.[14] Such a position is, however, untenable. The future is potentially infinite, since it does not exist; but the past is actual in a way the future is not, as evidenced by the fact that we have traces of the past in the present, but no traces of the future. Hence, if the series of past events never began to exist, there must have been an actually infinite number of past events.

The objections to either premiss therefore seem to be less compelling than the premisses themselves. Together they imply that the universe began to exist. Hence, I conclude that this argument furnishes good grounds for accepting the truth of premiss (2) that the universe began to exist.

Second Supporting Argument

The second argument (2.2) for the beginning of the universe is based on the impossibility of forming an actual infinite by successive addition. This argument is distinct from the first in that it does not deny the possibility of the existence of an actual infinite, but the possibility of its being *formed* by successive addition.

Premiss (2.21) is the crucial step in the argument. One cannot form an actually infinite collection of things by successively adding one member after another. Since one can always add one more before arriving at infinity, it is impossible to reach actual infinity. Sometimes this is called the impossibility of "counting to infinity" or "traversing the infinite." It is important to understand that this impossibility has nothing to do with the amount of time available: it belongs to the nature of infinity that it cannot be so formed.

Now someone might say that while an infinite collection cannot be formed by beginning at a point and adding members, nevertheless an infinite collection could be formed by never beginning but ending at a point, that is to say, ending at a point after having added one member after another from eternity. But this method seems even more unbelievable than the first method. If one cannot count to infinity, how can one count down from infinity? If one cannot traverse the infinite by moving in one direction, how can one traverse it by simply moving in the opposite direction?

Indeed, the idea of a beginningness series ending in the present seems to be absurd. To give just one illustration: suppose we meet a man who claims to have been counting from eternity and is now finishing: . . . , -3, -2, -1, 0. We could ask, why did he not finish counting yesterday or the day before or the year before? By then an infinite time had already elapsed, so that he should already have finished by then. Thus, at no point in the infinite past could we ever find the man finishing his countdown, for by that point he should already be done! In fact, no matter how far back into the past we go, we can never find the man counting at all, for at any point we reach he will have already finished. But if at no point in the past do we find him counting, this contradicts the hypothesis that he has been counting from eternity. This illustrates the fact that the formation of an actual infinite by successive addition is equally impossible whether one proceeds to or from infinity.

Premiss (2.22) presupposes a dynamical view of time according to which events are actualized in serial fashion, one after another. The series of events is not a sort of timelessly subsisting world-line which appears successively in consciousness. Rather becoming is real and essential to temporal process. Now this view of time is not without its challengers, but to consider their objections in this article would take us too far afield.[15] In this piece, we must rest content with the fact that we are arguing on common ground with our ordinary intuitions of temporal becoming and in agreement with a good number of contemporary philosophers of time and space.

Given the truth of (2.21) and (2.22), the conclusion (2.23) logically follows. If the universe did not begin to exist a finite time ago, then the present moment could never arrive. But obviously, it has arrived. Therefore, we know that the universe is finite in the past and began to exist.

Again, it would be profitable to consider various objections that have been offered against this reasoning. Against (2.21), Mackie objects that the argument illicitly assumes an infinitely

distant starting point in the past and then pronounces it impossible to travel from that point to today. But there would in an infinite past be no starting point, not even an infinitely distant one. Yet from any given point in the infinite past, there is only a finite distance to the present.[16] Now it seems to me that Mackie's allegation that the argument presupposes an infinitely distant starting point is entirely groundless. The beginningless character of the series only serves to accentuate the difficulty of its being formed by successive addition. The fact that there is *no beginning at all*, not even an infinitely distant one, makes the problem more, not less, nettlesome. And the point that from any moment in the infinite past there is only a finite temporal distance to the present may be dismissed as irrelevant. The question is not how any finite portion of the temporal series can be formed, but how the whole infinite series can be formed. If Mackie thinks that because every segment of the series can be formed by successive addition therefore the whole series can be so formed, then he is simply committing the fallacy of composition.

Sorabji similarly objects that the reason it is impossible to count down from infinity is because counting involves by nature taking a starting number, which is lacking in this case. But completing an infinite lapse of years involves no starting year and is, hence, possible.[17] But this response is clearly inadequate, for, as we have seen, the years of an infinite past could be enumerated by the negative numbers, in which case a completed infinity of years would, indeed, entail a beginningless countdown from infinity. Sorabji anticipates this rebuttal, however, and claims that such a backwards countdown is possible in principle and therefore no logical barrier has been exhibited to the elapsing of an infinity of past years. Again, however, the question I am posing is not whether there is a logical contradiction in such a notion, but whether such a countdown is not metaphysically absurd. For we have seen that such a countdown should at any point already have been completed. But Sorabji is again ready with a response: to say the countdown should at any point already be over confuses counting an *infinity* of numbers with counting *all* the numbers. At any given point in the past, the eternal counter will have already counted an infinity of negative numbers, but that does not entail that he will have counted all the negative numbers. I do not think the argument makes this alleged equivocation, and this may be made clear by examining the reason why our eternal counter is supposedly able to complete a count of the negative numbers ending at zero. In order to justify the possibility of this intuitively impossible feat, the argument's opponent appeals to the so-called Principle of Correspondence used in set theory to determine whether two sets are equivalent (that is, have the same number of members) by matching the members of one set with the members of the other set and *vice versa*. On the basis of this principle the objector argues that since the counter has lived, say, an infinite number of years and since the set of past years can be put into a one-to-one correspondence with the set of negative numbers, it follows that by counting one number a year an eternal counter would complete a countdown of the negative numbers by the present year. If we were to ask why the counter would not finish next year or in a hundred years, the objector would respond that prior to the present year an infinite number of years will have already elapsed, so that by the Principle of Correspondence, all the numbers should have been counted by now. But this reasoning backfires on the objector: for, as we have seen, on this account the counter should at any point in the past have already finished counting all the numbers, since a one-to-one correspondence exists between the years of the past and the negative numbers. Thus, there is no equivocation between counting an infinity of numbers and counting all the numbers. But at this point a deeper absurdity bursts in view: for suppose there were another counter who counted at a rate of one negative number per day. According to the Principle of Correspondence, which underlies infinite set theory and transfinite arithmetic, both of our eternal counters will finish their countdowns at the same moment, even though one is

counting at a rate 365 times faster than the other! Can anyone believe that such scenarios can actually obtain in reality, but do not rather represent the outcome of an imaginary game being played in a purely conceptual realm according to adopted logical conventions and axioms?

As for premiss (2.22), many thinkers have objected that we need not regard the past as a beginningless infinite series with an end in the present. Popper, for example, admits that the set of all past events is actually infinite, but holds that the *series* of past events is potentially infinite. This may be seen by beginning in the present and numbering the events backwards, thus forming a potential infinite. Therefore, the problem of an actual infinite's being formed by successive addition does not arise.[18] Similarly, Swinburne muses that it is dubious whether a completed infinite series with no beginning but an end makes sense, but he proposes to solve the problem by beginning in the present and regressing into the past, so that the series of past events would have no end and would therefore not be a completed infinite.[19] This objection, however, clearly confuses the *mental regress* of counting with the *real progress* of the temporal series of events itself. Numbering the series from the present backwards only shows that if there are an infinite number of past events, then we can denumerate an infinite number of past events. But the problem is, how can this infinite collection of events come to be *formed* by successive addition? How we mentally conceive the series does not in any way affect the ontological character of the series itself as a series with no beginning but an end, or in other words, as an actual infinite completed by successive addition.

Once again, then, the objections to (2.21) and (2.22) seem less plausible than the premisses themselves. Together they imply (2.23), or that the universe began to exist.

First Scientific Confirmation

These purely philosophical arguments for the beginning of the universe have received remarkable confirmation from discoveries in astronomy and astrophysics during this century. These confirmations might be summarized under two heads: the confirmation from the expansion of the universe and the confirmation from thermodynamic properties of the universe.

With regard to the first, Hubble's discovery in 1929 of the red-shift in the light from distant galaxies began a revolution in astronomy perhaps as significant as the Copernican revolution. Prior to this time the universe as a whole was conceived to be static; but the startling conclusion to which Hubble was led was that the red-shift is due to the fact that the universe is in fact *expanding*. The staggering implication of this fact is that as one traces the expansion back in time, the universe becomes denser and denser until one reaches a point of infinite density from which the universe began to expand. The upshot of Hubble's discovery was that at some point in the finite past-probably around 15 billion years ago-the entire known universe was contracted down to a single mathematical point which marked the origin of the universe. That initial explosion has come to be known as the "Big Bang." Four of the world's most prominent astronomers described that event in these words:

The universe began from a state of infinite density. . . . Space and time were created in that event and so was all the matter in the universe. It is not meaningful to ask what happened before the Big Bang; it is like asking what is north of the North Pole. Similarly, it is not sensible to ask where the Big Bang took place. The point-universe was not an object isolated

in space; it was the entire universe, and so the answer can only be that the Big Bang happened everywhere.[20]

This event that marked the beginning of the universe becomes all the more amazing when one reflects on the fact that a state of "infinite density" is synonymous to "nothing." There can be no object that possesses infinite density, for if it had any size at all it could still be even more dense. Therefore, as Cambridge astronomer Fred Hoyle points out, the Big Bang Theory requires the creation of matter from nothing. This is because as one goes back in time, one reaches a point at which, in Hoyle's words, the universe was "shrunk down to nothing at all." [21] Thus, what the Big Bang model of the universe seems to require is that the universe began to exist and was created out of nothing.

Some theorists have attempted to avoid the absolute beginning of the universe implied by the Big Bang theory by speculating that the universe may undergo an infinite series of expansions and contractions. There are, however, good grounds for doubting the adequacy of such an oscillating model of the universe: (i) The oscillating model appears to be physically impossible. For all the talk about such models, the fact seems to be that they are only theoretically, but not physically possible. As the late Professor Tinsley of Yale explains, in oscillating models "even though the mathematics say that the universe oscillates, there is no known physics to reverse the collapse and bounce back to a new expansion. The physics seems to say that those models start from the Big Bang, expand, collapse, then end." [22] In order for the oscillating model to be correct, it would seem that the known laws of physics would have to be revised. (ii) The oscillating model seems to be observationally untenable. Two facts of observational astronomy appear to run contrary to the oscillating model. First, the observed homogeneity of matter distribution throughout the universe seems unaccountable on an oscillating model. During the contraction phase of such a model, black holes begin to gobble up surrounding matter, resulting in an inhomogeneous distribution of matter. But there is no known mechanism to "iron out" these inhomogeneities during the ensuing expansion phase. Thus, the homogeneity of matter observed throughout the universe would remain unexplained. Second, the density of the universe appears to be insufficient for the re-contraction of the universe. For the oscillating model to be even possible, it is necessary that the universe be sufficiently dense such that gravity can overcome the force of the expansion and pull the universe back together again. However, according to the best estimates, if one takes into account both luminous matter and non-luminous matter (found in galactic halos) as well as any possible contribution of neutrino particles to total mass, the universe is still only about one-half that needed for re-contraction. [23] Moreover, recent work on calculating the speed and deceleration of the expansion confirms that the universe is expanding at, so to speak, "escape velocity" and will not therefore re-contract. According to Sandage and Tammann, "Hence, we are forced to decide that . . . it seems inevitable that the Universe will expand forever"; they conclude, therefore, that "the Universe has happened only once." [24]

Second Scientific Confirmation

As if this were not enough, there is a second scientific confirmation of the beginning of the universe based on the thermodynamic properties of various cosmological models. According to the second law of thermodynamics, processes taking place in a closed system always tend toward a state of equilibrium. Now our interest is in what implications this has when the law is applied to the universe as a whole. For the universe is a gigantic closed system, since it is everything there is and no energy is being fed into it from without. The second law seems to imply that, given enough time, the universe will reach a state of thermodynamic equilibrium, known as the "heat death" of the universe. This death may be hot or cold, depending on

whether the universe will expand forever or eventually re-contract. On the one hand, if the density of the universe is great enough to overcome the force of the expansion, then the universe will re-contract into a hot fireball. As the universe contracts, the stars burn more rapidly until they finally explode or evaporate. As the universe grows denser, the black holes begin to gobble up everything around them and begin themselves to coalesce until all the black holes finally coalesce into one gigantic black hole which is coextensive with the universe, from which it will never re-emerge. On the other hand, if the density of the universe is insufficient to halt the expansion, as seems more likely, then the galaxies will turn all their gas into stars and the stars will burn out. At 10³⁰ years the universe will consist of 90% dead stars, 9% supermassive black holes, and 1% atomic matter. Elementary particle physics suggests that thereafter protons will decay into electrons and positrons, so that space will be filled with a rarefied gas so thin that the distance between an electron and a positron will be about the size of the present galaxy. At 10¹⁰⁰ years some scientists believe that the black holes themselves will dissipate into radiation and elementary particles. Eventually all the matter in the dark, cold, ever-expanding universe will be reduced to an ultra-thin gas of elementary particles and radiation. Equilibrium will prevail throughout, and the entire universe will be in its final state, from which no change will occur.

Now the question which needs to be asked is this: if, given sufficient time, the universe will reach heat death, then why is it not now in a state of heat death if it has existed for infinite time? If the universe did not begin to exist, then it should now be in a state of equilibrium. Some theorists have suggested that the universe escapes final heat death by oscillating from eternity past to eternity future. But we have already seen that such a model seems to be physically and observationally untenable. But even if we waive those considerations and suppose that the universe does oscillate, the fact is that the thermodynamic properties of this model imply the very beginning of the universe which its proponents seek to avoid. For the thermodynamic properties of an oscillating model are such that the universe expands farther and farther with each successive cycle. Therefore, as one traces the expansions back in time, they grow smaller and smaller. As one scientific team explains, "The effect of entropy production will be to enlarge the cosmic scale, from cycle to cycle. . . . Thus, looking back in time, each cycle generated less entropy, had a smaller cycle time, and had a smaller cycle expansion factor than the cycle that followed it." [25] Novikov and Zeldovich of the Institute of Applied Mathematics of the USSR Academy of Sciences therefore conclude, "The multicycle model has an infinite future, but only a finite past." [26] As another writer points out, the oscillating model of the universe thus still requires an origin of the universe prior to the smallest cycle. [27]

So whatever scenario one selects for the future of the universe, thermodynamics implies that the universe began to exist. According to physicist P.C.W. Davies, the universe must have been created a finite time ago and is in the process of winding down. Prior to the creation, the universe simply did not exist. Therefore, Davies concludes, even though we may not like it, we must conclude that the universe's energy was somehow simply "put in" at the creation as an initial condition. [28]

We therefore have both philosophical argument and scientific confirmation for the beginning of the universe. On this basis I think that we are amply justified in concluding the truth of premiss (2) that the universe began to exist.

First Premiss

Premiss (1) strikes me as relatively non-controversial. It is based on the metaphysical intuition that something cannot come out of nothing. Hence, any argument for the principle is apt to be less obvious than the principle itself. Even the great skeptic David Hume admitted that he never asserted so absurd a proposition as that something might come into existence without a cause; he only denied that one could *prove* the obviously true causal principle.[29] With regard to the universe, if originally there were absolutely *nothing*-no God, no space, no time-, then how could the universe possibly come to exist? The truth of the principle *ex nihilo, nihil fit* is so obvious that I think we are justified in foregoing an elaborate defense of the argument's first premiss.

Nevertheless, some thinkers, exercised to avoid the theism implicit in this premiss within the present context, have felt driven to deny its truth. In order to avoid its theistic implications, Davies presents a scenario which, he confesses, "should not be taken too seriously," but which seems to have a powerful attraction for Davies.[30] He has reference to a quantum theory of gravity according to which spacetime itself could spring uncaused into being out of absolutely nothing. While admitting that there is "still no satisfactory theory of quantum gravity," such a theory "would allow spacetime to be created and destroyed spontaneously and uncaused in the same way that particles are created and destroyed spontaneously and uncaused. The theory would entail a certain mathematically determined probability that, for instance, a blob of space would appear where none existed before. Thus, spacetime could pop out of nothingness as the result of a causeless quantum transition." [31]

Now in fact particle pair production furnishes no analogy for this radical *ex nihilo* becoming, as Davies seems to imply. This quantum phenomenon, even if an exception to the principle that every event has a cause, provides no analogy to something's coming into being out of nothing. Though physicists speak of this as particle pair creation and annihilation, such terms are philosophically misleading, for all that actually occurs is conversion of energy into matter or vice versa. As Davies admits, "The processes described here do not represent the creation of matter out of nothing, but the conversion of pre-existing energy into material form." [32] Hence, Davies greatly misleads his reader when he claims that "Particles . . . can appear out of nowhere without specific causation" and again, "Yet the world of quantum physics routinely produces something for nothing." [33] On the contrary, the world of quantum physics *never* produces something for nothing.

But to consider the case on its own merits: quantum gravity is so poorly understood that the period prior to 10⁻⁴³ sec, which this theory hopes to describe, has been compared by one wag to the regions on the maps of the ancient cartographers marked "Here there be dragons": it can easily be filled with all sorts of fantasies. In fact, there seems to be no good reason to think that such a theory would involve the sort of spontaneous becoming *ex nihilo* which Davies suggests. A quantum theory of gravity has the goal of providing a theory of gravitation based on the exchange of particles (gravitons) rather than the geometry of space, which can then be brought into a Grand Unification Theory that unites all the forces of nature into a supersymmetrical state in which one fundamental force and a single kind of particle exist. But there seems to be nothing in this which suggests the possibility of spontaneous becoming *ex nihilo*.

Indeed, it is not at all clear that Davies's account is even intelligible. What can be meant, for example, by the claim that there is a mathematical probability that nothingness should spawn a region of spacetime "where none existed before?" It cannot mean that given enough time a region of spacetime would pop into existence at a certain place, since neither place nor time

exist apart from spacetime. The notion of some probability of something's coming out of nothing thus seems incoherent.

I am reminded in this connection of some remarks made by A.N. Prior concerning an argument put forward by Jonathan Edwards against something's coming into existence uncaused. This would be impossible, said Edwards, because it would then be inexplicable why just any and everything cannot or does not come to exist uncaused. One cannot respond that only things of a certain nature come into existence uncaused, since prior to their existence they have no nature which could control their coming to be. Prior made a cosmological application of Edwards's reasoning by commenting on the steady state model's postulating the continuous creation of hydrogen atoms *ex nihilo*:

It is no part of Hoyle's theory that this process is causeless, but I want to be more definite about this, and to say that if it is causeless, then what is alleged to happen is fantastic and incredible. If it is possible for objects-objects, now, which really are objects, "substances endowed with capacities"-to start existing without a cause, then it is incredible that they should all turn out to be objects of the same sort, namely, hydrogen atoms. The peculiar nature of hydrogen atoms cannot possibly be what makes such starting-to-exist possible for them but not for objects of any other sort; for hydrogen atoms do not have this nature until they are there to have it, i.e. until their starting-to-exist has already occurred. That is Edwards's argument, in fact; and here it does seem entirely cogent. . . .[34]

Now in the case at hand, if originally absolutely nothing existed, then why should it be spacetime that springs spontaneously out of the void, rather than, say, hydrogen atoms or even rabbits? How can one talk about the probability of any particular thing's popping into being out of nothing?

Davies on one occasion seems to answer as if the laws of physics are the controlling factor which determines what may leap uncaused into being: "But what of the laws? They have to be 'there' to start with so that the universe can come into being. Quantum physics has to exist (in some sense) so that a quantum transition can generate the cosmos in the first place." [35] Now this seems exceedingly peculiar. Davies seems to attribute to the laws of nature themselves a sort of ontological and causal status such that they constrain spontaneous becoming. But this seems clearly wrong-headed: the laws of physics do not themselves cause or constrain anything; they are simply propositional descriptions of a certain form and generality of what does happen in the universe. And the issue Edwards raises is why, if there were absolutely nothing, it would be true that any one thing rather than another should pop into being uncaused? It is futile to say it somehow belongs to the nature of spacetime to do so, for if there were absolutely nothing then there would have been no nature to determine that spacetime should spring into being.

Even more fundamentally, however, what Davies envisions is surely metaphysical nonsense. Though his scenario is cast as a scientific theory, someone ought to be bold enough to say that the Emperor is wearing no clothes. Either the necessary and sufficient conditions for the appearance of spacetime existed or not; if so, then it is not true that nothing existed; if not, then it would seem ontologically impossible that being should arise out of absolute non-being. To call such spontaneous springing into being out of non-being a "quantum transition" or to attribute it to "quantum gravity" explains nothing; indeed, on this account, there is no explanation. It just happens.

It seems to me, therefore, that Davies has not provided any plausible basis for denying the truth of the cosmological argument's first premiss. That whatever begins to exist has a cause would seem to be an ontologically necessary truth, one which is constantly confirmed in our experience.

Conclusion

Given the truth of premisses (1) and (2), it logically follows that (3) the universe has a cause of its existence. In fact, I think that it can be plausibly argued that the cause of the universe must be a personal Creator. For how else could a temporal effect arise from an eternal cause? If the cause were simply a mechanically operating set of necessary and sufficient conditions existing from eternity, then why would not the effect also exist from eternity? For example, if the cause of water's being frozen is the temperature's being below zero degrees, then if the temperature were below zero degrees from eternity, then any water present would be frozen from eternity. The only way to have an eternal cause but a temporal effect would seem to be if the cause is a personal agent who freely chooses to create an effect in time. For example, a man sitting from eternity may will to stand up; hence, a temporal effect may arise from an eternally existing agent. Indeed, the agent may will from eternity to create a temporal effect, so that no change in the agent need be conceived. Thus, we are brought not merely to the first cause of the universe, but to its personal Creator.

Summary and Conclusion

In conclusion, we have seen on the basis of both philosophical argument and scientific confirmation that it is plausible that the universe began to exist. Given the intuitively obvious principle that whatever begins to exist has a cause of its existence, we have been led to conclude that the universe has a cause of its existence. On the basis of our argument, this cause would have to be uncaused, eternal, changeless, timeless, and immaterial. Moreover, it would have to be a personal agent who freely elects to create an effect in time. Therefore, on the basis of the *kalam* cosmological argument, I conclude that it is rational to believe that God exists.

NOTES

[1]G.W. Leibniz, "The Principles of Nature and of Grace, Based on Reason," in *Leibniz Selections*, ed. Philip P. Wiener, The Modern Student's Library (New York: Charles Scribner's Sons, 1951), p. 527.

[2]Aristotle *Metaphysica* Lambda. l. 982b10-15.

[3]Norman Malcolm, *Ludwig Wittgenstein: A Memoir* (London: Oxford University Press, 1958), p. 70.

[4]J.J.C. Smart, "The Existence of God," *Church Quarterly Review* 156 (1955): 194.

[5]G.W. Leibniz, *Theodicy: Essays on the Goodness of God, the Freedom of Man, and the Origin of Evil*, trans. E.M. Huggard (London: Routledge & Kegan Paul, 1951), p. 127; cf. idem, "Principles," p. 528.

[6]John Hick, "God as Necessary Being," *Journal of Philosophy* 57 (1960): 733-4.

[7]David Hume, *Dialogues concerning Natural Religion*, ed. with an Introduction by Norman Kemp Smith, Library of the Liberal Arts (Indianapolis: Bobbs-Merrill. 1947), p. 190.

[8]Bertrand Russell and F.C. Copleston, "The Existence of God," in *The Existence of God*, ed. with an Introduction by John Hick, Problems of Philosophy Series (New York: Macmillan & Co., 1964), p. 175.

[9]See William Lane Craig, *The Cosmological Argument from Plato to Leibniz*, Library of Philosophy and Religion (London: Macmillan, 1980), pp. 48-58, 61-76, 98-104, 128-31.

[10]Wallace Matson, *The Existence of God* (Ithaca, N.Y.: Cornell University Press, 1965), pp. 58-60.

[11]J.L. Mackie, *The Miracle of Theism* (Oxford: Clarendon Press, 1982), p. 93.

[12]Quentin Smith, "Infinity and the Past," *Philosophy of Science* 54 (1987): 69.

[13]Richard Sorabji, *Time, Creation and the Continuum* (Ithaca, N.Y.: Cornell University Press, 1983), pp. 213, 222-3.

[14]Charles Hartshorne, *Man's Vision of God and the Logic of Theism* (Chicago: Willett, Clark, & Co., 1941), p. 37.

[15]G.J. Whitrow defends a form of this argument which does not presuppose a dynamical view of time, by asserting that an infinite past would still have to be "lived through" by any everlasting, conscious being, even if the series of physical events subsisted timelessly (G.J. Whitrow, *The Natural Philosophy of Time*, 2d ed. [Oxford: Clarendon Press, 1980], pp. 28-32).

[16]Mackie, *Theism*, p. 93.

[17]Sorabji, *Time, Creation, and the Continuum*, pp. 219-22.

[18]K.R. Popper, "On the Possibility of an Infinite Past: a Reply to Whitrow," *British Journal for the Philosophy of Science* 29 (1978): 47-8.

[19]R.G. Swinburne, "The Beginning of the Universe," *The Aristotelian Society* 40 (1966): 131-2.

[20]Richard J. Gott, *et.al.*, "Will the Universe Expand Forever?" *Scientific American* (March 1976), p. 65.

[21]Fred Hoyle, *From Stonehenge to Modern Cosmology* (San Francisco: W.H. Freeman, 1972), p. 36.

[22]Beatrice Tinsley, personal letter.

[23]David N. Schramm and Gary Steigman, "Relic Neutrinos and the Density of the Universe," *Astrophysical Journal* 243 (1981): p. 1-7.

- [24]Alan Sandage and G.A. Tammann, "Steps Toward the Hubble Constant. VII," *Astrophysical Journal* 210 (1976): 23, 7; see also idem, "Steps toward the Hubble Constant. VIII." *Astrophysical Journal* 256 (1982): 339-45.
- [25]Duane Dicus, *et.al.* "Effects of Proton Decay on the Cosmological Future." *Astrophysical Journal* 252 (1982): 1, 8.
- [26]I.D. Novikov and Ya. B. Zeldovich, "Physical Processes Near Cosmological Singularities," *Annual Review of Astronomy and Astrophysics* 11 (1973): 401-2.
- [27]John Gribbin, "Oscillating Universe Bounces Back," *Nature* 259 (1976): 16.
- [28]P.C.W. Davies, *The Physics of Time Asymmetry* (London: Surrey University Press, 1974), p. 104.
- [29]David Hume to John Stewart, February, 1754, in *The Letters of David Hume*, ed. J.Y.T. Greig (Oxford: Clarendon Press, 1932), 1:187.
- [30]Paul Davies, *God and the New Physics* (New York: Simon & Schuster, 1983), p. 214.
- [31]*Ibid.*, p. 215.
- [32]*Ibid.*, p. 31.
- [33]*Ibid.*, pp. 215, 216.
- [34]A.N. Prior, "Limited Indeterminism," in *Papers on Time and Tense* (Oxford: Clarendon Press, 1968), p. 65.
- [35]Davies, *God*, p. 217.

God, Time and Eternity

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Is God's eternity to be construed as timeless or temporal? Given that the universe began to exist, a relational view of time suggests that time also began to exist. God's existence "prior to" or *sans* creation would not entail the existence of time if God in such a state is changeless. But if God sustains real relations with the world, the

co-existence of God and the world imply that God is temporal subsequent to the moment of creation. Given the superiority of a relational over a non-relational (Newtonian) view of time, God ought to be considered as timeless *sans* creation and temporal subsequent to creation.

Source: "God, Time, and Eternity." *Religious Studies* 14 (1979): 497-503.

God is the 'high and lofty One who inhabits eternity',^{1} declared the prophet Isaiah, but exactly how we are to understand the notion of eternity is not clear. Traditionally, the Christian church has taken it to mean 'timeless'. But in his classic work on this subject, Oscar Cullmann has contended that the New Testament 'does not make a philosophical, qualitative distinction between time and eternity. It knows linear time only...'^{2} He maintains, 'Primitive Christianity knows nothing of a timeless God. The "eternal" God is he who was in the beginning, is now, and will be in all the future, "who is, who was, and who will be" (Rev. 1:4).'^{3} As a result, God's eternity, says Cullmann, must be expressed in terms of endless time.

When we speak of God as eternal, then, we may mean either 'timeless' or simply 'everlasting'. The question is: which understanding of God's relationship to time is to be preferred? Taking sharp issue with Cullmann's study, James Barr has shown that the biblical data are not determinative. He argues that Cullmann's study is based too heavily upon etymology and vocabulary studies, and these cannot be determinative in deciding the meaning of a term apart from use.^{4} Barr thinks that Genesis may very well teach that time was created along with the universe, and that God may be thought of as timeless.^{5} Barr's basic contention is that, 'A valid biblical theology can be built only upon the *statements* of the Bible, and not on the *words* of the Bible.'^{6} When this is done, the biblical data are inconclusive: '...if such a thing as a Christian doctrine of time has to be developed, the work of discussing it and developing it must belong not to biblical but to philosophical theology'.^{7}

Therefore, the issue lies in the lap of the philosopher, not the theologian. Are there, then, good philosophical arguments for preferring one of these competing notions of God's eternity to the other? I think that there are.

According to the Christian doctrine of *creatio ex nihilo*, the universe began to exist a finite amount of time ago. This doctrine receives philosophical confirmation from arguments demonstrating the absurdity of an infinite temporal regress of events^{8} and empirical confirmation from the evidence for the so-called 'big-bang' model of the universe.^{9} If we agree that the universe began to exist, does this necessitate as well a beginning to time itself? The answer is: it all depends. If a person believes that time exists apart from events such that if there were no events there would still be time, then our argument does not entail *prima facie* a beginning to time. On the other hand, if one accepts that time cannot exist apart from events, then a beginning of events would entail a beginning of time as well.

There are a few modern authors who hold to the independent status of time apart from events, and they are thus the heirs of the Newtonian conception of absolute time. Swinburne argues that time, like space, is of logical necessity unbounded.^{10} For every instant of time must be preceded and succeeded by another instant of time. The physical universe itself may have had a beginning – but this can only be true if there is a period of time before the beginning during which the universe did not exist. Since time is unbounded, it is of logical necessity infinite. Since prior to and after every period of time there is more time and since the same instant of time never recurs, time must have gone on and will go on forever. Although space would not

exist without physical objects, time would. But, he adds, without physical objects, time could not be measured: one could not distinguish an hour from a day in a period of time without objects.{11} Therefore, Newton's claims about Absolute Time were correct.{12} To say that the universe began to exist on such a time scale would simply be to say that a finite time ago there were no physical objects.{13}

J. R. Lucas also contends that time could neither begin nor end. {14} He notes that if time is defined in a relational manner, then if there was an absolutely stationary universe prior to the first event, we would have to say that time did not exist until the first event occurred. At the beginning of time no past tense statements could be made, since there was no past. Yet it is obvious that certain statements, such as, 'The stars were moving', is a meaningful, though in this case false, statement that could be made about the state of the universe prior to the first event. Lucas does not deny that the universe may have had a beginning, but he, like Swinburne, argues that in such a case time would precede the beginning of the universe and that it would be undifferentiated.{15} Without a world there would be no metric to impose upon time.

A variant on the above view is expressed by Lawrence Sklar, whose theories of time are heavily influenced by relativity theory. He interprets Minkowski spacetime in a literalistic way, asserting that future events 'have determinate reality' and future objects are 'real existents'.{16} Accordingly, he regards time and space as inextricably bound up together in spacetime. {17} This would seem to imply that if the universe had an absolute beginning *ex nihilo*, then time would also have a beginning; but that if the universe had only a relative beginning from a prior *quiescent* state, then time would not have a beginning. Ian Hinckfuss also argues that if the universe were frozen into immobility, there would still be time because temporal duration and measurement are not dependent upon the continuous operation of a clock throughout that time.{18}

Presumably to such thinkers the beginning of the temporal series of events would not entail a beginning to time itself. On the other hand, those who adhere to a relational view of time generally take the beginning of events to be synonymous with the beginning of time itself. Zwart, for example, asserts,

According to the relational theory the passage of time consists in the happening of events. So the question whether time is finite or infinite may be reduced to the question whether the series of events is finite or infinite.{19}

It might be asserted that even on the relational view of time there can be time prior to the first event because one may abstract from individual events to consider the whole universe as a sort of event which occurs at its creation. There would thus be a before and an after with regard to this event: no universe/ universe. And a relation of before and after is the primitive relation of which time consists.{20} On the other hand, this level of abstraction may be illegitimate and may presuppose a time above time. For prior to the universe's beginning, if there was *nothing* at all, not even space, then it would certainly seem to be true that there was no time either. For suppose the universe never came to exist - would there still be time? But if the universe does come to exist *ex nihilo*, how could we say this first event has an effect on reality (but of course there was no reality!) before it ever occurred, especially when its occurrence is a contingent matter? We might want to say that time does not exist until an event occurs, but when the event does occur, there is a sort of retroactive effect causing past time to spring into being. But this seems to confuse our mental ability to think back in time with the progressive, unidirectional nature of time itself. Though we can, after creation, *think*

of nothingness one hour before the first event, in terms of reality, there was no such moment. For there was just nothing, and Creation was only a future contingent. When the first event occurred, the first moment of time began.

These are difficult conundrums, and it is at least an open question as to whether a beginning of events necessitates a beginning of time. Therefore, we need to ask whether there is any absurdity in supposing that time had a beginning. Some philosophers have argued that time cannot have a beginning because every instant of time implies a prior instant. Thus, there could be no first instant of time. Within a Newtonian understanding of time this argument, even if valid, would only imply that the universe had a beginning *in* time instead of *with* time. But, in fact, it does seem plausible to contend on a relational view of time that a first instant could exist, since apart from events no time exists. Stuart Hackett argues,

Time is merely a relation among objects that are apprehended in an order of succession or that objectively exist in such an order: time is a form of perceptual experience and of objective processes in the external (to the mind) world. Thus the fact that time is a relation among objects or experiences of a successive character *voids* the objection that the beginning of the world implies an antecedent void time: for time, as such a relation of succession among experiences or objective processes, has no existence whatever apart from these experiences or processes themselves.{21}

Therefore, if nothing existed and then something existed, there is no absurdity in speaking of this as the first moment of time. Brian Ellis notes that because we speak of 'before creation' or 'prior to the first event', we tend to think that a beginning of time is impossible.{22 } But Ellis draws a very instructive analogy between this sort of speech and talk of temperatures below absolute zero. When a physicist says there are no temperatures lower than absolute zero, the use of 'lower than' does not presuppose there actually are such temperatures, but only that we can conceive it in our minds. In the same way, to say there was a time when the universe did not exist does not imply there was such a time, but only that we can mentally conceive of such a time. To say there is no time before the first event is like saying there is no temperature -273 C. Both express limits beyond which only the mind can travel. Whitrow remarks in this connection that many people have difficulty imagining a beginning to time because they think of it as a boundary similar to a boundary of space.{23} We reject the latter because we could presumably cross the boundary and find space on the other side. But the case with time is different because we cannot travel freely in time as in space. If time coexists with events, then an origin of time merely implies a beginning of the universe. The first moment of time is not a self-contradictory concept.

There does not appear to be, therefore, any absurdity in the notion of a beginning of time. The idea of a 'time before time' is a mental construction only, a product of the imagination. In reality there seems to be no impossibility in having time arise concomitantly with the universe *ex nihilo*. Thus, on a Newtonian view of time, the universe arises in an absolute, undifferentiated time, while on a relational view of time, it comes into existence with time.

But, of course, prior to creation was not simply nothing, but God. Would his existence necessitate the presence of time prior to creation? Lucas argues that a personal God could not be timeless and that if God is eternal, then time must be infinite as well. {24} But Hackett argues convincingly that a personal God need not experience a temporal succession of mental states. He could apprehend the whole content of the temporal series in a single eternal intuition, just as I analogously apprehend all the parts of a circle in a single sensory intuition. God could know the content of all knowledge - past, present, and future - in a simultaneous

and eternal intuition.{25} Therefore, the fact that the creator is personal does not necessitate the presence of time prior to creation. Sturch argues that in order to avoid an infinite temporal regress of states of consciousness, God's knowledge must be timeless.{26} On a Newtonian view of time, God would exist changelessly in an undifferentiated time prior to creation. On a relational view of time, God would exist changelessly and timelessly prior to the first event, creation, which marks the beginning of time.

But what about subsequent to the first event? If God sustains any relations to the world, does not this imply that he exists in time? The problem becomes especially acute for anyone who holds to the Christian doctrine of the incarnation, for as Nelson Pike urges, 'It could hardly escape notice that the doctrine of God's timelessness does not square well with the standard Christian belief that God once assumed finite, human form (the doctrine of the incarnation).'{27} Soren Kierkegaard called this the Absolute Paradox; this is the contradiction of existence: the presence of the Eternal in time, how God can enter the space-time world without ceasing to be the Eternal.{28}

Thomas Aquinas attempted to solve this problem by arguing that while creatures are really related to God, God sustains no real relation to creatures.{29} Hence, God exists timelessly, unrelated to creatures, while creatures in time change in their relations to him. In the incarnation, a human nature becomes related in a new way to the second person of the Trinity, but that person does not sustain a real relation with that human nature. But this doctrine is singularly unconvincing. It is system-dependent upon regarding relation as an accident inhering in a substance. Because God is absolutely simple, he has no accidents and, hence, no real relations. But if we reject the Aristotelian metaphysical doctrine of substance and accidents, then it seems foolish to say God is not really related to the world as Creator to creature.

If God is really related to the world, then it seems most reasonable to maintain that God is in time subsequent to creation. This also removes Kierkegaard's Absolute Paradox concerning the incarnation, for God would be in time prior to his assuming a human nature. This understanding does not involve any change in God; rather he is simply related to changing things. As Swinburne explains,

...since God coexists with the world and in the world there is change, surely there is a case for saying that God continues to exist for an endless time, rather than that he is timeless. In general that which remains the same while other things change is not said to be outside time, but to continue through time.{30}

Thus, on a relational view of time God would exist timelessly and independently 'prior' to creation; at creation, which he has willed from eternity to appear temporally, time begins, and God subjects himself to time by being related to changing things. On the other hand, the Newtonian would say God exists in absolute time changelessly and independently prior to creation and that creation simply marks the first event in time.{31}

These, then, are the alternatives. A relational view of time seems superior to a Newtonian view because (1) it is difficult to see how time could exist apart from events and (2) the Newtonian objection that every instant of time implies a prior instant is adequately answered by the relational view. Thus, the proper understanding of God, time, and eternity would be that God exists changelessly and timelessly prior to creation and in time after creation.

NOTES

{1} Isaiah 57:15 (RSV).

{2} Oscar Cullmann, *Christ and Time* (London: SCM Press, 1962), p. xxvi.

{3} *Ibid.* p.63.

{4} James Barr, *Biblical Words for Time* (London: SCM Press, 1962), p.80.

{5} *Ibid.* pp. 145- 7.

{6} *Ibid.* p. 147.

{7} *Ibid.* p. 149.

{8} Historically, this argument has been defended by Al-Kindi, *Al-Kindi's Metaphysics: A Translation of 'Īa' qub ibn Ishaq al-Kindi's Treatise 'on first Philosophy'*, with an Introduction and Commentary by Alfred L. Ivry (Albany, N.Y.: State University of New York Press, 1974); Al-Ghazali, *Tahafut al- Falasifah (Incoherence of the Philosophers)*, trans. Sabid Ahmad Kamali (Lahore: Pakistan Philosophical Congress, 1958); Saadia Gaon, *The Book of Beliefs and Opinions*, trans. Samuel Rosenblatt (New Haven, Conn.: Yale University Press, 1948); Bonaventure, 2 *Sentences* 1.1.1.2.1-6. Modern defenders of the argument include Stuart C. Hackett, *The Resurrection of Theism* (Chicago: Moody Press, 1957); G. J. Whitrow, *The Natural Philosophy of Time* (London and Edinburgh: Thomas Nelson and Sons, 1961); Pamela M. Huby, 'Kant or Cantor? That the Universe, if real, must be finite in Both Space and Time', *Philosophy*, XLVI (1971),121-32. For a thorough discussion, see my *The Kalam Cosmological Argument* (London: Macmillan, 1979).

{9} On the big-bang model see P. J. E. Peebles, *Physical Cosmology* (Princeton, N. J.: Princeton University Press, 1971); S. Weinberg, *Gravitation and Cosmology* (New York, Wiley, 1972). That this model requires *creatio ex nihilo* is explained by Fred Hoyle, *Astronomy and Cosmology* (San Francisco: W. H. Freeman & Co., 1975), p. 658. See also my book mentioned in the above note.

{10} R. G. Swinburne, *Space and Time* (London: Macmillan, 1968), pp.207-8.

{11} *Ibid.* p. 209.

{12} *Ibid.* p. 245.

{13} *Ibid.* p. 296.

{14} J. R. Lucas, *A Treatise on Time and Space* (London: Methuen & Co., 1973), pp. 10-11

{15} *Ibid.* pp. 311-12.

{16} Lawrence Sklar, *Space, Time, and Spacetime* (Berkley and Los Angeles: University of California Press, 1974), p. 274.

{17} *Ibid.* p. 297.

{18} Ian Hinckfuss, *The Existence of Space and Time* (Oxford: Clarendon Press, 1975), pp. 72-3.

{19} P. J. Zwart, *About Time* (Amsterdam and Oxford: North Holland Publishing Co., 1976), p. 237.

{20} *Ibid.* p. 36. '... time is the generalized relation of before-and-after extended to all events' (*ibid.* p. 43).

{21} Hackett, *Theism*, p. 263.

{22} Brian Ellis, 'Has the universe a beginning in time?', *Australasian Journal of Philosophy* XXXIII (1955), 33.

{23} G. J. Whitrow, *What is Time?* (London: Thames & Hudson, 1972), pp. 146-7.

{24} Lucas, *Treatise*, pp. 3, 309.

{25} Hackett, *Theism*, pp. 286-7. I think that it is within the context of Trinitarian theology that the personhood and timelessness of God may be the most satisfactorily understood. For in the eternal and changeless love relationship between the persons of the Trinity, we see how a truly personal God could exist timelessly, entirely sufficient within himself. Most writers who object to a timeless, personal God consider God only subsequent to creation as he is related to human persons, but fail to consider God prior to creation (e.g. Nelson Pike, *God and Timelessness* [London: Routledge & Kegan Paul, 1970], pp. 121-9). The former would appear to involve God in time, but the latter would not, for if God is tri-personal he has no need of temporal persons with whom to relate in order to enjoy personal relationships-- the three persons of the Godhead would experience perfect and eternal communion and love with no necessity to create other persons. Thus the answer to the question, 'What was God doing prior to creation?' is not the old gibe noted by Augustine: 'He was preparing hell for those who pry into mysteries', but rather, 'He was enjoying the fullness of divine personal relationships, with an eternal determination for the temporal creation and salvation of human persons.' Why did God so determine? Perhaps to share the joy and love of divine fellowship with persons outside himself and so glorify himself: on the other hand, perhaps we lack sufficient information to answer this question. Once temporal persons were created, God would then begin to experience temporal personal relationships with them.

{26} R. L. Sturch, 'The Problem of Divine Eternity', *Religious Studies* X (1974), 492.

{27} Pike, *God*, p. 172.

{28} Soren Kierkegaard, *Philosophical Fragments*, trans. David Swenson (Princeton, N. J.: Princeton University Press, 1936), pp. xii, 72.

{29} Thomas Aquinas *Summa Theologiae* Ia. 13.7. See also John Donnelly, 'Creatio ex nihilo', in *Logical Analysis and Contemporary Theism*, ed. John Donnelly (New York: Fordham University Press, 1972), pp. 210-11; Peter Geach, 'God's Relation to the World', *Sophia* VII 1969), 1-9.

{30} R. G. Swinburne, 'The Timelessness of God', *Church Quarterly Review* CLXVI (1965), 331.

{31} This serves effectively to rebut the objection of Julian Wolfe to the *kalam* cosmological argument 'Infinite Regress and the Cosmological Argument', *International Journal for Philosophy of Religion* II (1971), 246-9. The crucial premise is, in Wolfe's opinion, that an infinite time cannot elapse. He argues that this is incorrect because prior to causing the first effect, the uncaused cause existed for infinite time. Since the first event did not occur, then an infinite time must have elapsed. But in the first place, Wolfe's formulation of the argument is defective, for the contention is that an infinite number of *events* cannot elapse, not that an infinite time cannot elapse. Because the argument concerns events, not time, Wolfe's analysis is inapplicable, since prior to creation there were no events at all. Second, if the relationalist is correct, then an infinite time does not elapse prior to creation, because time begins at creation. God is simply timeless before the first event.

Hasker On Divine Knowledge

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

William Hasker has presented influential arguments against divine foreknowledge and middle knowledge. I argue that his objections are fallacious. With respect to divine foreknowledge, three central issues arise: temporal necessity, power entailment principles, and the nature of free will. In each case Hasker's analysis is defective. With respect to divine middle knowledge, Hasker presents four objections concerning the truth of counterfactuals of freedom. Against Hasker I argue that such propositions are grounded in states of affairs belonging to the actual world logically prior to its full instantiation and are contingently true or false.

Source: "Hasker on Divine Knowledge." *Philosophical Studies* 67 (1992): 57-78.

Introduction

The most positive feature of William Hasker's recent *God, Time, and Knowledge*, it seems to me, is its focusing the wide-ranging discussion of the diverse issues raised by the problem of divine foreknowledge and future contingents down to a few, central issues. In this paper, I

shall argue that the adherent of God's foreknowledge of future contingents has successfully defended his position on these issues against Hasker's attacks.

I. Theological Fatalism

In the dispute over the argument for theological fatalism --Necessarily, God has always believed that p ; Necessarily, if God has always believed that p , then p ; Therefore, necessarily p --Hasker isolates three central issues separating the disputants: temporal necessity, power entailment principles, and the nature of free will. Let us examine each of these.

Issue 1: Temporal Necessity

Key to the argument for theological fatalism is the claim that God's past belief is characterized by a sort of temporal necessity that renders it counterfactually inviolable to future events. Since the Ockhamist and Molinist claim that this is not the case--that it lies within my power to act in such a way, that were I so to act, God's belief would have been different from what it in fact was--, it is incumbent upon the theological fatalist to show why such a position is not possible, that is to say, why God's past belief must be categorized as a "hard" rather than a "soft" fact.

Hasker's procedure is to explicate the distinction between hard and soft facts by a series of steps. First, he explicates the notion of an immediate or future-indifferent proposition:

H₁: An elementary proposition is future-indifferent *iff* it is conceptually consistent with there being no times after the present, and also with there being times after the present.

Next he explicates the notion of a "hard fact," asserting,

H₅: Any future-indifferent proposition that is true is a hard fact.

"No argument will be given for (H₅)," he says, "since it is a common assumption among those who discuss hard and soft facts that true propositions that are 'really about the past' are such that it cannot be in anyone's power to render them false." {1} But Hasker's procedure is all too quick here. For Plantinga has shown that on Ockhamist principles a fact's being future-indifferent is no guarantee of its being hard, {2} and I have elsewhere provided examples of future-indifferent facts which in various contexts are plausibly regarded as soft. {3} Hence, (H₅) is simply unacceptable, and since Hasker gives no argument for it, we are free to reject it out of hand. {4}

But even if we accepted (H₅), God's past belief is *prima facie* not future indifferent and therefore not a hard fact. Hasker tries to elude this consequence by substituting the name "Yahweh" for "God" in "God has always believed p ." As a non-connotative proper name, "Yahweh" carries with it none of the connotations of infallibility that "God" does, so that "Yahweh has always believed p " is future-indifferent and hence expresses a hard fact. But such an argument seems clearly inconclusive. For Hasker assumes that proper names are non-connotative. He does not even mention, much less refute, views that take proper names to have a Fregean sense. On such a view, one may be unaware that the sentence "Yahweh has always believed p " expresses the proposition "God has always believed p " due to a conceptual inadequacy on one's part. {5} Until Hasker offers some refutation of such alternative theories of proper names, his argument is ineffectual. But secondly, even if "Yahweh" were a non-

connotative proper name, how is this relevant to the issue of whether "*Yahweh* has always believed *p*" expresses a hard or soft fact? For on Direct Reference theories "*Yahweh*" refers to the same individual as "God" and the two sentences express the same singular proposition; if the referent believes *p*, then *p* is true. What is of importance here is the referent, not the means of fixing the reference.

Therefore, it seems to me that Hasker's analysis of temporal necessity is not at all compelling and that no incoherence in the Ockhamist/Molinist position has been shown.

Issue 2: Power Entailment Principles

Hasker distinguishes the notion of "bringing it about that" from any sort of causal relation or mere counterfactual dependence. "The core idea in the notion of 'bringing about' is the notion of something's being the case *in consequence of* what an agent does. . . ." {6} The power to "bring it about that" lies somewhere in between counterfactual and causal power.

Now Hasker wants to argue on the basis of his power entailment principle

PEP₅: If it is in *S*'s power to bring it about that *P*, and "*P*" entails "*Q*" and "*Q*" is false, then it is in *S*'s power to bring it about that *Q*

that the Ockhamist solution to theological fatalism, namely,

1. *S* has it within his power to act in such a way that, were he to act in that way, God would not have believed that *p*,

entails the assertion of *S*'s ability to bring about the past. More specifically, *S*'s ability to do something other than what God foreknows he will do entails *S*'s ability to bring about God's past beliefs.

The question here is whether (PEP₅) is true. I doubt that it is. Consider Thomas Flint's objection that *S*'s power over *P* could be causal, but his power over *Q* merely counterfactual:

If two propositions are logically equivalent and I have power over the truth of one of them (i.e., its truth is up to me), then it does seem clear that the truth of the other one is within my power as well; what does not seem clear is that I need to have power in the same sense of 'power' over the second as over the first. Suppose I have causal power over the truth of one of two logically equivalent propositions; is it not sufficient that I have counterfactual power over the other? Is that not enough for me to say that each of them is such that its truth is up to me? {7}

If Flint is correct, then it is "up to me" what God believes concerning some free action of mine, but I do not have the power to bring about God's past belief concerning that action. Hasker replies, "On the one hand, power to bring about need not be *causal* power; on the other hand, the counterfactual dependency relation (and therefore also 'counterfactual power') is *not* 'enough for me to say that each of them is such that its truth is up to me'." {8} This reply misses Flint's point. We may agree that "bringing about" does not imply causal power and that my counterfactual power over something does not imply that thing is up to me. Flint's point is that the *composite* state of affairs of *S*'s being able to bring it about (even non-causally) that *P*

and its being the case that $P \square \rightarrow Q$ implies that Q is up to S , even though S cannot bring about Q . Accordingly, Flint would accept no more than

PEP₅*: If it is in S 's power to bring it about that P , and " P " entails " Q " and " Q " is false, then it is up to S whether it be the case that Q .

Hasker thus fails to show why power to "bring it about that" is closed under entailment.

Second, counterexamples to (PEP₅) can be offered, although space does not permit a discussion of them here.^{9} But even if we concede (PEP₅), whether it has deleterious consequences for divine foreknowledge depends on how we adjudicate issue three.

Issue 3: The Nature of Free Will

Hasker argues that in order to avoid theological fatalism, the Ockhamist must claim that one has the power to bring about the past, worse than that, the "power to bring about past events that have *not* occurred."^{10} Hasker is willing to concede for the sake of argument the power to bring about actual past events, but "What needs to be explained, but *has not* been explained, is how it is possible that *God has always believed a certain thing, and yet it is in someone's power to bring it about that God has not always believed that thing.*"^{11} Hasker thinks the Ockhamist must hold that S has the power to bring it about that whereas it was true at t_1 that God had always believed p , it was no longer true at t_2 that God had always believed p . Thus, S must have the power to eliminate the past fact of God's believing p , which is the power to alter the past, an evident absurdity.

Hasker recognizes that Ockhamists protest that they assert no such power, and this fact, which bewilders him, leads Hasker to infer that Ockhamists have a different concept of power and freedom than the standard libertarian analysis. When Hasker speaks of power,

The power in question is the power to perform a particular act under given circumstances, and not a generalized power to perform acts of a certain kind. . . . In general, if it is in N 's power at T to perform A , then there is nothing in the circumstances¹⁸ that obtain at T which *prevents* or *precludes* N 's performing A at T .

¹⁸It will be recalled that the circumstances that obtain at T comprise all and only the hard facts with respect to T .^{12}

In this sense of power, one does not have it within his power to act differently than God foreknows one will. In a different sense of power, in the sense of general abilities, "I may perfectly well *have* a power . . . to do something even though it is either logically or causally impossible that I *exercise* the power under the circumstances that obtain at a particular time."^{13} But the problem with this sense of power, he argues, is that it is insufficient for libertarian free will. In this sense of power,

. . . Peter can *have* the power to refrain from sinning *even though it is logically impossible that he should exercise that power under the existing circumstances*. But if one has the 'power to do otherwise' only in that sense--the sense in which *having* the power does not guarantee that it is possible for the power to be *used*--then the central idea of libertarianism . . . has been lost. Once again, we see that *the compatibilist on foreknowledge cannot consistently affirm libertarian free will.*^{14}

It is remarkable how clearly the echoes of Richard Taylor's fatalism resound through these passages.^{15} Hasker's analysis of the notion of "within one's power"--which Taylor complained his critics never understood--is virtually the same as Taylor's and is thus infected with the same deficiencies.

The best way to get at this problem is by drawing some helpful distinctions which were well-known to medieval discussants of these issues. Foremost is the distinction between the *sensus compositus* and the *sensus divisus* of a proposition. Hasker's failure to differentiate these senses leads him into muddles. For example, consider the problem of the unchangeability of the past and future. Hasker tries to explain that the unchangeability of the past is not a mere tautology and the changeability of the future not a self-contradiction because the past is a concrete totality which is, while the future is a realm of mere possibilities.^{16} This affirmation of an A-theory of time does not, however, bring any clarity to the logical issues raised. Utilizing the medieval distinction between the senses, however, consider the proposition

2. A future event can fail to occur.

In *sensu diviso*, (2) means

3. Possibly, an event, which is future, will fail to occur

and is true if the event is contingent. But taken in *sensu composito*, (2) means

4. Possibly, an event which is future will fail to occur,

which is necessarily false. Thus, what is at issue with regard to the misleading notion of "altering the future" is whether one has the power to prevent a future event in *sensu diviso*. One can prevent the event, but were one to do so, then the event would not be future. To say that one cannot prevent a future event in *sensu composito* is merely to assert that one cannot bring it about that the event both will and will not occur--hardly a restriction on human freedom! Now consider

5. A past event can have failed to occur.

In *sensu composito*, (5) means

6. Possibly, an event which is past has failed to occur,

which is a self-contradiction. In *sensu diviso*, (5) means

7. Possibly, an event, which is past, has failed to occur.

It is clearly this latter sense that is at issue when Hasker raises the question concerning the "power to bring about past events that have not occurred"--otherwise, this phrase would be as self-contradictory as "square circles." The so-called unalterability of the past in *sensu composito* amounts to nothing more than the logical impossibility of bringing it about that an event has both occurred and not occurred. This trivial sense is irrelevant to considerations of power and freedom. The really interesting question is whether we have it within our power to

postvent a past event in *sensu diviso*. In such a case one can bring it about that an event, which is past, did not occur, but were one to do so, then it would not have been a past event.

In so far as such postvention of the past relies upon retro-causation, we may certainly agree with Hasker that considerations of time and objective becoming rule out causal postvention of the past. But Hasker seems to have forgotten that the "bringing about" relation is non-causal. In this weak sense of "bring about," we do according to (PEP₅), have power over the past, for as Freddoso has shown, we bring about the past truth of future-tense propositions by bringing about the truth of present-tense propositions which entail them.^{17} It was Taylor's failure to discern this power over the past in *sensu diviso* that proved fatal to his fatalism.

But is there not a similar fatal fallacy in theological fatalism? Consider

8. An event foreknown by God can fail to occur.

In *sensu composito*, this means

9. Possibly, an event which is foreknown by God will fail to occur,

which is self-contradictory. But in *sensu diviso*, (8) means

10. Possibly, an event, which is foreknown by God, will fail to occur,

which may be true. Thus, my ability to prevent the event is not the ability to bring about the self-contradictory state of affairs that God foreknew the event and the event does not occur. It is the power to prevent the event, which is foreknown by God, and were I to do so, it would not have been foreknown by Him.

On the assumption of (PEP₅), the above implies that one has it within one's power to bring it about that the past should be different than it is, in that one can bring it about that God should have different beliefs than He has. This is not the power to alter or eliminate past events in *sensu composito*, which is absurd, but the power to bring it about that the past would have been different. For by acting differently now, one brings about the truth of different present-tense propositions and indirectly the past truth of different future-tense propositions. Since God is essentially omniscient, one thereby indirectly brings it about that He believed different propositions than He does. What is objectionable about that?

Hasker would reply that it is not within my power *under the circumstances* to act differently now. But the fallacy in this reply may be seen by means of a second distinction, closely related to the first, which the medievals discerned, that between *necessitas consequentiae* and *necessitas consequentis* or the necessity of a hypothetical inference versus the necessity of the consequent of the hypothetical. Thus the proposition

11. If God foreknew Peter would sin, then Peter cannot refrain from sinning,

properly understood, means

12. Necessarily, if God foreknew Peter would sin, then Peter does not refrain from sinning.

Hasker is misled by (11) into asserting a *necessitas consequentis* which he interprets as a abridgement of Peter's personal power. But what is impossible is not Peter's refraining from sin, but the *composite* state of affairs of God's foreknowledge of Peter's sin and Peter's refraining. That is to say, the proposition

13. Peter can refrain from the sin which God foreknew he would commit

is false in *sensu composito*, but true in *sensu diviso*.

Of course, (13)'s truth in *sensu diviso* implies that a backtracking counterfactual is in order here, in that since the composite state of affairs is impossible, Peter's power to refrain implies that were he to refrain, the circumstances (God's foreknowledge) would have been different. Such a counterfactual is justified since there are no possible worlds in which God errs. Of course, Hasker will insist, as the footnote in the above citation reminds us, that the circumstances he is talking about involve exclusively hard facts so that while the Ockhamist solution works for logical fatalism, it fails for theological fatalism. But such a reply only throws us back to the question of whether God's past belief is a hard fact, and we have seen that Hasker's inadequate analysis of that notion failed to provide any convincing argument against the Ockhamist position.

In short, the Ockhamist does not at all operate with a non-libertarian understanding of power or freedom. Once the proper distinctions are drawn, we see that Hasker has in no wise shown that one does not have the power to bring it about that God should have believed differently than He did.

II. Middle Knowledge

The doctrine of middle knowledge plays a foundational role in discussions of divine prescience, providence, and predestination. But Hasker lodges four objections against the doctrine of middle knowledge: {18} (i) What, if anything, is the ground of the truth of counterfactuals of freedom? (ii) Crucial counterfactuals of freedom, if true at all, are necessarily true, which is incoherent. (iii) Counterfactuals of freedom cannot guide God's creation of the world because it is only by deciding which world to create that God settles which world is actual and therefore which counterfactuals are true. (iv) Either the truth of counterfactuals of freedom is brought about by the relevant agent or not. But it cannot be brought about by the agent; and if it cannot be brought about by the agent, then the agent's freedom is obviated. Therefore, there are no true counterfactuals of freedom. Let us consider then each of these objections.

Objection (i)

Hasker wants to know what makes counterfactuals of freedom true. So stated, this is not much of an objection; it is just a question which ought to prompt further philosophical inquiry. Ignorance of an answer to the question demonstrates no incoherence in the position. In any case, it seems to me that the answer is that counterfactuals of freedom are true in virtue of what makes any non-truth-functional proposition true, namely, correspondence. Tarski's T-schema for truth, $Tp \equiv p$, applies to counterfactuals just as it does to any atomic proposition. The proposition, "If I were rich, I should buy a Mercedes," if true, is true in virtue of the fact that if I were rich I should buy a Mercedes. True counterfactuals correspond to reality and are therefore true; false counterfactuals fail to correspond and are therefore false.

Of course, it might be said that this answer only pushes the question back a notch: now we must ask, what makes certain counterfactual states of affairs obtain? Hasker says,

In order for a (contingent) conditional state of affairs to obtain, its obtaining must be grounded in some categorical state of affairs. More colloquially, truths about 'what *would be the case* . . . if' must be grounded in truths about what *is in fact* the case.{19}

For example, ". . . the truth of causal conditionals, and of their associated counterfactuals, are [sic] grounded in the natures, causal powers, inherent tendencies, and the like, of the natural entities described in them." {20}

Hasker's principle, as stated, is clearly false because we can entertain counterfactuals about what the world would be like were different laws of nature or boundary conditions to obtain. For example, consider

14. If a meter stick were set in motion relative to the aether, then it would undergo a FitzGerald-Lorentz contraction.

This counterfactual is true, but not virtue of what is in fact the case, since the classical aether does not exist. It might be said that the categorical state of affairs which in part grounds it is the state of affairs

15. The aether has the property of immobility.

But the problem is that (15) is in fact false, since there is no aether and merely possible objects neither exist nor have properties. What is true is rather

15'. If the aether existed, it would have the property of immobility.

But (15') is itself a counterfactual state of affairs, so that one counterfactual state of affairs is grounded by another.

Perhaps Hasker would merely recast his principle, however, such that a counterfactual state of affairs must be ultimately based on the individual essences of the things referred to in the counterfactual proposition. Because the essence "aethericity" includes the property of immobility, (15') is true and because (15') is true, (14) is true. But again, one can think of counterfactuals from the natural world for which this does not seem to be the case. Consider, for example, the Einstein-Podolsky-Rosen thought experiment with twin photons traveling in opposite directions. If we measure the momentum of photon 1, then photon 2 must possess the same momentum, even though no measurement is carried out on it. But we could just as easily have measured instead the position of photon 1, and then photon 2 would have had a precise position. So photon 2 must possess simultaneously both position and momentum. Notice that counterfactual reasoning plays a key role in this argument. Since quantum physics prohibits our measuring both the momentum and position of photon 1 simultaneously, all the physics allows us to assert is

16. Since the momentum of photon 1 is measured to be a certain value, photon 2 has a similar value

or

17. Since the position of photon 1 is measured to be a certain value, photon 2 has a similar value.

But what the thought experiment requires us to say is that if, say, (16) is true, it is also true that

18. If we had chosen to measure instead the position of photon 1, then photon 2 would have possessed a certain value for its position.

To most thinkers, (18) seems intuitively obvious, but one will search in vain for anything in the natures of quantum entities to ground it. Now maybe Einstein, Podolsky, and Rosen were wrong to assume (18); maybe (18) is false. But it is certainly not obviously false, and the three scientists could hardly be called irrational or their position incoherent because they accepted it. In the same way, one who accepts the truth of counterfactuals of freedom can hardly be said to be embracing an incoherency.

And how do we know that counterfactuals of freedom do not satisfy Hasker's principle? Plantinga has defended the possibility of transworld depravity--that every creaturely essence is such that, if exemplified, its exemplification would have committed moral evil.{21} More recently, Kvanvig has argued that creaturely essences contain all the relevant counterfactuals of freedom concerning what their exemplifications would do in any circumstances.{22} On such views counterfactuals of creaturely freedom *are* grounded in the relevant individual essences of the agents referred to in the propositions. Against Kvanvig, Hasker objects, "But this is fatal to the theory. No individual chooses, or is responsible for, what is contained in that individual's essence." {23} But this objection does not tell against a view like Plantinga's, according to which creaturely essences have properties involving counterfactuals contingently, and Kvanvig could avoid the objection by making the counterfactual properties world-indexed. If creaturely essences possess counterfactual properties, then it could be maintained that counterfactuals of creaturely freedom are grounded in individual creaturely essences.

Of course, it might still be asked why individual creaturely essences have the counterfactual properties they do. But why think that volitional counterfactual properties or states of affairs must be grounded in their relevant categorical counterparts at all? Perhaps this at best characterizes only causal counterfactual states of affairs. The demand for a ground for volitional counterfactual states of affairs seems misguided. It implicitly presupposes that libertarianism and agent causation are false doctrines. To see the point, consider the libertarian claim "Jones freely chose x." If a compatibilist were to demand what makes this proposition to be true, the libertarian might well respond that nothing makes it to be true, that it simply is true in virtue of the fact that Jones freely chose x. But suppose the compatibilist presses him further, demanding why *that* state of affairs obtains. If Jones's choice was undetermined, then why did not some other state of affairs obtain, say, Jones's freely choosing y? The libertarian will respond that the compatibilist has missed the whole point. Jones himself is the cause of his choice and there is nothing further that makes it the case that Jones freely chose x; to ask for that is implicitly to deny the very liberty the libertarian presupposes. But in the same way, the proposition, "If Jones were in C, he would freely choose x" is true in virtue of the fact that the counterfactual state of affairs it describes obtains. To demand "But what makes it the case that if Jones were in C, he would choose x?" implicitly denies Jones's liberty. There is no further ground of why Jones would freely choose x if he were in C. To

think that there must be such is to deny the hypothesis of Jones's free causal agency. Hence, Hasker's query is simply misconceived.

Objection (ii)

Hasker notes that counterfactuals are true or false relative to a world. According to the possible worlds semantics for counterfactual discourse, one is to consider the sphere of possible worlds most similar to the actual world in which the antecedent of the counterfactual is true. Better, all one has to consider are the initial world-segments of such worlds up to the time specified in the counterfactual, since what happens after that time can scarcely be relevant to the truth of the counterfactual. If the consequent is also true in all such antecedent-permitting world-segments, then the counterfactual is true. But Hasker argues that if the antecedent is maximally specified, then the restriction "most similar to the actual world" becomes superfluous. For there is only one sphere of possible world-segments which permits such maximally specified antecedents. An antecedent-permitting world-segment could not have some feature which made it more or less similar to the actual world because all such features are already taken account of in the maximally-specified antecedent. But then no matter what possible world one chooses as one's reference point, it will be that same sphere of worlds which will be closest to that world. Hence, if a counterfactual is true, it is true in all antecedent-permitting world-segments regardless of which possible world is one's reference point. There is thus no possible world in which the counterfactual is false. It is therefore necessarily true, which contradicts the hypothesis that there are true counterfactuals of freedom.

What this objection overlooks is that shared counterfactuals are themselves a measure of the similarity between worlds.^{24} Thus, if some counterfactual is true in the actual world, there still are antecedent-permitting worlds which are farther from the actual world than the sphere of antecedent-permitting worlds in which the consequent is universally true, namely, those worlds in which the consequent is false. But those worlds may be closer to some other possible world; hence, in that world the counterfactual which is true in the actual world is false.

Hasker retorts that this answer "violates the reason for introducing the comparative-similarity notion in the first place--that reason being . . . to secure that counterfactuals are evaluated in worlds sufficiently similar to the actual world *in noncounterfactual respects*."^{25} But if that was the motivation behind the similarity relation, it only follows that the motives of those who drafted possible world semantics for counterfactuals were thwarted. But as Plantinga explains, it follows neither that such semantics fails to correctly specify the truth conditions of counterfactuals nor is viciously circular.^{26}

Objection (iii)

Which counterfactuals are true depends on which antecedent-permitting, initial world-segments are most similar to the actual world. But which world is actual, Hasker continues, depends in part on God's decision about what to create. Therefore, God could not have been guided by the truth of counterfactuals of creaturely freedom in deciding what world to actualize, since such propositions are true only as a consequence of which world is actual.

What this objection fails to appreciate is that parallel to the logical sequence in God's knowledge--natural knowledge, middle knowledge, free knowledge--there is a logical

sequence in the instantiation of the actual world as well. In the first logical moment of God's natural knowledge, all broadly logically necessary states of affairs already obtain. In the second logical moment of God's middle knowledge the actual world is even more fully instantiated than at the first moment. For now all those states of affairs corresponding to true counterfactuals of creaturely freedom obtain. For example, the state of affairs *If Peter were in C, he would deny Jesus three times* obtains. Then comes logically the divine decree to create, and God freely actualizes all remaining states of affairs of the actual world. In the third logical moment, God possesses free knowledge of the actual world, which is exemplified in all its fullness (tenselessly speaking). Only at this point can the actual world as such be said to obtain.

It is therefore misleading to say that prior to the divine decree the actual world does not obtain *simpliciter*, for certain aspects do and other aspects do not. And those states of affairs that do obtain are sufficient for the truth of counterfactuals of creaturely freedom, since the latter correspond with reality as it thus far exists and since possible worlds can be ranked in their similarity to the actual world as thus far instantiated in terms of degree of shared counterfactuals, thus supplying the truth conditions for a possible worlds analysis of the truth of counterfactuals of freedom. Once it is appreciated that there is a logical sequence in the instantiation of the actual world just as there is in God's knowledge, then objections to middle knowledge based on counterfactuals' being true "too late" to facilitate such knowledge vanish.

Hasker complains that such an answer leaves us unable to *explain* the fact that those counterfactuals of creaturely freedom are true which are true. But this merely reiterates his first objection concerning the ground of the truth of counterfactuals of freedom and so fails to advance the discussion.

At any rate, objections to middle knowledge based on its alleged incompatibility with the possible worlds account of the truth conditions of counterfactuals strike me as very unimpressive. That account was drafted without any consideration of the peculiar situations engendered by theism (compare the way in which the existence of an Anselmian God upsets our intuitions about broadly logical modality!{27}) or middle knowledge. The account may simply be inadequate for the concerns of the philosopher of religion. In fact, I think it is evident that the possible worlds semantics for counterfactual conditionals is defective, for that account cannot adequately handle counterfactuals with impossible antecedents.{28} If the detractor of middle knowledge is to refute that doctrine, then, he will have to come up with a lot stronger arguments than its alleged incompatibility with current semantical theories.

Objection (iv)

Hasker's fourth argument involves a tortuously formulated illustration{29} which has fortunately been reduced with Hasker's approbation to three crucial premisses by Thomas Flint:{30}

I. If E brings it about that " Q " is true, then E is a token of an event-type T such that [(some token of T occurs) $\Box \rightarrow Q$] and [$\sim$ (some token of T occurs) $\Box \rightarrow Q$], and E is the first token of T which occurs.

II. Counterfactuals of freedom are more fundamental features of the world than are particular facts. (Hence, worlds which differ from the actual world with regard to factual content are closer than those which differ from it with regard to counterfactuals of freedom.)

III. If it is in *S*'s power to bring it about that *P*, and "*P* entails "*Q*" and "*Q*" is false, then it is in *S*'s power to bring it about that *Q*.

On the basis of these premisses Hasker argues as follows: Let $A \Box \rightarrow B$ be a true counterfactual of freedom about me and let *A* be true. Let us assume that I can bring about the truth of this counterfactual by performing the action specified in *B*. If premiss (I) is correct, then I can bring about the truth of $A \Box \rightarrow B$ (i.e., *Q*) only if it is the case that, if I had not performed the action specified in *B* (i.e., *E*) then $A \Box \rightarrow B$ would have been false (i.e., $A \Box \rightarrow B$). But if (II) is correct, this necessary condition will never be satisfied because the closest worlds to the actual world will always be worlds in which it is the case that *A* rather than worlds in which it is the case that $A \Box \rightarrow B$. So I cannot bring about the truth of any counterfactual of freedom. Moreover, the Molinist holds that $A \& \Box \rightarrow B$ entails $A \Box \rightarrow B$. So according to (III), if it lies within my power to bring it about that $A \& \Box \rightarrow B$ (i.e., *P*), it is also within my power to bring it about that $A \Box \rightarrow B$ (i.e., *Q*). But since I cannot bring about the truth of $A \Box \rightarrow B$, it follows that I cannot bring it about that $A \& \Box \rightarrow B$. This is not due to my inability to bring about *A*, since *A* is already the case; so it must not be within my power to bring it about that $\Box \rightarrow B$. Since this abrogates my freedom, we must deny the original assumption, that there are any true counterfactuals of freedom.

Now I think it is very apparent that the inference drawn in (II) is a *non sequitur*. In one sense, counterfactual states of affairs about creaturely freedom are more fundamental than states of affairs about particular facts, namely, the former already obtain logically prior to God's decree while the latter are logically subsequent to it. Thus, prior to God's decree, it is the case that *if Peter were to be in C, he would deny Christ three times*, but it is not the case that *Peter is a Galilean fisherman*. (The same could be said, as well, about certain counterfactual states of affairs about natural kinds. Freddoso, for example, would say that logically prior to God's decree it is the case that *if water were cooled to 0° C., it would freeze*, but it is not the case that *most of the Earth's water is saline*. {31}) But even though counterfactual states of affairs about creaturely freedom are thus logically prior to states of affairs about particular facts, they are no less contingent, for creatures could choose to act differently and then other counterfactuals of creaturely freedom would be true. Thus, "fundamental" in the sense of logical priority in the instantiation of the actual world has nothing at all to do with the resolution of vagueness between worlds to determine which are most similar to the actual world.

Why, then, should the defender of middle knowledge be committed to preservation of counterfactuals of freedom at the expense of the laws of nature in determining which worlds are most similar to the actual world? Suppose, for example, that it is true that if my phone were to ring, I would pick it up, and that it does ring. Which world is more similar to the actual world: one in which I do not pick it up when it rings or one in which a flying pink elephant crashes through my office window destroying my telephone--which I would have picked up had it rung? Hasker's (II) would require us to say that the second of these two worlds is more similar to the actual world. But there is nothing in the doctrine of middle knowledge that commits its defender to so silly a supposition.

In his reply to Flint, Hasker argues that the Molinist is committed to such a thesis because counterfactuals based on the laws of nature are only "would-probably" conditionals, whereas counterfactuals of freedom are necessitation conditionals. "Would-probably" counterfactuals are, *selon* Robert Adams, whose analysis Hasker approves, conditionals in which the consequent would be probable if the condition specified in the antecedent were to obtain. In

such conditionals there is no guarantee that if the antecedent obtains, the consequent also obtains. By contrast, in counterfactuals of freedom, if the antecedent condition obtains, then the consequent condition definitely obtains as well. Now Hasker apparently thinks that modern physics has proved that all the fundamental laws are probabilistic rather than deterministic in character. Therefore, counterfactuals of freedom surely have to be weighted more heavily than counterfactuals backed by the laws of nature in determining the relative closeness of possible worlds.

But this response (wholly apart from the false assertion that all natural laws are probabilistic rather than deterministic{32}) is multiply confused: (1) The Molinist is under no obligation to accept Robert Adams's analysis of probabilistic counterfactuals. In fact, I should say that Plantinga has convincingly refuted Adams on this score, that it is the whole conditional that is probable—Probably ($\phi \Box\rightarrow \psi$)--rather than the consequent alone, and that probability does not specify a certain value in a broad range of truth values, but registers our degree of epistemic certainty about which of two truth values the proposition possesses.{33} But the superiority of Plantinga's analysis aside, the point is that if Hasker is to refute middle knowledge, he has to do so either by showing some incoherence on Molinism's *own* assumptions or else refute those assumptions. But he cannot simply import without argument analyses of counterfactuals which Molinists would reject and then show that on *that* analysis, middle knowledge fails. (2) Counterfactuals backed by laws of nature are no more "would-probably" conditionals than are counterfactuals of freedom. The determinateness of the counterfactual's truth value is not affected by the determinacy of the causal relations involved. Alethic bivalence is just a different category from causal determinacy. This is evident in that some Molinists, like Freddoso, would say that even a counterfactual about causally indeterminate events such as

19. If a photon were fired through the aperture at t , it would strike the screen at coordinates $\langle x, y \rangle$

is bivalent and may, for all we know, be true.{34} I think the source of Hasker's confusion may be his conflation of a proposition's *certainty* and its *definiteness*.{35} Definiteness refers to its possession of one of two truth values; certainty does not characterize the proposition itself but is our degree of conviction as to which truth value it has. Thus, (19) may be utterly uncertain to us, but nonetheless definitely true. In the sense that (19) is definitely true, the consequent *is* guaranteed on the antecedent, regardless of causal indeterminacy. Really there are no such things as "would-probably" counterfactuals in Hasker's sense; there are bivalent counterfactuals which we know to be true or false to different degrees of probability. (3) Even if Hasker were correct, I still fail to see what relevance this has to the resolution of vagueness between possible worlds. How, on his analysis, does it follow that a world in which I do not pick up my phone when it rings is less similar to the actual world than a world in which the quantum motions of the subatomic particles in my telephone all happen to coincide so that my phone "tunnels" through my office wall instead of ringing--though it remains true that if it rang, I would pick it up?

In his reply to Flint, Hasker suggests that counterfactuals of freedom need not be, after all, more fundamental than counterfactuals based on the laws of nature, just so long as they are far more fundamental than particular facts.{36} But I do not see that the defender of middle knowledge need be committed even to this. Is it obvious, on the same hypothesis about the actual world above, that a world in which I do not pick up the phone when it rings is less

similar to the actual world than one in which, say, a short-circuit prevents my phone from ringing? I fail to see why the Molinist need make such a judgment.

What is especially curious about Hasker's argument based on (II) is that it seems to commit him to the use of backtracking counterfactuals in this case. For his argument based on (II) implies that if I were not to do the action specified in B , then it would not have been the case that A , that is $\sim B \Box \rightarrow \sim A$. In our example, were I not to pick up the phone, it would not have rung, even though it did ring. But the use of backtracking counterfactuals requires some justification for a special resolution of vagueness, such that worlds involving adjustments of the past are more similar to the actual world than worlds without such adjustments. It is precisely to such backtracking counterfactuals that the defender of divine foreknowledge of future contingents appeals in rebutting theological fatalism, and he is careful to offer justification for their appropriateness there.^{37} But Hasker has failed to justify why a special resolution must be always employed if it is to be within one's power to negate the consequent of any counterfactual of freedom.

But now an even deeper problem surfaces. For if $\sim B \Box \rightarrow \sim A$ is true, then do I not have it within my power to bring it about that *that* counterfactual of freedom is true, which contradicts Hasker's hypothesis? To avert that conclusion, Hasker must show that it is not within my power to perform $\sim B$. Hasker argues that I cannot bring it about that $\sim B$ because to do so is to bring about $A \& \sim B$, which entails $A \Box \rightarrow \sim B$, which it is not within my power to bring about. But this line of argument seems patently inconsistent. For we have already seen that Hasker is committed to the backtracking counterfactual $\sim B \Box \rightarrow \sim A$, so that to bring it about that $\sim B$ is *not* to bring it about that $A \& \sim B$, but to bring it about that $\sim A \& \sim B$. By (III), then, what lies within my power is to bring it about that $\sim A \Box \rightarrow \sim B$, which does not contradict either $A \Box \rightarrow B$ or $B \Box \rightarrow \sim A$.

The source of Hasker's error appears to be his belief that if A is already given, then my ability to perform $\sim B$ implies the ability to bring it about that $A \& \sim B$. He infers from my inability to bring about the composite state of affairs ($A \& \sim B$) and the givenness of A that it is not within my power to bring it about that $\sim B$. The reader will recognize that this is just the same, old argument for theological fatalism dressed up in a new guise, only in Hasker's hands it becomes a mish-mash of inconsistent elements from both Molinism and theological fatalism. I conclude that Hasker has provided no good reason for thinking that the doctrine of middle knowledge is incoherent and therefore not a possible solution to the problems of divine prescience, providence, and predestination.

Endnotes

^{1} William Hasker, *God, Time and Knowledge*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1989), p. 89.

^{2} Alvin Plantinga, "On Ockham's Way Out," *Faith and Philosophy* 3 (1986): 235-69.

^{3} William Lane Craig, "'Nice Soft Facts': Fischer on Foreknowledge," *Religious Studies* 25 (1989): 235-46.

^{4} Hasker incorrectly asserts that Freddoso now thinks that God's past belief is a hard fact (Hasker, *God, Time and Knowledge*, p. 95; cf. idem, review of *On Divine Foreknowledge*, *Faith and Philosophy* 7 [1990]: 358-59). He fails to notice that the Molinist definition of a

hard fact is different than the Ockhamist's and amounts to the causal closedness of the past. But the past is still counterfactually open, and thus in the Ockhamist sense God's belief remains a soft fact. See Alfred J. Freddoso, "Introduction" to *On Divine Foreknowledge*, by Luis de Molina, trans. with Notes by A.J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988), pp. 59-60.

{5} See Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), p. 86; idem, "The Boethian Compromise," *American Philosophical Quarterly* 15 (1978): 129-38.

{6} Ibid., p. 107.

{7} Thomas Flint, "In Defense of Theological Compatibilism," *Faith and Philosophy* 8 (1991): 240.

{8} Hasker, *God, Time, and Knowledge*, p. 109.

{9} See my discussion in *Divine Foreknowledge and Human Freedom*, Studies in Intellectual History 19 (Leiden: E. J. Brill, 1990), pp. 89-90. I should be willing to accept

PEP₅: If it is in S's power to bring it about that *P*, and "*P*" entails "*Q*" and "*Q*" is false, and *Q* is a consequence of *P*, then it is in S's power to bring it about that *Q*.

I should be inclined to say that it is within in S's power to bring about God's past beliefs about S's free actions in the same sense that Socrates had it within his power to make Xantippe a widow by drinking the hemlock cup.

{10} Hasker, *God, Time, and Knowledge*, p. 129.

{11} Ibid., p. 130.

{12} Ibid., p. 134.

{13} Ibid., p. 135.

{14} Ibid., p. 141.

{15} Richard Taylor, "Fatalism," *Philosophical Review* 71 (1962): 56-66; idem, "Fatalism and Ability I," *Analysis* 23 (1962-1963): 25-27; idem, "A Note on Fatalism," *Philosophical Review* 72 (1963): 497-99.

{16} Hasker, *God, Time, and Knowledge*, p. 126.

{17} Alfred J. Freddoso, "Accidental Necessity and Power Over the Past," *Pacific Philosophical Quarterly* 63 (1982): 54-68.

{18} Hasker, *God, Time and Knowledge*, pp. 29-52.

{19} Ibid., p. 30.

{20}Ibid.

{21}Plantinga, *Nature of Necessity*, p. 188.

{22}Jonathan L. Kvanvig, *The Possibility of an All-Knowing God* (New York: St. Martin's Press, 1986), pp. 124-25.

{23}Hasker, *God, Time, and Knowledge*, p. 32.

{24}See Plantinga, *Nature of Necessity*, pp. 177-78.

{25}Hasker, *God, Time, and Knowledge*, pp. 35-36.

{26}Plantinga, *Nature of Necessity*, p. 179; Alvin Plantinga, "Reply to Robert Adams," in *Alvin Plantinga*, ed. James Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht: D. Reidel, 1985), p. 378.

{27}See Thomas V. Morris, *The Logic of God Incarnate* (Ithaca, N.Y.: Cornell University Press, 1986), pp. 111-19.

{28}See my "'Lest Anyone Should Fall': A Middle Knowledge Perspective on Perseverance and Apostolic Warnings," *International Journal for Philosophy of Religion* 29 (1991): 65-74.

{29}The counterfactuals employed by Hasker, for example, are not in the canonical form of counterfactuals of creaturely freedom--if *S* were in *C*, *S* would freely decide to do *A*--and so could be dismissed by the Molinist as neither true nor false. But Flint has done Hasker the service of freeing the essential argument from its illustrative infelicities.

{30}Thomas P. Flint, "Hasker's *God, Time and Knowledge*," *Philosophical Studies* 60 (1990): 104-05; William Hasker, "Response to Thomas Flint," *Philosophical Studies* 60 (1990): 118.

{31}Alfred J. Freddoso, "The Necessity of Nature," in *Midwest Studies in Philosophy*, vol. 11, ed. P. French, T.E. Uehling, Jr., and H. Wettstein (Minneapolis: University of Minnesota Press, 1987).

{32}Modern physics rests on the twin pillars of Quantum Theory and Relativity Theory, but these two bodies of law are irreconcilable with each other. Relativistic laws are not probabilistic.

{33}Plantinga, "Reply to Robert Adams," pp. 380-381.

{34}Freddoso, "Introduction," pp. 28-29.

{35}Consider his statement ". . . how can those psychological facts provide good grounds for the assertion that the agent *definitely would* (as opposed, say, to *very probably would*) respond in that way?" (Hasker, *God, Time, and Knowledge*, p. 24) Cf. p. 31 where he seems to confuse taking psychological facts as *evidence* that a proposition is true and taking such facts as *making* a proposition true.

{36}Hasker, "Response," pp. 118-19.

{37} If God's beliefs are merely inerrant in the actual world, then that inerrancy warrants a special resolution of vagueness; if God is essentially omniscient, then no special resolution is required to justify backtracking counterfactuals, since no worlds exist in which God errs, so that the standard resolution suffices.

MIDDLE KNOWLEDGE AND CHRISTIAN EXCLUSIVISM

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

David Hunt has criticized a middle knowledge perspective on Christian exclusivism on evangelistic and metaphysical grounds. He argues that from a middle knowledge perspective attempts to evangelize another person are either futile or superfluous and that an omnibenevolent God would have created a post-mortem state of the blessed without ever creating any of the damned. Hunt's evangelistic objection is unfounded because by our evangelistic efforts we may bring it about that people are saved who otherwise would not have been saved. Hunt's metaphysical objection errs in thinking that God judges people on the basis of what they would do rather than what they in fact do.

Source: "Middle Knowledge and Christian Exclusivism." *Sophia* 34 (1995): 120-139.

In another place, {1} I have attempted to formulate and defend a middle knowledge perspective on the exclusivity of salvation through Christ. The difficulty posed by the doctrine of Christian exclusivism, it seems to me, is counterfactual in nature: granted that God has accorded sufficient grace to all persons for their salvation, still some persons who in fact freely reject God's grace might complain that they would have responded affirmatively to His initiatives if only they had been accorded greater or more congruent grace. If God is omnibenevolent, He must surely, it seems, supply all persons with grace efficacious for their

salvation. But then Christian exclusivism is incompatible with the existence of an omnipotent and omnibenevolent God.

To this challenge the Molinist may respond that it is possible that there is no world feasible for God in which all persons freely respond to His gracious initiatives and so are saved. Given the truth of certain counterfactuals of creaturely freedom, it is possible that God did not have it within His power to realize a world in which all persons freely respond affirmatively to His offer of salvation. But in His omnibenevolence, He has actualised a world containing an optimal balance between saved and unsaved. If it be further objected that God would not actualise a world in which some persons are damned as a concomitant of others' being saved, though the former, if placed under other circumstances, would themselves have freely accepted salvation, then the Molinist may respond that God in His omnibenevolence has chosen not to create any such persons; He has instead elected to create only persons who would freely reject Him in any world which is feasible for Him to actualise, persons who, accordingly, freely possess the property of transworld damnation. God in His providence has so arranged the world that as the Christian gospel went out from first century Palestine, all who would respond freely to it if they heard it did hear it, and all who do not hear it are persons who would not have accepted it if they had heard it. In this way, Christian exclusivism may be seen to be compatible with the existence of an omnipotent and omnibenevolent God.

It seems to me that this middle knowledge perspective on what I have called the soteriological problem of evil provides a solution of extraordinary power and fecundity. As a result, however, of a lengthy and even-handed critique by David Hunt,^{2} it does seem to me that this perspective is in need of clarification and qualification.

PRELIMINARY REMARKS

Before looking at Hunt's critique proper, I should like to make two comments on preliminary concerns. First, I wish to endorse Hunt's emphasis on what he calls the practical debate concerning the theological fruitfulness of a Molinist model. I think it extremely dubious that the detractors of middle knowledge will succeed in demonstrating the logical incoherence of that doctrine. To put the point as baldly as possible, when a person with the philosophical acumen of an Alvin Plantinga is prepared to endorse and defend the coherence of this doctrine,^{3} then it is somewhat unlikely that the doctrine will turn out to be *demonstrably* logically absurd. Whether we choose to adopt such a model in our theological theorising is likely to depend, therefore, on how fecund a source of theological insight we find Molinism to be. In my own work, therefore, I have sought not merely to refute the theoretical objections to middle knowledge,^{4} but also to exhibit its truly stunning theological richness.^{5} It will be on the basis of such considerations, I believe, that the doctrine of middle knowledge is apt to stand or fall.

This leads me to my second comment, namely, I think that Hunt has skewed both the statement of the problem as well as the proposed middle knowledge solution. With respect to the statement of the problem, Hunt's formulation is troublesome in a couple of respects. First, he portrays hell itself as an evil and therefore tends to think of the problem in terms of the prolongation of suffering into eternity. He writes, "... for many people, death will only inaugurate a condition of incalculable misery enduring for all eternity. This multipl[ies] (by infinity) the amount of evil that must be reconciled with the existence of an omnipotent and omnibenevolent God..."^{6} Or again, "... post-mortem evil, which is infinitely greater than

premortem ... evil consists of the sufferings of the damned ...".{7} But this is not, as I understand it, the soteriological problem of evil. For on the Christian view, hell is in fact good and the suffering of the damned just. The doctrine of hell constitutes the ultimate triumph of God's justice over evil; it assures us that we do, after all, live in a moral universe in which justice will prevail. A world without punishment for sin would be one in which the moral order is ultimately vacuous, justice is compromised, and God is not holy. The doctrine of hell shows us that God's terrible holiness and hatred of sin are not to be trifled with, that we cannot sin with impunity, that our sins shall, indeed, find us out.{8} Hell is thus a good thing; what is evil (and tragic) is the damned's freely willed rejection of God's grace by which they consign themselves to this state. Insofar as the damned continue in their hatred and rejection of God even in hell, evil is prolonged into the postmortem state. But the evil consists in the perverse wills of the damned, not in their being justly punished by God. The soteriological problem of evil does not consist in the sufferings of the lost, but the apparent irreconcilability of God's existing and His allowing human beings to freely make everlasting ruin of their lives.

The most difficult feature of this problem, as I said, is the counterfactual aspects of it. But Hunt again skews the problem by casting it as "a matter of comparative justice." {9} Certain people exist in circumstances which are more conducive to their receiving God's grace than are the circumstances in which others exist. "God appears to be in the position of a casino operator who stacks the deck in favour of the house at certain tables while stacking it in favour of the patron at other tables." {10} Moreover, some people who are lost would have been saved if they had existed under different circumstances. "... but it seems unfair that Jack, who would have accepted Christ under other conditions, must pay with his immortal soul the price of God's cosmic fine-tuning." {11} Furthermore, some people will be saved, even though they, like Jack, would have rejected Christ had they existed under similar circumstances. "This certainly appears to be a clear case of comparative injustice." {12}

What this presentation of the problem omits is any mention of the doctrine of sin. According to the Christian view, the natural man exists in a state of rebellion against God, spiritually dead, alienated from God, and morally guilty before Him. The natural man is therefore already under the just condemnation of God, meriting only His wrath. Salvation of *anybody* is therefore only by God's grace, by His unmerited favour. God's choosing one person to be saved and leaving the remainder to their just desserts can thus never be a matter of *unfairness* or comparative *injustice* on God's part (except in the peculiar sense that God is not just toward the one saved, having chosen to be merciful instead). I am reminded of a riveting scene from Dumas's *The Count of Monte Cristo*, in which two condemned criminals, Peppino and Andrea, are being led to the executioner's block, when a last minute pardon, secured through the influence of the Count, arrives on behalf of Peppino:

'For Peppino!' cried Andrea, who seemed aroused from the torpor in which he had been plunged. 'Why for him and not for me? We ought to die together. I was promised he should die with me. You have no right to put me to death alone. I will not die alone - I will not!' And he broke from the priests, struggling and raving like a wild beast, and striving desperately to break the cords that bound his hands ...

'What is passing?' asked Franz of the count ...

'Do you not understand,' returned the count, 'that this human creature who is about to die is furious that his fellow sufferer does not perish with him? And, were he able, he would tear him to pieces with his teeth and nails rather than let him enjoy the life he himself is about to be deprived of? ...'

All this time Andrea and the two executioners were struggling on the ground, and he kept exclaiming, 'He ought to die! - he shall die! - I will not die alone!'

'Look! look!' cried the count ...; 'look, for, on my soul, it is curious. Here is a man who had resigned himself to his fate, who was ... about to die without resistance ... Do you know what consoled him? It was that another partook of his punishment, that another partook of his anguish, that another was to die before him! Lead two sheep to the butcher's ... and make one of them understand his companion will not die: the sheep will bleat for pleasure ... But man - man, whom God created in His own image - ... what is his first cry when he hears his fellow-man is saved? A blasphemy! Honour to man, this masterpiece of nature, this king of the creation!' And the count burst into a laugh; but a terrible laugh that showed he must have suffered horribly to be able thus to laugh ...

Franz sprang back, but the count seized his arm and held him before the window.

'What are you doing?' said he. 'Do you pity him? If you heard the cry of "Mad dog!" you would take your gun - you would, unhesitatingly, shoot the poor beast, who, after all, was only guilty of having been bitten by another dog. And yet you pity a man who, without being bitten by one of his race, has yet murdered his benefactor; and who, now unable to kill any one, because his hands are bound, wishes to see his companion in captivity perish. No, no! Look! look!'

This recommendation was needless. Franz was fascinated by the horrible spectacle. The two assistants had borne Andrea to the scaffold; and there, spite of his struggles, his bites, and his cries, had forced him to his knees. During this time the executioner had raised his mace, and signed to them to get out of the way. The criminal strove to rise, but ere he had time the mace fell on his left temple. A dull and heavy sound was heard, and the man dropped on his face like an ox, and then turned over on his back. The executioner let fall his mace, drew his knife, and with one stroke opened his throat, and mounting on his stomach, stamped violently on it with his feet. At every stroke a jet of blood sprang from the wound.

This time Franz could sustain himself no longer, but sank half fainting into a seat ... The count was erect and triumphant, like the Avenging Angel.{13}

The reason we find the Count's behaviour horrifying is not because he was unjust, even comparatively so, in securing the pardon of only one man, when he could have rescued them both; it is rather that he was only comparatively merciful. He apparently pitied the one criminal, but not the other.

Similarly, in God's case, His salvation of some and reprobation of others seems to call into question, not God's *justice*, since all deserve condemnation, but rather His *love*. God is supposed to be omnibenevolent, and it seems difficult to deny that He would be more benevolent if He were to save all persons rather than just some, should this lie within His power.{14} The objection posed by the soteriological problem of evil, then, challenges, not God's justice, but His love. The middle knowledge perspective I offered seeks to preserve God's omnibenevolence, but modifies His omnipotence in order to maintain consistency with some people's being lost.

Turning now to Hunt's statement of the middle knowledge perspective under discussion, we again find that some correction is in order. First, according to Hunt, my favoured version of Christian exclusivism is that "everyone is given an adequate chance in *some possible* life" rather than that "everyone is given an adequate chance in *this* life." {15} But this is a misunderstanding, since I repeatedly endorsed in my article Molina's view that "In choosing a certain possible world, God commits Himself, out of His goodness, to offering various gifts of grace to every person which are sufficient for his salvation." {16} Everyone in this life is given an adequate chance of salvation; indeed, many of the lost may actually receive greater gifts of

prevenient grace and, thus, better chances of salvation than many of the saved. And I certainly do not think that exclusivism is defensible by maintaining that everyone is given an adequate chance of salvation in some possible world if they are denied it in the actual world.

Second, neither do I "note with approval" {17} the solution to the question of the salvific status of infants according to which God judges them on the basis of what they would have done had they grown up and been confronted with the gospel. I give this as one among several illustrations of "how often ordinary Christian believers naturally assume that God has middle knowledge" and comment that "accepting the doctrine of middle knowledge does not necessarily commit a person to holding such views," although "these views cannot be held without assuming divine middle knowledge." {18} It is also noteworthy that the illustration about the salvation/damnation of infants is followed by a solution to the problem of those not reached with the gospel which is not the solution to that problem which I defend. In fact, my reason for rejecting both of these doctrinal employments of middle knowledge is very much the same as the argument which Hunt will use against my position; namely, it would be unjust to judge a person on the basis of what he would have done rather than on the basis of what he actually did.

HUNT'S EVANGELISTIC OBJECTION

With these emendations in mind, let us turn to Hunt's two-pronged critique. His first objection is that my middle knowledge perspective involves "evangelical fatalism." {19} This label is rather puzzling. Rather than "evangelical," Hunt evidently means "evangelistic." The word "fatalism" seems even more inappropriate, since fatalism is the doctrine that it is not within one's power to do anything other than what one will do, and Hunt is not arguing that one does not have the power to refrain from evangelising those whom one does. Rather his argument is aimed at showing that it is somehow futile (or superfluous) to engage in evangelisation. Accordingly, his accusation might be better expressed as "evangelistic futility."

In a nutshell, his argument is that if any person, say, Jack, suffers from transworld damnation, then efforts to evangelise him are futile. If he suffers from transworld salvation, then efforts to evangelise him are superfluous. If he is only contingently saved, then his salvation may well depend on my sharing the gospel with him; but since he will be damned only if he suffers from transworld damnation, I can be certain that had I failed to share the gospel with him, he would still have been saved by some other means. Thus, my evangelistic efforts make no difference to anyone's salvation; it is not possible for my efforts to result in someone's being saved who would not otherwise have been saved.

Now even if this line of reasoning is correct, its conclusion does not strike me as very serious. It certainly does not prove that Molinism is impossible or even contingently false. At best all it proves is that my claim is false that the middle knowledge perspective I defended "helps to put the proper perspective on Christian missions." {20} Suppose, then, this claim is wrong. Nothing whatsoever follows concerning the Molinist solution to the soteriological problem of evil, nor does it follow that we have no motive for evangelisation. Our motivation for evangelisation should perhaps instead be the privilege and joy of being God's instruments in bringing another human being to salvation or, if nothing else, at least our moral duty to obey the Lord's command to "make disciples of all nations" (Mt. 28.17).

But it does not seem to me that Hunt's argument succeeds in establishing even the modest conclusion that my above missiological claim is wrong. For what is the "proper perspective

on Christian missions" of which I spoke? I explained, "... it is our duty to proclaim the gospel to the whole world, trusting that God has so providentially ordered things that through us the good news will be brought to persons who God knew would respond to it if they heard it." {21} And again, "Thus the motivation for the missionary enterprise is to be God's ambassadors in bringing the gospel to those whom God has arranged to freely receive it when they hear it." {22} The point of the middle knowledge perspective is that we engage in evangelisation, not because if we fail to do so, people will go to hell who would otherwise have been saved - a negative perspective which makes the damnation/salvation of the unreached hang on the contingencies of our personal obedience and leads to a guilt-ridden conscience -, but rather because we can be confident that God, knowing via His middle knowledge that we would engage in certain activities, has so providentially arranged the world in advance that as we go out sharing the gospel there will be people whom He has placed in our paths who will be ready and willing to receive the good news we bring and to trust in Christ for salvation - a positive perspective on missions which leads to joyous and victorious service for God.

The problem with Hunt's argument is that he seems to be operating under the presupposition that a proper perspective on evangelism entails the notion that our activities must somehow make a difference between someone's salvation and damnation. But this is not a presupposition which I accept, nor has he given any justification for it.

In fact, however, we can show that on a middle knowledge perspective Hunt's *desideratum* that "... my evangelical efforts might make a difference to someone's salvation - i.e. that it is possible for these efforts to result in someone being saved who would not otherwise have been saved" is fulfilled. {23} Consider first the case of someone who is transworldly damned. Here, a *mea culpa*: my intention in broaching this doctrine was to formulate a notion which is in fact broader than transworld damnation as I defined it. What I really meant was what we may call transcircumstantial damnation, which is a contingent property possessed by an individual essence if the exemplification of that essence would, if offered salvation, freely reject God's grace and be lost no matter what freedom-permitting circumstances God should create him in. (I thus accept what Hunt calls the "Broad Interpretation.") I agree that attempts to evangelise him will be futile, for no matter what we do he would freely reject God's grace. But it does not follow that "Evangelism, on this account, is clearly futile." {24} What follows is that evangelisation of a transcircumstantially damned person is futile. But on a middle knowledge perspective, some *other* person might exist in place of *that* person were we to engage in evangelistic activities. Suppose a missionary decides to preach the gospel to an unreached people group or, closer to home, that we decide to share our Christian faith with a neighbour down the street. God, knowing via His middle knowledge that such outreaches would be made, may have providentially arranged for people to be in the tribe or to be our neighbours who He knew would respond to the gospel under those circumstances, people whom He otherwise would not have created. Thus, as a result of our evangelistic efforts, there might well be people in the world who will be saved through those efforts who otherwise would not have been saved (because they would not have been created). Thus, our evangelistic efforts do make the sort of difference Hunt desires: these efforts may result in someone's being saved who would not otherwise have been saved. This, again, puts a very positive perspective on Christian missions: by our obedience to our Lord's Great Commission we can help to maximise the number of the saved, but we need not worry that through our disobedience people who would have been saved will instead be lost. We need only note that since we, of course, do not know who is transcircumstantially damned and who is not, we should proclaim the gospel to all peoples indiscriminately, trusting that as we sow the seed of

the gospel some of it will fall on fertile ground, which God has prepared, and grow and bear fruit.

The case of persons possessing the property of transworld or even transcircumstantial salvation is similar. It seems obviously possible that, given God's decree in every possible world to provide sufficient grace for salvation to every creature, some persons respond affirmatively to God's grace and so are saved in any set of circumstances in which God creates them. Of course, we do not know if any such persons exist in the actual world. If any do, then, as Hunt says, they will accept Christ even if I fail to share the gospel with them. But from that it does not follow that "there is no particular urgency to my doing so." {25} For as in the case of the transcircumstantially damned, it might be the case that if I were not to engage in certain evangelistic activities, then God would not have created the transcircumstantially saved individual. For a world in which I do not share the gospel with that individual but somebody else does might be deficient in *other* respects. By my obedience to our Lord's command, I could help to bring it about that such an individual have been created, thereby increasing the number of the saved. That lends urgency enough to the task of evangelisation, without our having to hold that such an individual would have been lost had I failed to share the gospel.

Finally, consider the case of the contingently, or better, circumstantially, saved, persons who are in fact saved but who would have been lost had they been placed in other circumstances. {26} Hunt seems to think we have "little incentive" for sharing the gospel with such persons, since they will fail to be saved only if they are transworldly damned, which they are not. Thus, "... I can be certain that the effect I actually had in this case would have been brought about in some other way if I had not acted as I did." {27} Again, this conclusion does not follow. For although it is true that if I do not evangelise such persons, they will still be saved, it may equally be true that were I not to evangelise such persons, they would not be saved (either because they would be damned or because God would have refrained from creating them). The Christian who refrains from evangelisation excuses himself on the basis of indicative conditionals; but the evangelist draws incentive from counterfactual conditionals. The latter finds in these counterfactual conditionals sufficient motivation for sharing the gospel, knowing that if he were to fail to act as he does, the effect he actually has might well not be brought about in some other way.

In sum, Hunt's charge of evangelistic futility is both unfounded and insignificant. It is insignificant because it undercuts neither the possibility nor the truth of the middle knowledge perspective and because other motivations and incentives for evangelisation are readily available. It is unfounded because whether people are transcircumstantially damned, transcircumstantially saved, or circumstantially saved, we still have motives for engaging in evangelistic activities. By sharing the gospel we can help to bring it about that people are saved who would otherwise not have been saved. By neglecting evangelisation, we contribute to bringing it about that there are not persons saved who otherwise would have been saved. The one thing we cannot do is bring it about that people are damned who, if not for our negligence, would otherwise have been saved (thank God!). We can thus help to maximise the number of people in heaven and minimise the number of people in hell - a worthy incentive if ever there was one!

HUNT'S METAPHYSICAL OBJECTION

In a nutshell, Hunt's metaphysical objection is that it is possible that God create a full post-mortem state of the blessed without ever creating any damned and that an omnibenevolent God would prefer such an alternative to creating a world containing persons who are damned. Hence, the Molinist alternative is untenable.{28} Hunt reasons that since God judges people on the basis of what they would do in various circumstances, there is no need to create a pre-mortem world at all; rather He could simply create the blessed in heaven and never create any of the damned. This objection is, however, based on the incorrect presupposition that according to the middle knowledge perspective God judges people on the grounds of what they would do rather than what they actually do. Hunt writes,

On the Molinist soteriology, ... God's assignment of souls to a post-mortem destiny is based entirely on the truth of certain subjunctive conditionals about how those souls would have responded under various pre-mortem conditions. These subjunctive conditionals, in turn, are true independently of which pre-mortem world is actual ... But then the postmortem fate of any soul can be determined independently of which world is actual; indeed, since this fate is fixed logically prior to the actualization of a pre-mortem world, it is fixed *whether or not a pre-mortem world ever exists*.{29}

But neither Molinism nor the middle knowledge perspective I defended implies that God judges people on any basis other than their actual acceptance or rejection of God's grace. It would be crazy to condemn someone who actually did *not* sin because he *would have* sinned under other circumstances. People who are damned are so because they willingly reject God's grace and ignore the solicitation of His Spirit. But what I suggested was that, if we are concerned that it would be unloving on God's part to condemn someone for rejecting His grace who would under other circumstances have accepted it, then we can hold that God in His mercy would not create such persons, but would only create individuals who would have rejected His grace under any circumstances. Thus, God is not unloving to condemn such individuals on the basis of their rejection of God's sufficient grace for salvation in the actual world. As I said before, this business about transworld or transcircumstantial damnation has nothing to do with comparative injustice on God's part; it is all about His love. It states that God is too loving to condemn someone who is only circumstantially damned - even though he deserves damnation for his free rejection of God's sufficient grace -, and so He creates among the lost only persons who would have rejected Him under any circumstances. But those who are lost are judged only on the basis of what they have actually done. And, of course, the doctrine of transcircumstantial damnation is merely an auxiliary doctrine proposed in response to an objection based on what I regard as the very dubious assumption that necessarily, an omnibenevolent God would not create persons who actually reject His grace and are lost, but who would have been saved under other circumstances.

Contrary to Hunt's initial version of the metaphysical objection, therefore, a holy God could not simply create persons in heaven (or hell) on the basis of what they would have done, but never in fact did.{30}

Hunt now raises a second problem. Even if the post-mortem existence of the blessed entails the pre-mortem existence of the blessed and the post-mortem existence of the damned entails the pre-mortem existence of the damned, nevertheless the pre-mortem existence of the blessed does not entail the pre-mortem existence of the damned.{31} Since it is not God's unconditional desire to create the damned but only His conditional will that they exist as the necessary concomitant of the pre-mortem existence of the blessed, God would have no reasons to create the damned if some other way could be devised to facilitate the appropriate pre-mortem environment for the blessed. The other way proposed by Hunt is that in the place of the damned God create soulless simulacra. Since these simulacra do things in the world

like give birth to real people, start wars, and run governments, it is evident that Hunt takes them to be not mere phenomenal percepts of the blessed, but physical, mindless automata. He states,

It seems that each of us could have exactly the experiences we actually have even though (unbeknown to us) none of the other bodies in our experience is itself a center of experiences. Why then could not God arrange things so that only the elect have a psychological 'inside' - a mind or soul - while the role of the damned (which is solely to elicit experiences in the elect) is played by perfect simulacra? {32}

Hunt anticipates the objection that such a strategy would involve deception on God's part and is therefore unacceptable. He responds that (i) it is not clear that such a strategy involves deception and (ii) the avoidance of people in hell constitutes a morally sufficient reason for God's engaging in deception of this sort.

But to my mind, Hunt's proposal is so morally abhorrent and unworthy of God that He could not entertain it. After all, we are not talking here of the sort of mild deception involved by, say, Berkeleian idealism. We are talking about a world filled with automata with which the elect enter into significant human relations, a scenario which constitutes a moral offence to the elect of unspeakable proportions. Can one imagine being married to an automaton, giving oneself to that thing in love, trust, and sexual surrender? Or giving birth to and loving an automaton? Or having a mother and father or trusted friends who are automata? I cannot convince myself that God would create such a world. And though the fate of the lost is tragic, their creation involves no moral failure on God's part as does Hunt's proposal. It must always be remembered that God loves the lost, desires their salvation, and provides sufficient grace for them to be saved; their ability to reject God's love is testimony to their status as morally significant persons whom God treats with due respect. By contrast Hunt's proposal involves God's treating real persons without the moral respect they deserve.

CONCLUSION

The area of soteriology is one of the *loci* of dogmatic theology where a Molinist perspective can be very helpful, especially when contrasted with its alternatives. We have seen that the doctrine of hell poses a significant challenge, not to God's justice and holiness, but to His omnibenevolence. Hell is a demonstration of God's justice, but it is difficult to understand why an omnibenevolent God does not do more to prevent persons from going there. The middle knowledge perspective I proposed holds that it may not be feasible for God to create a world of free creatures in which more are saved and fewer are lost than in the actual world and that God in His mercy providentially arranges the world such that any person who would receive the gospel if he heard it does hear it.

Hunt's objection that this perspective leads to evangelistic futility is both insignificant and false, insignificant because there are other cogent motivations for evangelisation and false because, by helping to spread the gospel throughout the world, we can bring it about that people will be saved who would not have been saved, had we remained silent.

Hunt's metaphysical objection that God could have created a plenitude of the saved without creating any lost is based on a false assumption and an apparently impossible supposition. He falsely assumes that Molinism holds that God judges people on the basis of subjunctive conditionals concerning them rather than on the basis of their actual response to God's grace. And his supposition that God might have created a world in which the lost are mindless

automata is morally unworthy of God and a violation of human personhood which does not characterise the Molinist alternative.

For his own part, Hunt honestly admits that a biblical theist cannot be a universalist, but he seems to be attracted to a risk-taking God who lacks middle knowledge and tries His best to defeat and redeem evil. But such a God is the epitome of moral recklessness, since logically prior His decree to create the world, He had no idea whatsoever whether anyone would enter into divine fellowship or whether *all* might be lost forever in hell. Moreover, such a God seems peculiarly indifferent to the fate of the billions of people who have never heard the gospel and most of whom are therefore lost, but who, for all He knows, might receive Christ were they only to hear of him, and yet whom He passes over in relative neglect, content to provide them only inefficacious general revelation and to let His Church, plodding and uncertain, advance the vacillating frontiers of the kingdom of light. Compared to that, Molinism seems a welcome alternative.

ENDNOTES

{1} William Lane Craig, "'No Other Name': A Middle Knowledge Perspective on the Exclusivity of Salvation through Christ," *Faith and Philosophy* 6 (1989): 172-88.

{2} David P. Hunt, "Middle Knowledge and the Soteriological Problem of Evil," *Religious Studies* 27 (1991): 3-26.

{3} Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), pp 169-89; idem, "Reply to Robert Adams," in *Alvin Plantinga*, ed. J.A. Tomberlin and P. Van Inwagen, Profiles 5 (Dordrecht: D. Reidel, 1985), pp. 372-82.

{4} See William Lane Craig, *Divine Foreknowledge and Human Freedom: The Coherence of Theism I: Omniscience*, Brill's Studies in Intellectual History 19 (Leiden: E.J. Brill, 1991), pp. 246-78.

{5} In addition to the article mentioned in note 1, see William Lane Craig, "Middle Knowledge: a Calvinist-Arminian Rapprochement?" in *The Grace of God, the Will of Man*, ed. C. Pinnock (Grand Rapids, Mich.: Zondervan, 1989), pp. 141-64; idem, "'Lest Anyone Should Fall': A Middle Knowledge Perspective on Perseverance and Apostolic Warnings," *International Journal for Philosophy of Religion* 29 (1991): 65-74; idem, "Theism and Big Bang Cosmology," *Australasian Journal of Philosophy* 69 (1991): 492-503.

{6} Hunt, "Middle Knowledge," p. 5.

{7} Ibid., p. 19. Hunt overreaches his bounds, however, when he speaks of "innumerable" and "countless" souls in hell (Ibid., pp. 19, 22), for the number of the lost will be finite.

{8} Of course, the good news of the gospel is that Christ has borne the punishment for our sins, so that those who accept his pardon are no longer under God's condemnation.

{9} Hunt, "Middle Knowledge," p. 6.

{10} Ibid., p. 7.

{11} Ibid., p.8.

{12} Ibid.,

{13} Alexandre Dumas, *The Count of Monte Cristo* (New York: Grosset & Dunlap, 1946), pp. 430-32.

{14} This is, however, a moot point. Nevertheless, the New Testament teaches that God desires the salvation of all persons (II Pet. 3.9; I Tim. 2.4), so that for the biblical theist a conflict arises between God's desire and His failure to fulfill that desire.

{15} Hunt, "Middle Knowledge," p. 24. He also errs in asserting that I cite Mt. 11.21-24 as a proof text for middle knowledge. On the contrary, I explicitly state, "The passage in Matthew 11 is probably religious hyperbole meant to underscore the depth of the depravity of the cities in which Jesus preached (William Lane Craig, *The Only Wise God* [Grand Rapids, Mich.: Baker, 1987], p. 137).

{16} Craig, "'No Other Name'," p. 179; cf. pp. 184, 186.

{17} Hunt, "Middle Knowledge," p. 21.

{18} Craig, *Only Wise God*, p. 188.

{19} Hunt, "Middle Knowledge," p. 12.

{20} Craig, "'No Other Name'," p. 186.

{21} Ibid.

{22} Craig, *Only Wise God*, p. 151

{23} Hunt, "Middle Knowledge," p. 17.

{24} Ibid., p. 14.

{25} Ibid., p. 17.

{26} It might be doubted whether there are any circumstantially saved people. One can entertain a couple of arguments for a negative conclusion. Suppose

i. Jack is only circumstantially saved.

ii. Therefore, there are circumstances under which Jack would be damned.

iii. Necessarily, Jack would be damned if any of these circumstances were actual.

iv. Necessarily, God would not create any circumstances under which Jack is circumstantially damned.

From these four premisses, the first argument continues:

v. Therefore, if any of these circumstances were actual, Jack would be transcircumstantially damned.

vi. If Jack were transcircumstantially damned, then he would be damned in a.
vii. Therefore, if any of these circumstances were actual, Jack would be damned in a.
viii. If those circumstances sufficiently close to a were actual, it would be the case that were the circumstances in a to be actual, Jack would be circumstantially saved.
But premisses (vii) and (viii) are incompatible, and therefore (i), (iii), or (iv) must be false. The most dubious of these is (i). But why should we regard (viii) as true? It needs to be kept in mind that counterfactuals are (on the possible worlds analysis of their truth conditions) true or false relative to a world. In the possible world in which the envisioned circumstances exist, different counterfactuals might be true of Jack, so that in that world it would be true that he would not be saved under the circumstances in a, though if a is actual he would. Thus, (vii) may be true rather than (viii). It might be rejoined that (viii) is plausible since Jack is saved under the circumstances in a, and so if worlds were to obtain having circumstances which are fairly close to those in a but under which Jack is damned, then the differences are not sufficient to make us think that if the circumstances in a were to be actual instead, Jack would not still be saved under such circumstances. It does not seem to me that our intuitions are firm here. But the Molinist could concede the point, adding merely that in such a case God would necessarily not have actualised those circumstances under which Jack is damned, since Jack would then be only circumstantially damned, which we have assumed for the sake of argument to be impossible. In other words, (viii) has an impossible antecedent and so describes no possible world. Thus, if Jack is circumstantially saved, there is no possible world in which he is circumstantially damned. That does not imply that Jack is saved in all worlds in which he exists, for he is damned in all those worlds in which it is not true that if he were in the circumstances in a, he would be saved.

These reflections lead to a second argument which proceeds from (i)-(iv) to

- v'. Therefore, it is not possible that any of these circumstances be actual.
- vi'. Therefore, it is not possible that Jack be damned.
- vii'. If Jack is circumstantially saved, then it is possible that Jack be damned.
- viii'. Therefore, Jack is not circumstantially saved.

Instead of inferring from (i)-(iv) that Jack would be transcircumstantially damned, (v') infers that worlds in which he is damned are impossible, that is to say, there are no such worlds, because he would be circumstantially damned in such worlds, which is impossible. It could be responded that worlds containing some of the envisioned circumstances are possible if the circumstances are quite different from those in the actual world, so that the counterfactual would be true in those worlds that if Jack were in the circumstances in a, he would be damned. But the Molinist could actually concede (v') and (vi'), but deny (vii') This strange position results from the fact that the existence of an Anselmian God plays havoc with our modal intuitions of what constitute possible worlds. Worlds which seem quite imaginable turn out to be impossible because God would necessarily not permit them to be actual. In order for Jack to be circumstantially saved, there need not exist any worlds in which he is damned, only circumstances in which he is damned. This points up a deficiency in the currently fashionable possible worlds analysis of counterfactuals, viz., its inability to deal with counterfactuals having impossible antecedents. What we want is an account of counterfactuals which permits us to say, "If God had actualised certain circumstances, then Jack, who is in fact saved, would have been damned," which, assuming (v'), the possible worlds account does not permit us to say. What we want to say is that the foregoing counterfactual is true, that Jack is only circumstantially saved, and that God would not let him be damned. (For more on this problem, see my "'Lest Any Should Fall'.") Of course, all our discussion is predicated on the truth of (iv), which I regard as dubious.

{27} Hunt, "Middle Knowledge," p. 17.

{28} It is not altogether clear to me whether Hunt takes this objection to defeat a middle knowledge perspective in its role as a *defense* or as a *theodicy*. He tends to speak in terms of theodicy, in which case the proposed solution will continue to function successfully as a defense, even if his objection is sound.

{29} Hunt, "Middle Knowledge," p. 18.

{30} A second misunderstanding evident in the above quotation is that counterfactuals of creaturely freedom are true or false independently of which pre-mortem world is actual. As I point out in response to Anthony Kenny's objection about counterfactuals' being true or false "too late" for God to make use of them in actualising a world, the actual world is already instantiated in certain respects logically prior to the divine decree, so that which counterfactuals are true or false is based on which world is thus far actual. What is correct to say is that counterfactuals of creaturely freedom are true or false logically prior to the existence of the physical universe.

{31} "Entails" is really too strong a word; I am saying that it is possible that there is no feasible world involving a more optimal balance between saved and unsaved than the actual world, not that there is no possible world having such a balance. The pre-mortem existence of the saved does not entail the pre-mortem existence of the lost, since there is a possible world in which billions of people freely receive salvation and no one is lost. But Hunt's argument requires only feasible worlds anyway.

{32} Hunt, "Middle Knowledge," p. 22.

On the Argument for Divine Timelessness From the Incompleteness of Temporal Life

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

In his study of time and eternity, {1} Brian Leftow argues that the fleeting nature of temporal life provides grounds for affirming that God is timeless. Drawing on Boethius's

characterization of eternity as *complete possession all at once* of interminable life, Leftow points out that a temporal being is unable to enjoy what is past or future for it. The past is gone forever, and the future is yet to come. The passage of time renders it impossible for any temporal being to possess all its life at once. Even God, if He is temporal, cannot reclaim the past. Leftow emphasizes that even perfect memory cannot substitute for actuality: "the past itself is *lost*, and no memory, however complete, can take its place--for confirmation, ask a widower if his grief would be abated were his memory of his wife enhanced in vividness and detail."^{2} By contrast a timeless God lives all His life at once and so suffers no loss. Therefore, if God is the most perfect being, He is timeless.

Here I think we have an argument for divine timelessness that is really promising. The premisses of the argument rest on very powerful intuitions about the irretrievable loss that arises through the experience of temporal passage, a loss which intuitively should not characterize the experience of a most perfect being. The force of these considerations is such that Stump and Kretzmann have rested their case for divine timeless eternity solely on the shoulders of this argument, commenting,

No life, even a sempiternal life, that is imperfect in its being possessed with the radical incompleteness entailed by temporal existence could be the mode of existence of an absolutely perfect being. A perfectly possessed life must be devoid of any past, which would be no longer possessed, and of any future, which would be not yet possessed. The existence of an absolutely perfect being must be an indivisibly persistent present actuality.^{3}

Whatever we may think of their demand for persistence and presentness, the claim that the life of a most perfect being must be indivisible actuality has a good deal of plausibility.

Notice that because the argument is based on the *experience* of temporal passage,^{4} rather than on the objective reality of temporal passage itself, it cannot be circumvented by the adoption of a tenseless theory of time according to which the experience of temporal becoming is non-veridical and all times/things/events are equally real. Even if the future never becomes and the past is never really lost, the fact remains that for a temporal being the past is lost *to him* and the future is not accessible *to him*. As Wells's celebrated Time Traveller, who believed that time was a fourth dimension of space, remarked, "Our mental existences, which are immaterial and have no dimensions, are passing along the Time-Dimension with a uniform velocity from the cradle to the grave."^{5} Even if the cradle and the grave do not differ in their ontological status, we still find ourselves experientially at some point in between, and events which are located at times earlier than that point are irretrievably lost to us, and events later than that point can only be anticipated. For this reason a tenseless theory of time does nothing to alleviate the loss occasioned by our experience of temporal becoming. We can only shake our heads in bewilderment that Einstein, upon the death of his life-long friend Michael Besso, tried to comfort Besso's surviving son and sister by writing, "This signifies nothing. For us believing physicists the distinction between past, present, and future is only an illusion, even if a stubborn one."^{6} I dare say that the bereaved find little comfort in the thought that the world-line of a deceased loved one exists tenselessly at earlier temporal co-ordinates than those which they occupy. Time's tooth gnaws away at our experience of life regardless of the purported tenseless existence of all events comprising one's life. For this reason, it would be futile to attempt to elude the force of this argument by postulating a temporal deity in a tenseless time.

However, the fact that this argument concerns, not temporal becoming itself, but our *experience* of temporal becoming, suggests another way round the argument. The fleetingness of our experience derives essentially from our confinement within the limits of our specious present, the subjective now-awareness of psychological time. The longer one's specious present, the less fleeting one's experience of life would be. If we could imagine someone who experienced a specious present which had the same duration as his entire life, such a person would experience his life all at once. These considerations have led William Alston to take up the view propounded by Royce{7} and Whitehead{8} that God's specious present has the same temporal extension as the whole of time, so that God has, indeed, at least experientially, complete possession all at once of interminable life. He writes,

just expand the specious present to cover all of time, and you have a model for God's awareness of the world . . . a being with an infinite specious present would not, so far as his awareness is concerned, be subject to temporal succession at all. There would be no further awareness to succeed the awareness in question. *Everything* would be grasped in one temporally unextended awareness.{9}

This is also the solution which Grace Jantzen adopts in order to de-fang God's experience of time. Explaining that "In the specious present, we take up experiences which are objectively past into a whole with those which are still occurring . . .," she contends that a temporal God with an everlasting specious present could respond to the succession of events without having fleetingness of experience.{10}

Such a model would enable us to hold to God's being temporal and yet experiencing His entire life at once as a whole. Nevertheless, a little reflection reveals that this model exacts far too high a price for these benefits. This fact can be seen by examining the specious present in human experience. The reason we have a specious present is due to our physical limitations, particularly the finite velocity of the transmission of neural signals. Because we do not have instantaneous transmission of such signals, there is a minimum threshold of the psychological present, so that events which occur with a rapidity above a certain limit cannot be experienced by us as consecutively and discretely present. At most we can apprehend to a certain limit a succession of events within the psychological present. C. D. Broad has provided the following useful illustration of the specious present's gathering into successive now-awarenesses minimal, but non-zero, temporal intervals:{11}

Fig. 1. Each act of awareness on the part of *O* is of some sensible field of finite duration which is presented to *O* as now. Acts of awareness which are separated by intervals less than the length of the specious present have overlapping sensible fields.

In the case of a temporal God with an everlasting specious present, the temporal interval experienced as *now* expands to infinity:

Fig. 2. A temporal God with one everlasting specious present.

In this way God knows the temporal succession of all events within a single experienced present.

But such a model faces insuperable objections. (i) As unembodied Mind possessing maximal cognitive excellence, God should possess no minimal, finite psychological present at all, much less an infinitely extended one. He is not dependent upon finite velocity neural processes which would slow down His apprehension of present events. And being maximally excellent cognitively, we should rather expect that He be able to distinguish discrete, consecutive events as present rather than unable. As one commentator has remarked, a God with an everlasting specious present would be infinitely slow on the uptake! {12} In a literal sense, He would be mentally retarded. (ii) As Figure 2 above makes evident, God would not experience His specious present until He had endured to the end of time. But then although God at that instant becomes aware of the succession of all events, it is too late for Him to do anything about them, for they are already past by that point. Thus, *contra* Jantzen, God could not respond to individual events in time. God's providence is therefore obliterated by such a model. Worse, God could not even know what He Himself had done throughout history until it was over. How He could act throughout history without any consciousness of what was happening at the time the events occurred remains a mystery. A sort of backward causation would seem to be necessary to explain God's acts in time. Since backward causation requires a tenseless view of time, this model would be invalidated should a tensed theory be shown to be preferable. Moreover, God's being temporal in tenseless time seems to imply a quasi-polytheism, since on the most plausible view of identity over time on such tenseless theories, God is a temporally extended object composed of temporal parts or stages; each of which is a different object and, hence, a different God. {13} If God is to be identified strictly with His maximal temporal stage (His everlasting part), then it follows that God is neither conscious nor does He act, since only His final temporal stage could be so capable. All these untoward consequences result if time in fact has an end. But if time has no end, as Christian doctrine of the afterlife teaches, then God *never* becomes conscious. There is no point at which all His cognitions of individual events can be gathered into a specious present, since there will always be time after that. Thus, the model becomes self-contradictory, for in order to have a specious present which takes in all of unending time, God's becoming conscious is indefinitely postponed such that He never has a specious present. (iii) It might be suggested that we loose the model from its physical and temporal foundations and interpret God's specious present merely on the *analogy* of our specious present. God just has at every point in time a specious present which takes in the whole of time (Figure 3).

Fig. 3. God does not acquire a specious present, but simply has the same specious present at every moment of time.

But as recent studies of indexical reference have shown, the ability to apprehend tenses is essential to timely action. If God has the same specious present at every moment of time, then He has neither memory nor foreknowledge nor changing now-awarenesses. Thus, He is rendered utterly impotent to act in a timely fashion, since He never knows what time it is. {14} On a tensed theory of time, God would undergo tense changes and temporal becoming but be utterly oblivious to these. Like Plantinga's Epistemically Inflexible Climber, {15} His cognitive awareness is fixated: at every time He experiences the whole ordered series of events as present. Unable to act in a timely way, God seems to be equally a victim of cognitive malfunction as the hapless climber. On a tenseless theory of time, God would never know at any time where He (or His temporal part) is located. Instead of a variety of now-awarenesses at different times, He has at each time the same now-awareness. Hence, He is incapacitated to effect something at the time at which He is located or, barring causation at a (temporal) distance, any other time. In short, it seems to me that the theory of God's having an

everlasting specious present is utterly inept and so affords no escape from the present argument.

Leftow himself discusses at considerable length an analogous model of what he calls quasi-temporal eternity, which might allow for a temporal God's complete possession of His life at once.^{16} According to this theory, the whole, tenselessly existing temporal series of events is present. Just as on an atomic theory of time, chronons--finite intervals of time--are each present as a whole, so the whole extension of time is present as a whole. If this model is not to collapse into the specious present model above, it must be a tensed view of time, that is to say, time as a whole has the property of presentness. Unfortunately, Leftow seems to conflate the quasi-temporal model of eternity with tenseless time's being *experienced* by God as wholly present, that is, with the specious present view. On the view as I understand it, however, the whole of time is supposed to have objective, not merely psychological, presentness. Since, on this view, all of time is objectively present, God may experience it as such and so have His life all at once.

But such a theory seems altogether implausible. It requires us to break loose the *earlier/later than* relation from pastness, presentness, and futurity in such a way that events earlier and later with respect to each other can both actually be (not merely be experienced as) present. But if two events are both objectively present, how can one be earlier than the other? If it be said that they are earlier/later than each other respectively in virtue of being located at different times, though both times are present (unqualifiedly), has one not posited a hyper-time in which both times are present at the same hyper-time? And if there is only a single present comprising all times, then one must ask why the whole temporal series of events does not immediately elapse. Perhaps it does, the duration and successive lapse of time intervals being a subjective illusion of time-bound persons. But then God, as a temporal being, comes to be and passes away, which is absurd. If we say that the present of the whole of time does not elapse but endures, then we are back to the mistaken notion of eternity as presentness. If the present persists, then in what does it endure? The postulation of a tensed hyper-hyper-time in which the present of hyper-time endures seems the inevitable and unwelcome consequence. If we deny that the presentness of the whole time series elapses or endures, then it is not really presentness, and what we have here is the familiar tenseless theory of time according to which the entire temporal series just exists (tenselessly, not present-tensedly). Moreover, on the model under discussion, God, as a temporal being, can act in a timely fashion only if He knows what time it is or where He (or His temporal part) is located, but on this theory God, in order to have the whole of His life at once, must experience the objective presentness of the whole series of events, which renders timely action impossible. In short, this view of time and eternity is as implausible as the specious present view.

Perhaps, however, the realization that the current argument for divine timelessness is essentially experiential rather than ontological in character opens the door for a temporalist alternative. When we recall that God is perfectly omniscient and so forgets absolutely nothing of the past and knows everything about the future, then time's tooth is considerably dulled for Him.^{17} His past experiences do not fade as ours do, and He has perfect recall of what He has undergone. To be sure, the past itself is gone, but His experience of the past remains as vivid as ever. A fatal flaw in Leftow's analysis is his assumption that God, like the widower, has actually lost the persons He loves and remembers. But according to Christian theism, this assumption is false. Those who perish physically live on in the afterlife where they continue to be real and present to God. At worst, what are past are the experiences God has enjoyed of those persons, for example, Jones's coming to faith. But in the afterlife Jones lives on with

God, and God can recall as though it were present His experience of Jones's conversion. So it is far from obvious that the experience of temporal passage is so melancholy an affair for an omniscient God as it is for us. Indeed, there is some evidence that consciousness of time's flow can actually be an enriching experience.^{18} R. W. Hepburn cautions against downplaying the importance of the flow of consciousness in awareness of music, for example. Music appreciation is not merely a matter of apprehending tenselessly the succession of sounds. Quoting Charles Rosen to the effect that "The movement from past to future is more significant in music than the movement from left to right in a picture," Hepburn believes that the phenomenon of music calls into question any claim that a perfect mode of consciousness would be exclusively atemporal.

Still, I think that we must admit that the argument has some force and could motivate justifiably a doctrine of divine timelessness in the absence of countermanding arguments. The question then will be whether the reasons for affirming divine temporality do not overwhelm the argument for divine timelessness.

Endnotes

^{1}Brian Leftow, *Time and Eternity*, Cornell Studies in Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991), p. 278.

^{2}Ibid.

^{3}Eleonore Stump and Norman Kretzmann, "Prophecy, Past Truth, and Eternity," *Philosophical Perspectives* 5 (1991): 395; cf. idem, "Eternity, Awareness, and Action," *Faith and Philosophy* 9 (1992): 463.

^{4}This emerges with special clarity in Brian Leftow, "Timelessness and Divine Experience," *Sophia* 30 (1991): 49: "there is a negative value to sequential experience as such: it makes possible loss of experience and experience of loss. . . . If it is bad to suffer this loss (as it is at least sometimes), it would be better not to suffer it;" but "A timeless God who experiences the whole of time has all His experiences at once and so experiences the whole of time at once . . ." (Ibid., p. 50).

^{5}H.G. Wells, *The Time Machine* (New York: Berkeley Publishing, 1957), p. 10. Cf. Hermann Weyl's remark, "The objective world simply *is*, it does not happen. Only to the gaze of my consciousness, crawling upward along the life-line of my body, does a section of this world come to life as a fleeting image in space which continuously changes in time" (H. Weyl, *Philosophy of Mathematics and Natural Science* [Princeton: Princeton University Press, 1949], p. 116). Of course, the "passing along" and "crawling upward" have reference to our *experience* of time's flow; contrary to Wells, psychological time passes at various rates.

^{6}Letter of Albert Einstein, March 21, 1955, cited in *Albert Einstein: Creator and Rebel*, by Banesh Hoffmann with Helen Dukas (London: Hart-Davis, MacGibbon, 1972), p. 258.

{7} Josiah Royce, *The World and the Individual*, 2 vols. (1901; rep. ed.: New York: Dover, 1959), 2: 140-145.

{8} A.N. Whitehead, *The Concept of Nature* (Cambridge: Cambridge University Press, 1920), p. 68. For discussion see Bowman L. Clarke, "God as Process in Whitehead," in *God and Temporality*, ed. Bowman L. Clarke and Eugene T. Long (New York: Paragon House, 1984), pp. 180-184; James F. Harris, "An Empirical Understanding of Eternality," *International Journal for Philosophy of Religion* 22 (1987): 165-183; Eugene Thomas Long, "Temporality and Eternity," *International Journal for Philosophy of Religion* 22 (1987): 185-189.

{9} William P. Alston, "Hartshorne and Aquinas: A Via Media," in *Existence and Actuality*, ed. John B. Cobb, Jr. and Franklin I. Gamwell (Chicago: University of Chicago Press, 1984), pp. 91. In all fairness to Alston, it must be admitted that he is using the specious present as "an intelligible model for a *nontemporal* knowledge of a temporal world" (p. 90, my emphasis).

{10} Grace M. Jantzen, *God's World, God's Body*, with a Foreword by John MacQuarrie (London: Darton, Longman, and Todd, 1984), p. 65.

{11} C.D. Broad, *Scientific Thought*, International Library of Psychology, Philosophy, and Scientific Method (London: Routledge and Kegan Paul, 1923), p. 349.

{12} Paul Fitzgerald, "Relativity Physics and the God of Process Philosophy," *Process Studies* 2 (1972): 267. Fitzgerald goes on to say, "This makes God out to be a sort of infinitely sluggish observer of the passing scene Contrary to what appears at first, it is a defect rather than a merit to have a specious present which is all inclusive."

{13} See the discussion of endurance and perdurance in Trenton Merricks, "Endurance and Indiscernibility," *Journal of Philosophy* (forthcoming).

{14} This is evident in Harris's description of God's experience on such a model: "God's experience of transient nature is infinite and instantly integrated and organized in a single, indivisible present moment. It is as though the entire universe is grasped in a single, infinite Gestalt organization where each part is 'seen' in its relation to other parts and the whole" (James F. Harris, "God, Eternality, and the View from Nowhere," in *Logic, God, and Metaphysics*, Studies in Philosophy and Religion 15 [Dordrecht: Kluwer Academic Publishers, 1992], p. 77).

{15} Alvin Plantinga, *Warrant: the Current Debate* (New York: Oxford University Press, 1993), p. 82. Due to a cognitive malfunction, the climber's belief that he is seated on a ledge on Guide's Wall becomes fixed, no longer responsive to changes in experience.

{16} Leftow, *Time and Eternity*, chap. 6.

{17} A point defended by Richard Swinburne, *The Coherence of Theism* (Oxford: Clarendon Press, 1977), p. ; Keith Ward, *Rational Theology and the Creativity of God* (Oxford: Basil Blackwell, 1982), p. 162.

{18} See the very interesting piece by R.W. Hepburn, "Time-Transcendence and Some Related Phenomena in the Arts," in *Contemporary British Philosophy*, 4th series, ed. H.D.

Lewis, Muirhead Library of Philosophy (London: George Allen & Unwin, 1976), pp. 152-173.

Prof. Grünbaum on Creation

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Adolf Grünbaum claims that the question of creation is a pseudo-problem because it is incoherent to seek an external, prior cause of the Big Bang, which marks the beginning of time. This claim is unwarranted, however, for the theological creationist has a number of options available: (i) The Creator may be conceived to be causally, but not temporally, prior to the origin of the universe, such that the act of creating is simultaneous with the universe's beginning to exist; (ii) The Creator may be conceived to exist in a metaphysical time of which physical time is but a sensible measure and so to exist temporally prior to the inception of physical time; or (iii) The Creator may be conceived to exist timelessly and to cause tenselessly the origin of the universe at the Big Bang singularity. Grünbaum also claims that theological creationism is pseudo-explanatory because it is in principle impossible to specify the causal linkage between the cause and the effect in this case. At best this objection only shows that theological creationism is not a scientific explanation. In fact Grünbaum's objection strikes not against theology *per se*, but against all appeals to personal agency as explanatory, which evinces a narrow scientism.

Source: "Prof. Grünbaum on Creation." *Erkenntnis* 40 (1994): 325-341.

Introduction

In a number of recent publications, Adolf Grünbaum (1989, 1990, 1991) has criticized the application of the theological notion of *creatio ex nihilo* to the origination of the universe. Since I have elsewhere responded to his covey of objections to the traditional cosmological argument for a chronologically First Cause of the origin of the universe (Craig, 1991, 1992), I shall in this paper confine myself to an examination of Grünbaum's arguments "that pseudo-explanations offered in response to pseudo-problems vitiate current attempts to harness the influential cosmological models of recent decades in support of theological creationism." (Grünbaum, 1991, p. 236) Two questions arise in assessing the alleged support lent by recent

cosmological models to theological creationism: (1) Is the question of the creation of the universe a pseudo-problem, and (2) Is the response of theological creationism a pseudo-explanation? Let us address each in turn.

1. Is Creation a Pseudo-Problem?

If the universe began to exist, would its temporal origin imply that it was created? Thomas Aquinas thought so. According to Thomas, "If the world and motion have a first beginning, some cause must clearly be posited to account for this origin of the world and of motion." (*Summa contra gentiles* 1. 13. 30) Thomas therefore always sought to construct demonstrations of God's existence on the more difficult Aristotelian assumption of the eternity of the world, demonstrations which would hold *a fortiori* were the universe shown to be temporally finite in the past. But to presuppose that the universe did have a temporal beginning made things too easy for the natural theologian, in his opinion, for then the necessity of a creating cause of the origin of the universe becomes patent. That most persons would agree with Thomas's judgement in this last regard is evident not only from the statements cited by Grünbaum on the part of scientific proponents and detractors alike of Big Bang cosmology, but even more so from the question ubiquitously posed by lay audiences to lecturers on contemporary cosmology, "What caused the Big Bang?"^{1} Such statements and questions evince a pre-philosophical intuition that whatever begins to exist has a cause, that things do not simply come to be without a distinct cause. Such an intuition strikes me as altogether reasonable and plausible and so affords *prima facie* justification for thinking that if the universe did begin to exist, its origination must have been the effect of some transcendent cause.^{2}

But Grünbaum argues that on none of the contemporary cosmogonic theories is the inference from the *origin* of the universe (that is, its being temporally finite in the past) to the *creation* of the universe (that is, its having an external cause) a sound one. Although he distinguishes quantum cosmological models from classical cosmological models and sub-divides the latter into two sorts, those positing a first instant of time at $t=0$ and those conceiving the initial singularity to lie on the boundary of space-time rather than within it, it fortunately turns out that "despite the replacement of the classical big bang theory by quantum cosmology, the philosophical issues . . . , as well as their resolution, remain essentially the same." (Grünbaum, 1991, p. 248) Indeed, the fundamental issue raised repeatedly by Grünbaum is disarmingly simple: it is unwarranted and, indeed, incoherent to seek an external, prior cause of the Big Bang because according to that very model there were no instants of time prior to the initial cosmological singularity. Hence, Grünbaum writes,

To suggest or to assume tacitly that instants existed after all before the big bang is simply *incompatible* with the physical correctness of the putative big bang model at issue, and thus implicitly denies its soundness.

. . . it is *altogether wrongheaded* . . . to complain that--even when taken to be physically adequate--the putative big bang model fails to answer questions based on assumptions which it denies as false. (Grünbaum, 1991, pp. 238- 239)

Thus, the problem of the creation of the universe is simply a pseudo- problem.

I must confess, however, that the force of this popular objection to theological creationism strikes me as grossly exaggerated. In fact, it seems to me that the creationist has a number of cogent options open to him to meet the objection.

(i) *The Creator may be conceived to be causally, but not temporally, prior to the origin of the universe, such that the act of causing the universe to begin to exist is simultaneous with its beginning to exist.* Grünbaum generates his alleged incoherency only by stipulating that the cause of the universe's origin be chronologically prior to that origin. But the causal principle that *whatever begins to exist has a cause* makes no such stipulation. Neither Aquinas nor, for that matter (*pace* Grünbaum), Maddox (1989, p. 425) claims that the cause of the origin of the universe must be temporally prior to the first effect. When creationists use locutions like "The universe came into being out of nothing," they mean, not that there was a state of nothingness temporally prior to the origin of the universe, but simply that the universe lacks a prior material cause, that it is false that the universe was made out of anything. Thus, the theological creationist may happily agree with Grünbaum that the following questions are illicit: "What happened *before* $t=0$?", "What *prior* events caused matter to come into existence at $t=0$?", "What *prior* events caused the Big Bang to occur at $t=0$?" (Grünbaum, 1991, p. 238) He may concur with Hawking, who is cited approvingly by Grünbaum, that "To ask what happened *before* the universe began is like asking for a point on the Earth at 91 north latitude." (Hawking, 1987, p. 651)

But the theological creationist will also point out that Grünbaum's inference that "Precisely the hypothesis that $t=0$ simply had no temporal predecessor obviates the misguided quest for the elusive cause" (1991, p. 239) does not follow. The quest is neither misguided (since it is *prima facie* plausible that whatever begins to exist has a cause) nor obviated (since causal priority does not imply temporal priority). Contemporary philosophical discussions of causal directionality deal routinely with cases in which cause and effect are simultaneous;{3} indeed, a good case can be made that all temporal causal relations involve the simultaneity of cause and effect. On the creationist theory under discussion, the Creator *sans* the world would exist changelessly and, given some relational view of time, therefore timelessly and at the Big Bang singularity create both the universe and, concomitantly, time. For the Creator *sans* the universe, there simply is no time because there are no events; time begins with the first event, not only for the universe, but also for God, in virtue of His real relation to the universe. The act of creation is thus simultaneous, or coincident, with the origination of the universe.

Grünbaum objects to the Augustinian assertion that time was made by God because this locution presupposes that there was a time at which time did not yet exist. (Grünbaum, 1991, p. 244) But this objection merely begs the question by assuming that causal priority implies temporal priority. According to the present theory, God did not exist temporally prior to the origin of the universe, for no such time existed; but with the creation of the universe time also comes into being, so that the creative causal act and the physical effect occur simultaneously. Against this notion, all that Grünbaum has to offer is the single sentence: "I consider the notion of simultaneous causation, as applied to the purported *creation of time*, either unintelligible or, at best, incoherent." (Grünbaum, 1991, p. 244) But until Grünbaum provides some argumentation in support of this opinion,{4} no creationist is obliged to abandon belief in a cause of the universe's origin.

(ii) *The Creator may be conceived to exist in a metaphysical time of which physical time is but a sensible measure and so to exist temporally prior to the inception of physical time.* Grünbaum's whole enterprise is based on a reductionistic view of time which the theological creationist is at liberty to reject. Confronted with the absolute origination of the universe, the creationist posits a cause for the universe's beginning to exist. But the Big Bang singularity need not be the first effect of such a transcendent cause. If the Creator has a discursive mental life, then there will have been a succession of mental events, which is itself alone sufficient to

generate a temporal series, leading up to the moment of creation. Such a temporal series in the life of an ultra-mundane being constitutes a metaphysical time in which our universe comes to exist.

Such a view has a very impressive pedigree: it was essentially the view of Isaac Newton. According to Newton,

Absolute, true, and mathematical time, of itself, and from its own nature, flows equably without relation to anything external, and by another name is called duration: relative, apparent, and common time, is some sensible and external (whether accurate or unequable) measure of duration by the means of motion, which is commonly used instead of true time; such as an hour, a day, a month, a year. (Newton, 1966, vol. 1, p. 6)

Twentieth century physicists and philosophers of space and time have largely abandoned Newton's theory of absolute time as "metaphysical" or even falsified by Relativity Theory. But such attitudes are merely symptomatic of a secular age which has forgotten the theistic foundations of Newton's doctrine of absolute time. In the *General Scholium* to the *Principia*, which Newton added in 1713, he explained that absolute time and space are constituted by the divine attributes of eternity and omnipresence:

He is eternal and infinite . . .; that is, his duration reaches from eternity to eternity; his presence from infinity to infinity He is not eternity and infinity, but eternal and infinite; he is not duration or space, but he endures and is present. He endures forever, and is everywhere present; and, by existing always and everywhere, he constitutes duration and space. Since every particle of space is *always*, and every indivisible moment of duration is *everywhere*, certainly the Maker and Lord of all things cannot be *never* and *nowhere*. (Newton, 1966, vol. 2, p. 545)

On such a view, God's time is sempiternal, and physical time, which begins at creation, represents our best efforts to measure sensibly His absolute time. That the physical time we employ, defined in STR in terms of certain conventions concerning clock synchronization via light signals, should turn out to be relativistic would not have disturbed Newton in the least.^{5} Neither does it disturb contemporary theists like Wolterstorff (1982, pp. 79-98) who hold that God exists in an infinite metric time prior to His creation of the world or like Padgett (1992) and Swinburne (1993) who hold that God prior to creation exists changelessly in a non-metric time in which there is no lapse of temporal intervals.

Theological creationists who thus do not follow Grünbaum in his reductionistic analysis of time can therefore agree with Hawking, who is again cited approvingly by Grünbaum, when he writes, "*In general relativity* [my emphasis], time . . . does not have any meaning outside the spacetime manifold" and even that "the use of the word 'create' would seem to imply that there was some concept of time in which the universe did not exist before a certain instant and then came into being" (Hawking, 1987, pp. 650-51) and yet see no incompatibility with the necessity of a creative cause of the Big Bang, since the requisite concept of time is metaphysical time, not the cosmic time defined in GTR via parameterized hyper-planes of homogeneity. The latter provides at best a sensible measure of the former, but cannot pretend to supplant or obviate the existence of the Creator's metaphysical time. The theological creationist will claim with justification that when Grünbaum asserts that it is incoherent to posit an external, prior cause of the Big Bang, he is just doing poor metaphysics.^{6}

(iii) *The Creator may be conceived to exist timelessly and to cause tenselessly the origin of the universe at the Big Bang singularity.* Grünbaum assumes without argument that causation is an essentially temporal activity or relation. But classical theological creationists like al-Ghazali (1963, pp. 23, 33, 36) maintained that the cause of the origin of the universe is timeless, and contemporary defenders of divine timelessness such as Stump and Kretzmann (1981), Helm (1988), Yates (1990), and Leftow (1992) also conceive of God's causal relation to the world to be one which involves no temporal succession on God's part, whereas the effect is temporal in its existence. The coherence of such a model on an A-theory of time is a matter of philosophical debate; but such a theory is obviously coherent on Grünbaum's own preferred B-theory of time: the entire space-time manifold of events and its boundary simply exist tenselessly, and God exists timelessly and spacelessly apart from it and tenselessly produces it in being. In response to divine timeless causation of the Big Bang, all Grünbaum has to offer is the following:

Let me stress, however, that, since it is not relevant to current physics, I shall not be concerned at all with this *atemporal* metaphysical version of Augustine's creation *ex nihilo*. Suffice it to say, however, that I find this version quite obscure, if not incoherent. And, in any case, I know of no cogent argument for it. (Grünbaum, 1991, p. 244)

But atemporal causation *is* relevant to current physics, in that the best physical theory shows that the universe began to exist, and the model of atemporal causation provides an understanding of how that beginning can have been caused without the cause's existing temporally prior to the Big Bang. And Professor Grünbaum notwithstanding, it certainly does not suffice for him merely to say--without supporting argument or evidence--that this version of theological creationism is obscure or incoherent. Finally, in demanding a cogent argument for atemporal causation, Grünbaum seems to have forgotten who bears the burden of proof here: it is he who, in response to the creationist demand for a cause of the origin of the universe, asserts that such a demand expresses a pseudo-problem because it is incoherent to ask for an external, prior cause of the Big Bang. By appealing to a model of atemporal causation, the theological creationist shows that there is no incoherence or conceptual confusion in the quest for a cause of the universe's origin. If Grünbaum is to carry his objection, he must now show that such a model is broadly logically impossible, for so long as it is even possible, such a model defuses the objection that to seek an external cause of the Big Bang is incoherent.

In sum, there are a number of possible options open to the theological creationist to meet Grünbaum's objection that the origin of the universe cannot have an external cause and that creation is therefore a pseudo-problem. The cause of the origin of the universe can be coherently conceived to be either (i) simultaneous with the Big Bang, (ii) temporally prior to the Big Bang in metaphysical time, or (iii) timeless. Which of these alternatives supplies the most plausible model is a matter of spirited (and very intriguing) debate in the field of philosophy of religion. Philosophers of space and time and physicists interested in the metaphysical problems of creation would do well to familiarize themselves with the work of their colleagues in this field. The availability of these various alternatives shows that the question of the creation of the universe is a genuine philosophical problem.

2. Is Theological Creationism a Pseudo-Explanation?

If the problem of creation is a genuine philosophical problem, is theological creationism a licit explanation of the universe's origin? Grünbaum argues first on general grounds that a theological explanation is inherently defective:

. . . the invocation of a divine creator to provide causal explanations in cosmology suffers from a fundamental defect vis-à-vis scientific explanation: As we know from two thousand years of theology, the hypothesis of divine creation does not even envision, let alone specify, an appropriate *intermediate* causal *process* that would *link* the presence of the supposed divine (causal) agency to the effects which are attributed to it In physics, there is either an actual specification or at least a quest for the *mediating causal dynamics* linking presumed causes to their effects Yet despite the failure of theology to provide such dynamical linkage, Newton invoked divine intervention in the belief that it could plug explanatory lacunae which his physics had left unfilled.

In the face of the inherently irremediable dynamical inscrutability of divine causation, the resort to God as creator, ontological conserver of matter, or intervener in the course of nature is precisely a *deus ex machina* that lacks a vital feature of causal explanations in the sciences. (Grünbaum, 1991, pp. 234-235)

Grünbaum takes these considerations to constitute a general *caveat* "against the tacit misassimilation of purported divine causation in cosmology to causal explanations in the sciences." (Grünbaum, 1991, pp. 235-236)

But these considerations at the very best show only that theological creationism does not constitute a *scientific* explanation of the origin of the world. And while Newton believed that "to discourse of [God] from the appearances of things does certainly belong to natural philosophy," (Newton, 1966, vol. 2, p. 546) I suspect that most theological creationists today, including those whom Grünbaum cites, would not think of themselves as offering a theistic Big Bang theory distinct from the usual models nor of God as a sort of theoretical entity akin to, say, quarks, postulated by some cosmological model. Rather most, I am sure, would agree with Robert Jastrow when he says with respect to questions about the cause of the Big Bang in the standard model: "Science cannot answer these questions The scientist's pursuit of the past ends in the moment of creation." (Jastrow, 1978, p. 115) This does not mean that science cannot attempt to avert the problem of creation by introducing certain quantum effects aimed at eliminating the troublesome initial cosmological singularity; but insofar as an absolute origin of the universe remains a recalcitrant feature of cosmogonic models, the question of the explanation of that origin, as well as its answer, will be regarded by most theological creationists as meta-scientific, or metaphysical, in nature.

Nevertheless, it may be profitable to press the question: why on Grünbaum's view can theological explanations not qualify as scientific explanations? I suggest that on Grünbaum's analysis, the disqualifying feature of theological explanations has nothing to do with supernaturalism or theology, but with a feature shared by other commonly employed sorts of explanation: the appeal to personal agency. Grünbaum's complaint is that theological explanations inherently lack the causal linkage between cause and effect which is essential to scientific explanations. Now at face value, this seems manifestly untrue. There seems to be no reason why the theological creationist who believes that "In the beginning God created the heavens and the earth" (Gen. 1:1) needs deny the presence of mediating causal linkage such as is described in contemporary astrophysical theories concerning the Big Bang, galaxy formation, and the like. Grünbaum is right that Genesis neither envisions nor specifies the

intermediate causal process between the divine causal agency and the effects attributed to it. But why think that this is inherently so? Could not the author of Genesis, if sufficiently apprised of the facts, have described the causal linkage involved in God's creation of the heavens and the earth?

Grünbaum's response is instructive. He holds that in such a case the theological explanation becomes superfluous and is supplanted by the explanation afforded by the physical causal linkage itself. Thus, for example, in models postulating an inflationary era, "general relativity turns out to tell us why there is an 'inflationary' expansion, thereby obviating any explanatory resort to an external divine creative cause!" (Grünbaum, 1991, p. 241; cf. p. 250) Thus, it is logically impossible to specify the causal linkage between the divine causal agency and its purported effect because once the linkage is given, the divine agency is expunged as an explanatory entity.^{7} On Grünbaum's analysis, in order to serve as a causal explanation, divine agency must produce its effect immediately, in which case the explanation is by definition not scientific.

The above account makes it evident that the stumbling block here has nothing to do with theology *per se*, but with the notion of personal agency. If a personal agent is said to be responsible for some event, then, on Grünbaum's analysis, insofar as it is feasible to specify intermediate causal linkage between them, the appeal to personal agency becomes superfluous. It is only when one is pushed back to an event which is a "basic action,"^{8} that is to say, an action which an agent immediately performs, that personal agency can count as explanatory, and then such an explanation cannot be scientific. Thus, when Grünbaum says that "so far as divine causation goes, we are being told . . . that an intrinsically elusive, mysterious agency X inscrutably produces the effect," (Grünbaum, 1991, p. 235) that could be said against any agent cause. Similarly, when Grünbaum says, "I, for one, draw a complete *explanatory* blank when I am told that God created photons," (Grünbaum, 1991, p. 235) such a complaint could be voiced with regard to the personal performance of any basic action. It is really the admission of personal agency into scientific explanation to which Grünbaum objects, and theological explanations turn out to be excluded, not because they are theological, but because God is conceived as a personal agent. His creation of the initial cosmological singularity in the standard model is a sort of basic action on His part. (Alston, 1988; Padgett, 1992, pp. 20-21)

Now even if we agree that explanations involving appeal to personal agency (and, hence, theological explanations) are not scientific explanations, why cannot personal explanations count as a legitimate, distinct category of explanation? Grünbaum seems to assume that the only true (causal) explanations are scientific explanations. But that is to evince a narrow and dogmatic scientism, which will simply be rejected even by a good many thinkers who are not theological creationists. (*e.g.*, Chisholm, 1986, pp. 60-64)^{9} Unless one is a thorough-going physicalistic determinist, the scientific explanation of the actions wrought by a personal agent will remain incomplete unless and until the agent is brought in. Perhaps Grünbaum is such a determinist and so rejects final explanatory appeals to personal agency. But such physicalistic determinism not only far outstrips the scientific evidence we have about the functioning of the human brain, but it also can never be rationally affirmed, since if it were true one's belief in its truth would be purely the result of determining physical causes. (Plantinga, 1991) Believing in determinism would be no more rational than having a toothache.

In any case, even if physicalistic determinism did hold for human agents, such a notion is inapplicable to God, since His mind is not linked to any material substratum, as are the minds

of embodied agents, nor can His action in *creatio ex nihilo* be the result of determining physical causes, since His creative activity is responsible for the very origination of any physical causes that exist.{10}

If, then, we accept personal agency as a legitimate (non-scientific) category of explanation, theological creationism may be regarded as a legitimate explanation of this type. Moreover, it should be noted that explanations involving personal agency may or may not be causal in nature, depending upon one's theory of agency. Causal agency theorists appeal at some point to agents as the causes of the actions they perform and so espouse a doctrine of agent causation. (e.g., Clarke, 1993) On such a theory God could be conceived to be the agent cause of the Big Bang event. But appeals to personal agency are not always causal in nature. On Chisholm's most recent view, certain human actions have no sufficient causal conditions. Goetz (1988) argues that events normally ascribed to agent causation are better regarded as "uncaused events done for a reason." Application of such an analysis to the problem of creation would completely dissolve Grünbaum's objection, since the Big Bang would be uncaused, but still done for a reason, and would therefore require the existence of a personal Creator.{11} Whether, then, one's appeal to personal agency to explain the origination of the world involves agent causation (as seems to me preferable) or a non-causal conception of agency, Grünbaum has failed to show that theological creationism's appeal to personal agency to explain the origin of the universe is not a licit (non-scientific) form of explanation. William Alston, who has devoted considerable analysis to the notion of divine agency and action, concludes, "the concept of divine action is, by any reasonable standards, quite intelligible, coherent, and acceptable, and . . . impressions to the contrary stem from confusions, uncritical acceptance of current shibboleths, or bad arguments." (Alston, 1990, p. 51)

All this has been said on the assumption that Grünbaum is correct that scientific explanation precludes reference to personal agents as causes. But surely that is a moot point. In quantum physics, for example, Eugene Wigner's interpretation of the collapse of the wave-function of a quantum system appeals explicitly to consciousness or personal agency to bring about the collapse, since any merely mechanical observer could itself be given a quantum physical description and would so share in the indeterminacy of the observed system. (Wigner, 1964) Intriguingly, the application of the received Copenhagen Interpretation to quantum cosmology requires a transcendent observer who collapses the wave-function of the universe itself, a conclusion which is very suggestive of theism. (Barrow, 1988, p. 156) Perhaps Grünbaum would say that such interpretations of quantum theory are not part of the theory itself, but represent philosophy of science, rather than science. But then the lines of demarcation become so blurry or arbitrary that we can repose no confidence in Grünbaum's claim that appeal to personal (divine) agency is pseudo-explanatory because it is not part of "science" proper.

Grünbaum has, however, a second implicit reason why theological creationism is a pseudo-explanation. In his discussion of the steady state model, Grünbaum argues that demands for a cause of the origination of matter are illegitimate because in that theory the origination of matter from nothing is *natural*. Against characterizations of matter creation in the model universe as miraculous, Grünbaum states, "the hypothesized matter-increase in a steady-state universe is turned into a divine miracle only by the gratuitous, dogmatic insistence on matter-conservation as *cosmically* the natural state, *no matter what the empirical evidence*. Those who share [the] view of miraculousness cannot justify a criterion of 'naturalness' that would turn the continual accretion of new matter into something 'outside the natural order'." (Grünbaum, 1992, p. 248) By extension, in the standard Big Bang model, the origination of

the universe from nothing is to be regarded as natural and so as requiring no miraculous cause.

In response to this argument, I should simply deny that it is any part of the standard model or any other model positing an initial cosmological singularity that the origin of the universe is uncaused. It is true that the singularity can have no spatio-temporal, physical cause, but it would be fanciful to think that Big Bang models include as a theoretical component that the origin of the universe does not have a supernatural cause.^{12} As for the allegation that on such models the origination of the universe from nothing is taken to be natural, I should say that such theories, being descriptive in nature, do not presume to make such a judgment. Of the classical Big Bang model, Adrian Webster comments,

Choosing to work backward from the present state of the universe to gain some knowledge of the initial conditions is not at all arbitrary, but it does not suffice to *explain* the initial conditions. Probably the most we can expect from this approach is that we shall be able at least to describe those conditions. (Webster, 1974, p. 31)

Similarly, with respect to quantum cosmology, Isham distinguishes between a description and an explanation of the universe's origin, remarking,

The minimal requirement is to construct a theory that affords a singularity-free description of the origination event and that gives satisfactory meaning to the 'beginning' of time Note that one question even a very ambitious creation theorist cannot (or, perhaps, should not) address is 'Why is there anything at all?'. That is strictly a job for philosophers and theologians! (Isham, 1990, pp. 3- 4)

Such descriptive accounts of the beginning of the universe make no pronouncement as to whether the origin of the first physical state of the universe is a natural occurrence or not. Indeed, it seems to me that Grünbaum finds himself hoist on his own petard in this matter, for what criterion of "naturalness" can he possibly offer that would serve to determine that an uncaused origin of the universe is natural? What can he mean when he speaks of the "empirical evidence" for what is natural, especially in the case of a unique origination event? The empirical evidence can at best, it seems, indicate that the universe began, but that its beginning is natural is not a judgment that can be read off an empirical description of the universe's beginning. In fact when one realizes that to call a physically uncaused beginning of the universe "natural" just is to assert that theological creationism is false, one sees that Grünbaum's argument is question-begging. The crux issue to which we are brought round again is whether something can begin to exist without a cause. Intuitively, that seems absurd. The fact that the universe began to exist without a physical cause does not undermine this intuition, but logically implies that the origin of the universe had a metaphysical cause.

Conclusion

Despite Grünbaum's disdain for theological creationism, it seems to me, therefore, that he has failed to show either that the problem of the creation of the universe is a pseudo-problem or that the answer of theological creationism to that question is a pseudo-explanation. Multiple solutions are available to the alleged problem of the creative cause's existing temporally prior to the beginning of time, solutions which Grünbaum has yet to begin to explore. How the universe could begin to exist without any sort of cause is most definitely a genuine and significant philosophical problem. The answer of theological creationism to that problem

cannot be dismissed merely because it is not scientific, if in fact it is non-scientific. Contemporary cosmogonic models do not presume to exclude the possibility of a supernatural cause of the universe's creation. Therefore, it seems to me that a theological answer to the problem of creation is worthy of philosophical consideration.

Endnotes

{1} Davies reports, "When giving lectures on cosmology, I am often asked what happened before the big bang. The answer, that there was no 'before,' because the big bang represented the appearance of time itself, is regarded with suspicion--'Something must have caused it.'" (Davies, 1983, p. 39; cf. p. 44) The impasse here results from the conflation of causal priority with temporal priority on the part of Davies and his auditors.

{2} This conclusion is not undermined by the query of an anonymous referee for this journal: "Why does the big bang imply that the universe begins to exist without a cause? In the standard big bang models, for every time t there is a $t' < t$, and the state at t' is a cause of the state at t ." It seems to me that this objection is confused, albeit in an interesting way. The referee cannot mean to deny the premiss that *whatever begins to exist has a cause*, because he affirms that every instantaneous state of the universe has a cause in a prior state. So he is not claiming that the origin of the universe is uncaused and, hence, an exception to this principle. But neither does he appear to be denying the premiss that *the universe began to exist*. For a beginning of time (and the universe) does not entail that a first instant of time existed. Time began to exist iff there is a finite interval of time which is such that every other congruent temporal interval is later than that interval, and prior to any finite interval of time there is at most a finite number of congruent temporal intervals. Hence, it is standard to regard the universe as having a beginning even though any initial temporal interval of arbitrary length is open in the past. But then what, exactly, does the referee mean to deny? From the two premisses it follows that the universe has a cause, which is the position of the theological creationist. Thus, *pace* our referee, the creationist does *not* take the Big Bang model to imply that the universe begins to exist without a cause; quite the contrary. The disagreement must be as to the nature of that cause. The creationist posits a transcendent metaphysical cause, the referee only immanent physical causes. That the referee cannot be right becomes evident when one reflects on the fact that the universe is not distinct from the instantaneous states of the universe, so that if the former began to exist, the beginning of that entity as a whole cannot be explained by the causal connections which obtain between its immanent temporal slices. What is needed is a cause of the whole entity, including all its instantaneous slices. Here the only plausible physical candidate would be the initial cosmological singularity existing on the boundary of time. But such an explanation is unavailing, since the singularity itself is not eternal but came into being and so requires a cause; moreover "the universe" may reasonably be taken to include all its boundary points as well as its space-time points and so, having begun to exist, requires an extra-mundane cause.

{3} For some discussion of the notion of causal directionality, see Dummett and Flew, 1954; Mackie, 1966; Suchting, 1968-69; Brier, 1974, pp. 91-98; Brand, 1979. Fortunately, we need not be concerned, as these discussions are, with the epistemic question of a criterion which will enable us correctly to discern the causal asymmetry between two simultaneous events, for our concern is only with the ontological question of the coherence of the notion of simultaneous causation. It is at any rate metaphysically impossible that God should be caused by the world, so that the asymmetry of cause and effect in this case is perspicuous.

{4} Notice that objections to the simultaneity of God's creating the universe and the universe's beginning to exist cannot be based on physical considerations such as the finite velocity of the transmission of causal influences in relativity theory, since God is not a physical entity and is immediately causally present to every point in space. If we assume *a priori* a doctrine of physicalism, then a dialogue between the creationist and anti-creationist is simply pointless. I do not pretend that interesting and difficult questions cannot be raised about the present alternative; but they will tend to be metaphysical, rather than physical.

{5} As Lucas nicely puts it,

"The relativity that Newton rejected is not the relativity that Einstein propounded; and although the Special Theory of Relativity has shown Newton to be wrong in some respects, . . . it has not shown that time is relative in Newton's sense, and merely some numerical measure of process." (Lucas, 1973, p. 90)

{6} See John Earman's remark:

"It seems to me that Newton demonstrated a much deeper understanding of the nature of space and time than Berkeley, Leibniz, and Mach. And so far as I can see, neither modern philosophers of science like Reichenbach, Whitrow, Nagel, Grünbaum, and Smart, nor the people identified by modern philosophers as major philosophical figures of the 17th, 18th, and 19th centuries, have succeeded in raising any compelling philosophical objections to absolute space, absolute time, or absolute space-time" (Earman, 1970, p. 317)

This verdict is reinforced when the theistic context of Newton's views is taken into account.

{7} Once this is understood, we can see that Grünbaum's apparently conciliatory *caveat*

A. If the best model of recent physical cosmogony were evidentially supportive of divine creation *ex nihilo*, then it would be an impermissible apriorism to reject the model for that reason, as some atheists have done (Grünbaum, 1992, p. 234)

is in fact vacuous. For given his argument, the antecedent of (A) is broadly logically impossible, so that (A), on the customary possible worlds semantics for the truth conditions of counterfactuals, is vacuous in its truth value. (A) would be equally true if the consequent read, "then it would be impermissible to accept theological creationism, as some theists have done."

{8} On this notion, see Danto (1965). before a

{9} On the theological front, see the very interesting remarks by P. T. Landsberg conference on the history and philosophy of thermodynamics concerning what he takes to be the lifting of a scientific taboo which occurred around 1975: "To talk about the implications of science for theology at a scientific meeting seems to break a taboo. But those who think so are out of date. During the last 15 years this taboo has been removed, and in talking about the interaction of science and theology I am actually moving with a tide" (Landsberg, 1991, p. 380). Landsberg endorses the view of Polkinghorne that "our concern is with those questions which by their nature science is powerless to discuss, but without answers to which its view of the world remains intellectually incomplete and unsatisfying." (Polkinghorne, 1988, p. 23)

{10} Again, if one simply assumes *a priori* the truth of physicalism, *i.e.*, that there are no immaterial agents, debate over theological creationism cannot even get off the ground. In that case we should be discussing the intelligibility, not of God's creating the universe, but of His very existence. causal premiss

{11} It would also require some modification of the that *to the activity whatever begins to exist has a cause*, for example, that *whatever begins to exist is to be attributed of either a cause or a personal agent*.who therefore

{12} This fact is recognized by Q. Smith, also an anti-creationist, feels constrained to offer further justification for why the initial cosmological singularity cannot have been caused by God, reasons which have nothing to do with Grünbaum's pseudo-problem of the cause's temporal priority to its effect. (Craig and Smith, 1993)

References

Al-Ghazali: 1963, *Tahafut al-Falasifah*, trans. S.A. Kamali, Lahore, Pakistan, Pakistan Philosophical Congress.

Alston, W.: 1988, 'Divine and Human Action,' in T.V. Morris (ed.), *Divine and Human Action*, pp. 257-280, Ithaca, N.Y., Cornell University Press.

_____: 1990, 'How to Think about Divine Action,' in B. Hebblethwaite and E. Henderson (eds.), *Divine Action*, pp. 51-70, Edinburgh, T. & T. Clark.

Barrow, J.: 1988, *The World within the World*, Oxford, Clarendon Press.

Brand, M.: 1979, 'Causality,' in P.D. Asquith and H.E. Kyburg, Jr. (eds.), *Current Research in Philosophy of Science: Proceedings of the P.S.A. Critical Research Problems Conference*, pp. 252-81, East Lansing, Mich., Philosophy of Science Association.

Brier, B.: 1974, *Precognition and the Philosophy of Science: An Essay on Backward Causation*, New York, Humanities Press.

Chisholm, R.: 1986, 'Self-Profile,' in R.J. Bogdan (ed.), *Roderick M. Chisholm*, pp. 3-77, Profiles 7, Dordrecht, D. Reidel.

Clarke, R.: 1993, 'Toward a Credible Agent-Causal Account of Free Will,' *Noûs* 27, 191-203.

Craig, Wm. L.: 1991, Correspondence, *Nature* 354, 347.

_____: 1992, 'The Origin and Creation of the Universe: A Reply to Adolf Grünbaum,' *British Journal for the Philosophy of Science* 43, 233-240.

Craig, Wm. L. and Smith, Q.: 1993, *Theism, Atheism, and Big Bang Cosmology*, Oxford: Clarendon Press.

Danto, A.C.: 1965, "Basic Actions," *American Philosophical Quarterly* 2, 141-148.

Davies, P.: 1983, *God and the New Physics*, New York, Simon and Schuster.

Dummett, A.E. and Flew, A.: 1954, 'Can an Effect Precede its Cause?' in *Belief and Will*, pp. 27-62, Aristotelian Society Supplementary Volume 28, London, Harrison & Sons.

Earman, J.: 1970, 'Who's Afraid of Absolute Space?' *Australasian Journal of Philosophy* 48, 287-319.

Goetz, S.: 1988, 'A Noncausal Theory of Agency,' *Philosophy and Phenomenological Research* 49, 303-16.

Grünbaum, A.: 1989, 'The Pseudo-Problem of Creation in Physical Cosmology,' *Philosophy of Science* 56, 373-394.

_____.: 1990, Correspondence, *Nature* 344, 821-822.

_____.: 1991, 'Creation as a Pseudo-Explanation in Current Physical Cosmology,' *Erkenntnis* 35, 233-254.

Hawking, S.W.: 1987, 'Quantum Cosmology,' in S. W. Hawking and W. Israel (eds.), *Three Hundred Years of Gravitation*, pp. 631-51, Cambridge, Cambridge University Press.

Helm, P.: 1988, *Eternal God*, Oxford, Clarendon Press.

Isham, C.J.: 1990, 'Quantum Theories of the Creation of the Universe,' paper presented at the annual conference of the Science and Religion Forum, 'God, Time, and the New Physics,' 4-6 April, Hoddesdon, Hertshire.

Jastrow, R.: 1978, *God and the Astronomers*, New York, W.W. Norton.

Landsberg, P.T.: 1991, "From Entropy to God?" in K. Martin, L. Ropolyi, and P. Szegedi (eds.), *Thermodynamics: History and Philosophy*, pp. 379-403, Singapore, World Scientific.

Leftow, B.: 1992, *Time and Eternity*, Ithaca, N.Y., Cornell University Press.

Lucas, J.: 1973, *A Treatise on Time and Space*, London, Methuen.

Mackie, J.L.: 1966, 'The Direction of Causation,' *Philosophical Review* 75, 441-66.

Maddox, J.: 1989, 'Down with the Big Bang,' *Nature* 340, 425.

Newton, I.: 1966, *Sir Isaac Newton's 'Mathematical Principles of Natural Philosophy' and his 'System of the World,'* trans. Andrew Motte, revised with an Introduction by Florian Cajori, Los Angeles, University of California Press.

Padgett, A.: 1992, *God, Eternity, and the Nature of Time*, London, Macmillan.

Plantinga, A.: 1991, 'An Evolutionary Argument against Naturalism,' *Logos* 12, 27-49.

Polkinghorne, J.C.: 1988, *Science and Creation*, London, SPCK.

Stump, E. and Kretzmann, N.: 1981, 'Eternity,' *Journal of Philosophy* 77, 429-458.

Suchting, W.A.: 1968-69, 'Professor Mackie on the Direction of Causation,' *Philosophy and Phenomenological Research* 29, 289-291.

Swinburne, R.: 1993, 'God and Time,' in E. Stump (ed.) *Reasoned Faith*, Ithaca, N.Y., Cornell University Press.

Webster, A.: 1974, 'The Cosmic Background Radiation,' *Scientific American*, 231, August, pp. 26-33.

Wigner, E.P.: 1964, 'Two Kinds of Reality,' *Monist* 48, 248-264.

Wolterstorff, N.: 1982, 'God Everlasting,' in S.M. Cahn and D. Shatz (eds.), *Contemporary Philosophy of Religion*, pp. 77-98, Oxford, Oxford University Press.

Yates, J.C.: 1990, *The Timelessness of God*, Lanham, Maryland, University Press of America.

PROFESSOR MACKIE AND THE KALAM COSMOLOGICAL ARGUMENT

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Against the second premiss of the *kalam* cosmological argument, that *the universe began to exist*, J. L. Mackie objects that the arguments for it either assume an infinitely distant beginning point or fail to understand the nature of infinity. In fact, the argument does not assume any sort of beginning point, whereas Mackie himself commits the fallacy of composition. Mackie fails to show that infinite collections can be instantiated in the real world. Against the first premiss, that *whatever begins to exist has a cause*, Mackie objects that there is no good reason to accept *a priori* this premiss and that *creatio ex nihilo* is problematic. But Mackie does not refute the premiss and even admits its plausibility. One can resolve the conundrums of *creatio ex nihilo* by holding God to be timeless *sans* creation and temporal with creation.

Source: "Professor Mackie and the Kalam Cosmological Argument." *Religious Studies* 20 (1985): 367-375.

INTRODUCTION

Like David Hume's *Dialogues Concerning Natural Religion*, J. L. Mackie's most potent blast against the rationality of belief in God, his *The Miracle of Theism* appeared after his death.^{1} The book is a broadside against not only the traditional arguments for God's existence, such as the onto-, cosmo-, and teleological arguments, but also against proofs from consciousness, miracles, the idea of God, and so forth, and against the validity of religious experience and faith without reason, and it presents as well negative arguments against divine existence. The book will no doubt supply much grist for the mill of future discussions, but in this piece I should like to focus on Mackie's analysis of one particular argument, the *kalam* cosmological argument. For his discussion at this point seems to me to be superficial, and I think it can be shown that he has failed to provide any compelling or even intuitively appealing objection against the argument.

The *kalam* argument is simply the old first cause cosmological argument based on impossibility of an infinite temporal regress of events. It may be schematized:

1. Whatever begins to exist has a cause of its existence.
2. The universe began to exist.
 - 2.1 Argument based on the impossibility of an actual infinite:
 - 2.11 An actual infinite cannot exist.
 - 2.12 An infinite temporal regress of events is an actual infinite.
 - 2.13 Therefore, an infinite temporal regress of events cannot exist.
 - 2.2 Argument based on the impossibility of the formation of an actual infinite by successive addition:
 - 2.21 A collection formed by successive addition cannot be actually infinite.
 - 2.22 The temporal series of past events is a collection formed by successive addition.
 - 2.23 Therefore, the temporal series of past events cannot be actually infinite.
3. Therefore, the universe has a cause of its existence.

Since the universe is the temporal series of events, the proof that that series had a beginning is taken to show that the universe began to exist. This conclusion has, as Mackie notes, received strong empirical support from cosmological research in astronomy and astrophysics during the last fifty years. Since the universe began to exist a finite time ago, it must have been brought into being by a reality *extra se*.

MACKIE'S CRITIQUE

Mackie objects to both premisses of the *kalam* cosmological argument. Turning his attention first to (2), Mackie asserts that (2.2) just expresses a prejudice against an actual infinity.^{2} In the medieval versions of the argument, (2.2) was often portrayed as the impossibility of traversing the infinite. Since an infinite distance cannot be crossed, if the past were infinite, then today would never arrive, But this is obviously absurd, since today has arrived. Therefore, the past must be finite. Against this version of the argument, Mackie objects that it illicitly assumes an infinitely distant starting point for the temporal series and then pronounces

it impossible to traverse the distance from that point to today. If we take the notion of infinity seriously, however, we must say that in an infinite past there would be no starting point whatever, even an infinitely distant one. Thus, from any specific point in past time there is only a finite stretch that needs to be traversed to reach the present.

Mackie finds (2.1) to be a more ingenious argument, but nonetheless fallacious. He contends that a proper understanding of the principles employed in infinite set theory enables us to see that the alleged absurdities entailed by the existence of an actual infinite (for example, infinities of different sizes), to which the proponent of the *kalam* argument appeals as evidence for (2.11), in fact involve no real contradiction.^{3} This is because our normal criteria for *smaller than* and *equal to* fail to be mutually exclusive for infinite groups. For finite groups to be *smaller than* means that the members of one group can be correlated one to one with a proper part of another group; to be equal to means that the members of the two groups can be exactly matched in a one to one correlation. These two criteria are mutually exclusive for all finite groups, but not for infinite groups. Once we understand this relation between the two criteria, we see that there is no real contradiction.

Mackie admits, however, that many people still harbour doubts about the existence of an actual infinite in the real world and that not all mathematicians or philosophers are ready to accept the actual infinite even in the mathematical realm. Moreover, current astronomy supports a finite past history for the universe. But, he continues, even if we grant (2) that the universe began to exist, there is no good reason to accept (1). For ' . . . there is *a priori* no good reason why a sheer origination of things, not determined by anything, should be unacceptable, whereas the existence of a god [sic] with the power to create something out of nothing is acceptable.'^{4} Indeed, *creatio ex nihilo* raises problems: (i) if God began to exist at a point in time, then this is as great a puzzle as the sheer origination of a material world; (ii) if God has existed for infinite time, this would raise again the problem of the actual infinite; (iii) if God's existence is not in time at all, this would be a complete mystery.

Suppose someone sought to escape these difficulties by proving the beginning of the universe by empirical evidence alone, not appealing to the philosophical arguments concerning the actual infinite, and then fastening on (ii). In that case, Mackie rejoins, he is still using the crucial assumptions that God's existence and power are self-explanatory, but that the unexplained origination of a material world is unintelligible. But this first assumption borrows from the ontological argument the notion of a being whose existence is self-explanatory because its non-existence is impossible, a notion that is indefensible. And as for the second assumption, there is no good ground for an *a priori* certainty that the beginning of things could not have been sheerly inexplicable. If we do find this origin of something from nothing improbable, then it should only serve to cast doubt on the interpretation of the big bang as an absolute beginning. Thus, the idea of creation is vaguely explanatory, apparently satisfying, until, that is, we take a hard look at it and try to formulate the suggestion precisely. Therefore, the *kalam* cosmological argument fails.

RESPONSE

As I said, it seems to me that none of Mackie's objections is cogently proved or even intuitively appealing. To see this, let us retrace our steps, examining Mackie's refutations as we go. With regard to (2.2) he is mistaken to call this a prejudice against the actual infinite, for the argument does not deny, as does (2.1) that an actual infinite can exist, but only that it can be formed by successive addition, or to use the medieval idiom, that it can be traversed.

Mackie's objection that this impossibility is based on the assumption of an infinitely distant starting point is entirely groundless. I know of no proponent of the *kalam* argument who made such an assumption; on the contrary, the beginningless character of an infinite temporal series serves only to underscore the difficulty of its formation by successive addition. For in this case the past would be like the second version of Zeno's Dichotomy paradox, in which Achilles to reach a certain point must have travelled across an infinite series of intervals from the beginningless and open end, with this exception: in the case of the past, unlike the case of the stadium, the intervals are actual and equal. The fact that there is no beginning at all, not even an infinitely distant one, makes the difficulty worse, not better. It is not the proponent of the *kalam* argument who fails to take infinity seriously. He is all too aware that the order type of the series in question would be ω , the order type of the negative numbers. For the past to have been formed by successive addition, to have been 'traversed', would be equivalent to saying someone has just succeeded in enumerating all the negative numbers ending at 0. But this seems to be inconceivable; as G. J. Whitrow urges, a collection of order type ω is simply not constructible. Whitrow notes that the question of how a sequence of events of this order-type could actually be produced is all too frequently ignored by those who base the possibility of an infinite past on Cantor's theory of infinite sets. In fact, the only way in which we can define the infinite set of negative integers is by *beginning* with -1, but this does not correspond to the order in which the events that we may wish to associate with them occur in time. Since the set of order type ω is non-constructible, there is no reason for assuming it could represent an infinite sequence of past events. {5} Be that as it may, it seems clear that the proponent of the *kalam* argument is not assuming an infinitely distant beginning, as Mackie alleges.

And, we may ask, how is Mackie's point that from any specific moment in past time there is only a finite stretch to the present even relevant to the issue? {6} The defender of the *kalam* argument may grant the point with equanimity. The issue is how the *whole* series can be traversed or formed by successive addition, not a finite segment of it. Does Mackie think because every finite segment of the series can be so formed or traversed that the whole can? That would be to commit the fallacy of composition. In fact, Mackie's point appears to be true but uninteresting. {7}

Turning to (2.1), Mackie has only succeeded in specifying some of the conditions which give rise to the absurdities entailed in the existence of an actual infinite, but he has done nothing to justify the assumption that those conditions may hold in the real world. He asserts, in effect, that both the Euclidean principle that the whole is greater than its part and the Cantorian principle of correspondence hold for finite collections, but that they are incompatible when applied to infinite collections. Infinite set theory therefore maintains logical consistency by abandoning the Euclidean principle. But the question is not whether infinite set theory, granted its conventions and axioms, constitutes an internally logically consistent system. The issue is whether such a system can be instantiated or obtain in the real world. Rather than alleviating the difficulties entailed therein, Mackie has merely specified an aspect of that system which supplies the conditions which, if instantiated in the real world, would spawn the absurdities like Hilbert's Hotel or Russell's Tristram Shandy paradox. The price paid for abandoning the Euclidean principle with regard to infinite collections in favour of the principle of correspondence would be being saddled with all the absurd situations which would be entailed *if* an infinite collection could exist in reality. Thus, Mackie has said nothing to resolve the absurdities or to commend to our thinking the real existence of an actual infinite.

The proponent of the *kalam* argument, on the other hand, may grant, if he wishes, the practice of adopting the principle of correspondence as a convention in infinite set theory in preference to Euclid's principle, but he reminds us that this carries with it no ontological commitment concerning the real world. In the real world the absurdities in question do not arise because no actual infinite exists. Only finite collections actually exist, and therefore both Euclid's principle and Cantor's principle hold of them.

Professor Mackie's attempts to refute (2), therefore, seem to fall far short of the mark. He himself recognizes that some thinkers question even the legitimacy of the actual infinite in mathematics and that (2) is probable on scientific grounds alone. Therefore, it is incumbent upon him to turn back the force of (1) Whatever begins to exist has a cause of its existence. Rather than refute the principle, however, he simply demands what good reason there is *a priori* to accept it. He writes, 'As Hume pointed out, we can certainly conceive an uncaused beginning-to-be of an object; if what we can thus conceive is nevertheless in some way impossible, this still requires to be shown.'[\[8\]](#) But as has been often pointed out, Hume's argument in no way makes it plausible to think that something could really come into existence without a cause. As G. E. M. Anscombe observes, Hume asks us to envision a picture, as it were, of something coming into being without a cause and to title the picture 'x coming into being without a cause'. She comments 'Indeed I can form an image and give my picture that title. But from my being able to do *that*, nothing whatever follows about what is possible to suppose " without contradiction or absurdity " as holding in reality'.[\[9\]](#) What the defender of the *kalam* argument maintains is that it is really impossible for something to come from nothing. But how can this be shown? I think that one could produce arguments for the principle,[\[10\]](#) but that since the principle is so intuitively obvious in itself, it would be perhaps unwise to do so, for one ought not to try to prove the obvious via the less obvious. After all, does anyone sincerely think that things can pop into existence uncaused out of nothing? Does he believe that it is really possible that, say, a raging tiger should suddenly come into existence uncaused out of nothing in the room in which he is now reading this article? How much the same would this seem to apply to the entire universe! If there were originally absolute nothingness-- no God, no space, no time-- how could the universe possibly come to exist?

In fact, Mackie's appeal to Hume at this point seems counter-productive. For Hume himself clearly believed in the causal principle. He presupposes throughout the *Enquiry* that events have causes, and in 1754 he wrote to John Stewart, 'But allow me to tell you that I never asserted so absurd a Proposition as *that anything might arise without a cause*: I only maintain'd, that our Certainty of the Falshood of that Proposition proceeded neither from Intuition nor Demonstration, but from another Source.'[\[11\]](#) This appears at first sight contradictory to Hume's claim in the footnote of *Enquiry* xii.III.132 to have refuted the maxim, *Ex nihilo nihil fit*. But the context makes clear that what Hume was denying was that one may infer like causes from like effects; the inference of a cause *simpliciter* is not only unchallenged, but even assumed. Actually Hume is defending here *creatio ex nihilo* but he mistakenly (or cleverly) plays it off against the above maxim, which originally meant to assert the necessity *creatio ex nihilo*. It is especially interesting that Hume thus not only grants the first premiss of the *kalam* cosmological argument, but he also concedes the second. For in *Enquiry* xii.II.125 he speaks of the palpable absurdity entailed in the existence of an infinite past, appealing to (2.2) of the *kalam* argument: 'An infinite number of real parts of time, passing in succession, and exhausted one after another, appears so evident a contradiction, that no man, one should think, whose judgment is not corrupted, instead of being improved, by the sciences, would ever be able to admit of it.' In the attendant footnote, Hume proposes

as the 'readiest solution' to these 'absurdities and contradictions' of abstract reason that we regard universals and abstract entities nominalistically, so that '... all the ideas of quantity, upon which mathematicians reason, are nothing but particular, and such as are suggested by the senses and imagination, and consequently, cannot be infinitely divisible'. This seems to be a wholly commendable suggestion, one with which I have a good deal of sympathy, but it is clear that it does nothing to resolve the difficulties entailed in the *real* existence of an actually infinite member of past events. Hume therefore in effect concedes the second premiss of the *kalam* argument and therefore, given his belief in the causal principle, should have concluded to a cause of the existence of the universe.

Hume would probably have protested at this point that while his mitigated skepticism would allow the use of the principle in everyday life, its extrapolation beyond common life would be disallowed. For if '... we cannot give a satisfactory reason, why we believe, after a thousand experiments, that a stone will fall, or fire burn; can we ever satisfy ourselves concerning any determination, which we may form, with regard to the origin of worlds, and the situation of nature, from, and to eternity?'{12} But this artificial restriction has become clearly untenable in light of the progress made in theoretical physics and other abstract sciences, which are light years away from the reflections necessary for the conduct of everyday life. Indeed, exploration and determination of precisely those questions which Hume thought unanswerable are commonplace in astronomy and astrophysics. There seems no way to escape the charge of *ad hoc* arbitrariness if one grants the causal principle as plausible and reasonable and yet forbids its application to the origin of the universe. Even Mackie confesses, 'Still, this principle has some plausibility, in that it is constantly confirmed in our experience (and also used, reasonably, in interpreting our experience.)'.{13} So why not accept the truth of (1) as plausible and reasonable, at least more so than its opposite?

Because, Mackie responds, in this context the theism implied in granting the principle is even more unintelligible than the denial of the principle. But is this the case? Certainly the proponent of the *kalam* argument would not hold to Mackie's option (i). Nor would he hold to (ii) if he regarded the philosophical arguments for (2) as cogent, for God without the creation would have to exist changelessly, if one is to avoid an infinite regress of events in God's life. Therefore, he holds quite happily to some version of (iii), most plausibly, I would argue, by maintaining that God without creation exists changelessly and timelessly with an eternal determination for the creation of a temporal world and that with creation God enters into temporal relationships with the universe, time arising concomitantly with the first event.{14} This may be mysterious in the sense of being wonderful or awesome, which indeed it is, but it is not so far as I can see unintelligible, as is something's coming into being uncaused out of nothing.{15}

But is not the notion of God as a self-explanatory being unintelligible and indefensible? Here Mackie has clearly confounded the *kalam* cosmological argument with the Leibnizian cosmological argument.{16} He charges that the Leibnizian argument commits one to the unintelligible notion of God as a being whose non-existence is logically impossible. If one rejoins that by 'necessary existence' one means here metaphysically necessary, in the sense of not dependent upon something else' or 'incapable of non-existence, if it exists', then Mackie retorts that the Leibnizian argument fails of cogency. But, of course, this is entirely irrelevant to the *kalam* cosmological argument. That argument only commits one to the necessity of God as an eternal and uncaused being, properties that characterize what philosophers for the last 20 years have been calling a 'factually necessary' being. Mackie can hardly object to

intelligibility of this sort of necessary being, since it is precisely what he as an atheist thinks the universe could be.

Therefore, it seems to me that Professor Mackie has provided no good reason for rejecting the intuitive plausibility of (1). But suppose we do accept, states Mackie, that it is improbable that the universe should have sprung into being uncaused out of nothing. Does not this make it probable that the universe was caused to exist? No, he insists, for now we should doubt that the beginning of the universe established in (2) by empirical evidence was an absolute beginning his assumes, however, that the philosophical arguments in (2.1) and (2.2) are unsound, which Mackie does not seem to have shown. But secondly, even on a scientific level Mackie's hypothesis encounters difficulties.. For according to the standard model of the universe, the universe originated in an explosion from a point of infinite density some 9-15 billion years ago. The further one regresses in time, the denser the universe becomes until one finally reaches a point at which the universe was contracted down to a single mathematical point, from which the universe began to expand. But a point of infinite density is synonymous with 'nothing'. There can be no object in the real world which possesses infinite density, for if it had any extension whatsoever it could be even more dense. Therefore, what the Big Bang model actually requires, as Hoyle points out, is *creatio ex nihilo*; this is because as one follows the expansion back in time one reaches a time at which the universe was 'shrunk down to nothing at all'.^{17} Now if Mackie wants to deny this conclusion, then he is quite simply obligated to come up with another model to supplant the standard model. But of course he has not done so. Some scientists, uncomfortable with the idea of an absolute beginning, have entertained oscillating models of the universe; but while such mathematical models have been drafted, they have also been shown to be physically, thermodynamically, and observationally untenable. Moreover, it would seem that since in such models the universe would have to pass through a singularity with each oscillation, then with every contraction, the universe would have to disappear into non-being and with each expansion emerge *de novo* from nothing. It is difficult to see what has been gained from this.

What is Mackie's counsel? We should infer that the universe must have had *some* physical antecedents, even if the big bang has to be taken as a discontinuity so radical that we cannot explain it, because we can find no laws which we can extrapolate backwards through this discontinuity.'^{18} Here I think we see more clearly than ever the quasi-religious character of Mackie's atheism. Either we believe that the universe came to exist uncaused out of nothing or else no matter what the empirical evidence for an absolute beginning, no matter how deep a caesura we have to carve in nature, we should infer that the universe must be eternal. The existence of a creator God is not even an alternative. The theist can hardly be blamed for not impaling himself on the horns of *this* dilemma. On the contrary, in light of the foregoing discussion, of the three options, theism seems the most plausible route to take.

In conclusion, Professor Mackie's objections to the *kalam* argument appear to be unsound. His objection against (2.2), when relevant, only strengthened the argument therein, while his analysis of (2.1) merely drew our attention to the conditions which generate the absurdities in question. He provided no good reason to doubt the truth of (1) *per se*, a truth which is intuitively appealing and which he admits to be confirmed in our experience. His attempts to undermine (1) in this special context failed to show any unintelligibility either in God's relation to the world or in His mode of existence. Hence, neither premise of the argument appears to have been successfully refuted. However else we may judge the rest of Mackie's book, it seems that with regard to the *kalam* cosmological argument, at least, his parting shot has missed its target.

NOTES

{1} J. L. Mackie, *The Miracle of Theism: Arguments for and against the Existence of God* (Oxford: Clarendon Press, 1982). The title is a clever allusion to Hume's remark in the tenth chapter of his *Enquiry Concerning Human Understanding* that it is a miracle that anyone assents to the Christian faith.

{2} Mackie, *Theism*, p. 93.

{3} *Ibid.*

{4} *Ibid.* p. 94.

{5} G. J. Whitrow, critical notice in *British Journal for the Philosophy of Science* XXXI (1980), 409. See also *idem*, *The Natural Philosophy of Time*, 2nd ed. (Oxford: Clarendon Press, 1980), pp. 28-32.

{6} This same rejoinder was used unsuccessfully by Aquinas against Bonaventure (*Scg* 2.38; *St* 1.46.2 *ad* 6). For a discussion see Francis J. Kovach, 'The question of the eternity of the world in St. Bonaventure and St Thomas - A critical analysis', *Southwestern Journal of Philosophy* v (1974), 141-72.

{7} It may not even be true. Some modern defenders of the *kalam* argument have argued that an infinite past would entail the existence of moments infinitely removed from the present. For an analysis, see William Lane Craig, 'The finitude of the past', *Alethia* II (1981), 235-42.

{8} Mackie, *Theism*, p.89.

{9} G. E. M. Anscombe, "' Whatever has a beginning of existence must have a cause": Hume's argument exposed', *Analysis* XXXIV (1974), 150.

{10} For example, Jonathan Edwards' argument in his *On The Freedom of the Will* 2.3 that something cannot come into existence uncaused because it then becomes inexplicable why just anything and everything does not come into existence uncaused. It cannot then be said that only things of a certain nature come into existence uncaused because prior to their existence they have no nature which could control their coming to be. For a discussion see Arthur N. Prior, 'Limited indeterminism,' in *Papers on Time and Tense* (Oxford: Clarendon Press, 1968), p. 65.

{11} David Hume to John Stewart, February 1754, in *The Letters of David Hume*, 2 vols., ed. J. T. Grieg (Oxford: Clarendon Press, 1932), 1, 187.

{12} David Hume, *Enquiry Concerning Human Understanding*, ed. L. A. Selby- Bigge, 3rd ed., ed. P. H. Nidditch (Oxford: Clarendon Press, 1975), xii.III.130.

{13} Mackie, *Theism*, p. 89.

{14} William Lane Craig, 'God, time and eternity', *Religious Studies* XIV (1978), 497-503.

{15} Note that whereas for the theist creation lacks a material cause but has an efficient cause, for Mackie the universe lacks both a material *and* an efficient cause (as well as any other sort of cause, such as final, formal or whatever).

{16} Mackie, *Theism*, pp. 84, 94.

{17} Fred Hoyle, *From Stonehenge to Modern Cosmology* (San Francisco: W. H. Freeman & Co., 1972), p. 36; *Idem*, *Astronomy and Cosmology: A Modern Course* (San Francisco: W. H. Freeman, 1975), p. 658.

{18} Mackie, *Theism*, pp. 94-5.

Purtill on Fatalism and Truth

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Richard Purtill's recent contribution to the fatalism debate does not, I think, succeed in the author's intent of proving that the omnitemporality of truth implies fatalism, nor that the past is unchangeable in a non-trivial sense, nor that the consequences of his argument are not detrimental to logic and theology.

Source: "Purtill on Fatalism and Truth." *Faith and Philosophy* 7 (1990): 229-234.

Richard Purtill's recent contribution to the fatalism debate does not, I think, succeed in the author's intent of proving that the omnitemporality of truth implies fatalism, nor that the past is unchangeable in a non-trivial sense, nor that the consequences of his argument are not detrimental to logic and theology.

His argument gets off to a bad start by misdefining several key concepts. First, by "fatalism" he means the doctrine "that there is nothing we can do now which will make any statement about the future either true or false." {1} But this is not at all what fatalism holds. Purtill's

definition leaves open the possibility that I can do something in the future to make a statement about the future now true (or false), *e.g.*, I can do something tomorrow that will make it true (or false) today that "I shall travel to Brussels tomorrow." Normally, what we can do now affects the truth of present-tense statements, not future-tense statements or tenseless statements about the future.{2} if we omit the word "now" from the definition, it still fails to capture the essence of fatalism, for the fatalist does not deny that what we do renders statements true (or false). Rather fatalism denies that we can do anything other than what we shall do, *i.e.*, we cannot act in such a way that a bivalent statement about the future would have a different truth value than the one it has.

Second, Purtill defines the omnitemporality of truth as the doctrine "that any statement which is true at any time is true at all times previous to and all times subsequent to that time." {3} But since Purtill thinks statements are tensed, this definition is wholly incorrect, since future-tense statements become false once the relevant events occur and remain false forever after. {4} Only tenseless propositions outfitted with appropriate dates are omnitemporally true. Though he must deny this doctrine as well, Purtill's real complaint concerns *antecedent* truth, *i.e.*, the bivalence of future contingent singular statements.

Third, he defines the "unchangeability of the past" as the doctrine "that there is nothing which we can do now which will make any statement about the past either true or false, that is, the past is beyond our control." {5} Again, this definition is multiply flawed. For those who hold to this doctrine are quite willing to allow that we have power to render past-tense statements about soft facts true or false (remember J. T. Saunders's "Caesar died 2009 years prior to my writing this article"?). Moreover, those who hold to the unchangeability of the past can freely admit that we do make past-tense statements true (or false), but still deny that the past is within our control, in the same way that the fatalist can hold that we do make future-tense statements true (or false) but denies that the future is within our control. Finally, many or most non-fatalists agree that the past is not within our control if that means the power to bring about the past or to make past-tense statements true (or false). What the non-fatalist holds and Purtill wants to deny is the doctrine that we can act in such a way that, were we to act in that way, the past would have been different, *i.e.*, different past-tense statements would have been true (or false).

With these confusions cleared up a bit, let us look at Purtill's argument for fatalism. He argues that if future-tense statements are bivalent, then for any such statement *p* we can form the past-tense statement "It was the case that *p*." Being in the past tense, this statement is now "unchangeable by me, beyond my control" {6} , in the sense defined above. Since this statement is beyond my control and it entails *p*, it follows that *p* is beyond my control, *i.e.*, fatalism is true.

Notice that this argument depends on the assumption that "unchangeability" or, as I prefer, temporal necessity is closed under entailment. Purtill asserts that ". . . it seems as clear as anything in logic can be that the logical consequences of what I cannot change are things I cannot change. . ." {7} But this closure is far from obvious and was denied by Molina, whose view is defended by his gifted translator A. Freddoso. {8} In fact, if all past-tense statements are temporally necessary, as Purtill alleges, then nothing could be more obvious than that temporal necessity, like the concept "within one's power," {9} is not closed under entailment. For if it were, fatalism would follow, and fatalism is simply incoherent, positing as it does a constraint on causally contingent events which is altogether mysterious.

Purtill would no doubt respond as he did at an APA Pacific Division symposium on this subject that "One man's *modus ponens* is another man's *modus tolens*," i.e., one may reject in this case either the Principle of Bivalence or the closure of temporal necessity, so that we are simply left with a conflict of intuitions here. Such a stand-off would, however, leave the orthodox theist's position intact; so Purtill attempts to break the deadlock by challenging the Molinist to provide a counter-example to the principle that temporal necessity is closed under entailment. Fine; in another place I have provided examples--drawn from independent discussions of the Special Theory of Relativity, backwards causation, time travel, precognition, and Newcomb's Paradox--to a similar challenge from John Fischer of past events which are as "hard" or fixed as God's past beliefs and which entail or imply future events which are nonetheless within our power.{10} if one holds with Purtill that such events are temporally necessary, then it seems obvious that such necessity is not closed under entailment. In any case, the instances of divine foreknowledge or bivalent future-tense statements are not unique.

Moreover, the Molinist can strengthen his case by arguing that it is plausible that future contingent statements are bivalent. This I have also done in another place.{11} By so doing, he renders plausible the thesis that temporal necessity is not closed under entailment.

The orthodox theist need not embrace the Molinist alternative, however. If he prefers, he can take the Ockhamist position instead (or as well), viz., that the relevant past-tense statements are not temporally necessary.{12} Purtill essays to refute this rejoinder, but his reasoning is vitiated by a fundamental misconception: that "There are two kinds of facts about the past: *hard facts* which cannot be changed and *soft facts* which can be changed." {13} But soft facts cannot in fact be changed; given that they are facts, they are as unalterable as hard facts. But they differ from the latter in that they are counterfactually dependent upon future contingents, such that were the future contingent event not to occur, the event expressed by the soft fact would not have occurred. Hence, it is the case, *pace* Purtill, that the set of future-tense statements true at any past time *t* is neither growing nor changing. Therefore, Purtill's argument for fatalism fails.{14}

This settles the issue; but the Ockhamist and Molinist might seek to strengthen their case against the would-be fatalist by pointing out the counter-intuitive consequences of denying the Principle of Bivalence.{15} Purtill tries to avoid these consequences by arguing for an infinite multi-valued logic for future contingent statements, the values being interpreted as probability functions. But a fundamental difficulty with this alternative is that it does not seem to make sense to speak of *degrees of truth* for a proposition. Probability functions are much more plausibly construed as epistemic in nature. A proposition is either true or else it is not-true, and its probability of being one or the other concerns our cognitive relation to it. Purtill would substitute for this simple structure an extravagant complexity without intuitive warrant.

Finally, Purtill seeks to mitigate the theological consequences of the denial of Bivalence, viz., the denial of divine foreknowledge. These are, indeed, serious, both biblically and theologically. Biblically, God's knowledge of future contingents is clearly taught in both Testaments, and numerous examples of prophecy of future contingents may be found.{16} Especially significant Christologically is that such foreknowledge is ascribed to Jesus Christ.

Purtill makes the amazing assertion that "every Biblical passage...about God's knowledge of the future is quite consistent with the view that some statements about the future are neither true nor false and thus are not known by God," and he challenges anyone who thinks

otherwise to produce such a biblical passage.{17} But the question is not whether *every* relevant passage of the Bible is consistent with some statements about the future being unknown to God; the question is whether *all* the relevant passages of Scripture are so consistent. In any case, it is not difficult to cite passages that assume God's knowledge of important classes of future contingents, for example:

Even before a word is on my tongue, lo, O Lord, thou knowest it altogether. (Psalm 139.4)
or

Peter, an apostle of Jesus Christ, to the chosen ones. . .according to the foreknowledge of God the Father. . .(I Peter 1.1-2)

Though in a technical sense these statements are compatible with God's not knowing *some* (other) future contingents, Purtill can hardly admit these, for if God knows our very thoughts before we think them and the identity of the saved before the creation of the world, then any vestige of ignorance left in God about the future will hardly be of much importance to us!

As for the issue of prophecy, Purtill attempts to account for prophetic statements as predictions of either causally determined events or events which God has determined to bring about Himself. But this will hardly do, for Scriptural prophecy is presented as being the revelation of future events which are not present in their causes, and while many prophecies could be construed as statements about God's intentions, the Scriptures contain numerous examples of prophecy concerning events not brought about by God, especially sinful human acts.{18}

Concerning the imagined charge that his view is disrespectful and blasphemous, denigrating the power of God, Purtill answers that ". . .it is not really respectful of God to attribute to Him *impossible* powers." {19} Granted; but what disrespectful of God is to say that something is impossible for Him when He has revealed it to be the case. If certain Christian philosophers do not find the preferred solutions to the problem of theological fatalism convincing, why not simply admit with the Psalmist

Such knowledge is too wonderful for me; it is high, I cannot attain it. (Psalm 139.6)
rather than jettison a doctrine which is taught with reasonable clarity through- out the Scriptures? Would this not be the better part of intellectual humility?

As for the theological consequences of his position, Purtill does not really discuss these, but raises instead difficulties with the timelessness of God. After Duns Scotus, however, most scholastics rejected the Boethian solution to theological fatalism,{20} so it is not necessary to pursue Purtill's objections to that doctrine. Rather the truly serious theological consequence of Purtill's position is that it renders the doctrine of divine providence and sovereignty virtually unintelligible. For without divine middle knowledge (which entails divine foreknowledge) it seems inexplicable how God could sovereignly direct a world of free creatures toward His previsioned ends without violating their freedom. By contrast, the Ockhamist, or better, Molinist, view of God wins all the advantages Purtill desires in terms of God's dynamic interaction with His creatures, yet without sacrificing either divine foreknowledge or human freedom.

NOTES

{1} Richard L. Purtill, "Fatalism and the Omnitemporality of Truth," *Faith and Philosophy* 5 (1988):185.

{2} There are exceptions: *e.g.*, by committing suicide now, I render the proposition "I will have lunch tomorrow" false.

{3} Purtill, "Fatalism," p. 185.

{4} Thus, he errs in stating that his future-tense statement F1 will at some future time be true or its denial be true. On the contrary it is *already* either true or false.

{5} Purtill, "Fatalism," p. 185.

{6} *Ibid*, p. 186.

{7} *Ibid*.

{8} Luis de Molina, *On Divine Foreknowledge: Part IV of the "Concordia,"* trans. and ed. with an Introduction by Alfred J. Freddoso (Ithaca, New York,: Cornell University Press, 1988), pp. 55-62.

{9} See Joshua Hoffmann and Gary Rosenkrantz, "On Divine Foreknowledge and Human Freedom," *Philosophical Studies* 37 (1980): 289-96.

{10} See William Lane Craig, "Nice Soft Facts: Fischer on Foreknowledge," *Religious Studies* 25 (1989): 235- 46.

{11} William Lane Craig, *Divine Foreknowledge and Human Freedom* (Leiden: E. J. Brill, 1990) chap. 4. *Viz.* (i) the same facts which serve to make past- and present-tense propositions true also serve to make the relevant future-tense propositions true; (ii) if future-tense propositions are neither true nor false, then neither are past-tense propositions; (iii) the tenseless versions of future contingent singular propositions would seem to be always true or false.

{12} See the fine study by Alfred J. Freddoso, "Accidental Necessity and Logical Determinism," *Journal of Philosophy* 80 (1983): 257-78.

{13} Purtill, "Fatalism," p. 186.

{14} The element of truth in Purtill's argument is that, contrary to the impression given by some recent contributors to the debate, theological fatalism represents, in fact, no advance over logical fatalism. For the temporal necessity ascribed to God's past belief can be more simply ascribed to the past state of affairs constituted by some future-tense proposition's being true (or false). In the standard formulations of the argument for theological fatalism, the premiss concerning God's belief can be replaced with a premiss concerning the antecedent truth of some proposition. For example, A. N. Prior's version actually omits all reference to God, depending merely upon his

6. If it was the case n time units ago that p , then necessarily it was the case n time units ago that p .

And despite his protestations, it seems to me that Pike's version is also so reducible. For one could replace his (31) with

31*. If Jones does *A* at *t*₂, then it was true at *t*₁ that "Jones does *A* at *t*₂"

or with

31**. If Jones does *A* at *t*₂, then it was true at *t*₁ that "Jones will do *A* at *t*₂."

Any successful attempt to remove the temporal necessity of such states of affairs will inevitably render God's past beliefs temporally contingent as well, as a moment's reflection on Freddoso, "Accidental Necessity," shows.

{15} As I have done in Craig, *Foreknowledge and Freedom*, chap. 4.

{16} I have done an exegetical study in *The Only Wise God*(Grand Rapids, Mich.: Baker, 1987), pt. 1.

{17} Purtill, "Fatalism," p. 189.

{18} Purtill seems willing to go so far as to say Judas's denial was inevitable and, hence, predictable because it lay on every future branch. But this is fantastic; on a libertarian view, there must be a branch in which Judas does not deny Christ, otherwise he sins necessarily, not freely. Purtill might back off to the view that on every future branch feasible for God to actualize, Judas sins; but then there is absolutely no way for God to know this apart from middle knowledge, which Purtill must deny. Mere probability is not sufficient for prophecy of future contingents.

{19} Purtill, "Fatalism," p. 190.

{20} See my *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, *Studies in Intellectual History* 7 (Leiden: E. J. Brill, 1988), chaps. 5-8.

Timelessness and Creation

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

One of the principal themes in Brian Leftow's extensive case for divine timelessness is that a temporal God cannot be the Creator of time and the universe. Therefore, since such an attenuated concept of deity is unacceptable, we should conceive of God as timeless. In support of the claim that a temporal God cannot be a full-fledged Creator, Leftow presents three arguments. Let us examine each in turn.

Timelessness and the Creation of Time

Leftow reasons that if God is essentially temporal, then His creating time would involve His making His own existence possible because time would be "an absolutely necessary precondition of God's own existence."^{1} But it is absurd to talk of something's making itself possible. Therefore, a temporal God cannot create time, which impugns His being the source of all that is other than Himself.

I have elsewhere criticized Leftow's claim that if God is temporal, He is so essentially.^{2} Fortunately, Leftow frees his argument from this false premiss by arguing that even if God is contingently temporal, He still cannot act to create time. "To create time," explains Leftow, "is to account for the fact that the set of times has members."^{3} But then if every divine action occurs at a time, God cannot act at any moment of time t to bring it about that the set of times has members. God cannot act at t to create times prior to t , since there is no causal power over the past. He cannot create t at t , for His action presupposes His existence, and the existence of t is a precondition of His existence. He can at t only create times later than t ; but then the existence of t is unaccounted for. So no matter what point of time one picks, there is no action of God at that time which can account for the fact that the set of times has members.

Is none of these alternatives possible? And are they exhaustive? Let us examine them in reverse order.

Alternative (iii): At t God creates times later than t . God's creating every time t at a time $t^* < t$ might appear to involve an infinite past, which some of us might find objectionable; but if the t_i are instants or unequal intervals of time, this is not necessarily the case, since the series of times could form a convergent series tending toward $t=0$ as the conceptual limit. Although time would be metrically finite, for any time t there would be a time $t^* < t$ at which God acts to bring about the existence of t . The crucial question concerning such a regress of times is not its (metrical) infinity, but whether it is vicious or benign with respect to God's creation of time. Leftow considers it a vicious regress, since at any t at which God acts to create all $t' > t$ the existence of t itself is unaccounted for. He concludes, "no action of God located at any time can account for the existence of all times."^{4} But why demand that God's action at any time should be able to account for the existence of *all* times? Surely no one would expect God's action at a time to account for the existence of past times! Why should God's creative action at a time account for the existence of anything other than the object of that action at that time? Leftow says, "If this is so, at every time, the set of times has members independent of God's action"^{5}--but he should add "at that time." The events at any time are not independent of God's action *überhaupt*. Leftow concludes, "So at every time it is false that God's action at that time accounts for the fact that the set of times has members."^{6} But surely it does: God's action at t ensures that there will be a time $t' > t$ and, hence, that the set of times is not the empty set, thereby meeting Leftow's conditions for the creation of time. What God's action at t does not account for is that the set of times has *all* the members it does; but there is no reason to expect that it should. No time ever comes to exist but for the fact that

God created it, which suffices, it seems, for God's creating time. So I do not find Leftow's reservations about the third alternative persuasive.

My own misgivings about this alternative would instead focus on the notion of existential causation.^{7} It seems very strange to hold that the effect of God's creative action at t is delayed until $t' > t$, rather than occurring at t itself. If God's causing the existence of times were to cease at t , then on this alternative time would continue on through t' without any creative action of God during t' . If it is said that God creates t' at t , but conserves t' in being during t' , then I do not see the necessity of any creative act of God at t ; it seems to contribute nothing to the existence of t' , which might as well be a first instant of time. In short, the nature of existential causation would seem to require Leftow's second alternative: that God creates t at t itself.

Alternative (ii): God creates t at t . Leftow objects to this second alternative because it allegedly involves a sort of causal or explanatory circle. But does it? Leftow believes that if God is necessarily temporal then "time is an absolutely necessary precondition of God's own existence."^{8} But while time's existence would *ex hypothesi* be a necessary condition of God's existence in a strictly logical sense, it need not be a metaphysical "precondition" of God's existence, since God's existence is explanatorily prior, indeed, on a Newtonian account of God and time,^{9} causally prior, to time's existence. The only reason time exists necessarily is because God exists necessarily. Similarly, if abstract objects necessarily exist, they do so only because God necessarily exists.^{10} In either case, one might object to the use of "create" in characterizing the causal relation God sustains to His effects, since creation typically is taken to imply free agency, whereas the causation of abstract objects or Newtonian time is, so to speak, automatic. For Newton God's just existing causes time and space to be. But God remains in such cases the source of all reality other than Himself, even if He cannot properly be said to "create" them.

Leftow also charges that if God is contingently temporal, He cannot at t create t because His action at t presupposes t 's existence: t 's existence is explanatorily prior to God's action at t . But on some sort of relational theory of time, such as Leibniz advocated,^{11} time is logically posterior to the occurrence of some event. So on a relational theory, God's acting is explanatorily prior to the existence of time. All God has to do is act and time is generated as a consequence. Thus, one could draft a model of divine eternity which combined both Newton's and Leibniz's insights: metaphysical time is founded in God; not, however, in His being, but in His successive activity. Against such a view Leftow's argument that God's creation of t is explanatorily posterior to t 's existence is unavailing.

Alternative (i): At t God creates times prior to t . Finally, what about the first alternative, that at t God creates times prior to t ? I agree with Leftow that no one has causal power over the past.^{12} But readers familiar with the literature on divine foreknowledge of future contingents will know that many philosophers affirm a non-causal power over the past, as when we act to bring it about that a future-tense statement or proposition about our action was true or even to bring it about that God had a certain belief in the past about our action.^{13} Others affirm a weaker, but nonetheless very important sort of power, namely, the ability to act in such a way that were we to do so, the past would have been different.^{14} These future-infected past facts are typically called "soft facts" about the past. Now if these philosophers are correct--and it seems that they are^{15}--in asserting some such power, then a bizarre but intriguing possibility arises with respect to God's creation of time, namely: could God's past temporality be a soft fact? That is to say, could it be the case that just as God's having

possessed a certain belief concerning future contingents and even having wrought in human history certain events in anticipation of that future contingent are soft facts concerning God which are not temporally necessary until the foreknown event transpires, so God's having existed temporally from eternity past is a soft fact about God which does not become temporally necessary until God causes the first event, say, the beginning of the universe? Having existed changelessly until the first event occurs, God, were He at that point to refrain from causing any events, would not have existed from eternity, but instead be timeless, just as He would not have had a certain belief or caused certain events were the foreknown future contingent not to transpire. Thus, if t is the time of the first event, God has at t either the power to bring it about that He has never been temporal or at least the power to act in such a way that were He to do so, He would never have been temporal. By creating a first event at t , God either brings it about that there is time prior to t or at least acts in such a way that, His having so acted, there is time prior to t . That is somewhat akin to creating at t time(s) prior to t , even if it falls short of a robust causal account of creation. Though strange, this alternative, which Leftow does not consider, is not obviously absurd and deserves further exploration and reflection.

Thus, it seems to me that Leftow has not successfully excluded any of the three alternatives mentioned, though the second seems the most plausible of the candidates.

Finally, it needs to be asked whether there is not a fourth alternative, to wit, an Ockhamist-inspired model of God's existing timelessly *sans* creation and out of that timeless eternity creating t , by which very act God takes on a temporal mode of existence.^{16} The presupposition of the first alternative is that there cannot be a first moment of time in God's life, that by creating a first event, God acts in such a way that it entails the existence of time prior to the time of the first event. But the Ockhamist sees no necessity of such a presupposition; by creating a first event God creates a first moment of time, and to imagine any time prior to creation is just that: imagination. God's creation of t out of timeless eternity would circumvent Leftow's problem that God's creation of t logically presupposes the existence of t . As Leftow himself observes, "Suppose that God *could have* acted from beyond time. If He had, His creation of t from beyond time would not presuppose His existing at t ."^{17}

Nevertheless, I think that we should question the coherence of this alternative. Suppose someone asserts that we should reject this alternative for the same reason that I rejected the third, namely, it seems inexplicable why there should be, so to speak, a delay between God's creative action and the effect of that action.^{18} If God causes something in timeless eternity, then the effect should exist in timeless eternity; the effect should exist co-eternally with God. On a tensed theory of time, it seems metaphysically impossible that God should be timelessly causing an event and yet that event not co-exist with God in eternity, but spring into being at a moment of time in the finite past. God's creating a first event is itself an event which brings God into time. But then the question arises, when does this creative act occur? The answer can only be: simultaneously with the first event. Thus, we are back to the second alternative. If, on the other hand, we adopt a tenseless theory of time, which permits God's timeless causation of a temporal event, then we shall reject the Ockhamist claim that so acting would temporalize God. Rather this would be a *bona fide* case of God's timelessly creating every t . Therefore, on either theory of time this alternative collapses into another view and so is incoherent.

In summary, then, even if we reject the first, third, and fourth alternatives, nevertheless, the second alternative remains plausible, which dissolves Leftow's trilemma.

Timelessness and the Creation of the Universe

Leftow's next argument piggy-backs on the foregoing and can be dealt with summarily. He argues that in order for God to create the whole universe of temporal things, He must also create time. But a temporal God cannot create time. So if God can create the universe, He is timeless.

In this argument we find not only the erroneous premiss that a temporal God cannot create time, but also an unacceptably reductionistic conception of time, {19} in that Leftow equates "the entire universe of temporal things" with physical space-time and its denizens. Once we free ourselves of that reductionism, there is no reason why God could not exist in a sort of metaphysical time prior to the inception of physical time (and space). Such a time could be conceived substantively along Newtonian lines or relationally as the concomitant of either changes in God or in His effects (say, God's creating angelic realms prior to His creation of physical space-time). Thus, even if it were true that a temporal God could not create time, He could still create the universe.

Timelessness and the Beginning of Time

Leftow's third argument is reminiscent of the first. If God is temporal, then it cannot have been up to God whether time had a beginning, for there cannot have been a time at which God made a choice that is responsible for time's having had no beginning. Suppose that t is such a time. If t was preceded by infinite time, then its existence is not up to God unless we credit Him with power to effect the past, which seems impossible. If t was preceded by a finite period of time, then time already has a beginning, and it is too late for God to wipe it out and replace it with an infinite past. If t is the first moment of time, then in order for God to choose that time be beginningless He must either annihilate t , so that the temporal series lacks a beginning point, or He must cause moments of time to exist prior to t . But God cannot act at t to annihilate t , for if t were annihilated it would be false that God acts at t . And neither can God act at t to bring it about that there were moments of time before t , since there is no such power over the past. Thus, a temporal God cannot be responsible for time's having had no beginning. But if God is not responsible for time's having had no beginning neither can He be responsible for time's having had a beginning, should that be the case. For in the first place, if it is not up to an agent whether p is true, then it is not up to him whether not- p is true. Secondly, only at the first moment of time could God effect it that time have a first moment. But if God is temporal, His existence and action at time's first moment presuppose the existence of that moment and so cannot account for that moment's existence. In sum, a temporal God cannot be responsible for time's having or lacking a beginning. Since a timeless God can be so responsible, an atemporal deity is more perfect than a temporal deity, and so God should be regarded as timeless.

Leftow's complex argument rests on the presupposition that in order for it to be up to God whether time had a beginning or not, there must have been "a *time* at which God makes a choice" for one of these options. {20} But it seems to me that this assumption is false. For in virtue of His omniscience, God's choices are not events, since He neither deliberates temporally nor does His will move from a state of indecision to decision. He simply has free determinations of the will to execute certain actions, and any deliberation can only be said to

be explanatorily, not temporally, prior to His decrees.^{21} If time is essential to choosing, then a timeless God could not choose between a beginningless or a finite time either. The key question, then, is whether it can be up to God whether time is finite or infinite, not whether there can be a time of His choice. So let us inquire whether God can act at t in such a way as to be responsible that past time is infinite.

Consider Leftow's three alternatives in order. *Alternative (i): t was preceded by infinite time.* Leftow simply waves aside the possibility of God's having power over the past, but we have seen that this assumption may be too quick. If God is changeless prior to t , such that t is the time of the first event, then it is not obvious that God's having had an infinite past prior to t , whether in metric time or non-metric time, cannot be a soft fact about God. For since there were no events prior to t , the only reason that time could be said to exist prior to t is that God existed literally before t . Had God refrained from acting at t , there would have been no time at all. Thus, by acting at t God either non-causally brings it about that time existed prior to t or else He acts in such a way that by His acting in that way, time existed prior to t . God has existed changelessly from eternity with a free determination to create t , and time before t is a soft fact contingent upon God's acting to create t . If the time prior to t is geometrically amorphous, then in a sense it is neither infinite nor finite, since there is no objective fact of the matter whether that whole time is greater than, equal to, or less than the moment t itself. But the prior non-metric time would be beginningless and in that sense not finite. This alternative may be strange, but it is not evidently incoherent and merits further investigation.

Alternative (ii): t was preceded by finite time. In saying that God would need to erase the finite past at t and replace it with an infinite past, Leftow seems to be envisioning the logically impossible task of changing the past. Of course God cannot do that, but this constitutes no restriction on what is within His power. The real question is whether God is able at t to bring it about that although the past is finite, it would have been infinite. This seems to me dubious. Even in the cases of soft facts about the past, God is not held to be able at t to bring it about that a past event e at $t^* < t$ did not occur. Rather the idea is that God, in virtue of His foreknowledge, brought about e when t^* was present; but had God foreknown other future contingents would transpire, He would not have brought about e when t^* was present. When those foreknown events themselves are transpiring or about to transpire at t , the agents involved have the ability to effect different events at t than those which they do. But were they to choose differently at t , God would have foreknown this and so not brought about e when t^* was present. It is not the case that at t God would somehow act to bring it about that He had not caused e at t^* or never foreknown the events at t . Yet alternative (ii) seems to envision precisely this latter sort of ability. Since t is preceded by finite time, that time is not the consequence of t 's being the time of the first event (otherwise it would be infinite or amorphous, since if t 's elapsing is itself sufficient that there should have been n finite time units prior to t , it would also be sufficient for there having been $n+1$ finite time units prior to t). So the times prior to t must be either substantial time units in their own right or the relational consequences of events going on prior to t . Thus, if God refrained from creating t , that would have no intrinsic effect on times prior to t ; they would still have existed, only now they would be at the end of time. Thus, it is difficult to see how God could do anything at t to bring it about that time was infinite when it was in fact finite.

But could He achieve this indirectly? For example, just as God would not bring about e when t^* was present were the agents responsible for the future contingent events at t to act other than as they will, so perhaps God would not have brought about a finite past at $t=0$, but an infinite past instead, had He foreknown that He would act differently than He will at t . Thus,

by acting differently at t God could indirectly bring it about that the past had always been infinite. This scenario, however, is problematic. For if God were to act differently than He will at t , there would still be no time in the past at which He could, as a result of His foreknowledge of His act at t , act to create an infinite past. Given that any t has predecessors $t_i < t$, such action would require backward causation, which we have dismissed as impossible. Therefore, such a decree cannot be based on divine foreknowledge; it must be explanatorily prior to His foreknowledge. That is to say, the decree that the past should be infinite would have to be based on God's middle knowledge of what He would do if He were to act in a certain way at t . Knowing how He would act in the circumstances at t , God decrees a finite past; but were He to act differently at t , His middle knowledge would have been different and He would have decreed an infinite past instead. The problem, however, with this scenario is that God cannot, it seems, have middle knowledge of His own free acts.{22} Therefore, He cannot act at t so as even indirectly to bring about an infinite past. Therefore, I concur with Leftow that the second alternative seems untenable.

Alternative (iii): t is the first moment of time. Consider Leftow's two sub-alternatives: (a) *God could annihilate t .* Here Leftow relies on his argument, which we have already rejected, that t 's existence is logically or explanatorily prior to God's action. Leftow contends that God's annihilating t is logically posterior to t 's existence. But a less misleading statement of this alternative would be that God simply refrains from creating t , which does not presuppose t 's existence. As we have seen, it can be plausibly maintained that had God refrained from creating t He would have been either timeless or non-metrically temporal. If t does exist, God is able at t to refrain from creating t . Leftow confuses this claim with the false claim that God is able to refrain at t from creating t .{23} This latter claim is necessarily false because if God were to refrain at t from creating t , t would exist as the time of God's refraining. But no such incoherence exists in the assertion that God is able at t so to act that, were He to act in that way, t would not have existed.{24}

Nevertheless, I do not think that the success of sub-alternative (a) goes to support the third alternative, that at the first moment of time God could have created a beginningless time. Leftow is operating with a faulty notion of what it means for time to begin to exist. In holding that a temporal series lacking a first temporal instant does not begin to exist, Leftow assumes that beginning to exist entails having a beginning *point*. But this seems quite wrong: would we say that a concert did not begin because it lacked an initial, durationless instant? Rather time begins to exist if and only if for some finite interval of time there are only a finite number of equal intervals earlier than that time. Or again, time begins to exist if and only if there is a finite interval of time which is not preceded by an interval of equal temporal extension.{25} Whether time has a first instant is incidental to time's having begun to exist.

Now consider sub-alternative (b): *God causes moments prior to t .* Since *ex hypothesi* t is the first moment of time, we have ruled out the model of God's existing prior to His creation of t . Whether it makes sense to say that God is able at t to bring it about that moments earlier than t would have existed before t will depend upon whether one adopts a certain version of the relational theory of time. God is plausibly able at t to create different events than those He in fact creates at t , such that the events at t should come later in the series of events rather than first. But on a relational view of time which identifies moments of time with certain classes of events,{26} it follows from God's ability at t to create events which would precede the events constituting t that God is able at t to create moments of time prior to t . Again, this claim should not be confused with the assertion that God is able to create at t moments of time prior to t . The latter ability would imply retro-causation; the former implies merely that at t God is

able to do something other than what He is in fact doing. Now if God is able at t to create different events and, hence, times prior to t , then, if an infinite series of past events is possible, there seems no reason to deny that God is able at t to create an infinite number of events prior to t , so that time would be beginningless.^{27} Now perhaps such a version of the relational theory of time is untenable; but pending some discussion of it we are forced to regard Leftow's refutation of the third alternative as inconclusive. Therefore, it seems to me, having failed to refute (i) and (iii. b), Leftow has not shown that a temporal God cannot be responsible for there having been an infinite time.

What, then, about His responsibility for time's having been finite? With respect to Leftow's first argument, Leftow appears to reason that since it was not up to God whether time was beginningless, then it is not up to God whether time had a beginning. What Leftow means to say here is that since it is not up to God that time, if it exists, is beginningless, it is not up to God that time, if it exists, has a beginning. For, even if his arguments had been successful, he would not have shown that it is not up to God whether time was beginningless. God could simply have refrained from creating time at all and thus, even though He would not be responsible for determining time's topology, it would still be up to Him whether a beginningless time exists. Similarly, it would still be up to God whether time had a beginning, if it does, even if its topology is outside His control. In any case, we have not seen any good reason to think that God cannot be responsible for the topological fact that time, if it exists, is beginningless, and we have yet to see a reason to think that it is not up to God whether time, if it exists, has a beginning. Leftow's second argument against God's being responsible for the fact that time, if it exists, has a beginning merely reiterates the false contention that God's acting at t is logically posterior to t . Hence, I do not think we have sound reasons for thinking a temporal God cannot be responsible for time's topological feature of having a beginning or not. Whether a timeless God can be so responsible is a moot question which will probably depend on whether one adopts a tensed or tenseless theory of time.

Conclusion

In conclusion, we have not seen any good reasons to think that a temporal deity could not be the Creator of time and the universe.

Endnotes

^{1}Brian Leftow, *Time and Eternity*, Cornell Studies in Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991), p. 273.

^{2}William Lane Craig, "Timelessness and Necessary Existence," *International Philosophical Quarterly* (under consideration).

^{3}Leftow, *Time and Eternity*, p. 273.

^{4}Ibid., p. 274.

^{5}Ibid.

^{6}Ibid.

{7}For background discussion see James F. Ross, "Creation," *Journal of Philosophy* 77 (1980): 614-629; idem, "Creation II," in *The Existence and Nature of God*, ed. A.J. Freddoso (Notre Dame, Ind.: University of Notre Dame Press, 1983), pp. 115-141; Philip Quinn, "Creation, Conservation, and the Big Bang," in *Philosophical Problems of the Internal and External Worlds*, ed. John Earman, et. al. (Pittsburgh: University of Pittsburgh Press, 1993), pp. .

Relevant in this connection are the arguments of those who contend that temporal causes necessarily precede their effects chronologically. Le Poidevin, for example, asserts a Principle of Reciprocity *R* which states that necessarily, if *A* at *t* causes *B*'s beginning to be *G* at *t'*, then *A* is *F* at *t* and not-*F* at *t** such that $t < t^* < t'$. This precludes $t = t'$. Imagining *A* and *B* to be two billiard balls, Le Poidevin observes that at the instant when *A* strikes *B*, if all *A*'s momentum were conserved, then *B* would not move; but if momentum is communicated to *B*, then at that instant *A* has lost some. Hence, *A*'s causing *B* to move must precede temporally *B*'s beginning to move (Robin Le Poidevin, *Change, Cause, and Contradiction: A Defense of the Tenseless Theory of Time*, Macmillan Studies in Contemporary Philosophy [London: Macmillan, 1991], p. 88). Le Poidevin extends *R* to cover static as well as dynamic cases of causal connection and elevates *R* to a logically, not merely physically, necessary truth, so that it would require God to create *t'* at $t < t'$. Even on a physical level, however, it seems to me that *R* is false. For if there is a time *t** between *t* and *t'* when *A* is not *F*, then why does *B* begin to be *G* at *t'*? *A*'s momentum is already spent by that time. So where does *B*'s newly found momentum at *t'* come from? *A* at *t*?--then how did it jump across the temporal gap from *t* to *t'*? During the interval containing *t** neither *A* nor *B* possesses it, which seems absurd. If *R* fails even on the physical level, how much more implausible is it on a metaphysical level governing God's creative relation to the world, where no conservation laws are involved! The erroneous presupposition of *R* is that simultaneous causation is to be construed as occurring at an instant, rather than at a moment (of arbitrarily short non-zero duration).

{8}Leftow, *Time and Eternity*, p. 273.

{9}In Newton's view, time (like space) is an emanative effect of God's being. He explains,

"No being exists or can exist which is not related to space in some way. God is everywhere, created minds are somewhere, and body is in the space that it occupies; and whatever is neither everywhere nor anywhere does not exist. And hence it follows that space is an [emanative] effect arising from the first existence of being, because when any being is postulated, space is postulated. And the same may be asserted of duration: for certainly both are dispositions of being or attributes according to which we denominate quantitatively the presence and duration of any existing individual thing. So the quantity of the existence of God was eternal, in relation to duration, and infinite in relation to the space in which he is present; and the quantity of the existence of a created thing was as great, in relation to duration, as the duration since the beginning of its existence, and in relation to the size of its presence as great as the space belonging to it" (Isaac Newton, "On the Gravity and Equilibrium of Fluids," in *Unpublished Scientific Papers of Isaac Newton*, ed. and trans. A. Rupert Hall and Marie Boas Hall [Cambridge: Cambridge University Press, 1962], pp. 136-37).

Hall and Hall's translation of the phrase *entis primario existentis effectus emanativus* conceals the bracketed word I have inserted in the text. Space and time are not voluntary creations of God, but, as it were, displacements in being resulting from His existence.

{10} See Thomas V. Morris and Christopher Menzel, "Absolute Creation," *American Philosophical Quarterly* 23 (1986): 353-362.

{11} On Leibniz's view, time is an order of succession among events. Thus,

"If there no creatures, there could be neither time nor place, and consequently no actual space. The immensity of God is independent upon space, as his eternity is independent upon time. These attributes signify only [with regard to these two orders of things] that God would be present and co-existent with all the things that should exist. And therefore I don't admit what's here alleged, that if God existed alone there would be time and space as there is now: whereas then, in my opinion, they would be only in the ideas of God as mere possibilities" (G. W. Leibniz, "Mr. Leibniz's Fifth Paper," in *The Leibniz-Clarke Correspondence*, ed. with an Introduction and Notes by H. G. Alexander [Manchester: Manchester University Press, 1956], p. 80).

Leibniz presupposes God's changelessness. But were God to act or even think discursively, time would spring into existence as a concomitant.

{12} See William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 (Leiden: E.J. Brill, 1990), pp. 150-156.

{13} See, e.g., respectively Alfred J. Freddoso, "Accidental Necessity and Power over the Past," *Pacific Philosophical Quarterly* 63 (1982): 54-68; George I. Mavrodes, "Is the Past Unpreventable?" *Faith and Philosophy* 1 (1984): 131-146.

{14} E.g., Alvin Plantinga, "On Ockham's Way Out," *Faith and Philosophy* 3 (1986): 235-269.

{15} See Craig, *Divine Foreknowledge and Human Freedom*, pp. 186-203. Leftow objects to the Molinist solution because it accords us power to effect events only in a Pickwickian sense. For Molinist freedom is compatible with its being the case that for all propositions p and q that $p \supset q$; that q is false; that were a person S going to effect it that p , then q would have been true; and that S has no power to effect it that q . But, Leftow objects, in that case S does not actually have the power to effect it that p , for q 's falsity prevents this. But this latter allegation is made by Leftow without justification and is therefore question-begging. I should say that if p = "I shall mow the lawn Saturday" and q = "God knows that I shall mow the lawn Saturday," then I do have the power to effect it that p even if q is false and q 's truth cannot be causally effected by me. As for Ockhamism, Leftow just asserts that God's past beliefs are hard facts, which is begging the question. On the most sophisticated analyses of temporal necessity to date, God's beliefs turn out to be soft facts.

Moreover, the defender of timelessness who rejects Ockhamist/Molinist solutions on the basis of the temporal necessity of propositions concerning God's past beliefs seem to find themselves hoist on their own petard, since a timelessly obtaining state of affairs seems as hard and unalterable a fact as facts about the past. The comparison of eternity to the present only reinforces the point since the present seems as realized and fixed as the past. Leftow himself endorses the dictum "What is, when it is, is fixedly," commenting, "If a fact is already established and present, it is too late to prevent its obtaining. For us it is as fixed and unalterable as the past, it can no longer be affected" (Leftow, *Time and Eternity*, p. 87). Leftow goes on to connect maximal fixity and presence with immutability and timelessness. It

is hard to avoid the conclusion that God's timeless beliefs about what events are present to Him in eternity are as hard and fixed as any event of the past. If we have the power to effect it that, or to act in such a way that, were we to act in that way, timelessly false propositions about God's beliefs would have been timelessly true instead, I do not see why similar power is objectionable with regard to past-tense propositions about God's beliefs.

{16} Such a model has been dubbed "accidental temporalism" by Thomas D. Senor, "Divine Temporality and Creation *ex Nihilo*," *Faith and Philosophy* 10 (1993): 86-92. For discussion see Craig, "Timelessness and Necessary Existence."

{17} Leftow, *Time and Eternity*, p. 274. Cf. "If . . . that moment's existence presupposes God's existence, then God exists 'logically before' that moment does. If so, God in effect makes 'outside' time His choice that that moment exist--in which case He is intrinsically timeless" (Ibid., p. 277).

{18} See Alan Padgett, *God, Eternity, and the Nature of Time* (New York: St. Martin's, 1992), pp. 20-21, 71-73.

{19} See the discussion in William Lane Craig, "The Special Theory of Relativity and Theories of Divine Eternity," *Faith and Philosophy* 11 (1994): 23-26; idem, "Timelessness and Necessary Existence."

{20} Leftow, *Time and Eternity*, p. 275 [my emphasis].

{21} See discussion of divine deliberation and middle knowledge in Craig, *Divine Foreknowledge and Human Freedom*, pp. 223-225.

{22} See William Lane Craig, *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, *Studies in Intellectual History* 7 (Leiden : E.J. Brill, 1988), pp. 275-278; idem, *Divine Foreknowledge and Future Contingents*, pp. 179-183, 229-232.

{23} Perhaps part of the confusion here arises from assimilating temporal necessity/possibility with the possible worlds semantics for broadly logical necessity/possibility. When it is said that it is possible at *t* for God to act in a certain way, this does not mean that if *t* were actual then it would be true that God acts in a certain way. Then nothing but what actually happens would be possible. Rather what is meant is that when *t* is present it is still within God's power to act in a certain way. So when it is asserted that God is able at *t* to refrain from creating *t*, this should not be construed to mean that there is some *t* at which God refrains from creating it, but that even as God is creating *t*, it is still within God's power not to create *t*; of course, were He to refrain, *t* would not exist.

{24} It might be objected by partisans of temporal necessity that it is not within God's power at *t* to refrain from what He is actually doing at *t*. One recalls Aristotle's dictum: "Everything that is, is necessarily, when it is." In some accounts of temporal necessity, such as Freddoso's, only past-tense propositions can be necessary, so that even though God is acting at *t* to create *t* God is able at *t* to refrain from creating *t*. Still it must be admitted that it is difficult to see any difference in the actuality of the past and present; both seem equally real, so that it is hard to justify why the present is not characterized by the same necessity that purportedly characterizes the past. Such an objection can be circumvented, however, by maintaining that God *sans* creation in a timeless state could have refrained from creating *t*, even if at *t* He did

not have the power to refrain. For the advocate of unqualified timelessness, on the other hand, the objection makes fatalism go through with a vengeance, for even though God's actions are timeless, still they are actual, instantiated in reality, and therefore God cannot refrain from what He is actually (tenselessly) doing.

{25} See Quentin Smith, "On the Beginning of Time," *Nous* 19 (1985): 579. Technically this characterization applies to metric time.

{26} See, e.g., Bertrand Russell, *Human Knowledge: Its Scope and Limits* (New York: Simon & Schuster, 1948), p. 275; for discussion see Quentin Smith, "The New Theory of Reference Entails Absolute Time and Space," *Philosophy of Science* 58 (1991): 411-416.

{27} The choice to create a beginningless series could not be taken at t , of course; the divine decision is logically prior to God's carrying out that decision and occurs at no time. God would just always be carrying out His logically prior decision by creating times. What makes this scenario puzzling is that we want to know where in the infinite series God would be, i.e., what moment would be present for Him, were He to be creating a beginningless time, and this seems arbitrary. It is tempting to place Him at the infinitely distant beginning of time on analogy with His actual location at t ; but no such moment need exist. It must be said that God's location in beginningless time is perhaps no more arbitrary than His location in any arbitrarily long finite series He could create prior to t . For if, instead of creating t as the first moment of time, God were to create a world beginning at $t^* < t$, where would God be: at t^* ? At t ? In between at $t^* < t' < t$? Do we preserve God's location at t or at the beginning of time? I do not know how to assess the weight of such worlds' similarities to the actual world to answer such a question.

Wallace Matson and the Crude Cosmological Argument

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Wallace Matson objects to the second premiss of the "crude" cosmological argument, that *the universe began to exist*, by pointing out that the natural number series shows the logical possibility of an infinite collection of

things. The cosmological argument proves only that an infinite collection cannot be formed in a finite time. But the argument asserts the *real*, not the *logical*, impossibility of an actual infinite. Nor does it assume that time is finite: one cannot explain how one infinite collection (the series of events) can be formed by successive addition merely by superimposing another (the series of moments) upon it. Matson objects to the first premiss, that *everything that begins to exist has a cause of its existence*, by asserting that if it were true, then God would also need a cause. But Matson misconstrues the premiss to state *everything has a cause of its existence*. The correct premiss does not imply a cause of God, since He did not begin to exist.

Source: "Wallace Matson and the Crude Cosmological Argument." *Australasian Journal of Philosophy* 57 (1979): 163-170.

1. The First Cause Cosmological Argument

Of all the various forms assumed by the cosmological argument, the most intriguing and mentally stimulating is the proof for a first cause of the universe based on the impossibility of an infinite temporal regress of events, a proof unceremoniously dubbed by Wallace Matson as the 'crude cosmological argument'.^{1} The argument appears to have originated in the efforts of early Christian apologists to refute the Greek doctrine of the eternity of matter.^{2} The Alexandrian commentator and theologian John Philoponus (d. 580) was the last great champion of the doctrine of *creatio ex nihilo* in the pre-Islamic era, and it is his refutation of Aristotle's doctrine of an eternal universe that constitutes the roots of the Arabic and Jewish formulations of the first cause cosmological argument.^{3} Thinkers such as al-Kindi, Saadia, and al-Ghazali reworked Philoponus's arguments into a variety of cosmological proofs.^{4}

The basic form of these arguments was:

Everything that begins to exist has a cause of its existence.

The universe began to exist.

The universe has a cause of its existence.

The critical second premise was supported quite frequently by two different arguments. First, the argument from the impossibility of the existence of an actual infinite:

An actual infinite cannot exist.

An infinite temporal regress of events is an actual infinite.

An infinite temporal regress of events cannot exist.

The argument was usually supported by demonstrating the various absurdities to which the existence of an actual infinite would give rise, such as infinities of different sizes, and so forth. The second argument was based on the impossibility of forming an actual infinite by successive addition:

A collection formed by successive addition cannot be actually infinite.

The temporal series of events is a collection formed by successive addition.

The temporal series of events cannot be actually infinite.

The argument held that since the infinite cannot be traversed, the present moment would never arrive if it were preceded by an infinite number of prior events. The reasoning eventually found its way into the thesis of Kant's first antinomy concerning time.

2. Matson's Critique

Now according to Matson, every premise of the crude cosmological argument is vulnerable.^{5} Turning first to the second premise, that *the universe began to exist*, Matson's main objection to the first supporting argument is that it is logically possible for the temporal

series of causes and effects to regress infinitely.{6} When the cosmological argument asserts that the series of causes and effects *must* have a beginning, this 'must' indicates that logical necessity is being claimed. Otherwise, all that is claimed is that as a matter of fact the series has a beginning, though it could conceivably be otherwise. Hence, the argument must prove that it is logically impossible for any series to lack a first member. And this is easily refuted: for example, the series of negative numbers

. . . , -8, -7, -6, -5, -4, -3, -2, -1

has no first member. Matson acknowledges that the number series is an intellectual construction and is in that sense different from the series of events in the real world. But that is beside the point; the cosmological argument must show any such series to be a logical impossibility:

There is nothing logically inconsistent in the notion of a (numerical) series without a first member; therefore, there is nothing logically inconsistent in the notion of a series of events, forming a causal chain, and such that at least one event in the chain is associated with each number in the beginningless series.{7}

Therefore, the cosmological argument fails to show that the series must be finite and must have a first cause.

With regard to the second supporting argument for the premise that the universe began to exist, Matson argues that it is question-begging, for it is only impossible to enumerate successively an infinite series *in a finite time*.{8} *But if the universe is eternal, then there has been infinite time to complete the series. The cosmological argument gains plausibility only by supposing that in an infinite series of events, there must be an event infinitely distant from the present, such that the distance between the two could never be traversed. But this is false, for, as the number series illustrates, no event need be infinitely removed; all that is required is that for any event finitely distant, there be a predecessor.*

With regard to the first premise of the crude cosmological argument, that *everything that begins to exist has a cause of its existence*, Matson objects that if everything must have a cause, then God must also have a cause.{9} Thus, it is impossible to prove that there was a first cause who made the world.

Finally, Matson mentions in passing several smaller difficulties:{10} (1) Since the universe is finite, the cause of the universe need not be an infinite being. (2) The 'big bang' may have been the first cause, not God. (3) The notion of cause assumed in the argument is dubious. Because of these considerations, concludes Matson, 'careful' Christian thinkers have held that the truth of the doctrine of creation can be known only by revelation.{11}

3. Answer to Matson's Objections

I think I can show fairly easily that Matson's objections fail to turn back the force of the crude cosmological argument. With regard to the first supporting argument for the beginning of the universe, it is incorrect that the argument asserts the *logical* impossibility of an infinite series. What the argument contends is that such a series is *really* impossible because of the various paradoxes to which it would give rise. Take, for example, the famous illustration of 'Hilbert's Hotel', an intellectual creation of the great German mathematician David Hilbert.{12} Let us imagine a hotel with a finite number of rooms, and let us assume that all the rooms are occupied. When a new guest arrives and requests a room, the proprietor apologises, 'Sorry--all the rooms are full.' Now let us imagine a hotel with an infinite number of rooms, and let us assume that again all the rooms are occupied. But this time when a new guest arrives and asks

for a room, the proprietor exclaims, 'But of course!' and proceeds to shift the person in room 1 to room 2, the person in room 2 to room 3, the person in room 3 to room 4, and so on . . . The new guest then moves into room 1, which has become vacant as a result of these transpositions. But now let us suppose that an *infinite* number of new guests arrives, each asking for a room. 'Certainly, certainly!' says the proprietor, and he proceeds to move the person in room 1 to room 2, the person in room 2 to room 4, the person in room 3 to room 6, the person in room 4 to room 8, and so on.... In this way, all the odd-numbered rooms become free, and the infinity of new guests can easily be accommodated in them. But Hilbert's paradoxical hotel is even more bewildering than the great mathematician realised. For what happens when the guests begin to check out? Suppose the guest in room 1 departs. Is there not one less guest in the hotel? Suppose all the guests in rooms 1, 3, 5, . . . check out? In this case an infinite number of persons has left the hotel, but there are no fewer persons in the building. But suppose the guests in rooms 4, 5, 6 . . . decide to check out. Suddenly the hotel is all but emptied, the guest register reduced to but three names, and the infinite transformed to the finite. And yet exactly the same number of guests checked out this time as when the guests in all the odd-numbered rooms departed. Can anyone believe that such a hotel could exist in reality?

A second example of the paradoxes resulting from the existence of an actual infinite is the Tristram Shandy paradox alluded to by Russell.^{13} In the novel by Sterne, Tristram Shandy writes his autobiography so slowly that it takes him a whole year to record the events of a single day. At this rate, he laments, he will never finish his life-story. This conclusion would only be true, asserts Russell, if Tristram Shandy were mortal, but if he were immortal, then he would finish, since each day would correspond to a year and both would be infinite. Russell's paradoxical conclusion, however, would not hold if we regard the future as a potential infinite. In this case, Tristram Shandy would only get farther and farther behind so that instead of finishing his autobiography, he would progressively approach a state in which he would be *infinitely* far behind. But he would never reach such a state because the years and hence the days of his life would always be finite in number though indefinitely increasing. But let us turn the story about: suppose Tristram Shandy has been writing from eternity past at the rate of one day per year. In this case Russell's paradoxical conclusion would be correct. Because a one-to-one correspondence would exist between the days and years of his life, the autobiography would be completed. But again an even deeper paradox now arises. For we may ask, why did Tristram Shandy not finish his autobiography yesterday or the day before, since by then an infinite series of events had already elapsed? No matter how far along the series one regresses, Tristram Shandy would have already completed his autobiography. Therefore, at no point in the past would we find him finishing the book. Worse than that, at no point in the past will we even find Tristram Shandy writing, for at any point the book would have already been completed. But this seems absurd, for *ex hypothesi* he has been writing from eternity, and to have completed the book, he would at some specific point have to have finished it. Now the proponent of the crude cosmological argument contends that situations such as arise in Hilbert's Hotel and the Tristram Shandy paradox, whatever their logical consistency may be, are nevertheless really impossible in the extra-mental world.

The difference between logical and real possibility may be illustrated with regard to God's existence: if God exists, then his non-existence is logically possible, but really impossible. And if God does not exist, then his existence is logically possible, but really impossible. The necessity of God's existence is not a logical necessity, but a real or factual necessity.^{14} So it is with an actually infinite series. According to the argument, the existence of an actually infinite series may be logically possible, but it is really impossible. Hence, the difference,

acknowledged by Matson, between the series of natural numbers as an intellectual construction and the temporal series of real events in the time-space universe becomes all important. For even if in the mathematical realm, given certain axioms, it is logically possible to talk about an infinite series of numbers, this in no way implies that the existence of an infinite series of events is really possible. In the same way that God's existence is factually necessary, the existence of an infinite series could be factually impossible.

Finally, it might be added that Matson also assumes that the natural number series is actually infinite, which in light of the objections of intuitionists such as Kronecker and Brouwer is a point that must be proved. According to this school, mathematics is based in the pure intuition of counting; therefore, constructibility is a pre-requisite for the intelligibility of any mathematical entity. Because it is not constructible, an actual infinite is not a well-defined totality and is therefore illegitimate. This means that the natural numbers series is a potential infinity only. In this case, even the logical possibility of an actually infinite series has not been demonstrated.

As to the second argument for the beginning of the universe, Matson's allegation that it is question-begging is quite groundless. The argument has nothing to do with any time factor; it is inherently impossible to form an infinite collection through a process of successive addition. In set theory an infinite set is posited as a unity by the definition determining membership; there is no question of sequential formation of the collection. Sequential formation of a collection yields only a potential infinity, as expressed by the sign $\aleph$. But in set theory $\aleph_0$ is not the end member of a collection numbered 1, 2, 3, ..., but stands over and above it as the number of all elements in the collection taken together timelessly as a whole. That the argument has nothing to do with the amount of time involved may be seen by the fact that this conundrum may be applied to time itself. If we divide time into temporal segments of equal duration, say hours, and if past time is actually infinite, then that means that before the present hour could arrive, an infinite number of previous hours would have had successively to elapse. But this is impossible. Clearly it does no good to object that it is only impossible for them to elapse *in a finite time*, for the argument concerns time itself. Here the objection would commit the fallacy of assuming a time above time. Thus, Matson's objection is manifestly wrong-headed; for one cannot explain how one infinite collection (the series of past events) could be formed by successive addition merely by superimposing another infinite collection (the series of hours) also formed by successive addition upon the former.

Matson's objection to the first premise of the crude cosmological argument misconstrues the principle of causality therein employed. The premise is not, as Matson thinks, that *everything has a cause*, but rather that *everything that begins to exist has a cause*. Because the universe began to exist, it must have a cause. But the cause of the universe is itself uncaused and eternal. Because He never began to exist, but exists changelessly from eternity, God does not require a cause. Notice that Matson does not deny the truth even of the statement that *everything has a cause*. In fact he tacitly assumes it. What he maintains is that given such a principle, the regress of causes could never come to a halt in a first cause, for this would also need a cause, *ad infinitum*. But the principle that *everything that begins to exist has a cause* suffers under no such difficulty. Therefore, Matson gives tacit admission that if the universe has a beginning, it must have a cause.

Finally, Matson's three minor difficulties: (1) The crude cosmological argument does not claim to prove the infinity of God's being, but simply that a personal creator of the universe exists. Matson's objections have failed to refute this conclusion. His complaint that the

argument falls short of an infinite being reminds one of those philosophers who dismiss the teleological argument because it concludes only to an architect, not the creator, of the universe. If they really believed the argument proved that an intelligent mind has designed and built the entire universe, they would be filled with awe. Similarly, rather than indict the cosmological argument for not proving the infinity of the universe's creator, ought we not rather to be stimulated to further investigation to discover whether reason or revelation can answer this question? (2) The 'big bang' is simply a descriptive model of the initial conditions of the universe, but does not itself explain how the universe came to exist. According to this model, the universe began to exist in a cataclysmic explosion from a point of infinite density a finite time ago. This is all the more remarkable when one reflects that a state of 'infinite density' is precisely equivalent to 'nothing', so that what the big bang model requires is that the universe came into being *ex nihilo*. But further than this science will not go. As J. V. Narlikar comments,

It is assumed that all the present matter (and radiation) in the Universe appeared in its primary form at the time of the 'big bang'. Subsequent to this event matter as a whole is conserved according to the Einstein equations, although it may change its form as the universe evolves. So the question 'How was the matter created in the first place?' is left unanswered. {15} Thus the big bang model, far from eliminating the necessity of a creator of the universe, fairly impels one to it, for, as Anthony Kenny observes, 'A proponent of such a theory, at least if he is an atheist, must believe that the matter of the universe came from nothing and by nothing.' {16} In such a case it is much more plausible to believe that a creator of the universe exists. (3) If the cosmological argument employed the notion of causality described by Matson, it might indeed be suspect. But the principle that whatever begins to exist has a cause of its existence is such a natural and intuitively reasonable principle that a sincere denial of it is well-nigh impossible. Even the sceptical Hume admitted that he never affirmed so absurd a proposition as that something might come to exist without a cause. This would seem to be doubly so when the entire universe's coming to exist is at stake.

Finally, it is simply not true that 'careful' Christian thinkers have denied that the doctrine of creation can be proved. While this was true of Aquinas, it was not so of Bonaventure, whose own arguments for *creatio ex nihilo* survive all of Thomas's attempted refutations. {17} It is true that today many theologians misguidedly try to safeguard the biblical doctrine of *creatio ex nihilo* against scientific investigation by interpreting it mythologically. For example, C. H. Dodd writes,

In the beginning God created heaven and earth and all that in them is . . . I have described this as mythological, and as such it must, I think be understood... The story of Creation is not to be taken as a literal, scientific statement that the time series had a beginning--an idea as inconceivable as its opposite, that time had no beginning. {18}

Dodd may be perfectly correct that a beginningless temporal series of events is inconceivable; but that the time series had a beginning is not so difficult a conception. For on a relational view of time, time comes into existence with the first event, and the notion of time 'before' this event is a mental abstraction only, analogous to temperatures 'below' absolute zero. In contradistinction to Dodd's position, however, the influential German theologian Wolfhart Pannenberg has affirmed the doctrine of temporal *creatio ex nihilo* precisely on the basis of scientific evidence. {19} Pannenberg asserts that the abandonment of theistic proofs from nature has led to theology's increasing anthropocentricity, thus 'allowing the Christian belief in creation to atrophy'. {20}

It is clear, therefore, that Matson's criticisms are wide of the mark. Perhaps this form of the cosmological argument can be said to be crude only in the sense that metallic ore is such: intrinsically valuable, waiting only to be refined.

NOTES

{1} Wallace I. Matson, *The Existence of God* (Ithaca, N. Y: Cornell University Press, 1965), p. 56.

{2} See Athenagoras *On the Resurrection* c. 3; Maximus Of Ephesus in Eusebius *Praeparatio Evangelica* 7.22; Tatian *Address to the Greeks* 5.7; Theophilus of Antioch *To Autolycus* 2.4, 10; Irenaeus *Against Heresies* 2.10.2,3; Tertullian *Apology* 17.1; *Against Herrnogenes* c. 4-8. 18 Dionysius of Alexandria in Eusebius *Praeparatio Evangelica* 7.19; Lactanius *Divine Institutes* 2.9.

{3} See Herbert A. Davidson, 'John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation', *Journal of the American Oriental Society* 89 (1969), pp. 357-391.

{4} Al-Kindi, *On First Philosophy*, with an Introduction and Commentary by Alfred L. Ivry (Albany, N. Y.: State University of New York Press, 1974), pp. 67-75; Saadia Gaon, *The Book of Beliefs and Opinions*, trans. Samuel Rosenblatt (New Haven, Conn.: Yale University Press, 1948), pp. 41- 44; al Ghazali, *Kitab al Iqtisad*, with a foreword by Î. A. Çubukçu and H. Atay (Ankara: University of Ankara Press, 1962), pp. 15-16.

{5} Matson, *The Existence of God*, p. 56.

{6} Ibid., pp. 58-60.

{7} Ibid., p. 60.

{8} Ibid.

{9} Ibid., p. 61.

{10} Ibid., pp. 57-58.

{11} Ibid., p. 61.

{12} This story is recorded in an entertaining work by George Gamov, *One, Two, Three, . . . Infinity* (London: Macmillian & Co., 1946), p 17.

{13} Bertrand Russell, *The Principles of Mathematics*, 2d ed. (London: George Allen & Unwin, 1937), pp. 358-359.

{14} John Hick, 'God as Necessary Being', *Journal of Philosophy* 57 (1960), 725-734. [Author's note: Since writing this article in 1978, I have come to understand God's existence as broadly logically necessary.]

{15} J. V. Narlikar, 'Singularity and Matter Creation in Cosmological Models', *Nature: Physical Science* 242 (1973), pp. 135-36.

{16} Anthony Kenny, *The Five ways: St Thomas Aquinas' Proofs of God's Existence* (New York: Schocken Books, 1969), p. 66.

{17} See Lucien Roy, 'Note philosophique sur l'idée de commencement dans la création', *Sciences Ecclésiastiques* 2 (1949), p. 223; Francis J. Kovach, 'The Question of the Eternity of the World in St. Bonaventure and St. Thomas-A Critical Analysis', *Southwestern Journal of Philosophy* 5 (1974), pp. 141-172 .

{18} C. H. Dodd, *History and the Gospel* (London: Nisbet, 1938), p 168.

{19} Wolfhart Pannenberg, 'Response to the Discussion,' in *New Frontiers in Theology*, ed. James M. Robinson and John B. Cobb, Jr., vol. 3: *Theology as History* (New York: Harper & Row, 1967), pp. 241-242. Pannenberg depends particularly on the scientific work of von Weizsäcker.

{20} Wolfhart Pannenberg, *Theology and the Philosophy of Science*, trans. Francis McDonaugh (London: Darton, Longman, & Todd, 1976), pp. 126-127.

Must the Beginning of the Universe Have a Personal Cause?: A Rejoinder

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Wes Morriston maintains that a negative answer to the question, "Did the First Cause exist in time prior to creation?" forces the defender of the kalam cosmological argument to analyze the concept of 'beginning to exist' in a way that raises serious doubts about the argument's main causal principle and that it also undercuts the main argument for saying that the cause of the universe must be a person.

Morriston in the first part of his critique tries to show that premiss (1) Whatever begins to exist has a cause loses much of its plausibility when it is applied to the beginning of time itself. At the heart of Morriston's denial that we have a metaphysical intuition of the principle's truth lies a dubious distinction between intra- and extratemporal beginnings. Apart from that same distinction Morriston provides no good reason to doubt the plausibility of the causal principle as an empirical generalization. His claim that the absence of a material cause of the universe is as troubling as the absence of an efficient cause backfires because in an uncaused origination of the universe we lack both. Finally, Morriston errs in thinking that a reductive analysis, if adequate, should

preserve the same epistemic obviousness involved in the analysandum and in thinking that all intuitively grasped, metaphysically necessary, synthetic truths should exhibit the same self-evidence and perspicuity.

In the second part of his article Morrision, still assuming that God exists atemporally sans the universe, criticizes an argument for the personhood of the First Cause inspired by the Islamic Principle of Determination. Morrision objects that appeal to agent causation is nugatory because God's changeless state of willing the universe is sufficient for the existence of the universe and is an instance of state-state causation. The failing of Morrision's objection is that in speaking of God's willing that the universe exist, he does not differentiate between God's timeless intention to create a temporal world and God's undertaking to create a temporal world. Once we make the distinction, we see that creation ex nihilo is not (given a tensed theory of time) an instance of state-state causation and is therefore not susceptible to Morrision's objection.

Faith and Philosophy.

In his interesting article "Must the Beginning of the Universe Have a Personal Cause?" Wes Morrision explores several "little discussed aspects" of the ancient *kalam* cosmological argument.^{1} The argument may be simply formulated:

1. Everything that begins to exist has a cause of its existence.
2. The universe began to exist.
3. Therefore, the universe has a cause of its existence.

Morrision grants that the philosophical arguments for premiss (2) are sound in order to focus our attention on the problems that arise when we ask, "Did the First Cause exist in time prior to creation?"^{2} Since that question must concern anyone who holds to the Judaeo-Christian doctrine of *creatio ex nihilo*, Morrision's critique will be of interest not only to the proponent of the *kalam* cosmological argument but to any orthodox theologian.

I have argued that it is a matter of indifference so far as the argument's cogency is concerned whether the First Cause of the universe is conceived to be temporal or atemporal sans creation. But Morrision claims that such a contention is mistaken. He maintains that a negative answer to the question "Did the First Cause exist in time prior to creation?"—that is to say, to maintain that God exists atemporally sans the universe—is not compatible with all the requirements of the *kalam* cosmological argument; specifically, a negative answer "forces the defender of the *kalam* argument to analyze the concept of 'beginning to exist' in a way that raises serious doubts about its main causal principle, and . . . it also undercuts the main argument for saying that the cause of the universe must be a person."^{3} The problem espied by Morrision, then, is not that a negative answer to his question is logically incompatible with the argument's premisses or entailments but that such an answer tends to undercut the warrant for accepting those premisses; in short, the argument becomes in a sense self-defeating (even if sound).

Must the Universe Have a Cause?

Assuming, then, that the First Cause did not exist temporally prior to the beginning of the universe and that, accordingly, time itself was created along with the universe, Morrision in the first part of his critique will "try to show that premiss (1) loses much of its plausibility

when it is applied to the beginning of time itself." {4} Now it needs to be said that, *pace* Morrision, this is not a conclusion which automatically spells defeat for the *kalam* cosmological argument. For in order to qualify as a successful piece of natural theology an argument need not consist of premisses which are undeniably true, or clearly true, or even plausibly true, but of premisses which are merely more plausibly true than their contradictories. If, as I believe, the premiss *Everything that begins to exist has a cause* is plausible *in excelsis* for temporally embedded things, then even if Morrision is right that its plausibility is significantly diminished when it comes to time itself, that does not in any way show that premiss (1) is implausible, much less no more plausible than its contradictory. Thus, the argument is not even ostensibly defeated by Morrision's conclusion.

But however that may be, we shall, of course, also want to ask whether Morrision is successful in establishing his conclusion. Why think that premiss (1) loses much of its plausibility when applied to the beginning of time? Morrision acknowledges that "it does seem pretty absurd" to imagine something's popping into existence without a cause: "It may not be *logically* impossible, but it is inconsistent with everything I know of the world in which I live!" {5} So why deny this intuition when it comes to the origin of time and the universe? Morrision's basic answer is that even if we have such an intuition with respect to temporally embedded entities, we do not have a similar intuition with regard to the beginning of time itself.

Now as a simple sociological claim, Morrision's assertion is demonstrably false. For the absolute beginning of time predicted by the Standard Friedman–Lemaître Big Bang model was the crucial factor in provoking not only the formulation of the Steady State model of continuous creation, but a whole series of subsequent models all aimed at avoiding the origin *ex nihilo* of our universe. Misner, Thorne, and Wheeler declare that "No problem of cosmology digs more deeply into the foundations of physics than the question of what 'preceded' the 'initial state' of infinite (or near infinite) density, pressure, and temperature." {6} For example, inflationary theorist Andrei Linde finds motivation for his past-eternal Chaotic Inflationary Model precisely in this feature of the Standard Model: "The most difficult aspect of this problem is not the existence of the singularity itself, but the question of what was *before* the singularity. . . . This problem lies somewhere at the boundary between physics and metaphysics." {7} Linde's extrapolation of his model to the infinite past was rooted, not in any empirical inadequacy of the Standard Model, but in the conviction that the absolute beginning predicted by that model was not acceptable as an explanatory stopping point. Although Borde and Vilenkin demonstrated that Linde's inflationary model was geodesically incomplete in the past and therefore itself involved an initial cosmological singularity, they did not conclude that the question of the origin of the universe was therefore a pseudo-problem; rather they wrote, "The fact that inflationary spacetimes are past incomplete forces one to address the question of what, if anything, came before." {8} The fact is that a whole series of cosmological models have been proposed over the last half-century specifically to avoid the absolute beginning predicted by the Standard Model. Both philosophers and physicists have been deeply disturbed at the prospect of a beginning of time and an absolute origination of the universe and so have felt constrained to posit the existence of causally prior entities like quantum vacuum states, inflationary domains, imaginary time regimes, and even timelike causal loops. The history of twentieth century astrophysical cosmology belies Morrision's claim that people have no strong intuitions about the need of a causal explanation of the origin of time and the universe.

Perhaps Morrision would say that we *should*, at least, have no strong intuitions concerning the need of a cause of the beginning of time. But why not? What is the relevant difference between something's coming into existence within time and something's coming into existence at the beginning to time? If the universe could not come into existence uncaused at *t*, where *t* is preceded by earlier moments of time, why think that if we were to annihilate all moments earlier than *t*, then the universe could come into existence uncaused at *t*? How could the existence of moments earlier than an uncaused event be of any possible relevance to the occurrence of that event?

Indeed, given a dynamic or tensed view of time, every moment of time is a fresh beginning, qualitatively indistinguishable from a first moment of time, for when any moment is present, earlier moments have passed away and do not exist. Thus, if the universe could exist uncaused at a first moment of time, it could exist uncaused at any moment of time. There just does not seem to be any relevant difference. It follows that if the latter is metaphysically impossible, so is the former.

Perhaps Morrision's difficulty is that he thinks of the causal principle as akin to a law of nature, like Boyle's Law or the Second Law of Thermodynamics, which hold only within our universe. But the causal principle is not a physical principle, but a metaphysical principle. Being does not arise from non-being; something cannot come from nothing. These are putative metaphysical claims, unrestricted in their application. Such claims are not contingent upon the properties, causal powers, and dispositions of the natural kinds of substances which happen to exist. Morrision has given no good reason for construing such claims as merely physical rather than as metaphysical claims.

Hence, until Morrision is able to show us the relevant difference between embedded moments of time and a first moment of time, I see no reason to think it more plausible that things can come into being uncaused at a first moment than at a later moment of time.

Morrision presents a second reason for thinking premiss (1) to have diminished plausibility with respect to time's origin: "*creation out of nothing* is at least as counterintuitive as is *beginning to exist without a cause*." {9} Now there is no doubt that *creatio ex nihilo* is deeply baffling. I well recall thinking, as I began to study the *kalam* cosmological argument, that all of the alternatives with respect to the universe's existence—the infinitude of the past, creation *ex nihilo*, spontaneous origination *ex nihilo*—were so bizarre that the most reasonable option seemed to be that nothing exists! Since our existence is, however, undeniable, we must settle, however uncomfortably, on one of the above three. Since we assume for the sake of argument in the present discussion the finitude of the past, our choices are creation *ex nihilo* or an uncaused origination *ex nihilo*. It seems to me that there is a very simple and yet decisive reason for preferring creation, namely, whereas creation *ex nihilo* is counter-intuitive in denying to the universe a material cause, it at least ascribes to it an efficient cause, whereas the spontaneous origination of the universe *ex nihilo* is doubly counter-intuitive in that it denies of the universe both a material and (especially) an efficient cause. Thus, even if one agrees with Morrision's observation, "When I do the relevant 'thought experiments,' I find the absence of a *material* cause at least as troubling as the absence of an *efficient* cause," {10} one cannot agree with his objection, since an uncaused origin of the universe lacks both sorts of cause and so is doubly implausible.

Morrision also complains that my reductive analysis of "x begins to exist" is so elaborate that premiss (1), so understood, "is not obviously supported by any widely shared metaphysical

intuition." {11} But this complaint is inappropriately lodged. I could have simply taken "begins to exist" as an undefined primitive in an intuitively true premiss. The worth of a reductive analysis of a concept is not to be judged by whether the original principle retains its intuitive sheen when the *analysans* is substituted for the *analysandum*, but rather by whether the analysis succeeds in capturing our pre-analytic understanding of the concept. {12} The unanalyzed notion is what we intuitively grasp, and we may struggle to find an adequate analysis of it. The analysis may turn out to be quite complicated, requiring various sorts of qualifications to ward off counter-examples. It is thus far less apt to be as intuitively obvious as the original concept. But its value is not to be measured by its intuitive obviousness, but by its adequacy to the concept and its imperviousness to counter-examples. Thus, for example, the notion "begins to exist" cannot be adequately analyzed by stating

A1. x begins to exist $\equiv x$ exists at t , and there is a time prior to t at which x does not exist.

For if time and the universe originated at the Big Bang, it would follow from (A1) that the universe did not begin to exist, which is counter-intuitive, given the past finitude of its existence. So we might try to adjust (A1) to

A2. x begins to exist $\equiv x$ exists at t , and there is no time prior to t at which x exists.

This might seem to do the trick, for there may or may not be time prior to t , according to (A2). Thus, the definition would apply to things originating both within time and with time. But then someone says, "What about something that ceases to exist for a time and then comes to exist a second time? Doesn't it begin to exist a second time?" That seems right; so we adjust (A2) to

A3. x begins to exist $\equiv x$ exists at t , and there is no time immediately prior to t at which x exists.

(A3) allows that x may have existed earlier than t but insists that in order to begin to exist at t there must be at least a temporal gap between any prior existence of x and x 's existing at t . We now realize, however, that the adequacy of (A3) requires that t does not range over instants of time, since instants have no immediate predecessors. So in order to preserve our temporal gap we must take t to range over non-degenerate, finite intervals of time. If this were not complicated enough, we now ask, "What about God? If He is timeless sans creation but temporal since creation, then (A3) requires that God began to exist." Again, our intuitive understanding of "begins to exist" is violated if we must say that a being which never fails to exist begins to exist. In order to capture our intuitive understanding we need to preclude such a scenario. Thus, I arrived at

A4. x begins to exist $\equiv x$ exists at t ; there is no time immediately prior to t at which x exists; and the actual world contains no state of affairs involving x 's timeless existence.

The adequacy of (A4) as a reductive analysis is not to be judged by whether premiss (1) remains as intuitively obvious if we substitute the *analysans* for the *analysandum*, but by whether there are counter-examples of situations which intuitively do (or do not) involve something's beginning to exist but which are such that (A4) would force us to say that they are not (or are) cases of something's beginning to exist.

Although Morrision does not attempt to show any deficiency in the analysis offered in (A4), I have come to believe on the basis of my work in trying to differentiate creation from conservation that (A4) does not, in fact, adequately capture our intuitive understanding of "begins to exist." {13} It seems to me that at the heart of this notion lies the idea of "coming into being." The gist of premiss (1) is that something cannot come into being without a cause. Now again we could leave this notion as an undefined but well-understood primitive. But I think that we can capture this idea via the following analysis:

A5. x comes into being at $t \equiv x$ exists at t ; t is either the first time at which x exists or is separated from any time $t^* < t$ at which x existed by a non-degenerate, temporal interval; and x 's existing at t is a tensed fact.

The crucial modification here comes with the third clause: x does not merely exist tenselessly at t as part of a static, four-dimensional, "block" universe. Rather x 's existing at t is an event of temporal becoming: x comes into being at t . It is in virtue of the reality of temporal becoming that x 's beginning to exist requires a cause of x . Locutions like x 's "popping into existence" or "springing into existence" were attempts on my part to express in ordinary language the objective reality of temporal becoming. Again, it just seems to me obvious that things do not begin to exist in this sense without a cause.

Morrison, however, contends that we do not know the causal principle in any of its forms to be true by means of an *apriori* metaphysical intuition. {14} Again, this is a conclusion which need little disturb nor long distract the proponent of the *kalam* cosmological argument. As I explained in my exchange with Quentin Smith, it is a matter of indifference whether our intuition of the truth of the causal principle is *a priori* or *a posteriori*. {15} That some synthetic truths are intuited to be metaphysically necessary *a posteriori* is evident from such examples as "Gold has atomic number 79" and "This table could not have been made of ice." It could well be that only logically posterior to our experience of reality do we intuitively grasp the necessary truth of the causal principle.

Even considered on its own merits, however, Morrison's argument is unconvincing because it is predicated upon a flawed methodology. He compares the causal principle to a truth like "The surface of an object cannot be both red all over and partly green at one and the same time" and finds that the causal principle lacks the self-evidence and perspicuity of this truth. We could argue about how successfully the causal principle measures up to these criteria, {16} but I suspect that such a debate would be fruitless. The more important shortcoming of Morrison's argument is its methodological assumption that all intuitively grasped, metaphysically necessary truths are alike in their self-evidence and perspicuity. As we have seen, some metaphysically necessary truths may be grasped only *a posteriori* and be quite debatable. Others may be grasped *a priori* but have varying degrees of self-evidence and perspicuity. For example, the truth "No event precedes itself" is, I think, a synthetic, metaphysically necessary truth which we intuitively grasp, but it does not have the self-evidence or perspicuity of Morrison's red and green example. We can imagine a circular time in which an event precedes (and succeeds) itself, but I see no reason to think that such a representation is metaphysically possible. Or again, the statement "Torturing a child for fun is wrong" seems to me to be a metaphysically necessary truth which I intuit, despite my ability to imagine in my mind's eye a nihilistic world without value. Examples could be given of a whole range of synthetic, metaphysically necessary truths, from the wholly obscure to the overwhelmingly self-evident, and it is no indictment of the causal principle that it does not match the epistemic luminosity of the statement that something cannot be both red and green

all over. What Morrision needs to do to undercut the causal premiss of the *kalam* cosmological argument is to show that its contradictory is as intuitively obvious as it is, which he has not even tried to do.

Morrision thinks that anyone who claims that we have a metaphysical intuition of the truth of the causal principle is obliged to explain why other equally well-informed and intelligent people do not share this intuition.{17} This is an odd assertion, since a philosopher seems hardly obliged to give an account of the sociological and psychological factors which lead other philosophers to disagree with him. Perhaps Morrision's point is best interpreted as inductive evidence against the claim that the causal principle is intuitively true. But so construed, the shoe is on the other foot: it is Morrision who is obliged to explain why he and a handful of other philosophers fail to see what the majority of philosophers and the overwhelming majority of mankind do see. The philosophers who deny that everything that begins to exist has a cause are a tiny minority of a tiny minority of mankind. Go ahead: name all the philosophers who believe that something can come into being without a cause or who are even agnostic about the matter. But be careful! Do not include Hume or Mackie.{18} Do not include quantum physicists.{19} The final list will be short, indeed. Morrision protests that he is not denying the truth of the causal principle, but merely that we have an *apriori* intuition of it.{20} But, as I say, it is a matter of indifference to me whether we come to grasp this principle *a priori* or *a posteriori*. I think it unlikely that the principle is for most of us an empirical generalization, for we instinctively apply it in unfamiliar situations, and the idea that something could come out of nothing is more than empirically repugnant. Since Morrision goes on to deny that we do know this principle empirically, he is unlikely to say that the conviction of mankind is based, not on intuition, but on empirical evidence. So it seems to me that the sociological evidence is quite consistent with the claim that the causal principle is intuitively obvious, and if there is any explaining to be done, it falls to Morrision to explain why his little band of skeptics fail to see what the vast majority of people, both philosophers and non-philosophers, do claim to see and to explain how the bulk of mankind, in his view, can be so deceived.

Finally, Morrision disputes our warrant for accepting the causal principle even as an empirical generalization.{21} This I find amazing; how can anyone deny in light of our empirical experience that the causal principle is more plausible than its contradictory? Here Morrision falls back on his distinction between temporally embedded events and events occurring at a first moment of time. Since we have experience only of temporally embedded origination events, Morrision questions whether we have evidence that origination events at a first moment of time require causal explanation. As we have already seen, however, this appears to be a distinction without a difference. Morrision misleads when he labels the one case *intratemporal* coming to be and the other *extratemporal* coming to be, for both are cases of events which are temporally located at some time *t*. The only difference is that in one case *t* was preceded by moments of time $t^* < t$ and in the other case it was not. How this could be relevant to the occurrence of an uncaused event at *t* is wholly mysterious.

Morrision also opposes two other empirical generalizations to the causal principle which he thinks enjoy comparable support but are allegedly incompatible with the *kalam* argument, to wit (i) *Everything that begins to exist has a material cause*, and (ii) *Causes always stand in temporal relations to their effects*. {22} Notice, however, that neither of these principles is incompatible with the causal principle enunciated in premiss (1). Morrision, in truth, offers no defeater at all for the argument's causal premiss, taken as an empirical generalization.

As defeaters of the conclusion (3) of the *kalam* argument, moreover, (i) and (ii) are not compelling. The evidence for (i) is, indeed, impressive. But it is not unequivocal or universal.{23} More importantly, (i) is in my view simply overridden by the arguments for the finitude of the past. For if it is impossible that there be an infinite regress of past events, it is impossible that the First Cause be a material object, since matter/energy is never quiescent.{24} As for (ii), the problem here is that (ii) appears to be an accidental generalization, akin to *Human beings have always lived on the Earth*, which was true until 1968. There does not seem to be anything inherently temporal about a causal relationship. More importantly, however, (ii) is not at all incompatible with the *kalam* argument's conclusion, since its defender may hold that God exists timelessly sans creation and temporally at and subsequent to the moment of creation, so that His act of causing the beginning of the universe is simultaneous with the universe's beginning to exist.

In summary, Morrision's claim that premiss (1) of the *kalam* cosmological argument loses much of its plausibility when applied to the beginning of time is unwarranted. Apart from his question based on the distinction between intra- and extratemporal beginnings, Morrision provides no reason to doubt the plausibility of the causal principle as an empirical generalization. That same dubious distinction lay at the heart of his denial that we have a metaphysical intuition of the principle's truth. His claim that the absence of a material cause is as troubling as the absence of an efficient cause backfires because in an uncaused origination of the universe we lack both, whereas in *creatio ex nihilo* we have at least an efficient cause. Finally, Morrision errs in thinking that a reductive analysis, if adequate, should have the same epistemic obviousness of the *analysandum* and in thinking that all intuitively grasped, metaphysically necessary, synthetic truths should shine with the same self-evidence and perspicuity. In short, I do not think that in light of Morrision's critique, premiss (1) of the argument is significantly diminished in its plausibility. In any case, it still remains more plausible than its contradictory. Thus, the answer to the first question should be, "Yes, the universe has a cause."

Must the Cause of the Universe Be a Person?

In the second part of his article Morrision, still assuming that God exists atemporally sans the universe, criticizes an argument for the personhood of the First Cause inspired by the Islamic Principle of Determination. In a nutshell, the argument is that, given a tensed theory of time, only personal, free agency can account for the origin of a first temporal effect from a changeless cause. As we have seen, on a tensed theory of time, the universe comes into being at the first moment of its existence. The event of the universe's coming into being cannot be an instance of state-state causation or event-event causation, since the origination of the universe is not a state and the condition of the timeless cause not an event. But neither can it be an instance of state-event causation, for this seems clearly impossible: If the unchanging cause is sufficient for the production of the effect, then the cause should not exist without the effect, that is to say, we should have state-state causation. If the cause is not sufficient for the production of the effect, then some change must take place in the cause to produce the effect, in which we have event-event causation and we must inquire all over again for the cause of the first event. The best way out of this dilemma is agent causation, whereby the agent freely brings about some event in the absence of prior determining conditions.

Morrision raises two objections to this argument: (i) Quantum mechanics allow for causal conditions which are not strictly speaking sufficient for their effects, and (ii) God's

changeless state of willing the universe is sufficient for the existence of the universe and is an instance of state–state causation.{25} Since I have elsewhere addressed (i),{26} I shall concentrate here on (ii).

I am inclined simply to deny that God's eternally willing to create the universe, properly understood, is sufficient for the existence of the universe. As J. P. Moreland explains, in the case of personal causal explanations, the salient factors are the existence of an agent with his relevant properties and powers, the agent's intention to bring about some result, an exercise of the agent's causal powers, and in some cases a description of the relevant action plan. So "a personal explanation (divine or otherwise) of some basic result R brought about intentionally by person P where this bringing about of R is a basic action A will cite the intention I of P that R occur and the basic power B that P exercised to bring about R." {27} Notice that it is insufficient for P to have merely the intention and power to bring about R. There must also be a basic action on the part of P, an undertaking or endeavoring or exercise of P's causal powers. Thus, it is insufficient to account for the origin of the universe by citing simply God, His timeless intention to create a world with a beginning, and His power to produce such a result. There must be an exercise of His causal power in order for the universe to be created. That entails, of course, an intrinsic change on God's part which brings Him into time at the moment of creation. For that reason He must be temporal since creation even if He is timeless sans creation.{28} Such an account of the origin of the universe will work only for agent causation, for only a libertarian agent could interrupt the static reign of being of the First Cause sans the universe. It is for that reason that we should conceive of the First Cause as personal. Hence, the failing of Morrision's objection is that in speaking of God's willing that the universe exist, he does not differentiate between God's timeless intention to create a temporal world and God's undertaking to create a temporal world. Once we make the distinction, we see that *creation ex nihilo* is not an instance of state–state causation and is therefore not susceptible to Morrision's objection.

Conclusion

I conclude that Morrision has not defeated the conclusion that if time and the universe had a First Cause, that Cause is plausibly personal. Moreover, he has not shown that the plausibility of the causal premiss is greatly diminished by the various considerations he raises. Finally, even if the plausibility of that premiss were greatly reduced, nothing has been said to show that it is still not more plausible than its contradictory. If the *kalam* argument is unsound or unpersuasive, it is unlikely that the fault lies in its first premiss.{29}

NOTES

Endnotes

{1} Wes Morrision, "Must the Beginning of the Universe Have a Personal Cause? A Critical Examination of the *Kalam* Cosmological Argument," *Faith and Philosophy* 17 (2000): 149.

{2} Ibid., p. 150.

{3} Ibid., p. 149.

{4} Ibid., p. 150.

{5}Ibid., p. 155.

{6}Charles Misner, Kip Thorne, and John A. Wheeler, *Gravitation* (San Francisco: W. H. Freeman, 1973), p. 769. Sir Arthur Eddington went so far as to conclude, "The beginning seems to present insuperable difficulties unless we agree to look on it as frankly supernatural" (Arthur Eddington, *The Expanding Universe* [New York: Macmillan, 1933], p. 178).

{7}A. D. Linde, "The Inflationary Universe," *Reports on Progress in Physics* 47 (1984): 9760. Cosmologists often misleadingly press the difficulty posed by an absolute beginning in terms of the question, "What was before the singularity?" In order to be acceptable this question must be construed in terms of causal, not temporal, priority.

{8}A. Borde and A. Vilenkin, "Eternal Inflation and the Initial Singularity," *Physical Review Letters* 72 (1994): 3308.

{9}Morrison, "Beginning of the Universe," p. 155.

{10}Ibid.

{11}Ibid.

{12}Perhaps I contributed to the confusion by framing my analysis in terms of a *definition* of "x begins to exist."

{13}See William Lane Craig, "Creation and Conservation Once More," *Religious Studies* 34 (1998): 177–88.

{14}Morrison, "Beginning of the Universe," p. 156.

{15}William Lane Craig, "A Criticism of the Cosmological Argument for God's Non-Existence," in *Theism, Atheism, and Big Bang Cosmology*, by Wm. L. Craig and Q. Smith (Oxford: Clarendon Press, 1993), pp. 273–5.

{16}The causal principle is not as evidently true as the statement that "An object can be both red and green all over" in the sense that I can imagine things popping into existence uncaused out of nothing, whereas I cannot imagine a wholly red and green object. But appeals to imagination have little philosophical significance, for some things are possible which are unimaginable (*e.g.*, a four-dimensional hyper-cube), and we can form mental pictures of states of affairs which are metaphysically impossible (*e.g.*, Fermat's Last Theorem's being proved false). Moreover, the more I reflect on the causal principle the more obviously true it seems to me. Not only does it seem impossible that pure potentiality should actualize itself, but in the case of the universe there was not even the prior potentiality of its existence, since there was no "prior." If the causal principle were false, then it seems inexplicable why anything and everything does not pop into being uncaused. I freely concede that my reductive analysis of "begins to exist" is not intuitively obvious; but, as I explain in the text, that is no flaw in the analysis.

{17}Morrison, "Beginning of the Universe," p. 159.

{18} Hume indignantly declared, "But allow me to tell you that I never asserted so absurd a Proposition as *that anything might arise without a cause*" (David Hume to John Stewart, Feb. 1754, in *The Letters of David Hume*, ed. J. Y. T. Greig, 2 vols. (Oxford: Clarendon Press, 1932), 1: 187. Similarly, Mackie: "I myself find it hard to accept the notion of self-creation *from nothing*, even *given* unrestricted chance. And how *can* this be given, if there really is nothing?" (J. L. Mackie, *Times Literary Supplement* [5 February, 1982], p. 126).

{19} As Kanitscheider explains,

"The violent microstructure of the vacuum has been used in attempts to explain the origin of the universe as a long-lived vacuum fluctuation. But some authors have connected with this legitimate speculations [*sic*] far-reaching metaphysical claims, or at most they couched their mathematics in a highly misleading language, when they maintained 'the creation of the universe out of nothing'

From the philosophical point of view it is essential to note that the foregoing is far from being a spontaneous generation of everything from naught, but the origin of that embryonic bubble is really a causal process leading from a primordial substratum with a rich physical structure to a materialized substratum of the vacuum. Admittedly this process is not deterministic, it includes that weak kind of causal dependence peculiar to every quantum mechanical process" (Bernulf Kanitscheider, "Does Physical Cosmology Transcend the Limits of Naturalistic Reasoning?" in *Studies on Mario Bunge's "Treatise,"* ed. P. Weingartner and G. J. W. Dorn [Amsterdam: Rodopi, 1990], pp. 346–7).

{20} Morriston, "Beginning of the Universe," p. 169.

{21} *Ibid.*, p. 162.

{22} *Ibid.*

{23} Morriston himself takes our own power to control our actions to be the paradigm of causality. But, as J. P. Moreland argues, such control plausibly requires some sort of dualism (J. P. Moreland, "Searle's Biological Naturalism and the Argument from Consciousness," *Faith and Philosophy* 15 [1998]: 68–91), in which case we have a clear counter-example to the claim that every effect has a material cause. Not only do I cause effects in my physical body, but my mental states are causally connected. Moreover, some scientists have taken vacuum fluctuations to be a counter-example in the physical realm to the notion that everything that begins to exist has a material cause, even if there exist efficient (indeterminate) causal conditions of such variations. See my "Design and the Cosmological Argument," in *Mere Creation*, ed. William A. Dembski (Downer's Grove, Ill: Inter-Varsity Press, 1998), pp. 332–59.

{24} See my "The *Kalam* Cosmological Argument and the Hypothesis of a Quiescent Universe," *Faith and Philosophy* 8 (1991): 104–108.

{25} Morriston, "Beginning of the Universe," p. 165.

{26} See Craig, "Design and the Cosmological Argument."

{27} Moreland, "Searle's Biological Naturalism," p. 75. See further idem, "Libertarian Agency and the Craig/Grünbaum Debate about Theistic Explanation of the Initial Singularity," *American Catholic Philosophical Quarterly* 71 (1998): 539–54.

{28} In arguing elsewhere for this view of divine eternity, I have refrained from speaking of the necessity of an exercise of God's causal power, since if it could be shown that a merely extrinsic change of God at the moment of creation suffices for His temporal existence at that moment, then *a fortiori* so will an intrinsic change. See, *e.g.*, my "The Tensed vs. Tenseless Theory of Time: A Watershed for the Conception of Divine Eternity," in *Questions of Time and Tense*, ed. R. Le Poidevin (Oxford: Clarendon Press, 1998), p. 222.

{29} I thank Editor William Hasker for his astute comments on the first draft of this paper.

A Swift and Simple Refutation of the Kalam Cosmological Argument?

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

John Taylor complains that the *kalam* cosmological argument gives the appearance of being a swift and simple demonstration of the existence of a Creator of the universe, whereas in fact a convincing argument involving the premiss that *the universe began to exist* is very difficult to achieve. But Taylor's proffered defeaters of the premisses of the philosophical arguments for the beginning of the universe are themselves typically undercut due to Taylor's inadvertence to alternatives open to the defender of the *kalam* arguments. With respect to empirical confirmation of the universe's beginning Taylor is forced into an anti-realist position on the Big Bang theory, but without sufficient warrant for singling out that theory as non-realistic. Therefore, despite the virtue of simplicity of form, the *kalam* cosmological argument has not been defeated by Taylor's all too swift refutation.

"A Swift and Simple Refutation of the *Kalam* Cosmological Argument?" *Religious Studies* 35 (1999): 57-72.

I. Introduction

In his helpful book *God, Reason, and Theistic Proofs*, Stephen T. Davis explores at some length what criteria must be fulfilled by a theistic argument in order for it to count as a successful piece of natural theology. Of course, the argument must be formally and informally valid; moreover, Davis opines, its premisses must be known to be more plausible than their denials.^{1} When assessed by this standard, it seems to me that the *kalam* cosmological argument qualifies as a successful piece of natural theology, for it is obviously valid, and we may at least know that its premisses are more plausible than their denials, even if we do not know them to be necessarily true, or simply true, or even plausible.

John Taylor disagrees.^{2} The *kalam* cosmological argument cannot in his view be endorsed because its adherents have not shown its main premiss, that *the universe began to exist*, to be more reasonable than its denial.

Taylor's fundamental complaint is that the *kalam* cosmological argument gives the appearance of providing a swift and simple demonstration of the existence of a supernatural Creator of the universe, whereas in fact a convincing argument for such a conclusion would have to be much more complicated and laborious than a single syllogism. This seems a strange complaint to lodge against an argument, the defense of whose premisses took me into extended discussions of such recondite and profound subjects as Cantorian set theory, transfinite arithmetic, the ontological status of sets, the nature of time as tensed or tenseless, Zeno's Paradoxes, Kant's First Antinomy, contemporary Big Bang cosmology (including critiques of alternative or non-standard cosmological theories such as the Steady State model, the Oscillating model, the Vacuum Fluctuation model, and Quantum Gravity models), thermodynamics and physical eschatology, and so on and so forth.^{3} Although the over-all logic of the argument is extremely simple, establishing the truth of its premisses can be, depending upon the depth to which one wishes to go, a long and complex affair, involving not only the issues mentioned above, but also additional argumentation to rule out such hypotheses as an eternally quiescent universe in which the temporal series of past events was initiated.^{4} Moreover, the simple syllogism lying at the heart of the *kalam* cosmological argument should be supplemented by a conceptual analysis of what it is to be a cause of the universe, an exercise which serves to recover many of the traditional divine attributes, demonstrating that the inferred cause of the universe is an uncaused, beginningless, timeless, changeless, spaceless, immaterial, personal Creator of unimaginable power. So although the *kalam* cosmological argument has the virtue of being formulable in a simple syllogism, the appearance of swiftness and simplicity which this apparently engenders in some should not lead one mistakenly to infer that the argument is simplistic or cursory in its treatment of difficult questions.

It is worth noting that Taylor does not dispute the truth of the argument's two premisses. Indeed, he rejects any attempt to deny the first premiss, that *whatever begins to exist has a cause*, and it is my impression that he may well accept the truth of the second as well. So he does not deny the soundness of the argument; rather he offers undercutting defeaters of the second premiss in order to show that the proponent of the argument has not been successful in his attempt to provide adequate warrant for believing the second premiss to be true.

I think I can show, however, that it is Taylor who is far too quick and easy in his critique. For several of his objections have already been dealt with in the literature, and yet he takes no

cognizance of the answers; other arguments on behalf of main premiss of the *kalam* cosmological argument he simply ignores.

II. Philosophical Arguments

Taylor attempts to refute what he calls *a priori* arguments (but which might more accurately be called philosophical or metaphysical arguments, since they do, *pace* Taylor, involve appeal to experience) for the beginning of the universe. With respect to the first of these, the argument based on the impossibility of the existence of an actual infinite, we immediately encounter a misconstrual of the argument: Taylor characterizes the argument as "claiming to show that the proposition that something could be actually infinite implies a contradiction" {5} --this despite my oft-repeated statements that the argument does not rest on any such claim. {6} Rather the argument purports to make it plausible that the existence of an actual infinite is *metaphysically* impossible. Compare in this connection such statements as "Some effect occurs before its cause," "Something has a shape but not a size," or "Something comes into being without a cause"--statements which imply no contradiction, but which are, plausibly, metaphysically impossible. Similarly, the statement that "an actual infinite exists" may imply no contradiction and yet be metaphysically impossible.

Taylor offers both an undercutting and a rebutting defeater of the premiss that *an actual infinite cannot exist*. First, in response to my argument that if an actually infinite number of things, say, books, could exist, then it would be impossible to add to the collection, which is obviously absurd, Taylor rejoins that one may simply re-number the collection so as to admit the addition of the new member. {7} But the shortcoming of this refutation lies in the fact that I had already anticipated this objection in the original statement of the problem and explained that such a re-numbering violates the problem conditions laid down and merely substitutes new conditions. {8} Unfortunately, Taylor takes no cognizance of my pre-emptive refutation of this objection. Worse, Taylor simply breaks off his discussion at this point, ignoring all the even more counter-intuitive absurdities entailed by the existence of an actual infinite, such as those illustrated by Hilbert's Hotel, including the contradictions which result when the inverse operations of subtraction or division are performed with transfinite numbers, operations which may be conventionally banned within transfinite arithmetic but which cannot be precluded in the real world of space and time.

Second, Taylor would rebut the premiss in question by furnishing a counter-example: the number of natural numbers is actually infinite. {9} In order to carry this objection, Taylor needs to address two subsidiary questions:

(i) *Are there mathematical instances of actual infinities?* That there are cannot simply be assumed, for intuitionist mathematicians--a small, but brilliant minority--deny the legitimacy of the notion of actual infinity even in the mathematical realm, accepting potential infinities only. {10} Taylor must show why the proponent of the *kalam* cosmological argument cannot rationally embrace intuitionism, a task which Taylor has not even begun to attempt--otherwise Taylor's objection is undercut.

(ii) *What is the ontological status of mathematical entities?* As I explained in *The Kalam Cosmological Argument*, only if one is a Platonist is the admission of mathematical actual infinities incompatible with the claim that an actual infinite cannot exist. {11} So long as Formalism, Conceptualism, or Nominalism remains a viable option, the *kalam* proponent need not deny the legitimacy of the mathematical actual infinite. Moreover, I pointed out that

Platonism is peculiarly burdened with the antinomies of naive set theory, specifically Burali-Forti's antinomy, Cantor's antinomy, and Russell's antinomy. Further, I explained that the customary means of avoiding these paradoxes, such as logicism or axiomatization, sit ill with a metaphysic of Platonism.

Although Platonism seems very popular today among metaphysicians, I think there are good reasons, wholly independent of the *kalam* cosmological argument, for preferring some form of Conceptualism over Platonism:

(A) *The entities postulated in a Platonist ontology are obscure.* I must confess that, try as I might, I simply have no idea what the Platonist is talking about when he asserts, for example, that the number three exists. To say that it is an abstract object existing timelessly and spacelessly is not elucidating. I understand what it means to say there are three of something, three apples, say, and the concept of threeness is clear to me; but the notion that three itself exists is utterly opaque. What is the Platonist talking about when he asserts that independently of all conceptualization, even on the part of God, there exist these infinite realms of strange objects like numbers and sets and points and lines, *et cetera*?

(B) *Platonism is theologically unacceptable.* {12} The abstract objects posited in a Platonist ontology exist, to borrow Plantinga's phrase, just as serenely as your most solidly concrete object. {13} There are thus infinite upon infinite realms of necessarily existing objects--numbers, curves, *n*-dimensional geometries, propositions, properties, relations, essences, possible worlds, theories, musical scores, and so on and so forth--which exist independently of God. Platonism thus entails a metaphysical pluralism which compromises the aseity of God. Some theists have attempted to marry Platonism to theism by postulating a sort of absolute creation, according to which doctrine abstract objects do not exist *a se*, but are necessary creations of God. {14} Insofar as the means of such objects' creation is divine intellection, however, then this is actually a Conceptualist, not a Platonist, metaphysic. Construed, on the other hand, as creation by the divine will, Platonism remains theologically unacceptable, for it then denies divine freedom with respect to creation and emasculates the doctrine of *creatio ex nihilo*, since God co-exists eternally with creation, only the (infinitesimally small) physical part of creation coming into being at a point in time. Platonism is thus profoundly unacceptable theologically, such that even were I not convinced of the truth of the premisses of the *kalam* cosmological argument, I should reject Platonism in favor of Conceptualism.

On a Conceptualist ontology, numbers are products of intellection, ultimately divine intellection, as Plantinga explains:

It . . . seems plausible to think of *numbers* as dependent upon or even constituted by intellectual activity; indeed, students always seem to think of them as 'ideas' or 'concepts,' as dependent upon our intellectual activity. So if there were no minds, there would be no numbers But again, there are too many of them for them to arise as a result of human intellectual activity; we should therefore think of them as among God's ideas. {15}

But, it might be rejoined, does not Conceptualism merely push the problem back a notch, forcing us to posit an actually infinite number of divine ideas? {16} Not at all! In the first place, one need not be conceptualizing consciously all that one knows. I know, for example, the multiplication table up to 10 although I am not consciously entertaining any of its individual equations, so that my knowledge of the multiplication table does not imply that I

have 10^2 ideas. Secondly, and more importantly, the Conceptualist may avail himself of the theological tradition that in God there are not, in fact, a plurality of divine ideas; rather God's knowledge is simple and is merely represented by us finite knowers as broken up into knowledge of discrete propositions and a plurality of divine ideas.^{17} William Alston points out that such a doctrine of divine knowledge does not commit one to a full-blown doctrine of divine simplicity.^{18} Such a full-blown doctrine faces well-known difficulties; but with respect to divine intellection such a simplicity doctrine has considerable advantages independent of the concerns of the *kalam* cosmological argument. For example, it allows one to circumvent wholly Patrick Grimm's paradoxes of omniscience based on God's knowledge of individual truths.^{19}

It seems to me, therefore, that there are substantive, independent reasons for rejecting Platonism. The detractor of the *kalam* cosmological argument thus finds himself shouldered with an enormous burden of proof if he is to carry his objection based on the existence of mathematical infinities: he must prove, first, that intuitionism is not a rationally tenable position and, second, that Platonism alone is a reasonable metaphysic with respect to abstract objects. Taylor has not even begun to discuss these issues. His refutation of the argument against the existence of an actual infinite is thus--shall I say it?--far too swift and simple.

Taylor also attempts to refute the premiss that *an infinite temporal regress of events is an actual infinite*. He observes that the series of past events is not like an infinite set of books in a library, for, in contrast to the books, "there would seem to be no clear sense in which the series of past events may be said to exist *all at once*."^{20} Notice that the difficulty here lies not in the difference between events and things, but in the difference between entities, some of which are past, and entities, all of which are present. The assumption seems to be that if a series or collection has a cardinality, then all the members of that collection must exist simultaneously. But that seems patently false: does not the series of U.S. presidents have, as of 1999, 42 members? If the series were beginningless, would it not have $\aleph_0$ members? Certain thinkers have tried to avoid that conclusion by contending that the number of members of such a series would be merely potentially infinite.^{21} But this contention is clearly wrong; since the series has an end in the present, in order to be potentially infinite the series would, as of that date, have to be finite but growing in a backward direction, which is absurd. If there were a beginningless series of falling dominoes, would not the number of dominoes fallen prior to today be actually infinite? How, then, would the number of fallen dominoes be different if each one, after falling, eventually decayed and ceased to exist?

Perhaps Taylor's objection is, not that the number of past events in a beginningless universe is not actually infinite, but that an actually infinite number of things which exist successively, not simultaneously, does not engender the alleged absurdities attending a simultaneously existing number of things. But this contention is obviously false: we can still compare, for example, the number of odd-numbered events with the total number of events, or the number of events prior to today with the number of events prior to any point in the past, and mentally add and subtract such events so as to obtain the same absurdities. In fact, the successive existence of the collection of past events affords striking illustrations of the counter-intuitive nature of the actual infinite: for example, the number of respective revolutions completed by two concentric spheres rotating at a 1:12 ratio will increasingly diverge the longer they revolve; but if they have revolved long enough, they will have miraculously completed the same number of revolutions! Indeed, appeal to the successive nature of the existence of past events lands one in the second, independent *kalam* argument against the formation of an

actual infinite by successive addition, so that we are, in effect, presented with a dilemma, as Davis discerns:{22}

- (i) If the series of past events is beginningless, then it constitutes either a simultaneously existing actual infinite or a series formed by successive addition.
- (ii) It cannot be a simultaneously existing actual infinite (first KCA).
- (iii) It cannot be a series formed by successive addition (second KCA).
- (iv) Therefore, the series of events is not beginningless.

Thus, even if the first *kalam* argument were inappropriate (which is moot), still the second argument would suffice to demonstrate the finitude of the past.

Turning, then, to the second *kalam* argument for the beginning of the universe, we find Taylor offering a critique of my Tristram Shandy paradox which I admitted in *Theism, Atheism, and Big Bang Cosmology* to be quite justified.{23} I had initially argued that Tristram Shandy, who writes his autobiography so slowly that it takes him a year to record the events of a single day, would, had he been writing from eternity past, have completed his autobiography by today, since, by the Principle of Correspondence, there has been a year available for writing corresponding to every day of living; but such a conclusion is absurd, since he could not yet have recorded today's events. Critics of the argument pointed out, however, that the absurdity of the Tristram Shandy story lies not in the infinity of the past, but in the requirement that he record a day not succeeded by a year. He can only record days which are earlier than the corresponding years of writing, no matter how briefly he has lived. The task assigned to Tristram Shandy is impossible, as Taylor says, "for reasons that have nothing to do with the actual infinite." {24} Therefore, if the past is infinite, there is no reason to think that he will have recorded today's events.

But then, as I pointed out, the obvious question arises: if Tristram Shandy has been writing from eternity, which days has he recorded? As Robin Small's incisive analysis reveals, the days recorded by Tristram Shandy must be infinitely distant in the past. For given that every year of writing is preceded by the relevant recorded day and that the number of years is infinite, the recorded days must be infinitely distant from the present. But this seems absurd, since, as G. J. Whitrow argued, it is impossible for an event which was once present to recede to an infinite temporal remove. But since the task of writing one's autobiography at the rate of one day a year (such that the year comes after the day recorded) is an obviously possible task, an actually infinite past must be impossible.

Taylor does not seem to grasp this revised paradox, merely repeating Small's contention that the days recorded and the years of writing cannot be put into a one-to-one correspondence. This is obviously false, since both have the cardinality of $\aleph_0$. Since every day of living generated a year of writing, the days and years cannot fail to correspond. Thus, there is no *logical* problem in locating the days corresponding to the years: they exist in the ω * series of days preceding the ω * series of years ($\dots, -3, -2, -1, \dots, -3, -2, -1$). Moreover, Taylor takes no cognizance of what I called a "deeper absurdity" revealed by the Tristram Shandy paradox, namely, that if Tristram Shandy were going to finish his book by the present moment, then he would always at any moment in the past have already completed it.{25} Thus, Taylor's treatment of the second *kalam* cosmological argument, like that of the first, is all too quick and easy.{26}

In summary, Taylor's refutation of the philosophical arguments for the beginning of the universe cannot be deemed successful, first, because his examination of the arguments is simply incomplete, and, second, with respect to those arguments which he does treat, Taylor's defeaters are based on misinterpretations, mistakes, or inadequate exploration of alternatives.

III. Scientific Confirmations

We now come to the scientific confirmation of the philosophical arguments for the beginning of the universe. Taylor admits that if it could be "shown satisfactorily that the universe began *ex nihilo*, from no prior cosmological goings-on, then the only available causes would be supernatural." {27} Now it needs to be understood clearly that this is precisely what the standard Big Bang theory, if true, does show. The initial cosmological singularity constitutes the boundary to physical time and space, so that if the theory is true, we have an origin of the universe *ex nihilo*. As Barrow and Tipler state, "At this singularity, space and time came into existence; literally nothing existed before the singularity, so, if the Universe originated at such a singularity, we would truly have a creation *ex nihilo*." {28} Thus, if the model provides a realistic description of the universe, there cannot be physical causal conditions of the Big Bang. As Grünbaum emphasizes, to postulate a physical cause of the Big Bang is simply to contradict the theory. {29}

Now Taylor seems to recognize the above implication of the standard model, and so he is compelled to argue, in effect, that if we construe the Big Bang model realistically, we must reject the Big Bang theory as false. That Taylor does, in fact, affirm this stringent claim is evident from the following argument:

The prediction, by a theory, of a singularity, is standardly taken as evidence that the theory has broken down. In the cosmological case, it indicates that there is an era in the universe's history about which we cannot rely on the Big Bang's predictions. The Big Bang theory is not telling us that the universe had an absolute beginning. The correct conclusion to be drawn from the singularity is that the theory *does not tell us* what happened in the earliest phase of the universe. {30}

In Taylor's thinking, the prediction on the part of the Big Bang theory of an initial cosmological singularity is proof positive that the theory is wrong.

Now it is certainly true that theorists prefer a theory which involves no singularities, since the laws of physics break down at such a point; but that heuristic does nothing to rule out the fact that the correct theory of the universe may well involve singularities. The Hawking-Penrose singularity theorem proves that so long as the General Theory of Relativity holds, an initial cosmological singularity is inevitable. A singular beginning of the universe is not *ipso facto* unphysical or unscientific, though it may be discomfiting. A theorist is always at liberty, if he has an aversion to singularities, to "cut out" the initial singular point from the model, treating it, in Fitzgerald's words, "as a kind of mathematical limit lacking physical reality." {31} But the discomfiture of an absolute beginning remains unabated. As cosmologist Andrei Linde candidly confesses, "The most difficult aspect of this problem is not the existence of the singularity itself, but the question of what was *before* the singularity This problem lies somewhere at the boundary between physics and metaphysics." {32}

Taylor errs in inferring that the presence of an initial cosmological singularity implies an era about which the standard model's predictions are unreliable. The singular state is a

durationless point with respect to time, the analogue to a temporal instant; $t=0$ does not even lie within the history of the universe, much less constitute an era, but lies on the boundary of space-time. Taylor seems to have confused the singular state with the Planck era prior to 10^{-43} sec after the Big Bang, whose description requires the marriage of GTR and quantum theory to yield a quantum theory of gravitation.[\[33\]](#) Some theorists hope that such a theory will not involve the singularities inevitable in classical gravitation; but this hope may well prove vain. John Barrow has rightly cautioned that "one should be wary of the fact that many of the studies of quantum cosmology are motivated by the desire to avoid an initial singularity of infinite density, so they tend to focus on quantum cosmologies that avoid a singularity at the expense of those that might contain one."[\[34\]](#) Noting the same tendency, Roger Penrose states, "I have gradually come around to the view that it is actually misguided to ask that the space-time singularities of classical relativity should disappear when standard techniques of quantum (field) theory are applied to them."[\[35\]](#) For if the initial cosmological singularity is removed, then "we should have lost what seems to me to be the best chance we have of explaining the mystery of the second law of thermodynamics."[\[36\]](#) What Penrose has in mind is the remarkable fact that as one goes back in time the entropy of the universe steadily decreases. Just how unusual this is can be demonstrated by means of the Bekenstein-Hawking formula for the entropy of a stationary black hole. The total observed entropy of the universe is 10^{88} . Since there are around 10^{80} baryons in the universe, the observed entropy per baryon must be regarded as extremely small. By contrast in a collapsing universe the entropy would be 10^{123} near the end. Comparison of these two numbers reveals how absurdly small 10^{88} is compared to what it might have been. Thus, the structure of the Big Bang must have been severely constrained in order that thermodynamics as we know it should have arisen. So how is this special initial condition to be explained? According to Penrose, we need the initial cosmological singularity, conjoined with the Weyl Curvature Hypothesis, according to which initial singularities (as opposed to final singularities) must have vanishing Weyl curvature.[\[37\]](#) In standard models, the Big Bang does possess vanishing Weyl curvature. The geometrical constraints on the initial geometry have the effect of producing a state of very low entropy. So the entropy in the gravitational field starts at zero at the Big Bang and gradually increases through gravitational clumping. The Weyl Curvature Hypothesis thus has the time asymmetric character necessary to explain the second law. Without the initial singularity we should have white holes spewing out material, in contradiction to the Weyl Curvature Hypothesis, the Second Law of Thermodynamics, and probably also observation.[\[38\]](#) Penrose supplies the following figure to illustrate the difference:

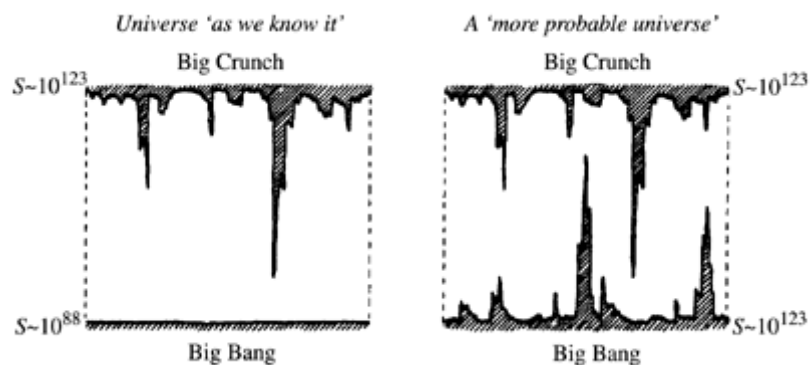


Fig. 1. Contrast between the universe as we know it (assumed for convenience to be closed) with a more probable universe. In both cases the Big Crunch is a high entropy ($\sim 10^{123}$), complicated, unconstrained singularity. For the left-hand picture the Big Bang is a low entropy (< 10), highly constrained, initial singularity, while for the right-hand picture it is an

unconstrained, much more probable Big Bang. The "stalactites" represent singularities of black holes, while the "stalagmites" represent singularities of white holes.

If we remove the initial cosmological singularity, we render the Weyl Curvature Hypothesis irrelevant and "we should be back where we were in our attempts to understand the origin of the second law." {39} Could the special initial geometry have arisen sheerly by chance in the absence of a cosmic singularity? Penrose's answer is decisive: "Had there not been any constraining principles (such as the Weyl curvature hypothesis) the Bekenstein-Hawking formula would tell us that the probability of such a 'special' geometry arising by chance is at least as small as about one part in $10^{1000B(3/2)}$ where B is the present baryon number of the universe [$\sim 10^{80}$]." {40} Thus Penrose calculates that, aiming at a manifold whose points represent the various possible initial configurations of the universe, "the accuracy of the Creator's aim" would have to have been one part in $10^{10(123)}$ in order for our universe to exist. {41} He comments, "I cannot even recall seeing anything else in physics whose accuracy is known to approach, even remotely, a figure like one part in $10^{10(123)}$." {42}

Furthermore, the fact that certain quantum gravity models like the Hartle-Hawking model lack an initial singular point is in any case really quite irrelevant to our concern, since such models still posit the finitude of the past and an origination of the universe *ex nihilo*. As Barrow explains, "This type of quantum universe has not always existed; it comes into being just as the classical cosmologies could, but it does not start at a Big Bang where physical quantities are infinite" {43} The Hartle-Hawking universe thus gives "a picture of 'creation out of nothing'," even though "one never runs into an unusual point like the apex of a cone." {44}

Thus, Taylor's claim that the presence of an initial cosmological singularity in the standard model necessitates anti-realism with regard to that model is simply wrong. Nor does the necessity of a quantum theory of gravity to describe the Planck era imply abnegation of the initial cosmological singularity or, in any case, serve to avert the beginning of the universe. According to Hawking in his most recent book, "almost everyone now believes that the universe, and time itself, had a beginning at the Big Bang." {45} The defender of the *kalam* cosmological argument can hardly be indicted for appealing to this vast consensus in support of his argument.

Taylor also makes a more modest claim in an attempt to undercut the confirmation from Big Bang cosmology enjoyed by the *kalam* cosmological argument, namely, one *may* abjure a realist construal of the Big Bang model. But on what grounds should we doubt a realist interpretation of the model? Taylor answers, "The heart of the case against realism lies in the possibility of underdetermination of theories by the data, that is, the possibility that, alongside a successful theory, there may be another, incompatible theory, which equally well accounts for the available data." {46} Now insofar as Taylor has reference to scientific theories *in general*, he is correct that the practitioner of *kalam*, in appealing to the Big Bang theory in support of the second premiss of his argument, does run up against the challenge of scientific anti-realism. But since such anti-realism afflicts all our scientific theorizing about the external world, calling into question the existence of even such theoretical entities as dinosaurs and other galaxies, it is no deficiency of the Big Bang model in particular. The natural theologian who is a scientific realist may simply consider himself in good company and relax unless and until some reason is proffered for anti-realism about the Big Bang theory *in particular*. Taylor seems to sense the deficiency of broad-brush anti-realism and goes on to suggest that it is not implausible that there *could* be some empirically equivalent rival to the Big Bang theory which does not involve a beginning of the universe. I see no reason to dispute that that could

be the case; but surely the mere possibility of such a theory is not sufficient justification for anti-realism about the Big Bang theory in particular. Taylor does not seem to appreciate how arduously detractors of the standard model have sought for such a theory and how extraordinarily difficult it has proved to find one. He is no doubt aware of the demise of the old Steady State theory. But he continues to speak favorably of oscillating models and of vacuum fluctuation models,{47} apparently unaware of the severe theoretical and observational difficulties which have rendered such theories obsolete.{48} Just this year five teams of astronomers at Princeton, Yale, the Lawrence Berkeley National Laboratory, and the Harvard-Smithsonian Center for Astrophysics, employing different measurement techniques, confirmed earlier results indicating that the density of the universe is insufficient to halt the expansion of the universe and bring about a contraction, thereby precluding an oscillating universe.{49} As for vacuum fluctuation models, Christopher Isham notes that such models encountered "fairly lethal" difficulties concerning their observational consequences and so were "jettisoned twenty years ago." {50} So what other prospective theories are there? Borde and Vilenkin have recently shown that Linde's attempt to craft a beginningless inflationary universe shatters: "A physically reasonable spacetime that is eternally inflating to the future must possess an initial singularity. The fact that inflationary spacetimes are past incomplete forces one to address the question of what, if anything, came before." {51} Taylor himself admits that the spacetimes of quantum gravity models like the Hartle-Hawking model cannot be interpreted as realistic alternatives to the standard model in view of their use of so-called imaginary time. Hawking himself is an anti-realist about his model: "The actual saddle point metric will be complex. This may upset a Platonist . . . but it is fine for a positivist like me." {52} "I don't demand that a theory correspond to reality because I don't know what it is. All I'm concerned with is that the theory should predict the results of measurements." {53} So where are these prospective theories that undercut realism with respect to the Big Bang theory?

Actually, there is one theory which does meet the criterion of accounting equally well for the empirical data and which should therefore occasion the suspicion that the standard model does not provide a realistic account of the spacetime universe, though this alternative account is one which is apt to come as a surprise to most people: Newtonian physics. E. A. Milne and W. H. McCrea shocked the scientific community by demonstrating that all the results of GTR-based Friedman cosmology can be recovered by Newtonian physics and in a way that is simpler than Einstein's cumbersome tensor calculus! Milne and McCrea were able to reproduce all the results of Big Bang cosmology by means of a material universe expanding in empty, classical space through classical time.{54} Schücking points out that the main asset of the Milne-McCrea formulation was that it gave exactly the same equations for the time development of the universe as the Friedman theory and yet allowed a much simpler derivation.{55} Comparing relativistic and Newtonian cosmology, Kerszberg observes, "as far as the prediction of the overall history of the universe is concerned, the equivalence seems to be total." {56} This implies, in Bondi's words, that GTR "cannot be expected to explain any major features in any different or better way than Newtonian theory." {57} As one who is philosophically attracted to Newtonian conceptions of time and space, I am not being facetious when I say that a cosmogonic theory based on Newtonian physics rather than Einstein's GTR constitutes a very real reason for doubting whether the origin of time and space postulated in the standard Friedman-LeMaître model of expanding space is not a fiction rooted in a now defunct positivistic epistemology. In the end, however, the success of Newtonian theory on a cosmological level remains merely a curiosity, since Newtonian physics is in contradiction with the evidence on the local level. Hence, the expansion of the universe is properly construed in Einsteinian terms as the expansion of space itself. So

construed, there is no alternative theory which explains the data as well as a model predicting a beginning to physical space and time.

The history of the Big Bang model for well over three-quarters of a century has been one of radical predictions repeatedly confirmed and the repeated failure of every attempt, some of them extremely speculative, to avoid the absolute origin of the universe posited in the standard model.^{58} With each failure, the theory is corroborated anew. The defender of the *kalam* cosmological argument seems to be on secure ground in appropriating the Big Bang theory as empirical confirmation of the beginning of the universe.

IV. Conclusion

In summary, then, it seems to me that the *kalam* cosmological argument meets reasonably suggested criteria for being a successful piece of natural theology. It is hard to deny that its premisses are at least more plausible than their contradictories. In particular, it seems more plausible to affirm, in light of philosophical argument and scientific confirmation, that the universe began to exist than that it did not begin to exist.

Taylor's attempt to undercut this premiss of the argument by defeating the philosophical arguments for the finitude of the past cannot be deemed a success. With respect to the first argument, based on the impossibility of the existence of an actual infinite, he misconstrues the nature of the modality involved, and his attempts to undercut and rebut the key premiss, that an actual infinite cannot exist, fail due to his ignoring both positive arguments offered in defense of the premiss as well as alternative positions open to the argument's defender which do not involve the existence of an actually infinite number of mathematical objects; moreover, his apparent denial of the second premiss, that an infinite temporal regress of events is an actual infinite, rests on confusion and forces Taylor into a dilemma, each horn of which implies the beginning of the universe. As for the second philosophical argument, based on the impossibility of the formation of an actual infinite by successive addition, Taylor's undercutting defeater is irrelevant to the version of the argument defended in *Theism, Atheism, and Big Bang Cosmology*; nor does he deal with the second consideration I offered in defense of impossibility of the successive formation of an actual infinite.

With regard to the empirical confirmation of the conclusion of the philosophical arguments, Taylor in effect admits that anyone who holds to a realist interpretation of the Big Bang theory should believe in God as the supernatural cause of the origin of the universe. For if that theory is correct in positing a beginning of the universe, then, since it is impossible for there to be physical antecedents of the Big Bang, it follows that we do have grounds "why positing a supernatural cause is more reasonable than positing a natural cause for the physical state in question."^{59} The natural theologian who is a Big Bang realist is thereby exonerated, by Taylor's own lights, "from the charge of positing a 'God of the gaps'."^{60} Thus, on Taylor's analysis to avoid God's existence one *must* be (not merely may be) an anti-realist concerning the Big Bang. I take this to be an enormous concession to the practitioner of *kalam* and to the power of his argument. Not many cosmologists would enjoy being forced into the dilemma of either being a theist or else an anti-realist. Moreover, we saw that Taylor's case for affirming anti-realism about the Big Bang was groundless and that, on the contrary, there exist good grounds for affirming the existence of an initial cosmological singularity.

In short, while the *kalam* cosmological argument enjoys the enormous heuristic advantage of being formulable in a simple syllogism, so that it can be easily communicated to a

philosophically or scientifically untutored person, it is by no means simplistic and cannot be defeated by swift and simple objections.

Endnotes

{1} Stephen T. Davis, *God, Reason, and Theistic Proofs*, Reason and Religion (Grand Rapids, Mich.: Wm. B. Eerdmans, 1997), pp. 1-8.

{2} John Taylor, "Kalam: A Swift Argument from Origins to a First Cause?" *Religious Studies* 33 (1997): 167-179.

{3} See particularly William Lane Craig, *The Kalam Cosmological Argument*, Library of Philosophy and Religion (London: Macmillan, 1979); William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology* (Oxford: Clarendon Press, 1993).

{4} See William Lane Craig, "The *Kalam* Cosmological Argument and the Hypothesis of a Quiescent Universe," *Faith and Philosophy* 8 (1991): 104-108.

{5} Taylor, "Kalam," p. 168.

{6} See especially William Lane Craig, "Graham Oppy on the *Kalam* Cosmological Argument," *Sophia* 32 (1993): 1-3.

{7} Taylor, "Kalam," p. 169.

{8} Craig, *Kalam Cosmological Argument*, pp. 83-84; idem, *Theism, Atheism, and Big Bang Cosmology*, pp. 96-97.

{9} Taylor, "Kalam," pp. 169-170.

{10} See discussion in Craig, *Kalam Cosmological Argument*, pp. 92-94.

{11} Ibid., pp. 87-94.

{12} I realize that this point will have force only with theists. But I am quite interested in persuading fellow theists of the soundness of the *kalam* cosmological argument, both for the confirmation of their own faith and for the sake of evangelism. Even in dialogue with a non-theist, it is important to show that we can present a coherent conceptualist alternative to Platonism.

{13} Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), p. 132.

{14} See Thomas V. Morris and Christopher Menzel, "Absolute Creation," *American Philosophical Quarterly* 22 (1985): 353-362.

{15} Alvin Plantinga, "2 Dozen (or so) Theistic Arguments," lecture delivered at the 33rd Annual Wheaton College Philosophy Conference, October 23-25, 1986. See also idem, "How to Be an Anti-Realist," *APA Proceedings and Addresses* (1982): 47-70. Conceptualism thus

affords a powerful argument for God's existence; see especially Quentin Smith, "The Conceptualist Argument for God's Existence," *Faith and Philosophy* 11 (1994): 38-49.

{16} See objections of William F. Lawhead, "The Symmetry of the Past and Future in the *Kalam* Cosmological Argument," and Robert Prevost, "Classical Theism and the *Kalam* Principle," in *The Logic of Rational Theism*, ed. Wm. L. Craig and M. S. McLeod, *Problems in Contemporary Philosophy* 24 (Lewiston, N.Y.: Edwin Mellen, 1990), pp. 99-111, 113-125 respectively.

{17} See Thomas Aquinas *Summa theologiae* 1a. 15. See also remarks of William Mann, "Necessity," in *A Companion to Philosophy of Religion*, ed. Philip L. Quinn and Charles Taliaferro, *Blackwell Companions to Philosophy* (Oxford: Blackwell, 1997), p. 267.

{18} William Alston, "Does God Have Beliefs?" *Religious Studies* 22 (1986): 287-306.

{19} Patrick Grimm, "Truth, Omniscience, and the Knower," *Philosophical Studies* 54 (1988): 9-41; Patrick Grimm and Alvin Plantinga, "Truth, Omniscience, and Cantorian Arguments: an Exchange," *Philosophical Studies* 71 (1993): 267-306.

{20} Taylor, "Kalam," p. 170.

{21} Thomas Aquinas *Summa theologiae* 1a. 7. 4; R. G. Swinburne, "The Beginning of the Universe," *The Aristotelian Society* 40 (1966): 131-132.

{22} Davis, *God, Reason, and Theistic Proofs*, p. 154.

{23} Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, p. 100.

{24} Taylor, "Kalam," p. 171.

{25} Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 104-106.

{26} Even quicker and easier is the treatment of the argument by Nicholas Everitt, "Interpretations of God's Eternity," *Religious Studies* 34 (1998): 25-32. According to Everitt, the "central error" of the argument is "the insistence on interpreting talk of infinity in terms of such empirical concepts such as those of traversing, or completing a movement"; rather the "correct understanding" recognises that "the infinity of a set of past times or past events consists in a relationship between the set and a proper subset", which "is not a relationship which we have to create by counting, traversing, moving, etc." (Ibid., p. 32). Defenders of the *kalam* cosmological argument realise well that the correspondence relation in terms of which infinite sets are defined is tenseless, but the point is that on a tensed view of time (which this version of the argument presupposes) the series of past events does have to be created by successive addition, which is directly analogous to counting, traversing, etc. The question is whether an infinite series of events, having no beginning and having an ending in the present, is metaphysically possible given a tensed view of time. Intuitively, this does not seem possible, for it seems that the present event could not arrive if its arrival had to be preceded by the successive arrival of an infinite number of prior events. Everitt merely asserts that such a successive completion of the past is "certainly possible" (Ibid., p. 28), but only because the past's being infinite entails its having no beginning--which is not in dispute. He says nothing about my proffered arguments for the impossibility of such a series; indeed, he admits that if

there were infinitely distant events (as Small's analysis of the Tristram Shandy paradox reveals), then there "would indeed be an absurdity" in the postulation of an infinite past (Ibid.).

{27} Taylor, Kalam," p. 174.

{28} John Barrow and Frank Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1985), p. 442.

{29} Adolf Grünbaum, "Creation as a Pseudo-Explanation in Current Physical Cosmology," *Erkenntnis* 35 (1991): 238-239.

{30} Taylor, "Kalam," p. 174.

{31} Paul Fitzgerald, "Swinburne's Space and Time," *Philosophy of Science* 43 (1976): 636; see further Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 226-227.

{32} Andrei Linde, "The Inflationary Universe," *Reports on Progress in Physics* 47 (1984): 976.

{33} The most promising candidate for such a unified theory is string theory, which construes fundamental entities, not as particles, but as strings and which has gravity as an inevitable consequence of the theory. On recent advances in this field see Edward Witten, "The Holes Are Defined by the String," *Nature* 383 (19 September, 1996), pp. 215-216; James Glanz, "Strings Unknot Problems in Particle Theory, Black Holes," *Science* 276 (27 June, 1997), pp. 1969-1970; Andrew Strominger and Cumrun Vafa, "Microscopic Origin of the Bekenstein-Hawking Entropy," *Physics Letters B* 379 (1996): 99-104.

{34} John Barrow, *The Origin of the Universe* (New York: Harper Collins, 1994), p. 113.

{35} Roger Penrose, "Some Remarks on Gravity and Quantum Mechanics," in *Quantum Structure of Space and Time*, ed. M. J. Duff and C. J. Isham (Cambridge: Cambridge University Press, 1982), p. 4.

{36} Ibid., p. 5.

{37} Weyl curvature is the curvature of space-time which is not due to the presence of matter and is described by the Weyl tensor. Space-time curvature due to matter is described by the Einstein tensor. Together they make up the Riemann tensor giving the metric for space-time.

{38} Stephen Hawking and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton, N. J.: Princeton University Press, 1996), p. 130.

{39} Penrose, "Remarks," p. 5.

{40} Ibid.

{41} Roger Penrose, "Time Asymmetry and Quantum Gravity," in *Quantum Gravity 2*, ed. C. J. Isham, R. Penrose, and D. W. Sciama (Oxford: Clarendon Press, 1981), p. 249; cf. Hawking and Penrose, *Nature of Space and Time*, pp. 34-35.

{42} Penrose, "Time Asymmetry," p. 249.

{43} John D. Barrow, *Theories of Everything* (Oxford: Clarendon Press, 1991), p. 68.

{44} Ibid., pp. 66, 67.

{45} Hawking and Penrose, *Nature of Space and Time*, p. 20.

{46} Taylor, "Kalam," p. 172.

{47} Ibid., p. 173.

{48} See objections to both in Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*.

{49} "Studies Find Universe Will Expand Forever and Not Collapse," *Associated Press News Release*, 9 January 1998.

{50} Christopher Isham, "Space, Time, and Quantum Cosmology," paper presented at the conference "God, Time, and Modern Physics," March, 1990; idem, "Quantum Cosmology and the Origin of the Universe," paper presented at the conference "Cosmos and Creation," Cambridge University, July 14, 1994.

{51} Arvind Borde and Alexander Vilenkin, "Eternal Inflation and the Initial Singularity," *Physical Review Letters* 72 (1994): 3305, 3307. Linde agrees with their judgement (A. Linde, *Physical Review D* 49 (1994): 1783-1826). This is significant, since Linde's model is the only inflationary scenario not plagued with internal inconsistencies.

{52} Hawking and Penrose, *Nature of Space and Time*, p. 123. Complex quantities involve imaginary numbers.

{53} Ibid., p. 121.

{54} E. A. Milne, *Relativity, Gravitation and World Structure* (Oxford: Clarendon Press, 1935); idem, "A Newtonian Expanding Universe," *Quarterly Journal of Mathematics* 5 (1934): 64-72; W. H. McCrea, "On the Significance of Newtonian Cosmology," *Astronomical Journal* 60 (1955): 271-274.

{55} E. L. Schücking, "Newtonian Cosmology," *Texas Quarterly* 10 (1967): 274.

{56} Pierre Kerszberg, "On the Alleged Equivalence between Newtonian and Relativistic Cosmology," *British Journal for the Philosophy of Science* 38 (1987): 349.

{57} H. Bondi, *Cosmology*, 2d ed. (Cambridge: Cambridge University Press, 1960), p. 89.

{58} The red shift anomalies noted by Rhook and Zangari, whom Taylor cites in an attempt to undercut the empirical warrant for the Big Bang theory, have been progressively resolved as measurements have been refined; and Hoyle's attempt to explain the microwave background radiation as the result of the thermalization of starlight by condensed iron filaments in space is an *ad hoc* expedient of desperation which has commended itself to no one. Rhook and Zangari's main complaint is really with inflation--itself an attempt to explain away the fine-

tuning of the Big Bang which is objectionable only to those who do not believe in an intelligent Designer of the universe.

{59}Taylor, "Kalam," p. 179.

{60}Ibid.

Creation, Providence, and Miracle

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

In treating divine action in the world, we must distinguish between creation, providence, and miracle. Creation has typically been taken to involve God's originating the world (*creatio originans*) and His sustaining the world in being (*creatio continuans*). A careful analysis of these two notions serves to differentiate creation from conservation. Providence is God's control of the world, either through secondary causes (*providentia ordinaria*) or supernaturally (*providentia extraordinaria*). A doctrine of divine middle knowledge supplies the key to understanding God's providence over the world mediated through secondary causes. Miracles are extraordinary acts of providence which should not be conceived, properly speaking, as violations of the laws of nature, but as the production of events which are beyond the causal powers of the natural entities existing at the relevant time and place.

Source: In *Philosophy of Religion*, ed. Brian Davies (Washington, D.C.: Georgetown University Press, 1998), pp. 136-162

Creatio Ex Nihilo

"In the beginning God created the heavens and the earth" (Gen. 1.1). With majestic simplicity the author of the opening chapter of Genesis thus differentiated his viewpoint, not only from that of the ancient creation myths of Israel's neighbors, but also effectively from pantheism,

panentheism, and polytheism. For the author of Genesis 1, no pre-existent material seems to be assumed, no warring gods or primordial dragons are present--only God, who is said to "create" (*bara*, a word used only with God as its subject and which does not presuppose a material substratum) "the heavens and the earth" (*et hassamayim we et ha ares*, a Hebrew expression for the totality of the world or, more simply, the universe). Moreover, this act of creation took place "in the beginning" (*bereshith*, used here as in Is. 46.10 to indicate an absolute beginning). The author thereby gives us to understand that the universe had a temporal origin and thus implies *creatio ex nihilo* in the temporal sense that God brought the universe into being without a material cause at some point in the finite past.{1}

Later biblical authors so understood the Genesis account of creation.{2} The doctrine of *creatio ex nihilo* is also implied in various places in early extra-biblical Jewish literature.{3} And the Church Fathers, while heavily influenced by Greek thought, dug in their heels concerning the doctrine of creation, sturdily insisting, with few exceptions, on the temporal creation of the universe *ex nihilo* in opposition to the eternity of matter.{4} A tradition of robust argumentation against the past eternity of the world and in favor of *creatio ex nihilo*, issuing from the Alexandrian Christian theologian John Philoponus, continued for centuries in Islamic, Jewish, and Christian thought.{5} In 1215, the Catholic church promulgated temporal *creatio ex nihilo* as official church doctrine at the Fourth Lateran Council, declaring God to be "Creator of all things, visible and invisible, . . . who, by His almighty power, from the beginning of time has created both orders in the same way out of nothing." This remarkable declaration not only affirms that God created everything *extra se* without any material cause, but even that time itself had a beginning. The doctrine of creation is thus inherently bound up with temporal considerations and entails that God brought the universe into being at some point in the past without any antecedent or contemporaneous material cause.

At the same time, the Christian Scriptures also suggest that God is engaged in a sort of on-going creation, sustaining the universe in being. Christ "reflects the glory of God and bears the very stamp of His nature, upholding the universe by his word of power" (Heb. 1.3). Although relatively infrequently attested in Scripture in comparison with the abundant references to God's original act of creation, the idea of continuing creation came to constitute an important aspect of the doctrine of creation as well. For Thomas Aquinas, for example, this aspect becomes the core doctrine of creation, the question of whether the world's reception of being from God had a temporal commencement or not having only secondary importance.{6} For Aquinas creation is the immediate bestowal of being and as such belongs only to God, the universal principle of being; therefore, even if creatures have existed from eternity, they are still created *ex nihilo* in this metaphysical sense.

Thus, God is conceived in Christian theology to be the cause of the world both in His initial act of bringing the universe into being and in His on-going conservation of the world in being. These two actions have been traditionally classed as species of *creatio ex nihilo*, namely, *creatio originans* and *creatio continuans*. While this is a handy rubric, it unfortunately quickly becomes problematic if pressed to technical precision. As Philip Quinn points out{7}, if we say that a thing is created at a time *t* only if *t* is the first moment of the thing's existence, then the doctrine of *creatio continuans* lands us in a bizarre form of occasionalism, according to which no persisting individuals exist. At each instant God creates a new individual, numerically distinct from its chronological predecessor, so that diachronic personal identity and agency are precluded.

Rather than re-interpret creation in such a way as to not involve a time at which a thing first begins to exist, we ought to recognize that *creatio continuans* is but a *façon de parler* and that creation needs to be distinguished from conservation. As John Duns Scotus observed,

Properly speaking . . . it is only true to say that a creature is created at the first moment (of its existence) and only after that moment is it conserved, for only then does its being have this order to itself as something that was, as it were, there before. Because of these different conceptual relationships implied by the words 'create' and 'conserve' it follows that one does not apply to a thing when the other does.{8}

Intuitively, creation involves God's bringing something into being. Thus, if God creates some entity *e* (whether an individual or an event) at a time *t* (whether an instant or finite interval), then *e* comes into being at *t*. We can explicate this notion as follows:

E₁. *e* comes into being at *t* iff (i) *e* exists at *t*, (ii) *t* is the first time at which *e* exists, and (iii) *e*'s existing at *t* is a tensed fact

Accordingly,

E₂. God creates *e* at *t* iff God brings it about that *e* comes into being at *t*

God's creating *e* involves *e*'s coming into being, which is an absolute beginning of existence, not a transition of *e* from non-being into being. In creation there is no patient entity on which the agent acts to bring about its effect.{9} It follows that creation is not a type of change, since there is no enduring subject which persists from one state to another. It is precisely for this reason that conservation cannot be properly thought of as essentially the same as creation. For conservation does presuppose a subject which is made to continue from one state to another. In creation God does not act on a subject, but constitutes the subject by His action; in contrast, in conservation God acts on an existant subject to perpetuate its existence. This is the import of Scotus's remark that only in conservation does a creature "have this order to itself as something that was, as it were, there before."

The fundamental difference between creation and conservation, then, lies in the fact that in conservation, as opposed to creation, there is presupposed a subject on which God acts. Intuitively, conservation involves God's preservation of that subject in being over time. Conservation ought therefore to be understood in terms of God's preserving some entity *e* from one moment of its existence to another. A crucial insight into conservation is that unlike creation, it does involve transition and therefore cannot occur at an instant.{10} We may therefore provide the following explication of divine conservation:

E₃. God conserves *e* iff God acts upon *e* to bring about *e*'s existing from *t* until some $t^* > t$ through every sub-interval of the interval $[t, t^*]$

Creation and conservation thus cannot be adequately analyzed with respect to the divine act alone, but involve relations to the object of the act. The act itself (the causing of existence) may be the same in both cases, but in one case may be instantaneous and presupposes no prior object, whereas in the other case occurs over an interval and does involve a prior object.

The doctrine of creation also involves an important metaphysical feature which is rarely appreciated: it commits one to a tensed or, in McTaggart's convenient terminology, an A-

Theory of time.{11} For if one adopts a tenseless or B-Theory of time, then things do not literally come into existence. Things are then four-dimensional objects which tenselessly subsist and begin to exist only in the sense that their extension along their temporal dimension is finite in the *earlier-than* direction. The whole four-dimensional, space-time manifold is extrinsically (as opposed to intrinsically) timeless, existing co-eternally with God. The universe thus does not come into being on a B-Theory of time, regardless of whether it has a finite or an infinite past relative to any time. Hence, clause (iii) in E₂ represents a necessary feature of creation. In the absence of clause (iii) God's creation of the universe *ex nihilo* could be interpreted along tenseless lines to postulate merely the finitude of cosmic time in the *earlier than* direction.

Since a robust doctrine of *creatio ex nihilo* thus commits one to an A-Theory of time, we are brought face to face with what has been called "one of the most neglected, but also one of the most important questions in the dialogue between theology and science," namely, the relation between the concept of eternity and that of the spatio-temporal structure of the universe.{12} Since the rise of modern theology with Schleiermacher, the doctrine of *creatio originans* has been allowed to atrophy, while the doctrine of *creatio continuans* has assumed supremacy.{13} Undoubtedly this was largely due to theologians' fear of a conflict with science, which *creatio continuans* permitted them to avoid by operating only within the safe harbor of metaphysics, removed from the realities of the physical, space-time world.{14} But the discovery in this century of the expansion of the universe, first predicted in 1922 by Alexander Friedman on the basis of the General Theory of Relativity, coupled with the Hawking-Penrose singularity theorems of 1968, which demonstrated the inevitability of a past, cosmic singularity as an initial boundary to space-time, forced the doctrine of *creatio originans* back into the spotlight.{15} As physicists Barrow and Tipler observe, "At this singularity, space and time came into existence; literally nothing existed before the singularity, so, if the Universe originated at such a singularity, we would truly have a creation *ex nihilo*." {16}

Of course, various and sometimes heroic attempts have been made to avert the initial cosmological singularity posited in the standard Big Bang model and to regain an infinite past. But none of these alternatives has commended itself as more plausible than the standard model. The old steady state model, the oscillating model, and vacuum fluctuation models are now generally recognized among cosmologists to have failed as plausible attempts to avoid the beginning of the universe.{17} Most cosmologists believe that a final theory of the origin of the universe must await the as yet undiscovered quantum theory of gravity. Such quantum gravity models may or may not involve an initial singularity, although attention has tended to focus on those that do not. But even those that eliminate the initial singularity, such as the Hartle-Hawking model, still involve a merely finite past and, on any physically realistic interpretation of such models, imply a beginning of the universe. This is due to the peculiar feature of such models' employment of imaginary, rather than real, values for the time variable in the equations governing the universe during the first 10^{-43} sec of its existence. Imaginary quantities in science are fictional, without physical significance.{18} Thus, use of such numbers is a mathematical "trick" or auxiliary device to arrive at physically significant quantities represented by real numbers. The Euclidean four-space from which classical space-time emerges in such models is thus a mathematical fiction, a way of modeling the early universe which should not be taken as a literal description.{19}

Now it might be said that so-called "imaginary time" just is a spatial dimension and to that extent is physically intelligible and so is to be realistically construed. But now the

metaphysician must surely protest the reductionistic view of time which such an account presupposes. Time as it plays a role in physics is an operationally defined quantity varying from theory to theory: in the Special Theory of Relativity it is a quantity defined via clock synchronization by light signals, in classical cosmology it is a parameter assigned to spatial hyper-surfaces of homogeneity, in quantum cosmology it is a quantity internally constructed out of the curvature variables of three-geometries. But clearly these are but pale abstractions of time itself.^{20} For a series of mental events alone, a succession of contents of consciousness, is sufficient to ground time itself. An unembodied consciousness which experienced a succession of mental states, say, by counting, would be temporal; that is to say, time would in such a case exist, and that wholly in the absence of any physical processes. I take this simple consideration to be a knock-down argument that time as it plays a role in physics is at best a measure of time, rather than constitutive or definitive of time. Hence, even if one were to accept at face value the claim of quantum cosmological models that physical time really is imaginary prior to the Planck time, that is to say, is a spatial dimension, that fact says absolutely nothing at all about time itself. When it is said that such a regime exists timelessly, all that means is that our physical measures of time (which in physics are taken to define time) break down under such conditions. That should hardly surprise. But time itself must characterize such a regime for the simple reason that it is not static. I am astonished that quantum theorists can assert that the quantum regime is on the one hand a state of incessant activity or change and yet is on the other not characterized by time. If this is not to be incoherent, such a statement can only mean that our concepts of physical time are inapplicable on such a scale, not that time itself disappears. But if time itself characterizes the quantum regime, as it must if change is occurring, then one can regress mentally in time back along the imaginary time dimension through concentric circles on the spherical hyper-surface as they converge toward a non-singular point which represents the beginning of the universe and before which time did not exist. Hartle-Hawking themselves recognize that point as the origin of the universe in their model, but how that point came into being (in metaphysical, that is, ontological, time) is a question not even addressed by their theory.

Hence, even on a naive realist construal of such models, they at best show that that quantity which is defined as time in physics ceases at the Planck time and takes on the characteristics of what physics defines as a spatial dimension. But time itself does not begin at the Planck time, but extends all the way back to the very beginning of the universe. Such theories, if successful, thus enable us to model the origin of the universe without an initial cosmological singularity and, by positing a finite imaginary time on a closed surface prior to the Planck time rather than an infinite time on an open surface, actually support temporal *creatio ex nihilo*.

But if the spatio-temporal structure of the universe exhibits an origination *ex nihilo*, then the difficulty concerns how to relate that structure to the divine eternity. For given the reality of tense and God's causal relation to the world, it is very difficult to conceive how God could remain untouched by the world's temporality. Imagine God existing changelessly alone without creation, with a changeless and eternal determination to create a temporal world. Since God is omnipotent, His will is done, and a temporal world begins to exist. (We may lay aside for now the question whether this beginning of a temporal creation would require some additional act of intentionality or exercise of power other than God's timeless determination.) Now in such a case, either God existed temporally prior to creation or He did not. If He did exist alone temporally prior to creation, then God is not timeless, but temporal, and the question is settled. Suppose, then, that God did not exist temporally prior to creation. In that case He exists timelessly *sans* creation. But once time begins at the moment of creation, God

either becomes temporal in virtue of His real, causal relation to time and the world or else He exists as timelessly with creation as He does *sans* creation. But this second alternative seems quite impossible. At the first moment of time, God stands in a new relation in which He did not stand before (since there was no *before*). We need not characterize this as a change in God; but there is a real, causal relation which is at that moment new to God and which He does not have in the state of existing *sans* creation. At the moment of creation, God comes into the relation of *causing the universe* or at the very least that of *co-existing with the universe*, relations in which He did not before stand. Hence, even if God remains intrinsically changeless in creating the world, He nonetheless undergoes an extrinsic, or relational, change, which, if He is not already temporal prior to the moment of creation, draws Him into time at that very moment in virtue of His real relation to the temporal, changing universe. So even if God is timeless *sans* creation, His free decision to create a temporal world constitutes also a free decision on His part to enter into time and to experience the reality of tense and temporal becoming.

The classic Thomistic response to the above argument is, remarkably, to deny that God's creative activity in the world implies that God is really related to the world. Aquinas tacitly agrees that if God were really related to the temporal world, then He would be temporal.^{21} In the coming to be of creatures, certain relations accrue to God anew and thus, if these relations be real for God, He must be temporal in light of His undergoing extrinsic change, wholly apart from the question of whether God undergoes intrinsic change in creating the world. So Thomas denies that God has any real relation to the world. According to Aquinas, while the temporal world does have the real relation of *being created by God*, God does not have a real relation of *creating the temporal world*. Since God is immutable, the new relations predicated of Him at the moment of creation are just in our minds; in reality the temporal world itself is created with a relation inhering in it of *dependence on God*. Hence, God's timelessness is not jeopardized by His creation of a temporal world.

This unusual doctrine of creation becomes even stranger when we reflect on the fact that in creating the world God does not perform some act extrinsic to His nature; rather the creature (which undergoes no change but simply begins to exist) begins to be with a relation to God of *being created by God*. According to this doctrine, then, God in freely creating the universe does not really do anything different than He would have, had He refrained from creating; the only difference is to be found in the universe itself: instead of God existing alone *sans* the universe we have instead a universe springing into being at the first moment of time possessing the property *being created by God*, even though God, for His part, bears no real reciprocal relation to the universe made by Him.

I think it hardly needs to be said that Thomas's solution, despite its daring and ingenuity, is extraordinarily implausible. "Creating" clearly describes a relation which is founded on something's intrinsic properties concerning its causal activity, and therefore *creating the world* ought to be regarded as a real property acquired by God at the moment of creation. It seems unintelligible, if not contradictory, to say that one can have real effects without real causes. Yet this is precisely what Aquinas affirms with respect to God and the world.

Moreover, it is the implication of Aquinas's position that God is perfectly similar across possible worlds, the same even in worlds in which He refrains from creation as in worlds in which He creates. For in none of these worlds does God have any relation to anything *extra se*. In all these worlds God never acts differently, He never cognizes differently, He never wills differently; He is just the simple, unrelated act of being. Even in worlds in which He

does not create, His act of being, by which creation is produced, is no different in these otherwise empty worlds than in worlds chock-full of contingent beings of every order. Thomas's doctrine thus makes it unintelligible why the universe exists rather than nothing. The reason obviously cannot lie in God, either in His nature or His activity (which are only conceptually distinct anyway), for these are perfectly similar in every possible world. Nor can the reason lie in the creatures themselves, in that they have a real relation to God of *being freely willed by God*. For their existing with that relation cannot be explanatorily prior to their existing with that relation. I conclude, therefore, that Thomas' solution, based in the denial of God's real relation to the world, cannot succeed in hermetically sealing off God in atemporality.

The above might lead one to conclude that God existed temporally prior to His creation of the universe in a sort of metaphysical time. But while it makes sense to speak of such a metaphysical time prior to the inception of physical time at the Big Bang (think of God's counting down to creation: . . ., 3, 2, 1, *fiat lux!*), the notion of an actual infinity of past events or intervals of time seems strikingly counter-intuitive. Not only would we be forced to swallow all the bizarre and ultimately contradictory consequences of an actual infinite, but we would also be saddled with the prospect of God's having "traversed" the infinite past one moment at a time until He arrived at the moment of creation, which seems absurd. Moreover, on such an essentially Newtonian view of time, we would have to answer the difficult question which Leibniz lodged against Clarke: why did God delay for infinite time the creation of the world?[{22}](#) In view of these perplexities, it seems more plausible to adopt the Leibnizian alternative of some sort of relational view of time according to which time does not exist in the utter absence of events.[{23}](#) God existing alone *sans* creation would be changeless and, hence, timeless, and time would begin at the first event, which, for simplicity's sake, we may take to be the Big Bang. God's bringing the initial cosmological singularity into being is simultaneous (or coincident) with the singularity's coming into being, and therefore God is temporal from the moment of creation onward. Though we might think of God as existing, say, one hour prior to creation, such a picture is, as Aquinas states, purely the product of our imagination and time prior to creation merely an imaginary time (in the phantasmagorical, not mathematical, sense!).[{24}](#)

Why, then, did God create the world? It has been said that if God is essentially characterized by self-giving love, creation becomes necessary.[{25}](#) But the Christian doctrine of the Trinity suggests another possibility. Insofar as He exists *sans* creation, God is not, on the Christian conception, a lonely monad, but in the tri-unity of His own being, God enjoys the full and unchanging love relationships among the persons of the Trinity. Creation is thus unnecessary for God and is sheer gift, bestowed for the sake of creatures, that we might experience the joy and fulfillment of knowing God. He invites us, as it were, into the inner-Trinitarian love relationship as His adopted children. Thus, creation, as well as salvation, is *sola gratia*.

Providence

The biblical worldview involves a very strong conception of divine sovereignty over the world and human affairs, even as it presupposes human freedom and responsibility. While too numerous to list here, biblical passages affirming God's sovereignty have been grouped by D. A. Carson under four main heads: (1) God is the Creator, Ruler, and Possessor of all things, (2) God is the ultimate personal cause of all that happens, (3) God elects His people, and (4) God is the unacknowledged source of good fortune or success.[{26}](#) No one taking these passages seriously can embrace currently fashionable libertarian revisionism, which denies

God's sovereignty over the contingent events of history. On the other hand, the conviction that human beings are free moral agents also permeates the Hebrew way of thinking, as is evident from passages listed by Carson under nine heads: (1) People face a multitude of divine exhortations and commands, (2) people are said to obey, believe, and choose God, (3) people sin and rebel against God, (4) people's sins are judged by God, (5) people are tested by God, (6) people receive divine rewards, (7) the elect are responsible to respond to God's initiative, (8) prayers are not mere showpieces scripted by God, and (9) God literally pleads with sinners to repent and be saved. {27} These passages rule out a traditional deterministic understanding of divine providence, which precludes human freedom.

Reconciling these two streams of biblical teaching without compromising either has proven extraordinarily difficult. Nevertheless, a startling solution to this enigma emerges from the doctrine of divine middle knowledge crafted by the Counter-Reformation Jesuit theologian Luis Molina. {28} Molina proposes to furnish an analysis of divine knowledge in terms of three logical moments. Although whatever God knows, He knows eternally, so that there is no temporal succession in God's knowledge, nonetheless there does exist a sort of logical succession in God's knowledge in that His knowledge of certain propositions is conditionally or explanatorily prior to His knowledge of certain other propositions. In the first, unconditioned moment God knows all *possibilia*, not only all individual essences, but also all possible worlds. Molina calls such knowledge "natural knowledge" because the content of such knowledge is essential to God and in no way depends on the free decisions of His will. By means of His natural knowledge, then, God has knowledge of every contingent state of affairs which could possibly obtain and of what the exemplification of the individual essence of any free creature could freely choose to do in any such state of affairs that should be actual.

In the second moment, God possesses knowledge of all true counterfactual propositions, including counterfactuals of creaturely freedom. Whereas by His natural knowledge God knew what any free creature *could* do in any set of circumstances, now in this second moment God knows what any free creature *would* do in any set of circumstances. This is not because the circumstances causally determine the creature's choice, but simply because this is how the creature would freely choose. God thus knows that were He to actualize certain states of affairs, then certain other contingent states of affairs would obtain. Molina calls this counterfactual knowledge "middle knowledge" because it stands in between the first and third moment in divine knowledge. Middle knowledge is like natural knowledge in that such knowledge does not depend on any decision of the divine will; God does not determine which counterfactuals of creaturely freedom are true or false. Thus, if it is true that *If some agent S were placed in circumstances C, then he would freely perform action a*, then even God in His omnipotence cannot bring it about that S would freely refrain from *a* if he were placed in *C*. On the other hand, middle knowledge is unlike natural knowledge in that the content of His middle knowledge is not essential to God. True counterfactuals are contingently true; S could freely decide to refrain from *a* in *C*, so that different counterfactuals could be true and be known by God than those that are. Hence, although it is essential to God that He have middle knowledge, it is not essential to Him to have middle knowledge of those particular propositions which He does in fact know.

Intervening between the second and third moments of divine knowledge stands God's free decree to actualize a world known by Him to be realizable on the basis of His middle knowledge. By His natural knowledge, God knows what is the entire range of logically possible worlds; by His middle knowledge He knows, in effect, what is the proper subset of

those worlds which it is feasible for Him to actualize. By a free decision, God decrees to actualize one of those worlds known to Him through His middle knowledge.

Given God's free decision to actualize a world, in the third and final moment God possesses knowledge of all remaining propositions that are in fact true in the actual world, including future contingent propositions. Such knowledge is denominated "free knowledge" by Molina because it is logically posterior to the decision of the divine will to actualize a world. The content of such knowledge is clearly not essential to God, since He could have decreed to actualize a different world. Had He done so, the content of His free knowledge would be different.

The doctrine of middle knowledge is a doctrine of remarkable theological fecundity. Molina's scheme would resolve in a single stroke most of the traditional difficulties concerning divine providence and human freedom. Molina defines providence as God's ordering of things to their ends, either directly or mediately through secondary agents. By His middle knowledge God knows an infinity of orders which He could instantiate because He knows how the creatures in them would in fact freely respond given the various circumstances. He then decides by the free act of His will how He would respond in these various circumstances and simultaneously wills to bring about one of these orders. He directly causes certain circumstances to come into being and others indirectly by causally determined secondary causes. Free creatures, however, He allows to act as He knew they would when placed in such circumstances, and He concurs with their decisions in producing in being the effects they desire. Some of these effects God desired unconditionally and so wills positively that they occur, but others He does not unconditionally desire, but nevertheless permits due to His overriding desire to allow creaturely freedom and knowing that even these sinful acts will fit into the overall scheme of things, so that God's ultimate ends in human history will be accomplished.{29} God has thus providentially arranged for everything that happens by either willing or permitting it, yet in such a way as to preserve freedom and contingency.

Molinism thus effects a dramatic reconciliation between divine sovereignty and human freedom. Before we embrace such a solution, however, we should ask what objections might be raised against a Molinist account. Surveying the literature, one discovers that the detractors of Molinism tend not so much to criticize the Molinist doctrine of providence as to attack the concept of middle knowledge upon which it is predicated. It is usually alleged that counterfactuals of freedom are not bivalent or are uniformly false or that God cannot know such counterfactual propositions. These objections have been repeatedly refuted by defenders of middle knowledge,{30} though opposition dies hard. But as Freddoso and Wierenga pointed out in an American Philosophical Association session devoted to a recent popularization of libertarian revisionism, until the opponents of middle knowledge answer the refutations of their objections--which they have yet to do,--there is little new to be said in response to their criticisms. Let us consider, then, objections, not to middle knowledge *per se*, but to a Molinist account of providence.

Robert Adams has recently argued that divine middle knowledge of counterfactuals of creaturely freedom is actually incompatible with human freedom. Although inspired by an argument of William Hasker for the same conclusion, Adams's argument avoids any appeal to Hasker's dubious--and, I should say, clearly false--premiss that on the Molinist view counterfactuals of freedom are more fundamental features of the world than are categorical facts.{31} Adams summarizes his argument "very roughly" as follows"

Suppose it is not only true that P would do A if placed in circumstances C; suppose that truth was settled, as Molinism implies, prior to God's deciding what, if anything, to create, and it would therefore have been a truth even if P had never been in C--indeed even if P had never existed. Then it is hard to see how it can be up to P to determine freely whether P does A in C.{32}

Granted that this summary is admittedly very rough, still it is frustratingly ambiguous. The argument seems to assume as a premiss that there is a true counterfactual of creaturely freedom $\emptyset$ that *If P were in C, P would do A*, whose antecedent is true.

Is the objection then supposed to be aimed at the imagined claim that P *freely* brings about the truth of $\emptyset$? Is Adams asserting that P cannot freely bring about the truth of $\emptyset$ because if, posterior to God's middle knowledge of $\emptyset$, P were not in C or did not exist at all, $\emptyset$ would still be true, though P never does A in C, which is absurd? Is Adams saying that once the content of God's middle knowledge is fixed, P is no longer free with respect to A in C? If this is the argument, then it is just the old bogey of fatalism raising its fallacious head in a new guise, as Jonathan Kvanvig points out effectively in his critique of Adams's similar argument against the temporal pre-existence of "thisnesses." {33} Just as we have the power to act in such a way that were we to do so, future-tense propositions which were in fact true would not have been true, so things can happen differently than they will, in which case thisnesses and singular propositions which in fact exist(ed) would not have existed. Analogously, the Molinist could hold that it is within our power so to act that were we to do so, the truth of counterfactuals of creaturely freedom which is brought about by us would not have been brought about by us.

But perhaps this is not what Adams intends. Maybe the argument is that if $\emptyset$ is true logically prior to God's decree, then God still has the choice whether to instantiate worlds in which the antecedent of $\emptyset$ is true or not. If, then, God decrees to actualize a world in which P is not in C or does not exist at all, $\emptyset$ still remains true, being part of what Thomas Flint calls the "world type" which confronts God prior to His decree. {34} But then how can P bring about the truth of $\emptyset$, if P does not even exist? The Molinist answer to that question, however, is straightforward: P does not in that case bring about the truth of $\emptyset$. The hypothetical Molinist against whom this objection is directed holds *ex hypothesi* "that in the case of a true counterfactual of freedom with a true antecedent it is the agent of the free action described in the consequent who brings it about that the conditional is true." {35} That claim is consistent--though I, like Adams, cannot imagine why any Molinist should want to maintain such a claim--with the further claim that in cases of true counterfactuals of creaturely freedom lacking true antecedents, their truth is not brought about by the agents described. In my opinion, it is better to say that in all cases of true counterfactuals of creaturely freedom, the truth of a counterfactual like $\emptyset$ is grounded in the obtaining in the actual world (logically prior to God's decree) of the counterfactual state of affairs that if P were in C, then he would do A, and that any further explanation of this fact implicitly denies libertarianism. {36} Just as a true, contingent, future-tense proposition of the form *It will be the case that P does A at t* cannot be explained in terms of the truth of a tenseless proposition of the form *P does A at t*, so it is futile to try to explain true counterfactuals of creaturely freedom of the form *If P were in C, P would do A* in terms of categorical, indicative propositions of a form like *P will do A in C*. Just as irreducibly tensed facts are needed in the former case, conditional subjunctive facts are needed in the latter. Be that as it may, however, Adams's intuitive reasoning provides no grounds for rejecting either the view that the truth of counterfactuals of creaturely freedom with true antecedents is brought about by the agents described or the view that the

truth of counterfactuals of creaturely freedom of any kind is not brought about by the agents described.

Having summarized the intuitive basis of his argument, Adams develops the following more rigorous formulation:

1. According to Molinism, the truth of all true counterfactuals of freedom about us is explanatorily prior to God's decision to create us.
2. God's decision to create us is explanatorily prior to our existence.
3. Our existence is explanatorily prior to all of our choices and actions.
4. The relation of explanatory priority is transitive.
5. Therefore it follows from Molinism (by 1-4) that the truth of all true counterfactuals of freedom about us is explanatorily prior to all of our choices and actions.
10. It follows also from Molinism that if I freely do action A in circumstances C, then there is a true counterfactual of freedom F*, which says that if I were in C, then I would (freely) do A.
11. Therefore, it follows from Molinism that if I freely do A in C, the truth of F* is explanatorily prior to my choosing and acting as I do in C.
12. If I freely do A in C, no truth that is strictly inconsistent with my refraining from A in C is explanatorily prior to my choosing and acting as I do in C.
13. The truth of F* (which says that if I were in C, then I would do A) is strictly inconsistent with my refraining from A in C.
14. If Molinism is true, then if I freely do A in C, F* both is (by 11) and is not (by 12-13) explanatorily prior to my choosing and acting as I do in C.
15. Therefore, (by 14) if Molinism is true, then I do not freely do A in C.

In his critique of Adams's earlier anti-Molinist argument, Alvin Plantinga charged that the argument is unsound because the dependency relation involved is not a transitive relation.^{37} It seems to me that the present argument shares a similar failing. The notion of "explanatory priority" as it plays a role in the argument seems to me equivocal, and if a univocal sense can be given it, there is no reason to expect it to be transitive.

Consider the explanatory priority in (2) and (3). Here a straightforward interpretation of this notion can be given in terms of the counterfactual dependence of consequent on condition:

- 2'. If God had not created us, we should not exist.
- 3'. If we were not to exist, we should not make any of our choices and actions.

Both (2') and (3') are metaphysically necessary truths. But this sense of explanatory priority is inapplicable to (1), for

- 1'. According to Molinism, if all true counterfactuals of freedom about us were not true, God would not have decided to create us

is false. Molinism makes no such assertion, since God might still have created us even if the actually true counterfactuals of creaturely freedom were false or even, *per impossible*, if no such counterfactuals at all were true. The sense of explanatory priority in (1) must therefore be different than it is in (2) and (3).

The root of the difficulty seems to be a conflation of reasons and causes on Adams's part. The priority in (2) and (3) is a sort of causal or ontic priority, but the priority in (1) is not causal or

ontic, since the truth of all counterfactuals of creaturely freedom is neither a necessary nor a sufficient condition of God's decision to create us. At best, the truth of such counterfactuals is prior to His decision in providing a partial reason for that decision. Adams's mistake seems to be that he leaps from God's decision in the hierarchy of reasons to God's decision in the hierarchy of causes and by this equivocation tries to make counterfactuals of creaturely freedom explanatorily prior to our free choices.

Perhaps Adams can enunciate a univocal sense of "explanatory priority" that is applicable to (1-3). But I suspect that any such notion would be so generic that we should have to deny its transitivity or so weak that it would not be inimical to human freedom. This suspicion is borne out by Hasker's very recent attempt to save Adams's argument by enunciating a very broad conception of explanatory priority which is univocal in (1)-(3) and yet transitive: for contingent states of affairs p and q ,

EP: p is explanatorily prior to q iff p must be included in a complete explanation of why q obtains

Hasker asserts, "It should be apparent that explanatory priority as explicated by (EP) is transitive: if p is explanatorily prior to q , and q to r , then clearly P must be included in a complete explanation of why r obtains." {38} But this is not at all clear. As Hasker observes, such a relation must also be irreflexive: "a contingent state of affairs cannot constitute an explanation (in whole or in part) of itself." {39} But if the relation described by (EP) is transitive, then it seems that the condition of irreflexivity is violated. My wife and I not infrequently find ourselves in the situation that I want to do something if she wants to do it, and she wants to do it if I want to do it. Suppose, then, that John is going to the party because Mary is going, and Mary is going to the party because John is going. It follows that if the (EP) relation is transitive, John is going to the party because John is going to the party, which conclusion is obviously wrong. Not only is such a conclusion explanatorily vacuous, but it also implies, in conjunction with (12), that John does not freely go to the party--the very conclusion Hasker wants to avoid.

Adams's *reductio* also fails because (12) is false. What is undeniably true is

12'. If I freely do A in C, no truth that is strictly inconsistent with my doing A in C is explanatorily prior to my choosing and acting as I do in C.

But why would we be tempted to think that no truth which is inconsistent with my *not* doing A in C is explanatorily prior to my freely doing A in C? Certainly

F**. If I were in C, then I would not do A

cannot be explanatorily prior to my freely doing A in C; but why would F** not be explanatorily prior to my freely not doing A in C? Adams's intuition seems to be that if F* were explanatorily prior to my doing A in C, then I could not refrain from A, which is a necessary condition of my doing A freely. {40} But such an assumption seems doubly wrong. First, it represents once more the fallacious reasoning of fatalism. Though F* is (*ex concessio*) in fact explanatorily prior to my freely doing A in C, it is within my power to refrain from doing A in C; only if I were to do so, F* would not then be explanatorily prior to my action nor a part of God's middle knowledge. Until Adams can show that the content of God's middle knowledge is a "hard fact," his argument based on (12) is undercut. Second, my

being able to refrain from doing A in C is not a necessary condition of my freely doing A in C. For perhaps I do A in C without any causal constraint, but it is also the case that God would not permit me to refrain from A in C. Perhaps it is true that

G. If I were to attempt to refrain from doing A in C, God would not permit me to refrain from doing A in C.

(G) is inconsistent with my refraining from doing A in C, and yet it may well be explanatorily prior to my freely doing A in C. Flint's essay on infallibility, which appears in the same volume as Adams's, provides a good illustration.^{41} Suppose I am the Pope and A is promulgating *ex cathedra* only correct doctrine. God knew via His middle knowledge that if I were in C, I would freely do A. Therefore, His creative decree includes my being elected Pope. Given papal infallibility, (G) may also be true and part of God's middle knowledge, and so is explanatorily prior to my freely doing A in C. But (G) is inconsistent with my refraining from A in C. If such a scenario is coherent--and Flint seems to have refuted all objections to it--, then (12) is false.

The sense of explanatory priority explicated in Hasker's (EP) is so weak that even if the Molinist simply concedes the truth of (5) in this sense, then (12) is all the more obviously false. For counterfactuals concerning our free actions may be explanatorily prior to those actions only in the sense that God's reason for creating us may have been in part that He knew we should freely do such things. But it is wholly mysterious how this sense of explanatory priority is incompatible with our performing such actions freely. In a footnote, Hasker claims that Adams's argument can be freed from reliance on (12), referring the reader to his own argument against middle knowledge.^{42} But the duly attentive reader will find in that discussion nothing but a reiteration of Hasker's previous argument on this score with no refutation of the several objections lodged against it in the literature.^{43}

Thus, it seems to me that both sides of Adams's *reductio* argument are unsound. His attempt to show that counterfactuals of creaturely freedom are explanatorily prior to our actions fails due to equivocation. And even if they were in some peculiar sense explanatorily prior to our actions because they are true and known by God logically prior to categorical contingent propositions, that would not be incompatible with the freedom of our actions. In short, neither Adams nor Hasker has been able to explicate a sense of explanatory priority with respect to the truth of counterfactuals of creaturely freedom which is both transitive and inimical to human freedom. Given that the objections against a Molinist doctrine of providence thus fail, the theological power of such an account ought to prompt us to avail ourselves of it.

Miracle

It hardly needs to be demonstrated that the biblical narrative of divine action in the world is a narrative replete with miraculous events. God is conceived to bring about events which natural things, left to their own resources, would not bring about. Hence, miracles are able to function as signs of divine activity.^{44} "Why this is a marvel!" exclaims the man born blind, when confronted with the Pharisees' scepticism concerning Jesus's rectification of his sight, "Never since the world began has it been heard that any one opened the eyes of a man born blind. If this man were not from God, he could do nothing" (Jn. 9.30-33).

In order to differentiate between the customary way in which God acts and His special, miraculous action, theologians have traditionally distinguished within divine providence

God's *providentia ordinaria* and His *providentia extraordinaria*, the latter being identified with miracles. But our exposition of divine providence based on God's middle knowledge suggests a category of non-miraculous, special providence, which it will be helpful to distinguish. One has in mind here events which are the product of natural causes but whose context is such as to suggest a special divine intention with regard to their occurrence. For example, just as the Israelites approach the Jordan River, a rockslide upstream blocks temporarily the water's flow, enabling them to cross into the Promised Land (Josh 3. 14-17); or again, as Paul and Silas lie bound in prison for preaching the gospel, an earthquake occurs, springing the prison doors and unfastening their fetters (Acts 16.25-26). By means of His middle knowledge, God can providentially order the world so that the natural causes of such events are, as it were, ready and waiting to produce such events at the propitious time, perhaps in answer to prayers which God knew would be offered. Of course, if such prayers were not be offered or the contingent course of events were to go differently, then God would have known this and so not arranged the natural causes, including human free volitions, to produce the special providential event. Events wrought by special providence are no more outside the course and capacity of nature than are events produced by God's ordinary providence, but the context of such events, such as their timing, their coincidental nature, and so forth, is such as to point to a special divine intention to bring them about.

If, then, we distinguish miracles from both God's *providentia ordinaria* and *extraordinaria*, how should we characterize miracles? Since the dawning of modernity, miracles have been widely understood to be "violations of the laws of nature." In his *Dictionary* article on miracles, for example, Voltaire states that according to accepted usage, "A miracle is the violation of mathematical, divine, immutable, eternal laws" and is therefore a contradiction.^{45} Voltaire is in fact quite right that such a definition is a contradiction, but this ought to have led him to conclude, not that miracles can thus be defined out of existence, but that the customary definition is defective. Indeed, an examination of the chief competing schools of thought concerning the notion of a natural law in fact reveals that on each theory the concept of a violation of a natural law is incoherent and that miracles need not be so defined. Broadly speaking, there are three main views of natural law today: the regularity theory, the nomic necessity theory, and the causal dispositions theory.^{46}

According to the regularity theory, the "laws" of nature are not really laws at all, but just generalized descriptions of the way things happen in the world. They describe the regularities which we observe in nature. Now since on such a theory a natural law is just a generalized description of *whatever* occurs in nature, it follows that no event which occurs can violate such a law. Instead, it just becomes part of the description. The law cannot be violated, because it describes in a certain generalized form everything that does happen in nature.

According to the nomic necessity theory, natural laws are not merely descriptive, but tell us what can and cannot happen in the natural world. They allow us to make certain counterfactual judgments, such as "If the density of the universe were sufficiently high, it would have re-contracted long ago," which a purely descriptivist theory would not permit. Again, however, since natural laws are taken to be universal inductive generalizations, a violation of a natural law is no more possible on this theory than on the regularity theory. So long as natural laws are *universal* generalizations based on experience, they must take account of anything that happens and so would be revised should an event occur which the law does not encompass.

Of course, in practice proponents of such theories do not treat natural laws so rigidly. Rather, natural laws are assumed to have implicit in them certain *ceteris paribus* assumptions such that a law states what is the case under the assumption that no other natural factors are interfering. When a scientific anomaly occurs, it is usually assumed that some unknown natural factors are interfering, so that the law is neither violated nor revised. But suppose the law fails to describe or predict accurately because some *supernatural* factors are interfering? Clearly the implicit assumption of such laws is that no supernatural factors as well as no natural factors are interfering. If the law proves inaccurate in a particular case because God is acting, the law is neither violated nor revised. If God brings about some event which a law of nature fails to predict or describe, such an event cannot be characterized as a violation of a law of nature, since the law is valid only on the assumption that no supernatural factors in addition to the natural factors come into play.

On such theories, then, miracles ought to be defined as naturally impossible events, that is to say, events which cannot be produced by the natural causes operative at a certain time and place. Whether an event is a miracle is thus relative to a time and place. Given the natural causes operative at a certain time and place, for example, rain may be naturally inevitable or necessary, but on another occasion, rain may be naturally impossible. Of course, some events, say, the resurrection, may be absolutely miraculous in that they are at every time and place beyond the productive capacity of natural causes.

According to the causal dispositions theory, things in the world have different natures or essences, which include their causal dispositions to affect other things in certain ways, and natural laws are metaphysically necessary truths about what causal dispositions are possessed by various natural kinds of things. For example, "Salt has a disposition to dissolve in water" would state a natural law. If, due to God's action, some salt failed to dissolve in water, the natural law is not violated, because it is still true that salt has such a disposition. As a result of things' causal dispositions, certain deterministic natural propensities exist in nature, and when such a propensity is not impeded (by God or some other free agent), then we can speak of a natural necessity. On this theory, an event which is naturally necessary must and does actually occur, since the natural propensity will automatically issue forth in the event if it is not impeded. By the same token, a naturally impossible event cannot and does not actually occur. Hence, a miracle cannot be characterized on this theory as a naturally impossible event. Rather, a miracle is an event which results from causal interference with a natural propensity which is so strong that only a supernatural agent could impede it. The concept of miracle is essentially the same as under the previous two theories, but one just cannot call a miracle "naturally impossible" as those terms are defined in this theory; perhaps we could adopt instead the nomenclature "physically impossible" to characterize miracles under such a theory.

On none of these theories, then, should miracles be understood as violations of the laws of nature. Rather they are naturally (or physically) impossible events, events which at certain times and places cannot be produced by the relevant natural causes.

Now the question is, what could conceivably transform an event that is naturally impossible into a real historical event? Clearly, the answer is the personal God of theism. For if a transcendent, personal God exists, then He could cause events in the universe that could not be produced by causes within the universe. Given a God who created the universe, who conserves the world in being, and who is capable of acting freely, Christian theologians seem to be entirely justified in maintaining that miracles are possible. Indeed, if it is even

(epistemically) possible that such a transcendent, personal God exists, then it is equally possible that He has acted miraculously in the universe. Only to the extent that one has good grounds for believing atheism to be true could one be rationally justified in denying the possibility of miracles. In this light arguments for the impossibility of miracles based upon defining them as violations of the laws of nature become fatuous.

The more interesting question is whether the identification of any event as a miracle is possible. On the one hand, it might be argued that a convincing demonstration that a purportedly miraculous event has occurred would only succeed in forcing us to revise natural law so as to accommodate the event in question. But as Swinburne has argued, a natural law is not abolished because of one exception; the counter-instance must occur repeatedly whenever the conditions for it are present.^{47} If an event occurs which is, as Swinburne puts it, contrary to a law of nature and we have reasons to believe that this event would not occur again under similar circumstances, then the law in question will not be abandoned. One may regard an anomalous event as repeatable if another formulation of the natural law better accounts for the event in question, and if it is no more complex than the original law. If any doubt exists, the scientist may conduct experiments to determine which formulation of the law proves more successful in predicting future phenomena. In a similar way, one would have good reason to regard an event as a non-repeatable counter-instance to a law if the reformulated law were much more complicated than the original without yielding better new predictions or by predicting new phenomena unsuccessfully where the original formulation predicted successfully. If the original formulation remains successful in predicting all new phenomena as the data accumulate, while no reformulation does any better in predicting the phenomena and explaining the event in question, then the event should be regarded as a non-repeatable counter-instance to the law. Hence, a miraculous event would not serve to upset the natural law:

We have to some extent good evidence about what are the laws of nature, and some of them are so well-established and account for so many data that any modifications to them which suggest to account for the odd counter-instance would be so clumsy and *ad hoc* as to upset the whole structure of science. In such cases the evidence is strong that if the purported counter-instance occurred it was a violation of the laws of nature.^{48}

Swinburne unfortunately retains the violation concept of miracle, which would invalidate his argument; but if we conceive of a miracle as a naturally impossible event, he is on target in reasoning that the admission of such an event would not lead to the abandonment of a natural law.

On the other hand, it might be urged that if a purportedly miraculous event were demonstrated to have occurred, we should conclude that the event occurred in accordance with unknown natural causes and laws. The question is, what serves to distinguish a genuine miracle from a mere scientific anomaly? Here the religio-historical context of the event becomes crucial. A miracle without a context is inherently ambiguous. But if a purported miracle occurs in a significant religio-historical context, then the chances of its being a genuine miracle are increased. For example, if the miracles occur at a momentous time (say, a man's leprosy vanishing when Jesus speaks the words, "Be clean!") and do not recur regularly in history, and if the miracles are numerous and various, then the chances of their being the result of some unknown natural causes are reduced. In Jesus's case, moreover, his miracles and resurrection ostensibly took place in the context of and as the climax to his own unparalleled life and teachings and produced so profound an effect on his followers that they called him

Lord. The central miracle of the New Testament, the resurrection of Jesus, was, if it occurred, doubtlessly a miracle. In the first place, the resurrection so exceeds what we know of natural causes that it can only be reasonably attributed to a supernatural cause. The more we learn about cell necrosis, the more evident it becomes that such an event is naturally impossible. If it were the effect of unknown natural causes, then its uniqueness in the history of mankind becomes inexplicable. Secondly, the supernatural explanation is given immediately in the religio-historical context in which the event occurred. Jesus's resurrection was not merely an anomalous event, occurring without context; it came as the climax to Jesus's own life and teachings. As Wolfhart Pannenberg explains,

The resurrection of Jesus acquires such decisive meaning, not merely because someone or anyone has been raised from the dead, but because it is Jesus of Nazareth, whose execution was instigated by the Jews because he had blasphemed against God. Jesus' claim to authority, through which he put himself in God's place, was . . . blasphemous for Jewish ears. Because of this Jesus was then also slandered before the Roman Governor as a rebel. If Jesus really has been raised, this claim has been visibly and unambiguously confirmed by the God of Israel, who was allegedly blasphemed by Jesus.{49}

We should therefore have good reasons to regard Jesus's resurrection, if it occurred, as truly miraculous. Thus, while it may, indeed, be difficult to know in some cases whether a genuine miracle has occurred, that does not imply pessimism with respect to all cases.

But perhaps the very natural impossibility of a genuine miracle precludes our ever identifying an event as a miracle. As Hume notoriously argued, perhaps it is always more rational to believe that some mistake or deception is at play than to believe that a genuine miracle has occurred.{50} This conclusion is based on Hume's principle that it is always more probable that the testimony to a miracle is false than that the miracle occurred. But Hume's principle incorrectly assumes that miracles are highly improbable. With respect to the resurrection of Jesus, for example, the hypothesis "God raised Jesus from the dead" is not improbable, either relative to our background information or to the specific evidence. What is improbable relative to our background information is the hypothesis "Jesus rose naturally from the dead." Given what we know of cell necrosis, that hypothesis is fantastically, even unimaginably, improbable. Conspiracy theories, apparent death theories, hallucination theories, twin brother theories--almost any hypothesis, however unlikely, seems more probable than the hypothesis that all the cells in Jesus's corpse spontaneously came back to life again. But such naturalistic hypotheses are not more probable than the hypothesis that God raised Jesus from the dead. The evidence for the laws of nature relevant in this case makes it probable that a resurrection from the dead is naturally impossible, which renders improbable the hypothesis that Jesus rose naturally from the grave. But such evidence is simply irrelevant to the probability of the hypothesis that God raised Jesus from the dead. That hypothesis needs to be weighed in light of the specific evidence concerning such facts as the post-mortem appearances of Jesus, the vacancy of the tomb where Jesus's corpse was laid, the origin of the original disciples' firm belief that God had, in fact, raised Jesus, and so forth, in the religio-historical context in which the events took place and assessed in terms of the customary criteria used in justifying historical hypotheses, such as explanatory power, explanatory scope, plausibility, and so forth. When this is done, there is no reason *a priori* to expect that it will be more probable that the testimony is false than that the hypothesis of miracle is true.

Given the God of creation and providence described in classical theism, miracles are possible and, when occurring under certain conditions, plausibly identifiable.

Guide to Further Reading

Bilinskyji, Stephen S. "God, Nature, and the concept of Miracle." Ph.D. dissertation, University of Notre Dame, 1982.

Craig, William Lane and Smith, Quentin. *Theism, Atheism, and Big Bang Cosmology*. Oxford: Clarendon Press, 1993.

Freddoso, Alfred J. "The Necessity of Nature." *Midwest Studies in Philosophy* 11 (1986): 215-242.

Hebblethwaite, Brian and Henderson, Edward, eds. *Divine Action*. Edinburgh: T. & T. Clark, 1990.

Molina, Luis de. *On Divine Foreknowledge: Part IV of the "Concordia"*. Translated with an Introduction and Notes by Alfred J. Freddoso. Ithaca, N.Y.: Cornell University Press, 1988.

Morris, Thomas V., ed. *Divine and Human Action*. Ithaca, N.Y.: Cornell University Press, 1988. See especially articles by Quinn, Kvanvig and McCann, Flint, and Freddoso.

Quinn, Philip L. "Creation, Conservation, and the Big Bang." In *Philosophical Problems of the Internal and External Worlds*, pp. 589-612. Edited by John Earman, *et.al.* Pittsburgh: University of Pittsburgh Press, 1993.

Swinburne, Richard. *The Concept of Miracle*. New York: Macmillan, 1970.

_____, ed. *Miracles*. Philosophical Topics. New York: Macmillan Publishing Co., 1989.

Tomberlin, James E., ed. *Philosophical Perspectives*. Vol. 5: *Philosophy of Religion*. Atascadero, Calif.: Ridgeview Publishing, 1991. See especially articles by Flint, Kvanvig and McCann, and Freddoso.

EndNotes

{1} On Gen. 1.1 as an independent clause which is not a mere chapter title, see Claus Westermann, *Genesis 1-11*, trans. John Scullion (Minneapolis: Augsburg, 1984), p. 97; John Sailhammer, *Genesis*, Expositor's Bible Commentary 2, ed. Frank Gaebelein (Grand Rapids, Mich.: Zondervan, 1990), p. 21.

{2} See, *e.g.*, Prov. 8.27-9; cf. Ps. 104.5-9; also Is. 44.24; 45.18, 24; Ps. 33.9; 90.2; Jn. 1.1-3; Rom. 4.17; 11.36; I Cor. 8.6; Col. 1.16, 17; Heb. 1.2-3; 11.3; Rev. 4.11.

{3} *E.g.*, II Maccabees 7.28; 1QS 3.15; Joseph and Aseneth 12.1-3; II Enoch 25.1ff; 26.1; Odes of Solomon 16.18-19; II Baruch 21.4. For discussion, see Paul Copan, "Is *Creatio ex nihilo* a Post-biblical Invention?": an Examination of Gerhard May's Proposal," *Trinity Journal* 17 (1996): 77-93.

{4} *Creatio ex nihilo* is affirmed in the *Shepherd of Hermas* 1.6; 26.1 and the *Apostolic Constitutions* 8.12.6,8; and by Tatian *Oratio ad graecos* 5.3; cf. 4.1ff; 12.1; Theophilus *Ad Autolyicum* 1.4; 2.4, 10, 13; and Irenaeus *Adversus haeresis* 3.10.3. For discussion, see

Gerhard May, *Creatio ex nihilo: The Doctrine of "Creation out of Nothing" in Early Christian Thought*, trans. A. S. Worrall (Edinburgh: T. & T. Clark, 1994); cf. Copan's review article in note 3.

{5} See Richard Sorabji, *Time, Creation and the Continuum* (Ithaca, N.Y.: Cornell University Press, 1983), pp. 193-252; H. A. Wolfson, "Patristic Arguments against the Eternity of the World," *Harvard Theological Review* 59 (1966): 354-367; idem, *The Philosophy of the Kalam* (Cambridge, Mass.: Harvard University Press, 1976; H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987); Richard C. Dales, *Medieval Discussions of the Eternity of the World*, Studies in Intellectual History 18 (Leiden: E. J. Brill, 1990).

{6} Thomas Aquinas *Summa theologiae* 1a.2.3; Idem *Summa contra gentiles* 2.16; 32-38; cf. idem *Summa theologiae* 1a.45.1; 1a.4b.2. Though Aquinas discusses divine conservation, he does not differentiate it from creation (Idem *Summa contra gentiles* 3.65; *Summa theologiae* 1a.104.1).

{7} Philip L. Quinn, "Divine Conservation, Continuous Creation, and Human Action," in *The Existence and Nature of God*, ed. Alfred J. Freddoso (Notre Dame, Ind.: University of Notre Dame Press, 1983), pp. 55-79. See also idem, "Creation, Conservation, and the Big Bang," in *Philosophical Problems of the Internal and External Worlds*, ed. John Earman, Allen I. Janis, Gerald J. Massey, and Nicholas Rescher (Pittsburgh: University of Pittsburgh Press, 1993), pp. 589-612; idem, "Divine Conservation, Secondary Causes, and Occasionalism," in *Divine and Human Action*, ed. Thomas V. Morris (Ithaca, N.Y.: Cornell University Press, 1988), pp. 50-73.

{8} John Duns Scotus, *God and Creatures*, trans. E. Alluntis and A. Wolter (Princeton: Princeton University Press, 1975), p. 276.

{9} As noted by Alfred J. Freddoso, "Medieval Aristotelianism and the Case against Secondary Causation in Nature," in *Divine and Human Action*, p. 79. For the scholastics causation is a relation between substances (agents) who act upon other substances (patients) to bring about states of affairs (effects). *Creatio ex nihilo* is atypical because in that case no patient is acted upon.

{10} To analyze God's conservation of *e*, along Quinn's lines, as God's re-creation of *e* anew at each instant of *e*'s existence is to run the risk of falling into the radical occasionalism of certain medieval Islamic theologians, who, out of their desire to make God not only the creator of the world, but also its ground of being, denied that the constituent atoms of things endure from one instant to another but are rather created in new states of being by God at every successive instant. There are actually two forms of occasionalism threatening Quinn: (1) the occasionalism implied by a literal *creatio continuans* according to which similar, but numerically distinct, individuals are created at each successive instant, and (2) the occasionalism which affirms diachronic individual identity, but denies the reality of *transeunt* secondary causation.

{11} On A- versus B-Theories of time: see Richard Gale, "The Static versus the Dynamic Temporal: Introduction," in *The Philosophy of Time*, ed. Richard M. Gale (New Jersey: Humanities Press, 1968), pp. 65-85.

{12} Wolfhart Pannenberg, "Theological Questions to Scientists," in *The Sciences and Theology in the Twentieth Century*, ed. A. R. Peacocke, Oxford International Symposia (Stocksfield, England: Oriel Press, 1981), p. 12.

{13} According to Schleiermacher, the original expression of the relation of the world to God, that of absolute dependence, was divided by the Church into two propositions: that the world was created and that the world is sustained. But there is no reason, he asserts, to retain this distinction, since it is linked to the Mosaic account of creation, which is the product of a mythological age. The questions of whether it is possible or necessary to conceive of God as existing apart from created things is a matter of indifference, since it has no bearing on the feeling of absolute dependence on God (F. D. E. Schleiermacher, *The Christian Faith*, 2d ed., ed. H. R. MacIntosh and J. S. Stewart [Edinburgh: T. & T. Clark, 1928], 36.1, 2; 41; pp. 142-143, 155).

{14} Good examples of such timorousness include Langdon Gilkey, *Maker of Heaven and Earth* (Garden City, N.Y.: Doubleday, 1959), pp. 310-315; Ian Barbour, *Issues in Science and Religion* (New York: Harper & Row, 1966), p. 383-385; Arthur Peacocke, *Creation and the World of Science* (Oxford: Clarendon Press, 1979), pp. 78-79.

{15} Pannenberg, "Questions," p. 12; Ted Peters, "On Creating the Cosmos," in *Physics, Philosophy, and Theology: a Common Quest for Understanding*, ed. R. Russell, W. Stoeger, and G. Coyne (Vatican City: Vatican Observatory, 1988), p. 291; Robert J. Russell, "Finite Creation without a Beginning: the Doctrine of Creation in Relation to Big Bang and Quantum Cosmologies," in *Quantum Cosmology and the Laws of Nature*, ed. R. J. Russell, N. Murphy, and C. J. Isham (Vatican City: Vatican Observatory, 1993), pp. 303-310.

{16} John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1986), p. 442.

{17} See William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology* (Oxford: Clarendon Press, 1993) for discussion.

{18} In the case of quantum mechanics, for example, "the state vector in the Schrödinger equation is not a physical magnitude, for it is an imaginary function and such functions do not represent real physical magnitudes" (C. Liu, "The Arrow of Time in Quantum Gravity," *Philosophy of Science* 60 [1993]: 622). Liu contends that in the mature theory of quantum gravity a fundamental arrow of time will obtain.

{19} Hartle-Hawking's use of imaginary numbers for the time variable allows one to redescribe a universe with an initial cosmological singularity in such a way that that point appears as a non-singular point on a curved hyper-surface. Such a re-description suppresses and also literally spatializes time, which makes evident the purely instrumental character of the model. Such a model could be of great utility to science, but it would not, as Hawking boldly asserts (Stephen Hawking, *A Brief History of Time* [New York: Bantam Books, 1988], pp. 140-141), eliminate the need for a Creator.

{20} See the interesting lecture by C. Rovelli, "What Does Present Day's [sic] Physics Tell Us about Time and Space?" Lecture presented at the 1993-94 Annual Series of Lectures of the Center for Philosophy of Science of the University of Pittsburgh, September 17, 1993, p. 17, where he lists eight properties of time as characterized in natural language and compares the

concepts of time found in thermodynamics, STR, GTR, and so forth; time as it is defined in quantum gravity has *none* of the properties usually associated with time.

{21} M.-T. Liske, "Kann Gott reale Beziehungen zu den Geschöpfen haben?" *Theologie und Philosophie* 68 (1993): 224.

{22} The difficulty may be formulated as follows:

1. If God delays creating at t until t' , He has good reason to do so.
2. If God existed from eternity past until creating at t' , He delayed creating at t .
3. God can have no good reason to do so.
4. $\therefore$ God did not delay creating at t until t' .
5. $\therefore$ God has not existed from eternity past until creating at t' .

{23} Such a view would not preclude the existence of time during hiatuses within the series of events, such as are envisioned by Sidney Shoemaker, "Time Without Change," *The Journal of Philosophy* 66 (1969): 363-381.

{24} Thomas Aquinas *De potentia Dei* 3. 1, 2.

{25} Keith Ward, *Rational Theology and the Creativity of God* (Oxford: Basil Blackwell, 1982), p. 86.

{26} D. A. Carson, *Divine Sovereignty and Human Responsibility: Biblical Perspectives in Tension*, New Foundations Theological Library (Atlanta: John Knox, 1981), pp. 24-35.

{27} Carson, *Sovereignty and Responsibility*, pp. 18-22. One should mention also the striking passages which speak of God's repenting in reaction to a change in human behavior (*e.g.*, Gen. 6.6; 1 Sam. 15.11, 35).

{28} See Luis Molina, *On Divine Foreknowledge: Part IV of the "Concordia,"* trans. with Introduction and Notes by Alfred J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988); also William Lane Craig, *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, Studies in Intellectual History 7 (Leiden: E. J. Brill, 1988), chaps. 7, 8.

{29} Molina explains,

". . . all *good* things, whether produced by causes acting from a necessity of nature or by free causes, depend upon divine predetermination . . . and providence in such a way that each is *specifically intended* by God though His predetermination and providence, whereas the *evil* acts of the created will are subject as well to divine predetermination and providence to the extent that the causes from which they emanate and the general concurrence on God's part required to elicit them are granted through divine predetermination and providence--though not in order that *these particular acts* should emanate from them, but rather in order that *other, far different, acts* might come to be, and in order that the innate freedom of the things endowed with a will might be preserved for their maximum benefit; in addition evil acts are subject to that same divine predetermination and providence to the extent that they cannot exist in particular unless God by His providence *permits them in particular* in the service of some greater good. It clearly follows from the above that all things without exception are

individually subject to God's will and providence, which intend certain of them *as particulars* and permit the rest *as particulars*. Thus, the leaf hanging from the tree does not fall, nor does either of the two sparrows sold for a farthing fall to the ground, nor does anything else whatever happen without God's providence and will either *intending it as a particular* or *permitting it as a particular*" (Molina *On Divine Foreknowledge* 4. 53. 3. 17).

On the way in which sins contribute to the eventual realization of God's purposes, see the powerful statement in *On Divine Foreknowledge* 4. 53. 2. 15.

{30} Alvin Plantinga, "Reply to Robert Adams," in *Alvin Plantinga*, ed. James E. Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht: D. Reidel, 1985), pp. 371-82; Jonathan L. Kvanvig, *The Possibility of an All-Knowing God* (New York: St. Martin's, 1986), pp. 121-148; Alfred J. Freddoso, "Introduction," in *On Divine Foreknowledge*, pp. 68-78; Edward J. Wierenga, *The Nature of God: an Inquiry into Divine Attributes* (Ithaca, N. Y.: Cornell University Press, 1989), pp. 150-160; William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 (Leiden: E. J. Brill, 1990), pp. 247-269; Thomas Flint, "Hasker's God, Time, and Knowledge," *Philosophical Studies* 60 (1990): 103-115; William Lane Craig, "Hasker on Divine Knowledge," *Philosophical Studies* 67 (1992): 89-110.

{31} Hasker does attempt to re-defend his controversial premiss in William Hasker, "Middle Knowledge: a Refutation Revisited," *Faith and Philosophy* 12 (1995): 224-225; but his account fails to respond to any of the three objections advanced in Craig, "Hasker on Divine Knowledge," pp. 106-107, and in the end he himself concedes that "... the complexity of the argument ... leaves a number of points at which doubts can arise and toward which critics can direct their fire" (Hasker, "Refutation Revisited," p. 226), so that he chooses to adopt Adams's alternative formulation.

{32} Robert Merrihew Adams, "An Anti-Molinist Argument," in *Philosophical Perspectives*, vol. 5: *Philosophy of Religion*, ed. James E. Tomberlin (Atascadero, Calif.: Ridgeview Publishing, 1991), p. 356.

{33} Adams had argued, "My thisness, and singular propositions about me, cannot have pre-existed me because if they had, it would have been possible for them to have existed even if I had never existed, and that is not possible" (Robert Merrihew Adams, "Time and Thisness," *Midwest Studies in Philosophy* 11 (1986): 317). This argument is parallel to the interpretation under discussion, counterfactuals of creaturely freedom and divine middle knowledge taking the place of thisnesses and singular propositions. As Kvanvig discerns, this reasoning is susceptible to the same response as is the argument for fatalism (Jonathan L. Kvanvig, "Adams on Actualism and Presentism," *Philosophy and Phenomenological Research* 50 (1989): ***).

{34} Thomas P. Flint, "The Problem of Divine Freedom," *American Philosophical Quarterly* 20 (1983): 255-264.

{35} Adams, "Anti-Molinist Argument." p. 345.

{36} See further my *Divine Foreknowledge and Human Freedom* , pp. 259-262.

{37} Alvin Plantinga, "Reply to Robert Adams," p. 376.

{38} William Hasker, "Explanatory Priority: Transitive and Unequivocal, A Reply to William Craig, " *Philosophy and Phenomenological Research* 57 (1997): 3.

{39} Ibid.

{40} He writes, ". . . (12) expresses a . . . distinctively incompatibilist intuition, that the explanatory antecedents of the totality of my choosing and doing, must leave the omission of the free action 'open,' at least in the sense of not being strictly inconsistent with the omission" (Adams, "Anti-Molinist Argument," p. 352).

{41} Thomas P. Flint, "Middle Knowledge and the Doctrine of Infallibility," in *Philosophy of Religion*, pp. 385-390.

{42} Hasker, "Explanatory Priority," p. 1. The article referenced is Hasker, "Refutation Revisited," pp. 223-236.

{43} Hasker revises the first part of his argument in deference to Adams's version, but the second part he leaves unchanged and undefended--indeed, in footnote 17 on p. 235 he actually commends Adams's (12) as an alternative to his argument for those "who have qualms about some of the premises in my version of the argument."

{44} It is very often said by biblical scholars anxious not to be associated with a defunct evidential apologetic use of miracles that biblical miracles function as signs, not evidence. This, however, is a false dichotomy; it is precisely because of their evidential force that miracles serve effectively as signs (see William Lane Craig, review article of *Miracles and the Critical Mind*, by Colin Brown, *Journal of the Evangelical Theological Society* 27 [1985]: 473-483).

{45} Marie François Arrouet de Voltaire, *Dictionnaire philosophique* (Paris: Garnier, 1967) s.v. "Miracles".

{46} For discussion see Stephen S. Bilinskyji, "God, Nature, and the Concept of Miracle" (Ph.D. dissertation, University of Notre Dame, 1982); Alfred J. Freddoso, "The Necessity of Nature," *Midwest Studies in Philosophy* 11 (1986): 215-242.

{47} R. G. Swinburne, "Miracles," *Philosophical Quarterly* 18 (1968): 321.

{48} Ibid., p. 323.

{49} Wolfhart Pannenberg, *Jesus--God and Man*, trans. L. L. Wilkins and D. A. Priebe (London: SCM, 1968), p. 67.

{50} David Hume, *An Enquiry concerning Human Understanding*, ed. L. A. Selby-Bigge, 3d ed. rev. P. H. Niddich (Oxford: Clarendon Press, 1975), chap. 10.

The Ultimate Question of Origins: God and the Beginning of the Universe

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

The absolute origin of the universe, of all matter and energy, even of physical space and time themselves, in the Big Bang singularity contradicts the perennial naturalistic assumption that the universe has always existed. One after another, models designed to avert the initial cosmological singularity--the Steady State model, the Oscillating model, Vacuum Fluctuation models--have come and gone. Current quantum gravity models, such as the Hartle-Hawking model and the Vilenkin model, must appeal to the physically unintelligible and metaphysically dubious device of "imaginary time" to avoid the universe's beginning. The contingency implied by an absolute beginning *ex nihilo* points to a transcendent cause of the universe beyond space and time. Philosophical objections to a cause of the universe fail to carry conviction.

Source: *Astrophysics and Space Science* 269-270 (1999): 723-740

The Fundamental Question

From time immemorial men have turned their gaze toward the heavens and *wondered*. Both cosmology and philosophy trace their roots to the wonder felt by the ancient Greeks as they contemplated the cosmos. According to Aristotle,

it is owing to their wonder that men both now begin and at first began to philosophize; they wondered originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters, e.g. about the phenomena of the moon and those of the sun and the stars, and about the origin of the universe.{1}

The question of why the universe exists remains the ultimate mystery. Derek Parfit, a contemporary philosopher, declares that "No question is more sublime than why there is a Universe: why there is anything rather than nothing." {2}

This question led the great German mathematician and philosopher Gottfried Wilhelm Leibniz to posit the existence of a metaphysically necessary being which carries within itself the sufficient reason for its own existence and which constitutes the sufficient reason for the existence of everything else in the world.^{3} Leibniz identified this being as God. Leibniz's critics, on the other hand, claimed that the space-time universe may itself be the necessary being demanded by Leibniz's argument. Thus, the Scottish sceptic David Hume queried, "Why may not the material universe be the necessarily existent Being . . . ?" Indeed, "How can anything, that exists from eternity, have a cause, since that relation implies a priority in time and a beginning of existence?"^{4} There is no warrant for going beyond the universe to posit a supernatural ground of its existence. As Bertrand Russell put it so succinctly in his BBC radio debate with Frederick Copleston, "The universe is just there, and that's all."^{5}

The Origin of the Universe

This stand-off persisted unaltered until 1917, the year in which Albert Einstein made a cosmological application of his newly discovered General Theory of Relativity.^{6} To his chagrin, he found that GTR would not permit a static model of the universe unless he introduced into his gravitational field equations a certain "fudge factor" Λ in order to counterbalance the gravitational effect of matter. Einstein's universe was balanced on a razor's edge, however, and the least perturbation would cause the universe either to implode or to expand. By taking this feature of Einstein's model seriously, Alexander Friedman and Georges Lemaitre were able to formulate independently in the 1920s solutions to the field equations which predicted an expanding universe.^{7}

The monumental significance of the Friedman-Lemaitre model lay in its historization of the universe. As one commentator has remarked, up to this time the idea of the expansion of the universe "was absolutely beyond comprehension. Throughout all of human history the universe was regarded as fixed and immutable and the idea that it might actually be changing was inconceivable."^{8} But if the Friedman-Lemaitre model were correct, the universe could no longer be adequately treated as a static entity existing, in effect, timelessly. Rather the universe has a history, and time will not be matter of indifference for our investigation of the cosmos. In 1929 Edwin Hubble's measurements of the red-shift in the optical spectra of light from distant galaxies,^{9} which was taken to indicate a universal recessional motion of the light sources in the line of sight, provided a dramatic verification of the Friedman-Lemaitre model. Incredibly, what Hubble had discovered was the isotropic expansion of the universe predicted by Friedman and Lemaitre. It marked a veritable turning point in the history of science. "Of all the great predictions that science has ever made over the centuries," exclaims John Wheeler, "was there ever one greater than this, to predict, and predict correctly, and predict against all expectation a phenomenon so fantastic as the expansion of the universe?"^{10}

The Standard Big Bang Model

As a GTR-based theory, the Friedman-Lemaitre model does not describe the expansion of the material content of the universe into a pre-existing, empty, Newtonian space, but rather the expansion of space itself. This has the astonishing implication that as one reverses the expansion and extrapolates back in time, space-time curvature becomes progressively greater until one finally arrives at a singular state at which space-time curvature becomes infinite. This state therefore constitutes an edge or boundary to space-time itself. P. C. W. Davies comments,

An initial cosmological singularity . . . forms a past temporal extremity to the universe. We cannot continue physical reasoning, or even the concept of spacetime, through such an extremity. . . . On this view the big bang represents the creation event; the creation not only of all the matter and energy in the universe, but also of spacetime itself.{11}

The popular expression "Big Bang," originally a derisive term coined by Fred Hoyle to characterize the beginning of the universe predicted by the Friedman-Lemaitre model, is thus potentially misleading, since the expansion cannot be visualized from the outside (there being no "outside," just as there is no "before" with respect to the Big Bang).{12}

The standard Big Bang model thus describes a universe which is not eternal in the past, but which came into being a finite time ago. Moreover,--and this deserves underscoring--the origin it posits is an absolute origin *ex nihilo*. For not only all matter and energy, but space and time themselves come into being at the initial cosmological singularity. As Barrow and Tipler emphasize, "At this singularity, space and time came into existence; literally nothing existed before the singularity, so, if the Universe originated at such a singularity, we would truly have a creation *ex nihilo*." {13} Thus, we may graphically represent space-time as a cone (Fig. 1).

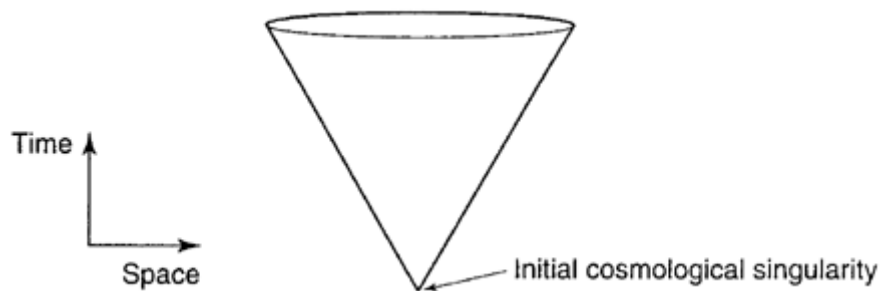


Fig. 1: Conical Representation of Standard Model Space-Time. Space and time begin at the initial cosmological singularity, before which literally nothing exists.

On such a model the universe originates *ex nihilo* in the sense that at the initial singularity it is true that *There is no earlier space-time point* or it is false that *Something existed prior to the singularity*.

Now such a conclusion is profoundly disturbing for anyone who ponders it. For the question cannot be suppressed: *Why does the universe exist rather than nothing?* In light of the universe's origin *ex nihilo*, one can no longer dismiss this question with a shrug and a slogan, "The universe is just there and that's all." For the universe is not "just there;" rather it *came into being*. The beginning of the universe discloses that the universe is not, as Hume thought, a necessarily existing being but is contingent in its existence. Philosophers analyzing the concept of necessary existence agree that the essential properties of any necessarily existing entity include its being eternal, uncaused, incorruptible, and indestructible {14}--for otherwise it would be capable of non-existence, which is self-contradictory. Thus, if the universe began to exist, it lacks at least one of the essential properties of necessary existence-eternality. Therefore, the reason for its existence cannot be immanent, but must in some mysterious way be ultra-mundane, or transcendent. Otherwise, one must say that the universe simply sprang into being uncaused out of absolutely nothing, which seems absurd. Sir Arthur Eddington, contemplating the beginning of the universe, opined that the expansion of the universe was so

preposterous and incredible that "I feel almost an indignation that anyone should believe in it-except myself." {15} He finally felt forced to conclude, "The beginning seems to present insuperable difficulties unless we agree to look on it as frankly supernatural." {16}

I find that most scientists do not reflect philosophically upon the metaphysical implications of their theories. But, in the words of one astrophysical team, "The problem of the origin [of the universe] involves a certain metaphysical aspect which may be either appealing or revolting." {17}

The Steady State Model

Revolted by the stark metaphysical alternatives presented us by an absolute beginning of the universe, certain theorists have been understandably eager to subvert the Standard Model and restore an eternal universe. Sir Fred Hoyle, for example, could countenance neither an uncaused nor a supernaturally caused origin of the universe. With respect to the first alternative, he wrote, "This most peculiar situation is taken by many astronomers to represent *the origin of the universe*. The universe is supposed to have begun at this particular time. From where? The usual answer, surely an unsatisfactory one, is: from nothing!" {18} Equally unsatisfactory in Hoyle's mind was the postulation of a supernatural cause. Noting that some accept happily the universe's absolute beginning, Hoyle complained,

To many people this thought process seems highly satisfactory because a 'something' outside physics can then be introduced at $\tau = 0$. By a semantic manoeuvre, the word 'something' is then replaced by 'god,' except that the first letter becomes a capital, God, in order to warn us that we must not carry the enquiry any further. {19}

To Hoyle's credit, he did carry the inquiry further by helping to formulate in 1948 the first competitor to the Standard Model, namely, the Steady State Model of the universe. {20} According to this theory, the universe is in a state of isotropic cosmic expansion, but as the galaxies recede, new matter is drawn into being *ex nihilo* in the interstices of space created by the galactic recession (Fig. 2).

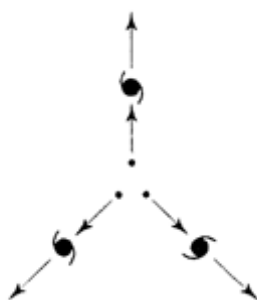


Fig. 2: Steady State Model. As the galaxies mutually recede, new matter comes into existence to replace them. The universe thus constantly renews itself and so never began to exist.

If one extrapolates the expansion of the universe back in time, the density of the universe never increases because the matter and energy simply vanish as the galaxies mutually approach!

The Steady State theory never secured a single piece of experimental verification; its appeal was purely metaphysical.{21} The discovery of progressively more radio galaxies at ever greater distances undermined the theory by showing that the universe had an evolutionary history. But the decisive refutation of the Steady State Model came with two discoveries which constituted, in addition to the galactic red-shift, the most significant evidence for the Big Bang theory: the cosmogonic nucleosynthesis of the light elements and the microwave background radiation. As a result, in the words of Ivan King, "The steady-state theory has now been laid to rest, as a result of clear-cut observations of how things have changed with time." {22}

Oscillating Models

The Standard Model was based on the assumptions of homogeneity and isotropy. Some cosmologists speculated that by denying homogeneity and isotropy, one might be able to craft an Oscillating Model of the universe.{23} If the internal gravitational pull of the mass of the universe were able to overcome the force of its expansion, then the expansion could be reversed into a cosmic contraction, a Big Crunch. If the universe were not homogeneous and isotropic, then the collapsing universe might not coalesce at a point, but the material contents of the universe might pass each other by, so that the universe would appear to bounce back from the contraction into a new expansion phase. If this process of expansion and contraction could be repeated indefinitely, then an absolute beginning of the universe might be avoided (Fig. 3).

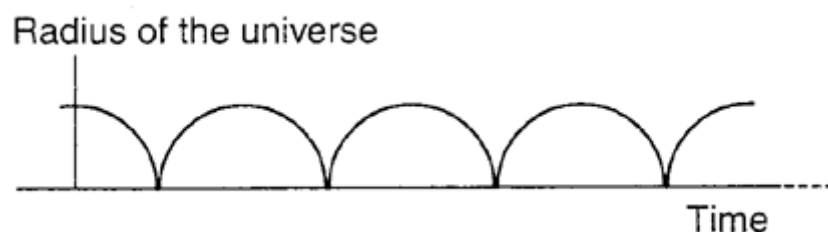


Fig. 3: Oscillating Model. Each expansion phase is preceded and succeeded by a contraction phase, so that the universe in concertina-like fashion exists beginninglessly and endlessly.

Such a theory is extraordinarily speculative, but again there were metaphysical motivations for adopting this model.{24} The prospects of the Oscillating Model were severely dimmed in 1970, however, by Penrose and Hawking's formulation of the Singularity Theorems which bear their names.{25} The theorems disclosed that under very generalized conditions an initial cosmological singularity is inevitable, even for inhomogeneous and non-isotropic universes. Reflecting on the impact of this discovery, Hawking notes that the Hawking-Penrose Singularity Theorems "led to the abandonment of attempts (mainly by the Russians) to argue that there was a previous contracting phase and a non-singular bounce into expansion. Instead almost everyone now believes that the universe, and time itself, had a beginning at the big bang." {26}

Despite the fact that the termini of a closed universe must be singularities and that no space-time trajectory can be extended through a singularity, the Oscillating Model exhibited a stubborn persistence. Three further strikes were lodged against it. First, there are no known physics which would cause a collapsing universe to bounce back to a new expansion. Second, the observational evidence indicates that the mean mass density of the universe is insufficient

to generate enough gravitational attraction to halt and reverse the expansion.^{27} Third, since entropy is conserved from cycle to cycle in such a model, which has the effect of generating larger and longer oscillations with each successive cycle, the thermodynamic properties of an Oscillating Model imply the very beginning its proponents sought to avoid (Fig. 4).^{28}

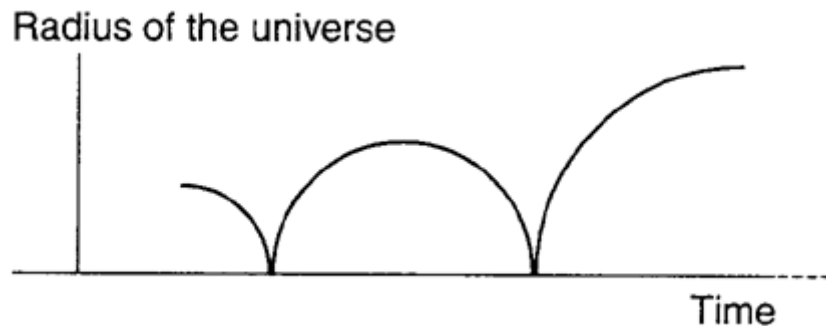


Fig. 4: Oscillating Model with Entropy Increase. Due to the conservation of entropy each successive oscillation has a larger radius and longer expansion time.

Although these difficulties were well-known, proponents of the Oscillating Model tenaciously clung to it until a new alternative to the Standard Model emerged during the 1970s.^{29} The theory drew its life from its avoidance of an absolute beginning of the universe; but once other models became available claiming to offer the same benefit, the Oscillating Model sank under the weight of its own deficiencies.

Vacuum Fluctuation Models

Cosmologists realized that a physical description of the universe prior to the Planck time would require the introduction of quantum physics in addition to GTR. In 1973 Edward Tryon speculated whether the universe might not be a long-lived virtual particle, whose total energy is zero, born out of the primordial vacuum.^{30} This seemingly bizarre speculation gave rise to a new generation of cosmogonic theories which we may call Vacuum Fluctuation Models. In such models, it is hypothesized that prior to some inflationary era the Universe-as-a-whole is a primordial vacuum which exists, not in a state of expansion, but eternally in a steady state. Throughout this vacuum sub-atomic energy fluctuations constantly occur, by means of which matter is created and mini-universes are born (Fig. 5).

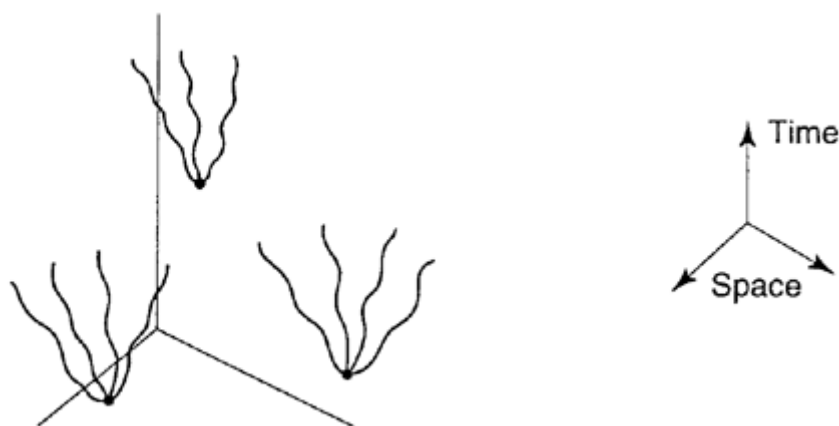


Fig. 5: Vacuum Fluctuation Models. Within the vacuum of the wider Universe, fluctuations occur which grow into mini-universes. Ours is but one of these, and its relative beginning does not imply a beginning for the Universe-as-a-whole.

Our expanding universe is but one of an indefinite number of mini-universes conceived within the womb of the greater Universe-as-a-whole. Thus, the beginning of our universe does not represent an absolute beginning, but merely a change in the eternal, uncaused Universe-as-a-whole.

Vacuum Fluctuation Models did not outlive the decade of the 1980s. Not only were there theoretical problems with the production mechanisms of matter, but these models faced a deep internal incoherence.[{31}](#) According to such models, it is impossible to specify precisely when and where a fluctuation will occur in the primordial vacuum which will then grow into a universe. Within any finite interval of time there is a positive probability of such a fluctuation occurring at any point in space. Thus, given infinite past time, universes will eventually be spawned at *every* point in the primordial vacuum, and, as they expand, they will begin to collide and coalesce with one another. Thus, given infinite past time, we should by now be observing an infinitely old universe, not a relatively young one. About the only way to avert the problem would be to postulate an expansion of the primordial vacuum itself; but then we are right back to the absolute origin implied by the Standard Model. According to Isham this problem proved to be "fairly lethal" to Vacuum Fluctuation Models; hence, these models were "jettisoned twenty years ago" and "nothing much" has been done with them since.[{32}](#)

Chaotic Inflationary Model

Inflation also forms the context for the next alternative to arise: the Chaotic Inflationary Model. One of the most fertile of the inflation theorists has been the Russian cosmologist Andrei Linde.[{33}](#) In Linde's model inflation *never* ends: each inflating domain of the universe when it reaches a certain volume gives rise via inflation to another domain, and so on, *ad infinitum* (Fig. 6).



Fig. 6: Chaotic Inflationary Model. The wider universe produces via inflation separate domains which continue to recede from one another. Since these "bubbles" do not interact, they cannot collide and coalesce as the mini-universes postulated by Vacuum Fluctuation Models could.

Linde's model thus has an infinite future. But Linde is troubled at the prospect of an absolute beginning. He writes, "The most difficult aspect of this problem is not the existence of the

singularity itself, but the question of what was *before* the singularity This problem lies somewhere at the boundary between physics and metaphysics." {34} Linde therefore proposes that chaotic inflation is not only endless, but beginningless. Every domain in the universe is the product of inflation in another domain, so that the singularity is averted and with it as well the question of what came before (or, more accurately, what caused it).

In 1994, however, Arvind Borde and Alexander Vilenkin showed that a universe eternally inflating toward the future cannot be geodesically complete in the past, so that there must have existed at some point in the indefinite past an initial singularity. They write,

A model in which the inflationary phase has no end . . . naturally leads to this question: Can this model also be extended to the infinite past, avoiding in this way the problem of the initial singularity?

. . . this is in fact not possible in future-eternal inflationary spacetimes as long as they obey some reasonable physical conditions: such models must necessarily possess initial singularities.

. . . the fact that inflationary spacetimes are past incomplete forces one to address the question of what, if anything, came before. {35}

In response, Linde reluctantly concurs with the conclusion of Borde and Vilenkin: there must have been a Big Bang singularity at some point in the past. {36}

Quantum Gravity Models

At the close of their analysis of Linde's Chaotic Inflationary Model, Borde and Vilenkin say with respect to Linde's metaphysical question, "The most promising way to deal with this problem is probably to treat the Universe quantum mechanically and describe it by a wave function rather than by a classical spacetime." {37} They thereby allude to the last class of models attempting to avoid the initial cosmological singularity which we shall consider, namely, Quantum Gravity Models. Vilenkin and, more famously, James Hartle and Stephen Hawking have proposed models of the universe which Vilenkin candidly calls exercises in "metaphysical cosmology." {38} In his best-selling popularization of his theory, Hawking even reveals an explicitly theological orientation. He concedes that on the Standard Model one could legitimately identify the Big Bang singularity as the instant at which God created the universe. {39} Indeed, he thinks that a number of attempts to avoid the Big Bang were probably motivated by the feeling that a beginning of time "smacks of divine intervention." {40} He sees his own model as preferable to the Standard Model because there would be no edge of space-time at which one "would have to appeal to God or some new law." {41}

Both the Hartle-Hawking and the Vilenkin models eliminate the initial singularity by transforming the conical hyper-surface of classical space-time into a smooth, curved hyper-surface having no edge (Fig. 7).

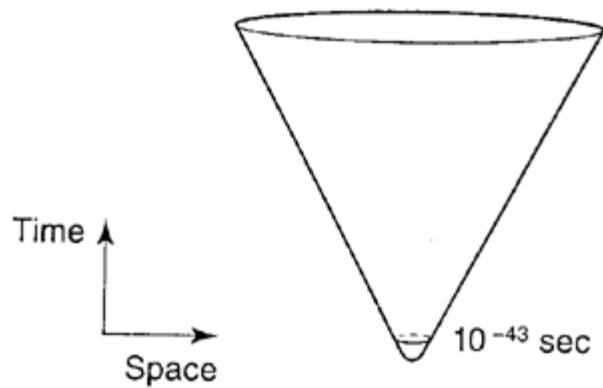


Fig. 7: Quantum Gravity Model. In the Hartle-Hawking version, space-time is "rounded off" prior to the Planck time, so that although the past is finite, there is no edge or beginning point.

This is accomplished by the introduction of imaginary numbers for the time variable in Einstein's gravitational equations, which effectively eliminates the singularity. Hawking sees profound theological implications in the model:

The idea that space and time may form a closed surface without boundary . . . has profound implications for the role of God in the affairs of the universe So long as the universe had a beginning, we could suppose it had a creator. But if the universe is really completely self-contained, having no boundary or edge, it would have neither beginning nor end. What place, then, for a creator?[\[42\]](#)

Hawking does not deny the existence of God, but he does think his model eliminates the need for a Creator.

The key to assessing this theological claim is the physical interpretation of Quantum Gravity Models. By positing a finite (imaginary) time on a closed surface prior the Planck time rather than an infinite time on an open surface, such models actually seem to support, rather than undercut, the idea that time had a beginning. Such theories, if successful, enable us to model the origin of the universe without an initial singularity involving infinite density, temperature, pressure, and so on. As Barrow points out, "This type of quantum universe has not always existed; it comes into being just as the classical cosmologies could, but it does not start at a Big Bang where physical quantities are infinite" [\[43\]](#) Barrow points out that such models are "often described as giving a picture of 'creation out of nothing,'" the only caveat being that in this case "there is no definite . . . point of creation." [\[44\]](#) Hartle-Hawking themselves construe their model as giving "the amplitude for the Universe to appear from nothing," and Hawking has asserted that according to the model the universe "would quite literally be created out of nothing: not just out of the vacuum, but out of absolutely nothing at all, because there is nothing outside the universe." [\[45\]](#) Taken at face value, these statements entail the beginning of the universe. Hawking's claim quoted above concerning the theological implications of his model must therefore be understood to mean that on such models there are no beginning or ending *points*, and, hence, no need for a Creator. But having a beginning does not entail having a beginning point. Even in the Standard Model, theorists sometimes "cut out" the initial singular point without thinking that therefore space-time no longer begins to exist and that the problem of the origin of the universe is thereby resolved. Time begins to exist just in case for any finite temporal interval, there are only a finite number of equal temporal intervals earlier than it. That condition is fulfilled for Quantum Gravity Models as

well as for the Standard Model. Nor should we think that by giving the amplitude for the universe to appear from nothing quantum cosmologists have eliminated the need for a Creator, for that probability is conditional upon several choices which only the Creator could make (such as selecting the wave function of the universe) and is dubiously applied to absolute nothingness.{46}

Perhaps it will be said that such an interpretation of Quantum Gravity Models fails to take seriously the notion of "imaginary time." Introducing imaginary numbers for the time variable in Einstein's equation has the peculiar effect of making the time dimension indistinguishable from space. But in that case, the imaginary time regime prior to the Planck time is not a space-time at all, but a Euclidean four-dimensional space. Construed realistically, such a four-space would be evacuated of all temporal becoming and would simply exist timelessly. Thus, Hawking describes it as "completely self-contained and not affected by anything outside itself. It would be neither created nor destroyed. It would just BE." {47}

The question which arises for this construal of the model is whether such an interpretation is meant to be taken realistically or instrumentally. On this score, there can be little doubt that the use of imaginary quantities for time is a mere mathematical device without ontological significance. Barrow observes, "physicists have often carried out this 'change time into space' procedure as a useful trick for doing certain problems in ordinary quantum mechanics, although they did not imagine that time was *really* like space. At the end of the calculation, they just swop [*sic*] back into the usual interpretation of there being one dimension of time and three . . . dimensions of . . . space." {48} In his model, Hawking simply declines to re-convert to real numbers. If we do, then the singularity re-appears. Hawking admits, "Only if we could picture the universe in terms of imaginary time would there be no singularities When one goes back to the real time in which we live, however, there will still appear to be singularities." {49} Hawking's model is thus a way of re-describing a universe with a singular beginning point in such a way that that singularity is transformed away; but such a re-description is not realist in character.

Hawking has recently stated explicitly that he interprets the Hartle-Hawking model non-realistically. He confesses, "I'm a positivist . . . I don't demand that a theory correspond to reality because I don't know what it is." {50} Still more extreme, "I take the positivist viewpoint that a physical theory is just a mathematical model and that it is meaningless to ask whether it corresponds to reality." {51} In assessing the worth of a theory, "All I'm concerned with is that the theory should predict the results of measurements." {52} The clearest example of Hawking's instrumentalism is his analysis of particle pair creation in terms of an electron quantum tunneling in Euclidean space (with time being imaginary) and an electron/positron pair accelerating away from each other in Minkowski space-time. {53} This analysis is directly analogous to the Hartle-Hawking cosmological model; and yet no one would construe particle pair creation as literally the result of an electron's transitioning out of a timelessly existing four-space into our classical space-time. It is just an alternative description employing imaginary numbers rather than real numbers.

Significantly, the use of imaginary quantities for time is an inherent feature of *all* Quantum Gravity Models. {54} This precludes their being construed realistically as accounts of the origin of the space-time universe in a timelessly existing four-space. Rather they are ways of modeling the real beginning of the universe *ex nihilo* in such a way as to not involve a singularity. What brought the universe into being remains unexplained on such accounts.

Summary

With each successive failure of alternative cosmogonic theories, the Standard Model has been corroborated. It can be confidently said that no cosmogonic model has been as repeatedly verified in its predictions and as corroborated by attempts at its falsification, or as concordant with empirical discoveries and as philosophically coherent, as the Standard Big Bang Model. This does not prove that it is correct, but it does show that it is the best explanation of the evidence which we have and therefore merits our provisional acceptance.

Beyond the Big Bang

The discovery that the universe is not eternal in the past but had a beginning has profound metaphysical implications. For it implies that the universe is not necessary in its existence but rather has its ground in a transcendent, metaphysically necessary being. The only way of avoiding this conclusion would be to deny Leibniz's conviction that anything that exists must have a reason for its existence, either in the necessity of its own nature or else in an external ground. Reflecting upon the current situation, P. C. W. Davies muses,

'What caused the big bang?' . . . One might consider some supernatural force, some agency beyond space and time as being responsible for the big bang, or one might prefer to regard the big bang as an event without a cause. It seems to me that we don't have too much choice. Either . . . something outside of the physical world . . . or . . . an event without a cause.{55}

The problem with saying that the Big Bang is an event without a cause is that it entails that the universe came into being uncaused out of nothing, which seems metaphysically absurd. Philosopher of science Bernulf Kanitscheider remonstrates, "If taken seriously, the initial singularity is in head-on collision with the most successful ontological commitment that was a guiding line of research since Epicurus and Lucretius," namely, *out of nothing nothing comes*, which Kanitscheider calls "a metaphysical hypothesis which has proved so fruitful in every corner of science that we are surely well-advised to try as hard as we can to eschew processes of absolute origin." {56} But if the universe began to exist, we are therefore driven to the second alternative: a supernatural agency beyond space and time.

The Supernaturalist Alternative

If we go the route of postulating some causal agency beyond space and time as being responsible for the origin of the universe, then conceptual analysis enables us to recover a number of striking properties which must be possessed by such an ultra-mundane being. For as the cause of space and time, this entity must transcend space and time and therefore exist atemporally and non-spatially, at least sans the universe. This transcendent cause must therefore be changeless and immaterial, since timelessness entails changelessness, and changelessness implies immateriality. Such a cause must be beginningless and uncaused, at least in the sense of lacking any antecedent causal conditions. Ockham's Razor will shave away further causes, since we should not multiply causes beyond necessity. This entity must be unimaginably powerful, since it created the universe without any material cause.

Finally, and most remarkably, such a transcendent cause is plausibly to be taken to be personal. As Oxford philosopher Richard Swinburne points out, there are two types of causal explanation: scientific explanations in terms of laws and initial conditions and personal explanations in terms of agents and their volitions.{57} A first state of the universe *cannot*

have a scientific explanation, since there is nothing before it, and therefore it can be accounted for only in terms of a personal explanation. Moreover, the personhood of the cause of the universe is implied by its timelessness and immateriality, since the only entities we know of which can possess such properties are either minds or abstract objects, and abstract objects do not stand in causal relations. Therefore, the transcendent cause of the origin of the universe must be of the order of mind. This same conclusion is also implied by the fact that we have in this case the origin of a temporal effect from a timeless cause. If the cause of the origin of the universe were an impersonal set of necessary and sufficient conditions, it would be impossible for the cause to exist without its effect. For if the necessary and sufficient conditions of the effect are timelessly given, then their effect must be given as well. The only way for the cause to be timeless and changeless but for its effect to originate *de novo* a finite time ago is for the cause to be a personal agent who freely chooses to bring about an effect without antecedent determining conditions. Thus, we are brought, not merely to a transcendent cause of the universe, but to its personal creator.

Naturalistic Objections

Many persons will, of course, be reluctant to take on board such metaphysical baggage. But what objection is there to the postulate of a personal, causal agency beyond the universe? Some critiques may be easily dismissed. For example, metaphysician John Post obviously begs the question when he claims that there cannot be a cause of the origin of the universe, since "by definition the universe contains everything there is or ever was or will be." {58} Again it is an obvious *non-sequitur* when he infers that because "the singularity cannot be caused by some earlier *natural* event or process," therefore "contemporary physical cosmology cannot be cited in support of the idea of a *divine* cause or creator of the universe." {59}

On the other hand, Smith realizes that the metaphysician must take seriously the "more difficult question" of "whether or not the singularity or the Big Bang probably is an effect of a supernatural cause." {60} What problem, then, is there with a supernaturalist perspective? Adolf Grünbaum has argued vigorously against what he styles "the New Creation Argument" for a supernatural cause of the origin of the universe. {61} His basic *Ansatz* is based on the assumption that causal priority implies temporal priority. Since there were no instants of time prior to the Big Bang, it follows that the Big Bang cannot have a cause. {62}

It seems to me that there are a number of options for dealing with this objection, one of which is to hold that the Creator of the universe is causally, but not temporally, prior to the Big Bang singularity, such that His act of causing the universe to begin to exist is simultaneous, or co-incident, with its beginning to exist. Grünbaum provides no justification for his assumption that causal priority implies temporal priority. Discussions of causal directionality deal routinely with cases in which cause and effect are simultaneous. One could hold that the Creator *sans* the universe exists changelessly and, hence, timelessly and at the Big Bang singularity created the universe along with time and space. For the Creator *sans* the universe, there simply is no time because there are no events of any sort; time begins with the first event, at the moment of creation.

The time of the first event would be not only the first time at which the universe exists, but also, technically, the first time at which the Creator exists, since *sans* the universe the Creator is timeless. {63} The act of creation is thus simultaneous with the origination of the universe.

The scenario I have sketched of the Creator's status sans the universe requires that the Creator be both a timeless and personal agent. But some philosophers have argued that such a notion is self-contradictory.{64} For it is a necessary condition of personhood that an individual be capable of remembering, anticipating, reflecting, deliberating, deciding, and so forth. But these are inherently temporal activities. Therefore, there can be no atemporal persons.

The weakness in this reasoning is that it conflates *common* properties of persons with *essential* properties of persons. The sorts of activities delineated above are certainly common properties of temporal persons. But that does not imply that such properties are essential to personhood. Arguably, what is necessary and sufficient for personhood is self-consciousness and free volition, and these are not inherently temporal notions. In his study of divine timelessness, John Yates writes,

The classical theist may immediately grant that concepts such as reflection, memory, and anticipation could not apply to a timeless being (nor to any omniscient being), but this is not to admit that the key concepts of consciousness and knowledge are inapplicable to such a deity . . . there does not seem to be any essential temporal element in words like . . . 'understand,' to 'be aware,' to 'know,' and so on . . . an atemporal deity could possess maximal understanding, awareness, and knowledge in a single, all-embracing vision of himself and the sum of reality.{65}

Similarly, the Creator could possess a free, changeless intention of the will to create a universe with a temporal beginning. Thus, it seems that neither self-consciousness nor free volition entail temporality. But since these are plausibly sufficient for personhood, there is no incoherence in the notion of a timeless, personal Creator of the universe.

All of the above objections have been offered as attempted justification of the apparently incredible position that the universe sprang into being uncaused out of nothing. But I, for one, find the premisses of those objections far less perspicuous than the proposition that *whatever begins to exist has a cause*. It is far more plausible to deny one of those premisses than to affirm what Hume called the "absurd Proposition" that something might arise without a cause,{66} that the universe, in this case, should pop into existence uncaused out of nothing.

Conclusion

We can summarize our argument as follows:

1. Whatever exists has a reason for its existence, either in the necessity of its own nature or in an external ground.
2. Whatever begins to exist is not necessary in its existence.
3. If the universe has an external ground of its existence, then there exists a Personal Creator of the universe, who, sans the universe, is timeless, spaceless, beginningless, changeless, necessary, uncaused, and enormously powerful.
4. The universe began to exist.

From (2) and (4) it follows that

5. Therefore, the universe is not necessary in its existence.

From (1) and (5) it follows further that

6. Therefore, the universe has an external ground of its existence.

From (3) and (6) it we can conclude that

7. Therefore, there exists a Personal Creator of the universe, who, sans the universe, is timeless, spaceless, beginningless, changeless, necessary, uncaused, and enormously powerful.

And this, as Thomas Aquinas laconically remarked,{67} is what everybody means by God.

Endnotes

{1} *Metaphysics* A. 2. 982^b10-15.

{2} Derek Parfit, "Why Anything? Why This?" *London Review of Books* 20/2 (January 22, 1998), p.24.

{3} Gottfried Wilhelm Leibniz, "The Principles of Nature and of Grace, Founded on Reason," in *The Monadology and Other Philosophical Writings*, trans. Robert Latta (London: Oxford University Press, 1951), p. 415; idem, "The Monadology," in *Monadology and Other Philosophical Writings*, pp. 237-39.

{4} David Hume, *Dialogues concerning Natural Religion*, ed. with an Introduction by Norman Kemp Smith, Library of Liberal Arts (Indianapolis: Bobbs-Merrill, 1947), pt. IX, p. 190.

{5} Bertrand Russell and F. C. Copleston, "The Existence of God," in *The Existence of God*, ed. with an Introduction by John Hick, Problems of Philosophy Series (New York: Macmillan, 1964), p. 175.

{6} A. Einstein, "Cosmological Considerations on the General Theory of Relativity," in *The Principle of relativity*, by A. Einstein, *et. al.*, with Notes by A. Sommerfeld, trans. W. Perrett and J. B. Jefferey (rep. ed.: New York: Dover Publications, 1952), pp. 177-88.

{7} A. Friedman, "Über die Krümmung des Raumes," *Zeitschrift für Physik* 10 (1922): 377-86; G. Lemaitre, "Un univers homogène de masse constante et de rayon croissant, rendant compte de la vitesse radiale des nébuleuses extragalactiques," *Annales de la Société scientifique de Bruxelles* 47 (1927): 49-59.

{8} Gregory L. Naber, *Spacetime and Singularities: an Introduction* (Cambridge: Cambridge University Press, 1988), pp. 126-27.

{9} E. Hubble, "A Relation between Distance and Radial Velocity among Extra-galactic Nebulae," *Proceedings of the National Academy of Sciences* 15 (1929): 168-73.

{10} John A. Wheeler, "Beyond the Hole," in *Some Strangeness in the Proportion*, ed. Harry Woolf (Reading, Mass.: Addison-Wesley, 1980), p. 354.

{11} P. C. W. Davies, "Spacetime Singularities in Cosmology," in *The Study of Time III*, ed. J. T. Fraser (Berlin: Springer Verlag).

{12}As Gott, Gunn, Schramm, and Tinsley write,

"the universe began from a state of infinite density about one Hubble time ago. Space and time were created in that event and so was all the matter in the universe. It is not meaningful to ask what happened before the big bang; it is somewhat like asking what is north of the North Pole. Similarly, it is not sensible to ask where the big bang took place. The point-universe was not an object isolated in space; it was the entire universe, and so the only answer can be that the big bang happened everywhere" (J. Richard Gott III, James E. Gunn, David N. Schramm, and Beatrice M. Tinsley, "Will the Universe Expand Forever?" *Scientific American* [March 1976], p. 65).

{13}John Barrow and Frank Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1986), p. 442.

{14}For this analysis, see John Hick, "God as Necessary Being," *Journal of Philosophy* 57 (1960): 733-34.

{15}Arthur Eddington, *The Expanding Universe* (New York: Macmillan, 1933), p. 124.

{16}Ibid., p. 178.

{17}Hubert Reeves, Jean Audouze, William A. Fowler, and David N. Schramm, "On the Origin of Light Elements," *Astrophysical Journal* 179 (1973):

{18}Fred Hoyle, *Astronomy Today* (London: Heinemann, 1975), p. 165.

{19}Fred Hoyle, *Astronomy and Cosmology: A Modern Course* (San Francisco: W. H. Freeman, 1975), p. 658.

{20}H. Bondi and T. Gold, "The Steady State Theory of the Expanding Universe," *Monthly Notices of the Royal Astronomical Society* 108 (1948): 252-70; F. Hoyle, "A New Model for the Expanding Universe," *Monthly Notices of the Royal Astronomical Society* 108 (1948): 372-82.

{21}As Jaki points out, Hoyle and his colleagues were inspired by "openly anti-theological, or rather anti-Christian motivations" (Stanley L. Jaki, *Science and Creation* [Edinburgh: Scottish Academic Press, 1974], p. 347. Martin Rees recalls his mentor Dennis Sciama's dogged commitment to the Steady State Model: "For him, as for its inventors, it had a deep philosophical appeal--the universe existed, from everlasting to everlasting, in a uniquely self-consistent state. When conflicting evidence emerged, Sciama therefore sought a loophole (even an unlikely seeming one) rather as a defense lawyer clutches at any argument to rebut the prosecution case" (Martin Rees, *Before the Beginning*, with a Foreword by Stephen Hawking [Reading, Mass.: Addison-Wesley, 1997], p. 41). The phrase "from everlasting to everlasting" is the Psalmist's description of God (Ps. 90.2). Rees gives a good account of the discoveries leading to the demise of the Steady State Model.

{22}Ivan R. King, *The Universe Unfolding* (San Francisco: W. H. Freeman, 1976), p. 462.

{23}See, e.g., E. M. Lifschitz and I. M Khalatnikov, "Investigations in Relativist Cosmology," *Advances in Physics* 12 (1963): 207.

{24}As evident from the sentiments expressed by John Gribbin:

"The biggest problem with the Big Bang theory of the origin of the universe is philosophical--perhaps even theological--what was there before the bang? This problem alone was sufficient to give a great initial impetus to the Steady State theory; but with that theory now sadly in conflict with the observations, the best way round this initial difficulty is provided by a model in which the universe expands from a singularity, collapses back again, and repeats the cycle indefinitely" (John Gribbin, "Oscillating Universe Bounces Back," *Nature* 259 [1976]: 15).

Scientists not infrequently misexpress the difficulty posed by the beginning of the universe as to what existed before the Big Bang (which invites the easy response that there was no "before"). The real question concerns the causal conditions of this event, why the universe exists rather than nothing.

{25}R. Penrose, "Gravitational Collapse and Space-Time Singularities," *Physical Review Letters* 14 (1965): 57-59; S. W. Hawking and R. Penrose, in *The Large-Scale Structure of Space-Time*, ed. S. W. Hawking and G. F. R. Ellis (Cambridge: Cambridge University Press, 1973), p. 266.

{26}Stephen Hawking and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton, N. J.: Princeton University Press, 1996), p. 20.

{27}Associated Press News Release, 9 January 1998.

{28}I. D. Novikov and Ya. B. Zeldovich, "Physical Processes near Cosmological Singularities," *Annual Review of Astronomy and Astrophysics* 11 (1973): pp. 401-02; Joseph Silk, *The Big Bang*, 2d ed. (San Francisco: W. H. Freeman, 1989), pp. 311-12..

{29}Looking back, quantum cosmologist Christopher Isham muses,

"Perhaps the best argument in favor of the thesis that the Big Bang supports theism is the obvious unease with which it is greeted by some atheist physicists. At times this has led to scientific ideas, such as continuous creation or an oscillating universe, being advanced with a tenacity which so exceeds their intrinsic worth that one can only suspect the operation of psychological forces lying very much deeper than the usual academic desire of a theorist to support his/her theory" (Christopher Isham, "Creation of the Universe as a Quantum Process," in *Physics, Philosophy and Theology: a Common quest for Understanding*, ed. R. J. Russell, W. R. Stoeger, and G. V. Coyne [Vatican City: Vatican Observatory, 1988], p. 378).

One recalls, for example, the late Carl Sagan on his *Cosmos* television series propounding the oscillating model and reading from Hindu scriptures about cyclical Brahman years in order to illustrate the model, but with nary a hint to his viewers about the difficulties attending this model.

{30}Edward Tryon, "Is the Universe a Vacuum Fluctuation?" *Nature* 246 (1973): 396-97.

{31}See Isham, "Creation of the Universe," pp. 385-87.

{32}Christopher Isham, "Space, Time, and Quantum Cosmology," paper presented at the conference "God, Time, and Modern Physics," March 1990; Christopher Isham, "Quantum

Cosmology and the Origin of the Universe," lecture presented at the conference "Cosmos and Creation," Cambridge University, 14 July 1994.

{33} See, e.g., A. D. Linde, "The Inflationary Universe," *Reports on Progress in Physics* 47 (1984): 925-86; idem, "Chaotic Inflation," *Physics Letters* 1298 (1983): 177-81. For a recent critical review of inflationary scenarios, including Linde's, see John Earman and Jesus Mosterin, "A Critical Look at Inflationary Cosmology," *Philosophy of Science* 66 (1999): 1-49.

{34} Linde, "Inflationary Universe," p. 976.

{35} A. Borde and A. Vilenkin, "Eternal Inflation and the Initial Singularity," *Physical Review Letters* 72 (1994): 3305, 3307.

{36} Andrei Linde, Dmitri Linde, and Arthur Mezhlumian, "From the Big Bang Theory to the Theory of a Stationary Universe," *Physical Review D* 49 (1994): 1783-1826.

{37} Borde and Vilenkin, "Eternal Inflation," p. 3307.

{38} A. Vilenkin, "Birth of Inflationary Universes," *Physical Review D* 27 (1983): 2854. See J. Hartle and S. Hawking, "Wave Function of the Universe," *Physical Review D* 28 (1983): 2960-75; A. Vilenkin, "Creation of the Universe from Nothing," *Physical Letters* 117B (1982): 25-28.

{39} Stephen Hawking, *A Brief History of Time* (New York: Bantam Books, 1988), p. 9.

{40} Ibid., p. 46.

{41} Ibid., p. 136.

{42} Ibid., pp. 140-141.

{43} John D. Barrow, *Theories of Everything* (Oxford: Clarendon Press, 1991), p. 68.

{44} Ibid., pp. 67-68.

{45} Hartle and Hawking, "Wave Function of the Universe," p. 2961; Hawking and Penrose, *Nature of Space and Time*, p. 85.

{46} See my "Hartle-Hawking Cosmology and Atheism," *Analysis* 57 (1997): 291-95. With respect to determining the wave function of the universe DeWitt says, "Here the physicist must play God" (B. DeWitt, "Quantum Gravity," *Scientific American* 249 [1983]: 120).

{47} Hawking, *Brief History of Time*, p. 136.

{48} Barrow, *Theories of Everything*, pp. 66-67.

{49} Hawking, *Brief History of Time*, pp. 138-39.

{50} Hawking and Penrose, *Nature of Space and Time*, p. 121.

{51}Ibid., pp. 3-4. Cf. his comment, "I . . . am a positivist who believes that physical theories are just mathematical models we construct, and that it is meaningless to ask if they correspond to reality, just whether they predict observations" (Stephen Hawking, "The Objections of an Unashamed Positivist," in *The Large, the Small, and the Human*, by Roger Penrose [Cambridge: Cambridge University Press, 1997], p. 169).

{52}Hawking and Penrose, *Nature of Space and Time*, p. 121; cf. pp. 4, 53-55.

{53}Ibid., pp. 53-55.

{54}As pointed out by Christopher Isham, "Quantum Theories of the Creation of the Universe," in *Quantum Cosmology and the Laws of Nature*, ed. R. J. Russell, N. Murphey, and C. J. Isham (Vatican City: Vatican Observatory, 1993), p. 56.

{55}Paul Davies, "The Birth of the Cosmos," in *God, Cosmos, Nature and Creativity*, ed. Jill Gready (Edinburgh: Scottish Academic Press, 1995), pp. 8-9.

{56}Bernulf Kanitscheider, "Does Physical Cosmology Transcend the Limits of Naturalistic Reasoning?" in *Studies on Mario Bunge's "Treatise"*, ed. P. Weingartner and G. J. W. Doen (Amsterdam: Rodopi, 1990), p. 344.

{57}Richard Swinburne, *The Existence of God*, rev. ed. (Oxford: Clarendon Press, 1991), pp. 32-48.

{58}John Post, *Metaphysics: a Contemporary Introduction* (New York: Paragon House, 1991), p. 85.

{59}Ibid., p. 87.

{60}Quentin Smith, "The Uncaused Beginning of the Universe," in *Theism, Atheism, and Big Bang Cosmology*, by William Lane Craig and Quentin Smith (Oxford: Clarendon Press, 1993), p. 120.

{61}Adolf Grünbaum, "The Pseudo-Problem of Creation in Physical Cosmology," *Philosophy of Science* 56 (1989): 373-94. For a response, see William Lane Craig, "The Origin and Creation of the Universe: a reply to Adolf Grünbaum," *British Journal for the Philosophy of Science* 43 (1992): 233-40.

{62}Adolf Grünbaum, "Creation as a Pseudo-Explanation in Current Physical Cosmology," *Erkenntnis* 35 (1991): 233-54. For a response, see William Lane Craig, "Prof. Grünbaum on Creation," *Erkenntnis* 40 (1994): 325-41.

{63}Brian Leftow puts this nicely when he writes,

"If God existed in time once time existed and time had a first moment, then God would have a first moment of existence: there would be a moment before which He did not exist, because there was no 'before' that moment Yet even if He . . . had a first moment of existence, one could still call God's existence unlimited were it understood that He would have existed even if time did not. For as long as this is true, we cannot infer from God's having had a first moment of existence that God *came into* existence or would not have existed save if time did"

(Brian Leftow, *Time and Eternity*, Cornell Studies in Philosophy of Religion [Ithaca, N.Y.: Cornell University Press, 1991], p. 269; cf. p. 201).

Senor has dubbed such a model of divine eternity "accidental temporalism" (Thomas D. Senor, "Divine Temporality and Creation *ex nihilo*," *Faith and Philosophy* 10 [1993]: 88). See further William Lane Craig, "Timelessness and Creation," *Australasian Journal of Philosophy* 74 (1996): 646-56.

{64} See discussion and references in William Lane Craig, "Divine Timelessness and Personhood," *International Journal for Philosophy of Religion* 43 (1998): 109-24.

{65} John C. Yates, *The Timelessness of God* (Lanham, Md.: University Press of America, 1990), p. 173.

{66} David Hume to John Stewart, February, 1754, in *The Letters of David Hume*, 2 vols., ed. J. Y. T. Greig (Oxford: Clarendon Press, 1932), 1: 187.

{67} Thomas Aquinas *Summa theologiae* 1a.2.3.

Creation and Conservation Once More

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

God is conceived in the Western theistic tradition to be both the Creator and Conservor of the universe. These two roles were typically classed as different aspects of creation, *originating creation* and *continuing creation*. On pain of incoherence, however, conservation needs to be distinguished from creation. Contrary to current analyses (such as Philip Quinn's), creation should be explicated in terms of God's bringing something into being, while conservation should be understood in terms of God's preservation of something over an interval of time. The crucial difference is that while conservation presupposes an object of the divine action, creation does not. Such a construal has significant implications for a tensed theory of time.

"Creation and Conservation Once More," *Religious Studies* 34 (1998): 177-188.

Introduction

"In the beginning God created the heavens and the earth" (Gen. 1.1). With majestic simplicity the author of the opening chapter of Genesis thus differentiated his viewpoint, not only from that of the ancient creation myths of Israel's neighbors, but also effectively from pantheism, such as is found in Eastern religions like Vedanta Hinduism and Taoism, from panentheism, whether of classical Neo-platonist vintage or twentieth-century process theology, and from polytheism, from ancient paganism to contemporary Mormonism. He thereby gives us to understand that the universe had a temporal origin and thus implies *creatio ex nihilo* in the temporal sense that God brought the universe into being without a material cause at some point in the finite past.{1}

Later biblical authors so understood the Genesis account of creation.{2} The doctrine of *creatio ex nihilo* is also implied in various places in early extra-biblical Jewish literature.{3} And the Church Fathers, while heavily influenced by Greek thought, dug in their heels concerning the doctrine of creation, sturdily insisting, with few exceptions, on the temporal creation of the universe *ex nihilo* in opposition to the eternity of matter.{4} A tradition of robust argumentation against the past eternity of the world and in favor of *creatio ex nihilo*, issuing from the Alexandrian Christian theologian John Philoponus, continued for centuries in Islamic, Jewish, and Christian thought.{5} In 1215 the Catholic church promulgated temporal *creatio ex nihilo* as official church doctrine at the Fourth Lateran Council, declaring God to be "Creator of all things, visible and invisible, . . . who, by His almighty power, from the beginning of time has created both orders in the same way out of nothing." This remarkable declaration not only affirms that God created everything *extra se* without any material cause, but even that time itself had a beginning. The doctrine of creation is thus inherently bound up with temporal considerations and entails that God brought the universe into being at some point in the past without any antecedent or contemporaneous material cause.

At the same time, the Christian Scriptures also suggest that God is engaged in a sort of on-going creation, sustaining the universe in being. Christ "reflects the glory of God and bears the very stamp of His nature, upholding the universe by his word of power" (Heb. 1.3). Although relatively infrequently attested in Scripture in comparison with the abundant references to God's original act of creation, the idea of continuing creation came to constitute an important aspect of the doctrine of creation as well. For Thomas Aquinas, for example, this aspect becomes the core doctrine of creation, the question of whether the world's reception of being from God had a temporal commencement or not having only secondary importance.{6} For Aquinas creation is the immediate bestowal of being and as such belongs only to God, the universal principle of being; therefore, creation is *ex nihilo* in that God's causing a creature to exist is immediate. Even if that creature has existed from eternity, it is still created *ex nihilo* in this metaphysical sense.

Creatio Originans and Creatio Continuans

Thus, God is conceived in Christian theology to be the cause of the world both in His initial act of bringing the universe into being and in His on-going conservation of the world in being. These two actions have been traditionally classed as species of *creatio ex nihilo*, namely, *creatio originans* and *creatio continuans*. While this is a handy rubric, it unfortunately quickly becomes problematic if pressed to technical precision, as Philip Quinn has pointed

out. In line with the traditional understanding of creation as involving a temporal origination, Quinn initially broached the following definitions,{7} where x is any contingent individual and t any instant of time:

- D₁. At t God conserves $x =_{\text{def.}}$ x exists at t iff God at t brings it about that x exists at t
D₂. At t God creates $x =_{\text{def.}}$ God at t brings it about that x exists at t and there is no t' such that t' is before t and x exists at t'
D₃. God continuously creates $x =_{\text{def.}}$ for all t , x exists at t iff at t God creates x

Quinn points out, however, that these definitions entail a bizarre form of occasionalism, according to which no persisting individuals exist. At each instant God creates a new individual, numerically distinct from its chronological predecessor, so that diachronic personal identity and agency are precluded.

One can respond to this difficulty in one of two ways: either by eliminating from the concept of creation any reference to a beginning of existence or by denying that conservation is properly a species of creation. Quinn initially chose the first route, "de-temporalizing" creation so that it implies no beginning of existence:

- D₄. At t God creates $x =_{\text{def.}}$ God at t brings it about that x exists at t

On (D₄) creation becomes indistinguishable from conservation: "At t God conserves x " means the same as "At t God creates x ." We can now speak coherently of *creatio continuans*:

- D₅. God continuously creates $x =_{\text{def.}}$ x is a persistent thing, and, for all t , if x exists at t , then at t God creates x

The definition of continuous creation becomes indistinguishable from the definition of continuous conservation.

This first route accords with the Thomistic analysis and also accommodates modern sensibilities, which eschew empirical predictions based on theology. Undoubtedly the popularity of this route has been largely due to theologians' fear of a conflict with science, which *creatio continuans* permits them to avoid by operating only within the safe harbor of metaphysics, removed from the realities of the physical, space-time world.{8} Since the rise of modern theology with Schleiermacher, the doctrine of *creatio originans* has thus been allowed to atrophy, while the doctrine of *creatio continuans* has assumed supremacy.{9} According to Schleiermacher, the Church divided the original expression of the relation of the world to God, that of absolute dependence, into two propositions: that the world was created and that the world is sustained. But there is no reason, he asserts, to retain this distinction, since it is linked to the Mosaic account of creation, which is the product of a mythological age. The question of whether it is possible or necessary to conceive of God as existing apart from created things is a matter of indifference, since it has no bearing on the feeling of absolute dependence on God. Hence, the doctrine of *creatio originans* becomes an irrelevance.

On the other hand, this first route tends to compromise the teaching of Scripture and the Church that a temporal beginning is a vital element of the doctrine of creation. It is clear that the biblical authors' notion of creation is not some metaphysical doctrine of ontological dependence, but involves the idea of a temporal origin of that which is created. The nearly

ubiquitous use of the past-tense with verbs of creation in the Scriptures is alone sufficient to establish the point. Moreover, the Church has so understood creation. By contrast Quinn's re-definitions ignore the temporal aspect of creation, thus leading to a depreciation of temporal *creatio ex nihilo*:

For God to create or conserve an individual at an instant is merely for him at that instant to bring about the existence of the individual at the instant Seen in this light, the question of whether the cosmos of contingent things was introduced into existence *ex nihilo* after a period of time when nothing contingent existed becomes relatively unimportant for theistic orthodoxy.{10}

While this conclusion may be congenial to modern theologians, it must be said that the modern *modus operandi* of hermetically sealing off theology from science has tended to make theology itself something of an irrelevance. This is all the more tragic because modern cosmology, which studies the large-scale structure and origin of the universe, has been strongly confirmatory of a doctrine of *creatio originans*. Moreover, since Quinn is offering us *definitions*, not mere explications, of divine creation, they must accord with our pre-philosophical intuitions and language.{11} But there does seem to be an intuitive, conceptual distinction between creation and conservation which is obscured by treating the latter as a species of creation. As John Duns Scotus observed,

Properly speaking . . . it is only true to say that a creature is created at the first moment (of its existence) and only after that moment is it conserved, for only then does its being have this order to itself as something that was, as it were, there before. Because of these different conceptual relationships implied by the words 'create' and 'conserve' it follows that one does not apply to a thing when the other does.{12}

Rather than re-interpret creation in such a way as to not involve a time at which a thing first begins to exist, we ought perhaps to treat that *creatio continuans* as a *façon de parler* and to try to distinguish creation from conservation.

Creation and Conservation

In his most recent work Quinn does differentiate between creation and conservation.{13} He offers the following postulate and definitions:

A. Necessarily, for all x and t , if x exists at t , God willing that x exists at t brings about x existing at t .

D₆. God creates x at $t =_{\text{def.}}$ God willing that x exists at t brings about x existing at t , and there is no t' prior to t such that x exists at t'

D₇. God conserves x at $t =_{\text{def.}}$ God willing that x exists at t brings about x existing at t , and there is some t' prior to t such that x exists at t'

Unfortunately, these definitions remain problematic. First, in contrast to Quinn's initial definitions, they construe divine causation as a sort of state-state causation rather than as agent causation. The *bringing about* relation is said to be a special relation of metaphysical causation which holds between the state of affairs *God willing that x exists at t* and *x existing at t* .{14} Thus, Quinn says, "My account of creation and conservation rests on the . . . assumption that there is a special two place relation of divine bringing about defined on ordered pairs of states of affairs." {15} On Quinn's account there are thus contingent states of

affairs like *x existing at t* which are not brought about or metaphysically caused by God, which is incompatible with an adequate doctrine of creation.{16}

Secondly, even if we revert to D₂, Quinn's definitions still fail to capture the essence of creation. Creation and conservation are distinguished in his account only in virtue of the accidental feature of something's existing or not at a time prior to the time at which God brings it about that *x* exists. Indeed, Quinn takes it as a virtue of his account that creation and conservation are intrinsically the same: those who differentiate creation and conservation "seem to suppose that the kind of power required to create something *ex nihilo* is different from the sort of power needed merely to keep it from lapsing back into nonbeing once it has been created." {17} "But," according to Quinn, "the power and action involved in the bringing about are the same in both cases." {18} Accordingly, all that differentiates creation from conservation of *x* is the adventitious fact of *x*'s prior existence. {19}

But those who differentiate creation and conservation need not, *pace* Quinn, find the intrinsic difference between them in the divine power and action, but may see it rather in the terminus of that action. Intuitively, creation involves God's bringing something into being. Thus, if God creates some entity *e* (whether an individual or an event) at a time *t* (whether an instant or finite interval), then *e* comes into being at *t*. We can explicate this last notion as follows:

E₁. *e* comes into being at *t* iff (i) *e* exists at *t*, (ii) *t* is the first time at which *e* exists, and (iii) *e*'s existing at *t* is a tensed fact

Accordingly,

E₂. God creates *e* at *t* iff God brings it about that *e* comes into being at *t*

God's creating *e* involves *e*'s coming into being, which is an absolute beginning of existence, not a transition of *e* from non-being into being. In creation there is no patient entity on which the agent acts to bring about its effect. {20} It follows that creation is not a type of change, since there is no enduring subject which persists from one state to another. {21} It is precisely for this reason that conservation cannot be properly thought of as essentially the same as creation. For conservation does presuppose a subject which is made to continue from one state to another. In creation God does not act on a subject, but constitutes the subject by His action; in contrast, in conservation God acts on an existent subject to perpetuate its existence. This is the import of Scotus's remark that only in conservation does a creature "have this order to itself as something that was, as it were, there before." In conservation there is a patient entity on which the agent acts to produce its effect.

To analyze God's conservation of *e*, along Quinn's lines, as God's re-creation of *e* anew at each instant or moment of *e*'s existence is to run the risk of falling into the radical occasionalism of certain medieval Islamic theologians, who, out of their desire to make God not only the creator of the world, but also its ground of being, denied that the constituent atoms of things endure from one instant to another but are rather created in new states of being by God at every successive instant. {22} The Islamic *mutakallimun* therefore denied the reality of secondary causation, leaving God as the sole cause of change. {23}

There are actually two forms of occasionalism courted by Quinn: (1) the occasionalism implied by a literal *creatio continuans* according to which similar, but numerically distinct, individuals are created at each successive instant, and (2) the occasionalism which affirms

diachronic individual identity, but denies the reality of *transeunt* secondary causation. Quinn insists that his account of *creatio continuans* avoids (1) because his definitions presuppose that x is a persistent thing. But is it even coherent to affirm that God creates a persistent entity anew at every instant? If at every t God creates *ex nihilo*, is it really x which exists at successive instants rather than a series of simulacra? Since there is no patient subject on which the agent acts in creation, how is it that it is the identical subject which is re-created each instant out of nothing rather than a numerically distinct, but similar, subject? This difficulty may be sharpened by noting that Quinn's (D₇) allows that there may be temporal intervals separating the instants at which x exists. Not only does this feature of (D₇) render it an inadequate definition of conservation (since intuitively each new beginning of x 's existence represents creation, not conservation), but it also exacerbates one's doubts about x 's diachronic identity on Quinn's account of conservation. Quinn dismisses the objection that God cannot create one and the same individual more than once and appeals to the doctrine of eschatological resurrection as positive support of his position.^{24} But traditionally the identity of resurrected persons was vouchsafed by the doctrine of the intermediate state of the soul or by God's using the remains of or the same material particles that constituted the mortal body, and apart from these doctrines it is very difficult to see why a body created *de novo* in the end time is the same person or body which lived and ceased to exist long before.^{25}

Quinn also denies that his account of conservation implies type (2) occasionalism. This is because his state-state causation says nothing about whether or how events are brought about. For all it says, events like x being F at t have causes only in Hume's sense, not in the sense of being brought about by God. Indeed, Quinn confesses that the empiricist in him inclines him toward such a position.^{26} But such a position seems both implausible and theologically unacceptable. If the fire when brought into proximity with the cotton does not blacken the cotton, but is merely part of an event regularly conjoined and continuous with the event of the cotton's turning black, then the fire's being brought into proximity with the cotton is merely the occasion upon which the cotton turns black. But if God, then, does not turn the cotton black upon such occasions, as Islamic occasionalists believed, then the cotton's turning black seems to be utterly mysterious and magical. This is not only incredible, but impugns the providence of God. Moreover, if God does conserve x at t , then He must not only conserve x in abstraction, but x in its concrete particularity with all its properties.^{27} God does not simply conserve the piece of cotton at t , but the blackened, smoldering piece of cotton at t . For the cotton to exist in all its particularity at t God must bring about its existing with its properties. Therefore, conservation requires God to be a cause of x being F at t . If, then, there are mere Humean causes in nature, occasionalism follows.

Quinn does entertain as well an account of secondary causation according to which secondary causes act to bring about their effects, just as God does. But he insists that such an account is compatible with his doctrine of conservation because that doctrine does not entail that God willing x is F at t brings about x being F at t . This account, however, is incompatible with divine providence. For either God wills that x is F at t or not. If not, then God is utterly indifferent to what happens in the world, conserving it in being but not caring what happens in it, which denies God's providence. Suppose, then, that God does will that x is F at t . Then His will is either directive or permissive. If His will is directive, then God is impotent, since on Quinn's account x being F at t is not brought about by God willing that x is F at t . But if God's will is merely permissive, then divine providence is again denied, since God does not directly will anything to happen.

The same point can be made in another way. Suppose that x being F at t brings about y being G at t^* . The latter state of affairs entails that y exists at t^* , a state of affairs which, on Quinn's account, is brought about by God willing that y exists at t^* . Such a circumstance seems to preclude God's free choice not to will that y exists at t^* . Granted, x being F at t does not bring about God willing that y exists at t^* , since *bringing about* is not closed under entailment. Still, given the efficacy of secondary causes, God seems to have no choice but to will that y exists at t^* . Quinn, however, interprets this entailment in terms of divine concurrence: x being F at t cannot act to bring about its effect unless divine volition actively concurs in bringing about its effect at that time. But Quinn cannot mean that y being G at t^* is brought about both by x being F at t and God willing that y is G at t^* (which is what divine concurrence holds) for his account precludes this. Rather he must mean that God wills that y exists at t^* because He knows what x being F at t will bring about and He wills that its effect should be produced. In other words, He wills that y is G at t^* . The same goes for x being F at t , otherwise He would not have willed that x exist at t . On Quinn's account of concurrence, then, God does actively will the effects of secondary causes, but His will is impotent, bringing about nothing in that respect. Not only does this impugn divine omnipotence, but it remains mysterious why God willing that y exists at t^* should be causally efficacious and yet His willing that y is G at t^* is not. Moreover, the same problem discussed above reappears on this account: in order to bring about y existing at t^* , God must bring about y existing with all its properties at t^* , so that conservation implies genuine divine concurrence, namely, God's bringing about y being G at t^* .

It is therefore unhelpful to blur the distinction between divine conservation and creation. The fundamental difference between creation and conservation, as we have seen, lies in the fact that in conservation, as opposed to creation, there is presupposed a subject on which God acts. Intuitively, conservation involves God's preservation of that subject in being over time. A fundamental flaw in Quinn's definition of conservation is that he construes it as instantaneous. Not only does this subvert the meaning of "conservation," but it spawns counter-intuitive results as well. For example, on Quinn's (D₇) an individual which exists only for an instant is not conserved because it fails to exist at a *prior* time; but intuitively we should say that the reason it is not conserved is because it fails to persist until a *later* time. Or again, an individual which exists merely for an instant is, on (D₇), conserved so long as it also existed at a single, remote, prior instant, a scenario which intuitively has nothing to do with conservation. Or again, an individual which exists for only a finite time but lacks a first instant of existence is, on Quinn's account, conserved, but never created; but then one by definition has precluded the universe's being such an individual--unless one is prepared to abandon the doctrine of creation.

All this serves to underline the fact that conservation ought to be understood in terms of God's preserving some entity e from one moment of its existence to another. A crucial insight into conservation is that unlike creation, it does involve transition and therefore cannot occur at an instant. We may therefore provide the following explication of divine conservation:

E₃. God conserves e iff God acts upon e to bring about e 's existing from t until some $t^* > t$ through every sub-interval of the interval $t \rightarrow t^*$

In this light the statement that creating and conserving the world are, with respect to the act itself, indistinguishable is misleading. For creating and conserving cannot be adequately analyzed with respect to the act alone, but involve relations to the object of the act. The act itself (the causing of existence) may be the same in both cases, but in one case may be

instantaneous and presupposes no prior object, whereas in the other case occurs over an interval and does involve a prior object.

Creation, Conservation, and Tense

The doctrine of creation also involves an important metaphysical feature which is rarely appreciated and is missed by Quinn's tenseless definitions: it commits one to a tensed or, in McTaggart's convenient terminology, an A-Theory of time.^{28} For if one adopts a tenseless or B-Theory of time, then things do not literally come into existence. Things are then four-dimensional objects which tenselessly subsist and begin to exist only in the sense that their extension along their temporal dimension is finite in the *earlier than* direction. The whole four-dimensional, space-time manifold is extrinsically (as opposed to intrinsically) timeless, existing co-eternally with God. The universe thus does not come into being on a B-Theory of time, regardless of whether it has a finite or an infinite past relative to any time. Hence, clause (iii) in E₂ represents a necessary feature of creation. In the absence of clause (iii) God's creation of the universe *ex nihilo* could be interpreted along tenseless lines to postulate merely the finitude of cosmic time in the *earlier than* direction.

What about conservation? At first blush this notion would seem to be much more amenable to a tenseless construal. God can be conceived to act tenselessly on *e* to sustain it from t_1 to t_2 . But a moment's reflection reveals this construal to be problematic. What if *e* exists only at *t*? Or what if *e* is the whole, four-dimensional space-time block? In neither case can God be said to conserve *e*, according to our definition. Yet on a tenseless view of time God is the source of being for such entities and therefore in some sense sustains them. Similarly, if we countenance timeless, abstract objects in our ontology, then God must be the source of their being as well. In their case there is properly speaking no conservation, no preserving them in existence from one moment to another. The existence of such entities would seem to necessitate a third category of creation not contemplated by the classical theologians, since they admitted no timeless entities apart from God, what we might, on the pattern of *creatio originans* and *creatio continuans*, as a *façon de parler* call *creatio stans*, a sort of static creation. *Creatio stans* is the relation appropriate to a B-Theory of time. We can use "sustenance" as the technical term for such divine action and explicate it as follows:

E₄. God sustains *e* iff either *e* exists tenselessly at *t* or *e* exists timelessly, and God brings it about that *e* exists.

The very idea of the need for conservation in being thus also implies an A-Theory of time, according to which temporal becoming is real and moments of time do elapse and cease to be. Conservation of an entity is necessary if that entity, like the moment at which it exists, is not to lapse into non-being. On a B-Theory of time, no such lapse occurs, and so conservation is unnecessary, indeed, excluded, if God is timeless. Rather God is engaged in sustaining the four-dimensional universe as a whole and every entity in it, whether that entity has a temporal extension or exists merely at an instant. Thus, even conservation is compromised if definitions of it are given which are compatible with a B-Theory of time.

Conclusion

In summary, we have seen that Scripture and tradition conceive of God as both the Creator and the Conservor of the world, the former having reference to His initial act of bringing the universe into being out of nothing and the latter referring to His preservation of the world in

being from one moment to another. The widespread tendency among scholars to conflate these two actions on God's part flouts the witness of Scripture and the Church, has heightened the sense of theology's irrelevance to the real world, and runs roughshod over important philosophical differences between the two. Creation is distinct from conservation in that the former does not presuppose a patient entity but involves God's bringing something into being, whereas the latter does presuppose a patient entity and involves God's acting on it to preserve it from one moment to another--notions which both imply a metaphysic of objective temporal becoming.

Endnotes

{1} Many modern commentators have denied this *prima facie* reading. Usually their claim is that v. 1 should be read as a subordinate circumstantial clause modifying v. 2: "In the beginning when God created the heavens and the earth, the earth was without form and void . . ." In this way, it would appear that God's creation of the world consisted simply in fashioning a cosmos out of a pre-existent chaotic state. But on Gen. 1.1 as an independent clause which is not a mere chapter title, see Claus Westermann, *Genesis 1-11*, trans. John Scullion (Minneapolis: Augsburg, 1984), p. 97; John Sailhammer, *Genesis*, Expositor's Bible Commentary 2, ed. Frank Gaebelin (Grand Rapids, Mich.: Zondervan, 1990), p. 21.

{2} See, e.g., Is. 44.24. This prophecy, usually dated as exilic, asserts that God made *everything*. Isaiah could never have countenanced the idea that something existed which God did not create. (Cf. Is. 45.18; 24). In the various creation Psalms, the impression is never given that God's creation is not *ex nihilo* (Ps. 33.9). God's eternity is contrasted with the temporal finitude of creation (Ps. 90.2). It would be unthinkable that there should have also existed some co-eternal, uncreated stuff along with God. *Creatio ex nihilo* is the implicit assumption. Job is more explicit (Job 26.7; cf. Ps. 89.11, 12). Proverbs 8.22-31 seems to be an especially interesting reflection on Genesis 1. Particularly significant is the claim that God's wisdom was with the LORD even when the depths were not yet in existence, for it is precisely the depths which Gen. 1.2 describes. It is God who created the depths and who then took their measure and prescribed their limits (Prov. 8.27-9; cf. Ps. 104.5-9).

The New Testament also extols the God who is Maker of heaven and earth and understands the Old Testament doctrine as *creatio ex nihilo* (Rom. 4.17; 11.36; Heb. 11.3; Rev. 4.11). But the most notable contribution of the New Testament is its ascription of *creatio ex nihilo* to the pre-incarnate Christ, who is the Father's agent in creating the world (I Cor. 8.6; Col. 1.16, 17; Heb. 1.2, 3; cf. 2.10). Indeed, Christ is God, since he is the creator of all things (Jn. 1.1-3). The similarity of these passages suggests that the notion of the cosmic Christ was a common motif in the theology of the primitive church. The New Testament writers not only understood the Old Testament to be teaching *creatio ex nihilo*, but went further in identifying the pre-incarnate Christ as the principal agent of creation.

{3} E.g., II Maccabees 7.28; 1QS 3.15; Joseph and Aseneth 12.1-3; II Enoch 25.1ff; 26.1; Odes of Solomon 16.18-19; II Baruch 21.4. For discussion, see Paul Copan, "Is *Creatio ex nihilo* a Post-biblical Invention?": an Examination of Gerhard May's Proposal," *Trinity Journal* 17 (1996): 77-93.

{4} *Creatio ex nihilo* is affirmed in the *Shepherd of Hermas* 1.6; 26.1 and the *Apostolic Constitutions* 8.12.6,8; and by Tatian *Oratio ad graecos* 5.3; cf. 4.1ff; 12.1; Theophilus *Ad Autolyicum* 1.4; 2.4, 10, 13; and Irenaeus *Adversus haeresis* 3.10.3. For discussion, see

Gerhard May, *Creatio ex nihilo: The Doctrine of "Creation out of Nothing" in Early Christian Thought*, trans. A. S. Worrall (Edinburgh: T. & T. Clark, 1994); cf. Copan's review article in note 3.

{5} See Richard Sorabji, *Time, Creation and the Continuum* (Ithaca, N.Y.: Cornell University Press, 1983), pp. 193-252; H. A. Wolfson, "Patristic Arguments against the Eternity of the World," *Harvard Theological Review* 59 (1966): 354-367; idem, *The Philosophy of the Kalam* (Cambridge, Mass.: Harvard University Press, 1976; H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987); Richard C. Dales, *Medieval Discussions of the Eternity of the World*, Studies in Intellectual History 18 (Leiden: E. J. Brill, 1990).

{6} Thus, Aquinas argues in his second and third ways of proving God's existence for God as the first cause of all things, even while presupposing *ex concessionis* the past eternity of the world (Thomas Aquinas *Summa theologiae* 1a.2.3). Or again, he affirms that *creatio ex nihilo* can be demonstrated, while at the same time admitting that the past temporal finitude of the world cannot be demonstrated, a position which is tenable only because he has "de-temporalized" the traditional doctrine of *creatio ex nihilo* (Idem *Summa contra gentiles* 2.16; 32-38; cf. idem *Summa theologiae* 1a.45.1; 1a.4b.2). Though Aquinas discusses divine conservation, he does not differentiate it from creation (Idem *Summa contra gentiles* 3.65; *Summa theologiae* 1a.104.1).

{7} Philip L. Quinn, "Divine Conservation, Continuous Creation, and Human Action," in *The Existence and Nature of God*, ed. Alfred J. Freddoso (Notre Dame, Ind.: University of Notre Dame Press, 1983), pp. 55-79.

{8} Good examples of such timorousness include Langdon Gilkey, *Maker of Heaven and Earth* (Garden City, N.Y.: Doubleday, 1959), pp. 310-315; Ian Barbour, *Issues in Science and Religion* (New York: Harper & Row, 1966), p. 383-385; Arthur Peacocke, *Creation and the World of Science* (Oxford: Clarendon Press, 1979), pp. 78-79. By way of contrast see Wolfhart Pannenberg, "Theological Questions to Scientists," in *The Sciences and Theology in the Twentieth Century*, ed. A. R. Peacocke, Oxford International Symposia (Stocksfield, England: Oriel Press, 1981), p. 12; Ted Peters, "On Creating the Cosmos," in *Physics, Philosophy, and Theology: a Common Quest for Understanding*, ed. R. Russell, W. Stoeger, and G. Coyne (Vatican City: Vatican Observatory, 1988), p. 291; Robert J. Russell, "Finite Creation without a Beginning: the Doctrine of Creation in Relation to Big Bang and Quantum Cosmologies," in *Quantum Cosmology and the Laws of Nature*, ed. R. J. Russell, N. Murphy, and C. J. Isham (Vatican City: Vatican Observatory, 1993), pp. 303-310.

{9} F. D. E. Schleiermacher, *The Christian Faith*, 2d ed., ed. H. R. MacIntosh and J. S. Stewart (Edinburgh: T. & T. Clark, 1928), 36.1, 2; 41; pp. 142-143, 155.

{10} Quinn, "Continuous Creation," pp. 70, 74. Of course, it is no part of the doctrine of creation that the cosmos was created *in* time rather than *with* time. But Quinn means to downplay the importance of any introduction into existence *ex nihilo* of the cosmos.

{11} On definitions and explications, see Samuel Gorowitz, *et. al.*, *Philosophical Analysis*, 3d ed. (New York: Random House, 1979), pp. 135-140.

{12} John Duns Scotus, *God and Creatures*, trans. E. Alluntis and A. Wolter (Princeton: Princeton University Press, 1975), p. 276.

{13} See Philip Quinn, "Creation, Conservation, and the Big Bang," in *Philosophical Problems of the Internal and External Worlds*, ed. John Earman, Allen I. Janis, Gerald J. Massey, and Nicholas Rescher (Pittsburgh: University of Pittsburgh Press, 1993), pp. 589-612; cf. idem, "Divine Conservation, Secondary Causes, and Occasionalism," in *Divine and Human Action*, ed. Thomas V. Morris (Ithaca, N.Y.: Cornell University Press, 1988), pp. 50-73.

{14} Quinn, "Secondary Causes," p. 52.

{15} Quinn, "Big Bang," pp. 596-597.

{16} Hence, it is difficult to understand what Quinn means when he asserts, "According to this account, then, divine volition brings about the existence of every contingent individual at every instant at which it exists . . ." (Ibid., p. 597), for this is precisely what his account does *not* state. If he allows that God's volition brings about the existence of individuals, then why define creation and conservation in terms of the superfluous state-state causation envisioned by Quinn?

{17} Quinn, "Secondary Causes," p. 54.

{18} Ibid., p. 55.

{19} This is a very common failing. Cf. similar assertions by Kvanvig and McCann: from the point of view of the creative act, " . . . it is not even possible to distinguish God's bringing things to be from His sustaining them in existence" (Jonathan L. Kvanvig and Hugh J. McCann, "Divine Conservation and the Persistence of the World," in *Divine and Human Action*, p. 49; God's "creating and conserving the world are, from the point of view of the act itself, indistinguishable, a seamless endeavor consistent with the divine simplicity . . . and responsible for every instant of the world's existence" (Hugh J. McCann, "Creation and Conservation," in *A Companion to Philosophy of Religion*, Blackwell Companions to Philosophy 8, ed. Philip L. Quinn and Charles Taliaferro (Oxford: Basil Blackwell, 1997), p. 308). A similar tendency is evident in James F. Ross, "Creation," *Journal of Philosophy* 77 (1980): 614-619; idem, "Creation II," in *Existence and Nature of God*.

{20} As noted by Alfred J. Freddoso, "Medieval Aristotelianism and the Case against Secondary Causation in Nature," in *Divine and Human Action*, p. 79. For the scholastics causation is a relation between substances (agents) who act upon other substances (patients) to bring about states of affairs (effects). *Creatio ex nihilo* is atypical because in that case no patient is acted upon.

{21} Rightly so Aquinas *Summa contra gentiles* 2.17.

{22} See Majid Fakhry, *Islamic Occasionalism and its Critique by Averroës and Aquinas* (London: George Allen & Unwin, 1958), p. 30.

{23} It is very interesting to compare Kvanvig and McCann's development on this score with Quinn's. Whereas Quinn claims that "because God can repeatedly create a single individual at

every instant in a finite interval throughout which it persists, God can repeatedly create, or recreate, one and the same individual" (Quinn, "Continuous Creation," p. 76), Kvanvig and McCann deny "that each of the things God creates somehow begins to exist *anew* at each moment of its duration Rather what is intended is a view according to which each instant of the existence of any of God's creatures is as radically contingent as any other . . ." (Kvanvig and McCann, "Divine Conservation," p. 15). They think that they are re-affirming Quinn's position, but his view is much more radical than the common claim that every instant of a creature's existence is equally contingent, as is evident from his affirmation that God's conservation of the same individual could be discontinuous. For Quinn, an individual is re-created anew at every instant at which it exists. McCann does not dispute that such continuous re-creation would preclude diachronic identity; instead, he attempts to block the inference from conservation to continual re-creation by denying that the world is "in any process of continually passing away and being re-created," with the emphasis on *process*: "there can be no process of the world's passing away, just as there can be none of its coming to be" (McCann, "Creation and Conservation," p. 307). But it is no part of Islamic occasionalism that ceasing to exist and being created are processes; quite the contrary. At each successive instant God creates *e* afresh, rather than acts upon *e* to preserve it from instant to instant. Thus, the absence of process is irrelevant to whether continual creation precludes diachronic identity.

Kvanvig and McCann also affirm in their early work that secondary causes are operative in nature to produce changes in things (Kvanvig and McCann, "Divine Conservation," p. 16), but in their later article they argue that in fact there is no causal nexus among things and events in the world because both diachronic and synchronic causation are impossible (Jonathan L. Kvanvig and Hugh J. McCann, "The Occasionalist Proselytizer: a Modified Catechism," in *Philosophical Perspectives*, vol. 5: *Philosophy of Religion*, ed. James E. Tomberlin [Atascadero, Calif.: Ridgeway Publishing, 1991], pp. 598-609). Perhaps they mean only to re-affirm their earlier position that secondary causes produce only changes in things, not their existence; but their arguments, if successful, seem to strike down any causal relations between creatures. They claim not to defend the view that there are no genuine interactions among creatures; but it is difficult to see what room is left in their account for such. When they say of the collision and acceleration of billiard balls, "It is simply a question of the things God creates being what they are rather than something else" (*Ibid.*, pp. 611-612), this sounds very much like Islamic occasionalism. God creates things afresh in different states of being at each successive instant, and secondary causal relations become mere Humean relations.

{24} Quinn, "Continuous Creation," p. 76.

{25} For discussion see Stephen T. Davis, *Risen Indeed* (Grand Rapids, Mich.: Wm. B. Eerdmans, 1993), chap.7.

{26} Quinn, "Secondary Causes," p. 60.

{27} On this point see the extremely interesting piece by Alfred J. Freddoso, "God's General Concurrence with Secondary Causes: Why Conservation is not Enough," in *Philosophical Perspectives*, pp. 553-585.

{28} On A- versus B-Theories of time: see Richard Gale, "The Static versus the Dynamic Temporal: Introduction," in *The Philosophy of Time*, ed. Richard M. Gale (New Jersey: Humanities Press, 1968), pp. 65-85.

The Caused Beginning of the Universe: A Response to Quentin Smith

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Quentin Smith has recently argued that (I) the universe began to exist and (II) its beginning was uncaused. In support of (II), he argues that (i) there is no reason to think that the beginning was caused by God and (ii) it is unreasonable to think so. I dispute both claims.

His case for (i) misconstrues the causal principle, appeals to false analogies of *ex nihilo* creation, fails to show how the origin of the universe *ex nihilo* is naturally plausible, and reduces to triviality by construing causality as predictability in principle. His case for (ii) ignores important epistemological questions and fails to show either that vacuum fluctuation models are empirically plausible or that they support his second claim.

"The Caused Beginning of the Universe: a Response to Quentin Smith." *British Journal for the Philosophy of Science* 44 (1993): 623-639.

Contents:

[I. Introduction](#)

[II. No Reason to Regard the Theistic Hypothesis as True](#)

[III. Unreasonable to Regard the Theistic Hypothesis as True](#)

[IV. Conclusion](#)

I. Introduction

Quentin Smith [1988] has recently argued that there is sufficient evidence at present to warrant the conclusions that (i) the universe probably began to exist and that (ii) it began to

exist without being caused to do so. While I am inclined to agree with (i), {1} it seems to me that Smith has overstated the case for (ii).

As part of his argument for (ii), Smith takes on the task of disproving what we may call the theistic hypothesis (TH), that the beginning of the universe was caused by God. It is apparently Smith's contention that the theist who believes in divine *creatio ex nihilo* must fly in the face of the evidence in order to do so. But is this in fact the case? As I read him, Smith's refutation of (TH) basically falls into two halves: (i) there is no reason to regard (TH) as true, and (ii) it is unreasonable to regard (TH) as true. Let us, therefore, examine each half of his refutation in turn.

II. No Reason to Regard (TH) as True

In order to show that there is no reason to think that God caused the beginning of the universe, Smith attacks the universality of the causal principle, variously construed. After arguing that ". . . it belongs analytically to the concept of the cosmological singularity that it is not the effect of prior physical events" and that "this effectively rules out the idea that the singularity is an effect of some prior natural process" (p. 48), Smith turns to the "more difficult question" of whether the singularity or the Big Bang is the effect of a supernatural cause. He presents the following argument (incorrectly attributed to me) as a basis for inferring a supernatural cause of the universe's origin:

1. We have reason to believe that all events have a cause.
2. The Big Bang is an event.
3. Therefore, we have reason to believe that the Big Bang has a cause.

While admitting that this argument does not violate singularity theorems, since the cause is not conceived to be a spatio-temporal object, Smith maintains that the argument fails because (1) is false. Quoting me to the effect that "the causal proposition may be taken as an empirical generalization enjoying the strongest support experience affords," Smith rejoins that quantum mechanical considerations show that the causal principle is limited in its application, so that a probabilistic argument for a cause of the Big Bang cannot succeed. For according to Heisenberg's Uncertainty Principle, it is impossible to predict precisely the conditions of the values of momentum or position of some particle x at some time t_2 on the basis of our knowledge of the conditions of x at t_1 . Since it is sufficient to understand causality in terms of a law enabling precise predictions of individual events to be deduced, it follows from Heisenberg's Principle that there are uncaused events in this sense. {2} Therefore, the causal proposition is not universally applicable and may not apply to the Big Bang.

But what exactly is the causal proposition which is at issue here? The proposition which I enunciated was not (1), as Smith alleges, but rather

- 1.' Whatever begins to exist has a cause.

The motions of elementary particles described by statistical quantum mechanical laws, even if uncaused, do not constitute an exception to this principle. As Smith himself admits, these considerations "at most tend to show that acausal laws govern the *change of condition* of particles, such as the change of particle x 's position from q_1 to q_2 . They state nothing about the causality or acausality of absolute beginnings, of beginnings of the existence of particles" (p. 50).

Smith seeks to rectify this defect in his argument, however, by pointing out that the Uncertainty relation also permits energy or particles (notably virtual particles) to "spontaneously come into existence" for a very brief time before vanishing again. It is therefore false that "all beginnings of existence are caused" and, hence, ". . . the crucial step in the argument to a supernatural cause of the Big Bang . . . is faulty" (pp. 50-51).

But as a counterexample to (1'), Smith's use of such vacuum fluctuations is highly misleading. For virtual particles do not literally come into existence spontaneously out of nothing. Rather the energy locked up in a vacuum fluctuates spontaneously in such a way as to convert into evanescent particles that return almost immediately to the vacuum. As John Barrow and Frank Tipler comment, ". . . the modern picture of the quantum vacuum differs radically from the classical and everyday meaning of a vacuum-- nothing. . . . The quantum vacuum (or vacua, as there can exist many) states . . . are defined simply as local, or global, energy minima ($V'(O)=0$, $V''(O)>0$)" ([1986], p. 440). The microstructure of the quantum vacuum is a sea of continually forming and dissolving particles which borrow energy from the vacuum for their brief existence. A quantum vacuum is thus far from nothing, and vacuum fluctuations do not constitute an exception to the principle that whatever begins to exist has a cause. It therefore seems that Smith has failed to refute premiss (1').

Let us pursue Smith's argument further, however. He proceeds to argue that there is no reason to think that the causal principle applies to the Big Bang, whether one adopts a model based exclusively on the General Theory of Relativity or whether one uses a model adjusted for quantum effects during the Planck era. Consider on the one hand a model in which quantum physics plays no role prior to 10^{-43} second after the singularity. Since the classical notions of space and time and all known laws of physics break down at the singularity, it is in principle impossible to predict what will emerge from a singularity. If we regard the Big Bang as the first physical state, {3} then the particles that constitute that state must be regarded as being randomly and spontaneously emitted from nothing at all. Smith states, "This means, precisely put, that if the Big Bang is the first physical state, then every configuration of particles that does constitute or might have constituted this first state is as likely on *a priori* grounds to constitute it as every other configuration of particles. In [this] case, the constitution of the Big Bang₁ is impossible in principle to predict and thus is uncaused (for 'uncaused' minimally means 'in principle unpredictable')" (p. 52). Moreover, since spacetime curves cannot be extended beyond the singularity, it cannot have causal antecedents.

On the other hand, consider a model in which quantum processes do predominate near to the Big Bang. If the defender of the causal principle maintains that the proposition

4. There are some uncaused beginnings of existence *within* spacetime

is irrelevant to and thus cannot increase the probability of

5. The beginning of the existence of spacetime itself is uncaused,

then Smith will respond that the same holds for the parallel argument for a supernatural cause of four-dimensional spacetime. For the proposition

6. All beginnings of existence *within* spacetime are caused

would by the same token be irrelevant to and thus not increase the probability of

7. The beginning of the existence of four- dimensional spacetime is caused.

So whether one adopts a classical relativistic model or a quantum model, there is no reason to postulate a cause, natural or supernatural, of the Big Bang.

Is this a sound argument? It seems to me not. To pick up on a point noted earlier, Smith's argument throughout his paper appears to be infected with positivism, so that it is predicated upon a notion of causality that is drastically inadequate. Smith assumes uncritically the positivistic equation between predictability in principle and causation. But this verificationist analysis is clearly untenable, as should be obvious from the coherence of the position that quantum indeterminacy is purely epistemic, there existing hidden variables which are in principle unobservable, or even the more radical position of die-hard realists who are prepared to abandon locality in order to preserve the hidden variables. Clearly, then, to be "uncaused" does not mean, even minimally, to be "in principle unpredictable."

This single point alone seems to me to vitiate Smith's entire argument for his conclusion (ii) and against (TH) in particular. For now we see that Smith's argument, even if successful, in no way proves that the universe began to exist without a cause, but only that its beginning to exist was unpredictable. What is ironic about this conclusion is that it is one with which the theist is in whole-hearted agreement. For since according to classical theism creation is a freely-willed act of God, it follows necessarily that the beginning and structure of the universe were in principle unpredictable even though it was caused by God. The theist will therefore not only agree with Smith that "That there are uncaused events *in this sense* follows from Heisenberg's uncertainty principle" (p. 49), but even more insist that such uncaused events are entailed by classical theism's doctrine of creation. He will simply deny that this is the relevant sense when we are inquiring whether the universe could have come into being uncaused out of nothing.

When we ask that question, we are asking whether the whole of being could come out of non-being; and here a negative answer seems obvious. Concerning this question, even genuine quantum indeterminacy affords no evidence for an affirmative response. For if an event requires certain physically necessary conditions in order to occur, but these conditions are not jointly sufficient for its occurrence, and the event occurs, then the event is in principle unpredictable, but it could hardly be called uncaused in the relevant sense. In the case of quantum events, there are any number of physically necessary conditions that must obtain for such an event to occur, and yet these conditions are not jointly sufficient for the occurrence of the event. (They are jointly sufficient in the sense that they are all the conditions one needs for the event's occurrence, but they are not sufficient in the sense that they guarantee the occurrence of the event.) The appearance of a particle in a quantum vacuum may thus be said to be spontaneous, but cannot be properly said to be absolutely uncaused, since it has many physically necessary conditions. To be uncaused in the relevant sense of an absolute beginning, an existent must lack any non-logical necessary or sufficient conditions whatsoever. Now at this juncture, someone might protest that such a requirement is too stringent: "For how could *anything* come into existence without *any* non-logical necessary or sufficient conditions?" But this is my point exactly; if absolutely nothing existed prior to the Big Bang--no matter, no energy, no space, no time, no deity--, then it seems impossible that anything should begin to exist.

As for Smith's two cases, then, in the case of the classical relativistic theory, the fact that the universe originates in a naked singularity only proves that we cannot *predict* what sort of

universe will emerge therefrom (and Smith does not claim otherwise), and it leaves the coming-into-existence of the singularity itself unexplained. If we interpret the singularity as a mathematical idealization whose ontological counterpart is nothing, then it becomes clear why the universe is unpredictable and why its unpredictability in no way implies the possibility of its coming into being without a cause.{4} As for Smith's consideration that a singularity is a point beyond which spacetime curves cannot be extended, this only proves that the creation event cannot have been brought about by any natural cause; but it does not prove that a being which transcended space and time could not have caused it.

As for the quantum case, the problem with the inference from (4) to (5) is not that it moves from existents within the universe to the universe as a whole, but rather that Smith's faulty concept of causation makes the notion of "uncaused" equivocal. For some beginnings of existence within spacetime are uncaused in the sense of being spontaneous or unpredictable, but one cannot conclude that therefore spacetime itself could come into being uncaused in the stronger sense of arising from nothing in the utter absence of physically necessary and sufficient conditions. But the inference from the necessity of causal conditions for the origin of existents in spacetime to the necessity of causal conditions for the origin of spacetime itself is not similarly equivocal. Indeed, our conviction of the truth of the causal principle is not based upon an inductive survey of existents in spacetime, but rather upon the metaphysical intuition that something cannot come out of nothing.{5} The proper inference, therefore, is actually from "Whatever begins to exist has a cause" and "The universe began to exist" to "The universe has a cause," which is a logically impeccable inference based on universal instantiation. It seems to me, therefore, that not only has Smith failed to show that the Big Bang does not require a supernatural cause, but that, on the contrary, we see from these considerations that if the universe did originate from nothing, then that fact does point to a supernatural cause of its origin.{6}

Hence, I conclude that Smith has failed to show that there is no reason to regard (TH) as true.

III. Unreasonable to Regard (TH) as True

If Smith is to prove his point (ii), in any case, he has to do much more than show that there is no reason to adopt (TH). He has to show that in light of the evidence, (TH) has now become unreasonable. Smith believes the evidence for vacuum fluctuation models of the origin of the universe is such as to render (TH) unreasonable. For it is physically necessary for quantum effects to predominate near to the Big Bang, and quantum mechanical models of the origin of the universe as or on the analogy of a vacuum fluctuation provide the most probable account of the origin of the universe out of nothing.

Now Smith's line of reasoning raises some intriguing epistemological issues, to which, unfortunately, Smith gives no attention.{7} Under what circumstances would it be irrational to believe in supernatural *creatio ex nihilo*? Under what circumstances would it be rational? When is a supernatural explanation preferable to a naturalistic one and *vice versa*? Rather than seek to adjudicate these questions, let us assume for the sake of argument that it would be unreasonable, all things being equal, to posit a supernatural cause for the origin of the universe when a plausible empirical explanation is available or even likely to become available. Notice that in such a case (TH) would not be *falsified*; it would simply be *unreasonable*, all things being equal, to believe it. The question is, then, whether vacuum fluctuation models of the origin of the universe are or are likely to become plausible empirical explanations.

The answer to the question as to whether such models now provide plausible empirical explanations for the universe's origin is, of course, no, both because the theories are so problematic and underdeveloped and because there is no empirical evidence in their favor. Christopher Isham comments,

None of the schemes proposed so far are in any sense rigorous theories. This stems partly from the lack of any proper unification of general relativity and quantum theory. However, even setting this aside, the extant proposals are incomplete; in particular it is by no means clear that they do in fact lead to a unique quantum state. Major conceptual problems arise when trying to apply quantum theory to the universe as a whole. This problem is so severe that many highly respectable theoretical physicists think the whole subject of quantum cosmology is misconceived.

It follows from the above that theories of the quantum origin of the universe are highly speculative and do not have anything like the scientific status of, say, even the more exotic branches of modern elementary particle physics (Isham [1992], sec. 1.5).

It is remarkable that Smith has so high a degree of confidence in quantum fluctuation models that he thinks it unreasonable to believe in (TH), for this is tantamount to saying that in light of these theories it is no longer reasonable to hold to a Big Bang model involving a singularity. But these theories are so inchoate, incomplete, problematic, and poorly understood that they have not commended themselves to most scientists as more plausible than traditional Big Bang models. Of course, quantum effects will become important prior to 10^{-43} sec, but it is pure speculation that the initial singularity will be averted. {8}

Smith's bold assertions on behalf of these models greatly overshoot the modest, in some cases almost apologetic, claims made by the proponents of the models themselves. Brout, Englert, and Gunzig, for example, advised: "We present our work as a hypothesis; . . . For the present all that can be said in favor of our hypothesis is that these questions can be examined and on the basis of the answers be rejected or found acceptable ([1978], pp. 78, 98). Atkatz and Pagels offered the following justification: "While highly speculative, we believe this idea is worth pursuing" ([1982], p. 2072). All that Vilenkin claimed on behalf of his model was, "The advantages of the scenario presented here are of aesthetic nature ([1982], p. 27). Other proponents of such models claim no more than that their model is *consistent* with observational data--and sometimes they do not even claim that much. In fact, it is ironic that--apparently unbeknownst to Smith--several of the original proponents of these models have, as we shall see, already abandoned the vacuum fluctuation approach to cosmogeny as implausible and are seeking elsewhere for explanations of the universe's origin.

Are these models then likely to become plausible empirical explanations of the universe? Again it would be somewhat presumptuous to give an affirmative answer to this question. Such models are provocative and worth pursuing, but there is no reason to think that they are likely to become plausible empirical explanations of the universe's origin. Indeed, there is some reason to doubt that such models can ever become plausible *empirical* explanations, since such models, by their very nature, tend to posit events which are in principle inaccessible to us, causally discontinuous with our universe or lying beyond event horizons. According to Vilenkin, the only verifiable prediction made by his model is that the universe must be closed--a prediction which observational cosmology tends to falsify. Smith likes Gott's model because it makes empirical predictions (Smith, [1986]). But so far as I can see, his only prediction is that the universe is open, which is so general as to be useless in serving

as evidence for the model. None of the proponents of such models has to my knowledge laid down conditions which would verify his theory. J. P. Van der Weele concludes, "We will never be able to determine which one of the possibilities is actually true (if any), so all our ideas about the outer universe are doomed to remain metaphysical speculations" ([1983], p. 36). At present, then, such models are perhaps best viewed as naturalistic metaphysical alternatives to (TH).

But even so construed, their superiority to theism is far from obvious:

(1) Such models make the metaphysical presupposition that the observed expansion of the universe is not, in fact, the expansion of the Universe- as-a-whole, but merely the expansion of a restricted region of it. Our expanding universe is contained in some sort of wider space (whether a Minkowski space as in the Brout, Englert, Gunzig model or a curved de Sitter space as in Gott's model) in which the quantum fluctuations occur in the spacetime geometry which "pull" particles into existence out of the energy locked up in empty space. Thus, throughout this broader Universe-as-a-whole, which is considered to be a quantum mechanical vacuum, fluctuations occur which blow up into distinct material universes. But immediately the question arises, why, since all the evidence we possess suggests that space is expanding, should we suppose that it is merely our *region* of space (and regions like it) that is expanding rather than *all* of space? This thesis would appear to be in violation of the Copernican Principle, which holds that we occupy no special place in the universe. This methodological principle, which underlies all of modern astronomy and astrophysics, would be violated because what we observe would not be typical of the Universe at large. A violation of the principle in this case would appear to be entirely gratuitous. Moreover, it is not just the postulate of a different wider space that is required, but a good deal of fine-tuning is necessary in order to get the space to spawn appropriate universes. But there is no independent reason to think that such a different wider space exists or, indeed, that a different wider space of any sort at all exists. In this sense, the postulation of such a wider space is an exercise in speculative metaphysics akin to the postulate of theism--except that theism enjoys the advantage that there are at least putative independent reasons for accepting the existence of God.

(2) Moreover, it is questionable whether the models at issue are anything more than mathematical constructs lacking any physical counterpart. For, as David Lindley [1987] points out, such models depend on the use of certain mathematical "tricks" for their validity. For example, quantities derived from the conformal factor most naturally belong to the geometrical side of Einstein's equation, but by being put on the other side of the equation they can be imagined to be part of the stress energy tensor instead. This "rather arbitrary procedure" allows one to think of the conformal factor as a physical field. But this seems to be a clear case of unjustified ontologizing of a mathematical notion into a physical entity. To make matters worse, proponents of such models then propose the trick of coupling these conformal fields dynamically to other more conventional physical components of the stress energy tensor, such as the fields associated with particles similar to gauge bosons in high energy physics. In this way the conformal field can be made to generate regions of distorted geometry and a local density of particles. But what reason or evidence is there to regard such a procedure as anything more than mathematical legerdemain? As Barrow and Tipler point out, "It remains to be seen whether any real physical meaning can be associated with these results([1986], p. 441). Brout and Spindel, who pioneered work on vacuum fluctuation models, now admit that the field theoretical foundations of the production mechanisms as well as the instability of the background space "are flimsy at best" ([1989], p. 216).

Nor does the comparison of the universe's origin to the spontaneous production of a virtual particle serve to render these models plausibly realistic. For if this comparison is meant to be reasoning by analogy, then it seems extraordinarily weak, since the disanalogies between the universe and a virtual particle are patent. If we are to believe with Tryon [1973] that the universe literally *is* a virtual particle, then this seems even more preposterous, since the universe has neither the properties nor behavior of a virtual particle. One might ask, too, why quantum fluctuations are not now spawning universes in our midst? Why do vacuum fluctuations endure so fleetingly rather than grow into mini- universes inside ours?

(3) Vacuum fluctuation models are incompatible with observational cosmology. As Isham ([1990], p. 10; [1992], sec. 2) points out, there is in such models simply no way in which the mathematics can select one particular moment within the pre-existent, infinite, and homogeneous time at which a fluctuation should occur which will spawn a universe. Similarly, no way exists for specifying a certain point in space at which such a creation event should occur. Rather vacuum fluctuation theories tend to predict a creation event at every time t , or more precisely, as quantum theories they predict a non-zero probability of a creation event within any finite time interval, with an infinite number of creation points distributed evenly throughout space. This leads at once to an infinite number of creation events within the wider spacetime. But then the fluctuation-formed universes would inevitably collide with each other as they expand, which contradicts the findings of observational cosmology, since we do not see such "worlds in collision," to borrow a phrase.{9}

Gott [1982] attempts to avoid this difficulty by simply laying down conditions where the fluctuations are allowed to occur in the wider space. For any universe-spawning event E , there must not exist another similar event E' in the past light cone of E . The volume of this region which must be free of events like E is infinite. In order to prevent any E' from occurring in this region, Gott stipulates that the probability of randomly producing events like E per unit four-volume be infinitesimal. Since de Sitter space is infinite, one can thus construct a model of an infinite number of disjoint universes formed by fluctuations. But not only is this scenario extraordinarily *ad hoc*, but it does not seem even to avoid the difficulty.{10} For given infinite past wider time, each of the infinite regions of the de Sitter space will have spawned an open universe which will have filled the volume of that region completely, so that all the bubble universes will by now have collided or coalesced. About the only way to avoid this consequence is to postulate an expansion of the background space itself. But then we seem constrained to posit some origin of the wider spacetime--and thus we are right back to where we started. Isham regards this difficulty as "fairly lethal" to vacuum fluctuation models and reports that "theories of this type have not found wide acceptance," commenting that their interest "lies mainly in some of the rather general problems" that they raise ([1990], p. 10; [1988], p. 387).

(4) It is obvious from what has been said above that vacuum fluctuation models have, in fact, nothing to do with the origination of the universe *ex nihilo*. They posit metaphysical realities of precise specifications in order to generate our universe. Some of them are really more closely related to inflationary scenarios than to cosmogeny. Interpreted cosmogenically, vacuum fluctuation models constitute in the final analysis denials that the universe began to exist, for it is only our observable segment of the universe that had a beginning, not the Universe- as-a-whole. As Barrow and Tipler comment, "It is, of course, somewhat inappropriate to call the origin of a bubble Universe in a fluctuation of the vacuum 'creation *ex nihilo*,' for the quantum mechanical vacuum state has a rich structure which resides in a previously existing substratum of space-time, either Minkowski or de Sitter space-time.

Clearly, a true 'creation *ex nihilo*' would be the spontaneous generation of everything--space-time, the quantum mechanical vacuum, matter--at some time in the past ([1986], p. 441). Smith admits that "A disadvantage of . . . theories that postulate a background space from which the universe fluctuates, is that they explain the existence of the universe but only at the price of introducing another unexplained given, viz., the background space" (p. 54). In that case, Smith has not only failed to carry his point (ii), but (i) as well.

But Smith asserts that there are even more radical models of a quantum origin of the universe that do not postulate the existence of a wider space, but hold that the universe is the result of some sort of quantum transition out of nothingness into being. For example, in the Vilenkin model, the origin of the universe is understood on the analogy of quantum tunneling, a process in which an elementary particle passes through a barrier, though it lacks the energy to do so, because the Uncertainty relation allows it to acquire spontaneously the energy for the period of time necessary for it to pass through the barrier. Vilenkin proposes that spacetime itself tunnels into existence out of nothing, except that in this case there is no prior state of the universe, but rather the tunneling itself is the first state that exists.

Unfortunately, Smith seems to have misinterpreted in a literal way Vilenkin's philosophically naive use of the term "nothing" for the four-dimensional Euclidean space out of which our spacetime emerged.^{11} Be that as it may, if the quantum tunneling is supposed to be literally from nothing, then such models seem to be conceptually flawed. For as Thomas Aquinas saw (*Summa contra gentiles* 2.17), creation is not properly any kind of a change or transition at all, since transition implies the existence of an enduring subject, which is lacking in creation. In a beginning to be out of nothing, there can be no talk whatsoever of transition, quantum or otherwise. It is therefore incoherent to characterize creation as a quantum transition out of nothingness.

Even more fundamentally, however, what we are being asked to believe is surely metaphysical nonsense. Though dressed up in the guise of a scientific theory, the thesis at issue here is a philosophical one, namely, can something come out of nothing? Concerning his own model, even Vilenkin admits, "The concept of the universe being created from nothing is a crazy one ([1982], p. 26). He tries to alleviate this craziness by comparing it to particle pair creation and annihilation--an analogy which we have seen to be altogether inadequate and in any case irrelevant to the Vilenkin model as Smith interprets it, since he supposedly lacks either the embedding quantum mechanical spacetime or the Euclidean 4-space. The principle *ex nihilo nihil fit* seems to me to be a sort of metaphysical first principle, one of the most obvious truths we intuit when we reflect seriously. If the denial of this principle is the alternative to a theistic metaphysic, then let those who decry the irrationality of theism be henceforth forever silent!

If this fourth criticism is on target, then vacuum fluctuation models say nothing against divine *creatio ex nihilo*, for even if some such model turns out to be correct, the theist will maintain that God created the wider spacetime from which our material universe emerged. It might be rejoined that there would then be no grounds for positing God as the creator of the embedding spacetime, since there is no scientific evidence that it began to exist. Not only is that not the case, as we have seen, but divine *creatio ex nihilo*, as I have defended it elsewhere, is grounded in revelation and philosophical argument, and the scientific evidence merely serves as empirical *confirmation* of that doctrine. The theist, after all, has no vested interest in denominating the Big Bang as the moment of creation. He is convinced that God created all of spacetime reality *ex nihilo*, and the Big Bang model provides a powerful suggestion as to

when that moment was; on the other hand, if it can be demonstrated that our observable universe originated in a broader spacetime, so be it--in that case it was this wider reality that was the immediate object of God's creation. But unless the conceptual difficulties in such models can be overcome and some empirical evidence for them is forthcoming, the theist will probably apply Ockham's Razor and be content to regard the Big Bang as the creation event.

(5) I earlier alluded to the fact that vacuum fluctuation models have been abandoned as plausible accounts of the origin of the universe by some of their principal expositors and to that extent are already somewhat dated. Brout, Englert, and Spindel of the Free University of Brussels, where much of the theoretical work on these models was done, have, for example, moved beyond such models and have criticized the attempt of some of their colleagues to refurbish the old, untenable models (Brout and Spindel, [1989], pp. 215-16). They now contend that an explanation of the origin of the universe "must await the yet-to-come quantum theory of gravity." The quantum gravity model that seems to have fired the imagination of many current theorists is the model of Hartle-Hawking [1983] based on the assigning of a wave function to the universe.

Unfortunately, models of this sort confront acute philosophical difficulties concerning the metaphysics of time.^{12} (i) Such models presuppose a geometrodynamical interpretation of spacetime that suppresses objective temporal becoming in favor of a Parmenidean, static construal of the dynamics of spacetime in terms of positions on a leaf of history in superspace.^{13} Already this reduction of spacetime to a leaf of history in superspace has completed the Parmenidean reinterpretation of the dynamics of time along static lines, for the arena of geometrodynamics is not a super-spacetime, but a *superspace* alone. But the introduction of quantum theory into geometrodynamics--a move essential to wave functional models of the origin of our 4-geometry--not only makes spacetime ontologically derivative from superspace, but, far more, actually expunges spacetime altogether, for quantum theory makes it impossible to distinguish sharply between 3-geometries on a leaf of history in superspace and those not on it, due to indeterminacy. Misner, Thorne, and Wheeler state,

That object which is central to all of classical general relativity, the four-dimensional spacetime geometry, simply does not exist, except in a classical approximation.

. . . one has to forego that view of nature in which every event, past, present, or future, occupies its pre-ordained position in a grand catalog called 'space-time' There is no spacetime, there is no time, there is no before, there is no after ([1973], pp. 1182-3).

(ii) Such models convert time into a spatial dimension by employing imaginary numbers for the time coordinate prior to the Planck time.^{14} Construed realistically, this is just bad metaphysics. Space is a dimension ordered by a relation of *betweenness*: for three successive points x , y , and z on a spatial line, y is between x and z . But time is ordered in addition by a unique relation of *earlier/later than*: for two successive moments t_1 and t_2 in time, t_1 is earlier than t_2 , and t_2 is later than t_1 . While spatial points are not ordered by any such relation, this relation is essential to the nature of time; as Schlesinger points out, "The relations 'before' and 'after' have generally been acknowledged as being the most fundamental temporal relations, which means that time deprived of these relations would cease to be time" ([1975], p. 171). It is thus metaphysically impossible for time to be a dimension of space. Moreover, as an ardent A-theorist who holds to the objective reality of tensed facts, Smith regards moments of time as essentially possessing the shifting properties or relations of presentness, pastness, and futurity. Nothing even remotely like these A-determinations characterizes units of space.

Thus, Smith must agree that the notion of imaginary time, a sort of spatialized time, is metaphysically impossible. Now perhaps quantum gravitational models could be interpreted as holding, not that time in the earliest stages of the universe is imaginary, but rather that as one goes back in time one arrives at a regime in which time (gradually) ceases to exist and is replaced by a fourth spatial dimension. But such an interpretation is still metaphysically problematic. First, it would imply that the earliest segment of the universe was timeless, which contradicts the claim that this era existed *before* real time began. As Smith himself demands, "If the four-dimensional space does not possess a real time value, how can it stand in relation to the four-dimensional spacetime of being earlier than it? If the four-dimensional space is not in a real (Lorentzian) time, then it is not really earlier than, later than, or simultaneous with the four-dimensional spacetime manifold" ([1993], p. 318). Secondly, it seems impossible for this Euclidean 4-space to "hook up," so to speak, with the real temporal history of the universe. Once the first moment of time had elapsed, that moment was in the past. But the timeless, Euclidean 4-space cannot be in the past, since it is timeless. Thus, there never could have been a time when it was "hooked up" to our temporal universe, since then it would have been present, which is impossible. Hawking seems to realize the impossibility of having two stages of the universe, one timeless and the other temporal, and so he is driven to the Parmenidean position that our universe's existing in real time is just an illusion ([1988], p. 139)! But as Smith points out, such an interpretation is "preposterous . . . at least observationally, since it is perfectly obvious that the universe in which we exist lapses in real rather than imaginary time" ([1993], p. 319).

In order to avert the metaphysical difficulties of the Parmenidean construal of the nature of time inherent in such theories, Smith is forced to interpret quantum gravitational models' employment of geometrodynamics and imaginary time instrumentally rather than realistically and to take the beginning of the universe out of nothing to occur at the first moment of real time ([1993], p. 321). But then we are right back to the metaphysical absurdity of something's coming into being uncaused out of nothing. Smith interprets Hawking's model as establishing a certain probability for the first three-dimensional slice of spacetime to appear uncaused out of nothing. But this is a mistake, for the probability of finding any three-dimensional cross-section of spacetime in such quantum models is only relative to some other cross-section given as one's point of departure (Isham [1988], pp. 395-400). As Isham emphasizes, quantum models hope to give a *description* of the earliest state of the universe, but do not purport to *explain* it: "Note that the one question which even a very ambitious creation theorist cannot (or, perhaps, should not) address is 'Why is there anything at all?' That is strictly a job for philosophers and theologians!" (Isham [1992], p. 4)

It seems to me, therefore, that even if we concede that it would be unreasonable, all things being equal, to posit divine *creatio ex nihilo* when a plausible, empirical hypothesis for the origin of the universe is available or even likely to become available, Smith has failed to show that (TH) is unreasonable. Moreover, for the theist, it is not the case that all things are equal in this matter, for he has independent reasons (from philosophy and revelation) for accepting *creatio ex nihilo* apart from the scientific evidence. If these reasons are sound, then he would be rational in accepting (TH) even if a plausible, empirical account of the world's origin were available--which at present it most certainly is not--though he might not in such a case have a clue as to the moment of creation.

IV. Conclusion

In conclusion, then, I think it is clear that Smith has failed to carry the second prong of his argument, namely, that the universe began to exist without being caused to do so. In his attempt to show that there is no good reason to accept the theistic hypothesis, he misconstrued the causal proposition at issue, appealed to false analogies of *ex nihilo* creation, contradicted himself in holding the singularity to be the source of the universe, failed to show why the origin of the universe *ex nihilo* is reasonable on models adjusted or unadjusted for quantum effects, and, most importantly, trivialized his whole argument through the reduction of causation to predictability in principle, thus making his conclusion an actual entailment of theism. Nor has he been any more successful in proving that the theistic hypothesis is unreasonable in light of the evidence. For he ignores the important epistemological questions concerning the circumstances under which it would be rational to accept divine *creatio ex nihilo*; he has failed to show that vacuum fluctuation models are or are likely to become plausible, empirical explanations of the universe's origin; on the contrary, such models are probably best regarded as naturalistic metaphysical alternatives to the theistic hypothesis, but as such are fraught with conceptual difficulties; and, most importantly, such models, on pain of ontological absurdity, do not in fact support Smith's (ii), so that they do not render unreasonable the hypothesis that God created the universe, including whatever wider spatio-temporal realms of reality might be imagined to exist.

Endnotes

{1} See Craig [1979], pp. 65-140; Smith has offered refutations of some of my philosophical arguments against an infinite temporal regress of events in Craig and Smith [1993], pp. 77-91; his objections do not, however, seem decisive, as I try to show in Craig and Smith [1993], pp. 92-107.

{2} Notice that Smith's claim that such events are uncaused is predicated on the very dubious equivalence between "unpredictability in principle" and "uncausedness," an equivalence which I shall criticize in the text. If all that quantum indeterminism amounts to is "uncausedness" in the sense of "unpredictability in principle," then the demonstration that quantum events are uncaused in this sense fails to confute the causal proposition at issue in the first premiss of the *kalam* argument, unpredictability being an epistemic affair which may or may not result from an ontological indeterminism. For clearly, it would be entirely consistent to maintain determinism on the quantum level even if we could not, even in principle, predict precisely such events. In this paper, however, I shall not assume some controversial "hidden variables" view, but shall for the sake of argument go beyond Smith and assume that indeterminism does hold on the quantum level. For discussion see Shimony [1978], pp. 3-17; Aspect and Grangier [1986], pp. 1- 15; and Bhawe [1986], pp. 467-75.

{3} Smith's own view that the universe began to exist at t_0 and that the state of affairs existing at t_0 in 0, 1, or 2 dimensions is the source of the universe contradicts his claim that the universe began to exist uncaused, for on his view the universe did not come from nothing but is causally connected to the singularity, whose existence remains unexplained. Smith rejects Newton-Smith's demand for a cause of the singularity. Therefore, his argument for (ii) fails.

{4} I cannot refrain from referring again to Anscombe [1973-74], p. 150. As she points out, we can form various pictures in our minds and give them appropriate titles, *e.g.* "Superforce Emerging from the Singularity" or "Gravitons Emerging from the Singularity," but our ability to do that says absolutely nothing about whether it is ontologically possible for something to come into being uncaused out of nothing.

{5} My defense of the causal proposition as an "empirical generalization enjoying the strongest support experience affords" cited by Smith was in its original context a last ditch defense of the principle designed to appeal to the hard-headed empiricist who resists the metaphysical intuition that properly grounds our conviction of the principle (Craig [1979], pp. 141-48). It does seem to me that only an aversion to the theism implied by the principle in the present context would lead the empiricist to think that the denial of the principle is more plausible than the principle itself.

{6} Such a cause would have to be uncaused, eternal, changeless, immaterial, and spaceless; it would, as I have argued elsewhere, also have to be personal and therefore merits the appellation "God" (Craig [1979], pp. 149-53; Craig [1991]).

{7} See, however, Morris [1987], pp. 151-60, for some initial and interesting analysis of these issues.

{8} See also the interesting discussion by Barrow and Tipler [1988], pp. 31-34, in which they explain that since we have no tested theory of quantum gravitation to supersede General Relativity nor any observational evidence for the existence of matter fields which violate the strong or weak energy conditions, the initial cosmological singularity has not been eliminated. In fact, they point out that the finiteness of the action in Friedman models is due to the cosmological singularities. "Thus in general there is a trade-off between space-time singularities: a singularity in the action is avoided only at the price of a singularity in curvature invariants, and *vice versa*. In cosmology some sort of singularity seems inevitable" (pp. 32-33).

{9} See the similar objection urged against the quantum tunneling model of Atkatz and Pagels by M. Munitz, *Cosmic Understanding* (Princeton: Princeton University Press, 1986), p.136, who observes, "For if the actual closed universe arose by a process of quantum tunneling from a prior stable initial state, then the universe in its pre-creation state could not remain indefinitely long in that state, if indeed it is unstable with respect to quantum tunneling." Atkatz and Pagels have admittedly no answer to the question of how the universe got into its pre-creation state. Cf. the analogous reasoning of Davies [1978], p. 336.

{10} See a similar objection urged by Barrow and Tipler [1986], pp. 602-07, who point out that although Gott's model posits a causal structure of the background space consisting of infinitely many non-intersecting, open bubble universes, there must be such a bubble universe in the past light cone of any event p , given a constant probability of bubble formation in the de Sitter space. Notice that because Gott's bubbles are potentially infinite in their expansion, so long as the bubbles are formed after p they will not intersect; the walls of each bubble reach spacelike infinity at an infinite time in the future. But since "the volume of an open bubble becomes infinite in an infinite time," then given an infinite past prior to p , it follows that the past light cone of any p will already contain an open bubble universe that has already expanded to infinity. So also Isham [1988], p. 387.

{11} See Isham [1992], sec. 5.4.

{12} For more on this see Craig [1990], pp. 473-91.

{13} For discussion, see Misner, Thorne, and Wheeler [1973], pp. 1180-95. Cf. "There is no such thing as spacetime in the real world of quantum physics. . . . superspace leaves us space

but not spacetime and therefore not time. With time gone the very ideas of 'before' and 'after' also lose their meaning" (Wheeler [1973], p. 227; see also Wheeler [1980], pp. 346-50 and the therein cited literature.

{14} Isham remarks, "Although these schemes differ in their details they all agree on the idea that space and time emerge in some way from a purely quantum mechanical region which can be described in some respects as if it were a classical, imaginary-time four-space" ([1992], sec. 5.6).

REFERENCES

Anscombe, G.E.M. (1973-74), "'Whatever Has a Beginning of Existence Must Have a Cause': Hume's Argument Exposed," *Analysis* 34:145-51.

Aspect, A. and Grangier, P. (1986), "Experiments on Einstein-Podolsky-Rosen type correlations with pairs of visible photons," in R. Penrose and C.J. Isham (eds.), *Quantum Concepts in Space and Time*. Oxford: Clarendon Press, pp. 1-15.

Atkatz, D. and Pagels, H. (1982), "Origin of the Universe as a Quantum Tunneling Event," *Physical Review D* 25:2065-73.

Barrow, J. and Tipler, F.J. (1986), *The Cosmological Anthropic Principle*. Oxford: Clarendon Press.

_____. (1988), "Action principles in nature," *Nature* 331:31- 34.

Bhave, S. (1986), "Separable Hidden Variables Theory to Explain Einstein- Podolsky-Rosen Paradox," *British Journal for the Philosophy of Science* 37:467-75.

Brout, R., Englert, F., and Gunzig, E. (1978), "The Creation of the Universe as a Quantum Phenomenon," *Annals of Physics* 115:78-106.

Brout R. and Spindel, Ph. (1989), "Black Holes Dispute," *Nature* 337:215-16.

Craig, Wm. (1979), *The Kalam Cosmological Argument*, Library of Philosophy and Religion. London: Macmillan.

_____. (1990), "'What Place, then, for a Creator?': Hawking on God and Creation," *British Journal for the Philosophy of Science* 41:473-91.

_____. (1991), "The *Kalam* Cosmological Argument and the Hypothesis of a Quiescent Universe," *Faith and Philosophy* 8:492- 503.

Craig, Wm. and Smith, Q. (1993), *Theism, Atheism, and Big Bang Cosmology*. Oxford: Clarendon.

Davies, P.C.W. (1978), "Cosmic Heresy?" *Nature* 273:336.

Gott III, J.R. (1982), "Creation of Open Universes from de Sitter Space," *Nature* 295:304-07.

- Gunzig, E., G        , J., and Prigogine, I. (1987), "Entropy and Cosmology," *Nature* 330:621-24.
- Hartle, J. and Hawking, S. (1983), "Wave function of the Universe," *Physical Review D* 28:2960-75.
- Hawking, S. (1988), *A Brief History of Time*. London: Bantam.
- Isham, C. (1988), "Creation of the Universe as a Quantum Process," in R. Russell, W. Stoeger, and G. Coyne (eds.), *Physics, Philosophy, and Theology: a Common Quest for Understanding*. Vatican City State: Vatican Observatory, pp. 375-408.
- _____. (1990), "Space, Time and Quantum Cosmology, " paper presented at the conference "God, Time and Modern Physics," March, 1990, sponsored by the Science and Religion Forum.
- _____. (1992), "Quantum Theories of the Creation of the Universe," unpublished paper, a preliminary version of which appears in V. Br         (ed.), *Interpreting the Universe as Creation*, The Netherlands: Pharos, 1991.
- Lindley, D. (1987), "Cosmology from Nothing," *Nature* 330:603-4.
- Misner, C., Thorne, K.S., and Wheeler, J.A. (1973), *Gravitation*. San Francisco: W.H. Freeman.
- Morris, T. (1987), "Creation *ex Nihilo*: Some Considerations," in *Anselmian Explanations*. Notre Dame, Ind.: University of Notre Dame Press, pp. 151-60.
- Munitz, M. (1986), *Cosmic Understanding*. Princeton: Princeton University Press.
- Schlesinger, G. (1975), "The Similarities between Space and Time," *Mind* 84:161-76.
- Shimony, A. (1978), "Metaphysical Problems in the Foundations of Quantum Mechanics," *International Philosophical Quarterly* 18:3-17.
- Smith, Q. (1986), "World Ensemble Explanations," *Pacific Philosophical Quarterly* 67:73-86.
- _____. (1988), "The Uncaused Beginning of the Universe," *Philosophy of Science* 55:39-57.
- Tryon, E. (1973), "Is the Universe a Vacuum Fluctuation?" *Nature* 246:396-97.
- Van der Weele, J. (1983), "The Inflationary Universe," unpublished thesis, University of Utrecht.
- Vilenkin, A. (1982), "Creation of Universes from Nothing" *Physical Letters B* 117:25-28.
- Wheeler, J.A. (1973), "From Relativity to Mutability," in J. Mehra (ed.), *The Physicist's Conception of Nature*. Dordrecht: D. Reidel, pp. 202-47.

_____. (1980), "Beyond the Black Hole," in Harry Wolf (ed.), *Some Strangeness in the Proportion*. Reading, Mass.: Addison-Wesley Publishing Co., pp. 341-75.

Introduction: The Resurrection of Theism

William Lane Craig

William Craig earned a doctorate in philosophy at the University of Birmingham, England, before taking a doctorate in theology from the Ludwig Maximilians Universität-München, West Germany, at which latter institution he was for two years a Fellow of the Alexander von Humboldt-Stiftung. He is currently a visiting scholar at the Université Catholique de Louvain. He has authored various books, including The Kalam Cosmological Argument, The Cosmological Argument from Plato to Leibniz, and The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez, as well as articles in professional journals like British Journal for the Philosophy of Science, Zeitschrift für Philosophische Forschung, Australasian Journal of Philosophy, and Philosophia.

This article is Dr. Craig's Introduction to [volume three of the Truth Journal](#) on "New Arguments for the Existence of God." It charts the resurgence in our day of Philosophy of Religions and interacts briefly with the thought of such important theistic philosophers as Plantinga, Swinburne, and Leslie.

Source: *Truth: A Journal of Modern Thought*, vols. 3 & 4 (1991): "New Arguments for the Existence of God."

Back in the mid-1960's *Time* magazine ran a cover story for which the magazine's cover was completely black, except for three words emblazoned against the dark background in bright, red letters: "IS GOD DEAD?" The article described the then current "Death-of-God" movement in American theology. But, to paraphrase Mark Twain, it seemed that the news of God's death was premature. At the same time that theologians were writing God's obituary, philosophers were re-discovering His vitality. Just a few years after its "Death-of-God" issue, *Time* carried a story with a similar red on black cover, only this time the title read, "Is God Coming Back to Life?" Indeed, so it must have seemed to those theological morticians of the sixties. During the 1970's interest in philosophy of religion continued to grow. By 1980, *Time* found itself running a major story entitled, "Modernizing the Case for God," which described the contemporary movement among philosophers of religion to refurbish the traditional arguments for God's existence. *Time* marveled,

In a quiet revolution in thought and argument that hardly anybody could have foreseen only two decades ago, God is making a comeback. Most intriguingly, this is happening not among theologians or ordinary believers, but in the crisp intellectual circles of academic philosophers, where the consensus had long banished the Almighty from fruitful discourse.[1]

According to the article, the noted American philosopher Roderick Chisholm believes that the reason that atheism was so influential a generation ago is that the brightest philosophers were atheists; but, he says, today many of the brightest philosophers are theists, and they are using a tough-minded intellectualism in defense of that theism.

This volume of *Truth* attempts to bring to its readers some of those defenses of theism from several of its brightest minds as well as critiques from some of theism's leading detractors. In this Introduction, I hope to assist the reader by explaining a bit of the debate in which the various contributions find their context and by offering some commentary of my own on a few of the contributions themselves.

I.

One of the most exciting developments in the field of religious epistemology has been the move, spearheaded by Alvin Plantinga, to defend the rationality of theistic belief not based on argument. According to Plantinga, belief that God exists is what he calls a "properly basic" belief—that is to say, is not based on inference from other beliefs but is rationally warranted in the circumstances of one's immediate experience of God. Now it must be confessed that such a view is not entirely new—as Roy Varghese notes in his interview with Plantinga (see Table of Contents), much the same sort of religious epistemology has been long espoused by Hick, Mascall, and others. Why then has Plantinga received so much attention for his efforts in religious epistemology? The answer, I think, is two-fold: (i) Plantinga, unlike his epistemological fellows, develops his case fully within the context of and in informed dialogue with the currents of contemporary analytic philosophy. Thus, he rather felicitously presents what he calls the "Reformed Objection to Natural Theology" as a critique-groping, implicit, and inchoate as it may be—of the position of epistemological foundationalism. With that, Plantinga springs into the mainstream of contemporary epistemological debate. (ii) Plantinga's position as one of America's major philosophers ensured that whichever avenue he explored subsequent to his epochal *Nature of Necessity* would be followed with great interest. Having already made important contributions in the philosophy of religion concerning the ontological argument and the problem of evil, Plantinga's handling of issues in religious epistemology could be expected to be intriguing and fruitful.

Already in *God and Other Minds*, Plantinga had made a first foray in the direction of the rationality of theism not based on argument by maintaining that if it is rational to believe in the existence of other minds besides one's own, then it is rational to believe in God.[2] For the analogical argument for other minds is parallel to the teleological argument for God's existence. Though both arguments succumb to the same failing, it is still rational to believe in other minds and hence, *pari passu*, in God. James Tomberlin pointed out that Plantinga's argument assumes that belief in God is basic, that is, non-inferential,[3] and in his subsequent work this was precisely the line that Plantinga took.

In his "The Reformed Objection to Natural Theology," Plantinga attacks what he calls the evidentialist objection to theistic belief.[4] According to the evidentialist, one is rationally justified in believing a proposition to be true only if that proposition is either foundational to knowledge or is established by evidence that is ultimately based on such a foundation. According to this viewpoint, since the proposition "God exists" is not foundational, it would be irrational to believe this proposition apart from rational evidence for its truth. But, Plantinga asks, why cannot the proposition "God exists" be itself part of the foundation, so that no rational evidence is necessary? The evidentialist replies that only propositions that are

properly basic can be part of the foundation of knowledge. What, then, are the criteria that determine whether or not a proposition is properly basic? Typically, the evidentialist asserts that only propositions that are self-evident or incorrigible are properly basic. For example, the proposition "the sum of the squares of the sides of a right triangle is equal to the square of the hypotenuse" is self-evidently true. Similarly, the proposition "I feel pain" is incorrigibly true, since even if I am only imagining my injury, it is still true that I feel pain. Since the proposition "God exists" is neither self-evident nor incorrigible, then according to the evidentialist it is not properly basic and therefore requires evidence if it is to be believed. To believe this proposition without evidence is therefore irrational.

Now Plantinga does not deny that self-evident and incorrigible propositions are properly basic, but he does demand, "How do we know that these are the only properly basic propositions or beliefs?" He presents two considerations to prove that such a condition is too restrictive. (i) If only self-evident and incorrigible propositions are properly basic, then we are all irrational, since we commonly accept numerous beliefs that are not based on evidence and that are neither self-evident nor incorrigible. For example, take the belief that the world was not created five minutes ago with built-in memory traces, food in our stomachs from the breakfasts we never really ate, and other appearances of age. Surely it is rational to believe that the world has existed longer than five minutes, even though there is no way to prove this. The evidentialist's criteria for properly basicity must be flawed. (ii) In fact, what about the status of those criteria? Is the proposition "only propositions that are self-evident or incorrigible are properly basic" itself properly basic? Apparently not, for it is certainly not self-evident nor incorrigible. Therefore, if we are to believe this proposition, we must have evidence that it is true. But there is no such evidence. The proposition appears to be just an arbitrary definition-and not a very plausible one at that! Hence, the evidentialist cannot exclude the possibility that belief in God is also a properly basic belief.

And in fact, Plantinga maintains, following Calvin, that belief in God is properly basic. Man has an innate, natural capacity to apprehend God's existence even as he has a natural capacity to accept truths of perception (like "I see a tree"). Given the appropriate circumstances- such as moments of guilt, gratitude, or a sense of God's handiwork in nature-man naturally apprehends God's existence. Hence, Plantinga insists that his epistemology is not fideistic, since there are circumstances that make belief in God a properly basic belief. In fact, it may be more correct, he admits, to say that the proposition "God exists" is not itself properly basic but is entailed by other beliefs that are truly basic, such as "God is convicting me of sin" or "God is speaking to me." Hence, one is perfectly rational to believe in God wholly apart from evidence.

In his "Reason and Belief in God," Plantinga developed these thoughts in considerably greater detail and endorsed the "central insight" of the Reformers that "the correct or proper way to believe in God . . . was not on the basis of arguments from natural theology or anywhere else; the correct way is to take belief in God as basic." [5] He makes four principal claims in this connection: (i) Taking belief in God as properly basic does not commit one to the relativistic view that virtually any belief can be properly basic. He points out that one can recognize properly basic beliefs without having an explicit criterion of proper basicity. Hence, the Christian theist can reject the proper basicity of other beliefs-like belief in the Great Pumpkin-even though he lacks a criterion for proper basicity and holds belief in God to be properly basic. (ii) Though properly basic, belief that God exists is not groundless. Just as certain perceptual beliefs, like "I see a tree," are properly basic *given the appropriate circumstances*, so belief in God is properly basic in certain appropriate circumstances. Neither

the existence of the tree nor of God is *inferred* from the experience of the circumstances. But it is being in the appropriate circumstances that renders one's belief *properly* basic; the belief would be irrational were it to be held under inappropriate circumstances. Thus, belief that God exists is not arbitrary or gratuitous, for it is properly held by a person placed in appropriate circumstances. (iii) A person who accepts belief in God as properly basic may be open to arguments against that belief. For someone may present him with arguments against theism which are based on propositions and argument forms he also accepts as basic. These counter-arguments constitute defeaters for his basic belief in God, and if that belief is to remain rational for him, he must find some defeater of the defeater. Otherwise he will be forced to abandon some of his basic beliefs in order to restore consistency in his noetic structure, and theism may well be the belief that he chooses to jettison. (iv) Taking belief in God as properly basic is not a form of fideism. For the deliverances of reason include not just inferred propositions, but also propositions taken as basic. God has so constructed us that we naturally form the belief in His existence under appropriate circumstances, just as we do belief in other minds, perceptual objects, and so forth. Hence, belief in God is among the deliverances of reason, not faith.

Plantinga's work in the area of religious epistemology is very welcome, for he adroitly manages to steer his ship between the Charybdis of theological rationalism (Plantinga calls it "evidentialism") and the Scylla of fideism in a way that is wholly consonant with biblical teaching. Still, at least two questions need further clarification: (1) Does the theist *know* that God exists, or is his belief merely rational? (2) What is the relationship between a properly basic belief and an incompatible belief based on evidence?

With regard to the first question, Plantinga agrees that rationality has no necessary connection with truth. In certain circumstances, it may be rational to accept a belief that is, in fact, false, or to reject a belief that is, after all, true. Perhaps the available evidence is preponderant for some belief that is, unbeknownst to us, false, while the evidence for the true belief may be slim or self-contradictory. But the same thing may be said of properly basic beliefs. It is rational, for example, to believe that the world was not created five minutes ago. But maybe it was! Now this raises the obvious question, how do we know that our belief that God exists, while properly basic and rational, is not, nonetheless, false? At first Plantinga seemed inclined to dismiss this problem, claiming that all we can really hope to get at is rationality, not truth. As finite, fallible minds, our epistemic duty is to be rational, not to hit upon truth. But this leaves the theist in the rather disquieting position of not being able to say how or whether he knows that God exists and may in the end lead to skepticism. More recently, therefore, Plantinga has directed his efforts toward providing an account of what it is for belief to be knowledge.^[6] Accepting the traditional definition of knowledge as justified true belief, Plantinga has rejected coherentist and reliabilist accounts and has sought to develop a distinctively theistic account of justification. Although in the works already cited above, Plantinga speaks repeatedly of a properly basic belief's being justified, such language is apt to be misleading, since Plantinga is not addressing the issue of justification insofar as it plays a role in the concept of knowledge. Rather, he is talking about a person's being within his epistemic rights (and so justified in this sense) in accepting a belief non-inferentially or basically. It would be less misleading, I think, to say that a person who forms a basic belief in the appropriate circumstances is *rationally warranted* in accepting that belief. For the question still remains open whether that belief is justified and so knowledge for the person involved. In his first contribution to this volume, Plantinga seeks to address that question by proposing an account of justification according to which a belief is justified if one's cognitive faculties are functioning properly, that is, as God designed them to, in forming that belief. He

claims that the theist has a ready answer to the question of what it means for our cognitive faculties to function correctly, whereas the atheist has failed to provide an answer to this question. Taking his cue from Calvin's claim that there is in man an innate *sensus divinitatis*, Plantinga holds that God has so constituted us that we naturally form the belief that God exists when placed in appropriate circumstances. It is only due to sin that persons under appropriate circumstances do not form this belief; they are, in effect, cognitively dysfunctional. In his "Self Profile" in the recent *Alvin Plantinga Festschrift*, Plantinga makes it clear that, in his opinion, a person whose cognitive faculties function properly in appropriate circumstances and who thus forms the belief that God exists has justified true belief, or knowledge, of God's existence:

Just as we have a natural tendency to form perceptual beliefs under certain conditions, so says Calvin, we have a natural tendency to form such beliefs as *God is speaking to me*, or *God has created all this*, or *God disapproves of what I've done* under widely realized conditions. And a person who in these conditions forms one of these beliefs is within his epistemic rights, displaying no epistemic defect; indeed, Calvin thinks, such a person *knows* the proposition in question. . . . In sum, on the Reformed or Calvinist way of looking at the matter, a person who accepts belief in God as basic may be entirely within his epistemic rights, he may thereby display no defect or blemish in his noetic structure; indeed, under those conditions he may *know* that God exists. This seems to me correct.[7]

For Plantinga, then, a person who forms the belief that God exists under the appropriate circumstances knows that God exists.

But this takes us on to that second question, the relationship between a properly basic belief and an incompatible belief supported by evidence. Although Plantinga's detractors have characterized his view as fideistic,[8] my misgiving here is precisely the opposite: that Plantinga seems on the verge of falling into a sort of crypto- evidentialism. For in considering whether a person who holds to belief in God as properly basic may be open to argument, Plantinga appears to allow that belief in God so held may be overcome by argument, so that the theist in order to be rational may have to abandon his belief in God. Granted, Plantinga asserts that the theist in such a predicament may instead abandon belief in one of the argument's premises or in the argument form itself, but the fact remains that if the theist has a greater degree of belief in those premises and argument forms, then it will be theism that must go. If he is unsure which he believes more deeply, then he will be left in doubt, an existential predicament which is destructive of the spiritual life. Plantinga clearly denies that a person who takes belief in God as basic remains rationally warranted in that belief no matter what counter argument or counter evidence arises.[9] The circumstances which ground his belief confer only a *prima facie* justification, not an *ultima facie* justification, to that belief. Earlier in "Reason and Belief" Plantinga had been concerned to show that a fourteen-year-old theist was rational in believing in God apart from any argument or evidence. But now, returning to the example, he envisions a situation in which such a youngster ought give up his faith:

Like the fourteen-year-old theist . . . , perhaps I have been brought up to believe in God and am initially within my rights in so doing. But conditions can arise in which perhaps I am no longer justified in this belief. Perhaps you propose to me an argument for conclusion [sic] that it is impossible that there be such a person as God. If this argument is convincing for me-if it starts from premises that seem self-evident to me and proceeds by argument forms that seem self-evidently valid- then perhaps I am no longer justified in accepting theistic belief.[10]

Plantinga calls a condition which overrides my *prima facie* justification for *p* a *defeater* for my belief that *p*. Now many people have been brought up to believe in God, observes Plantinga, but then they encountered various potential defeaters for that belief. "If the believer is to remain justified, something further is called for—something that *prima facie* defeats the defeaters." [11] This is the task of theistic apologetics. For example, if I am confronted with the antitheistic problem of evil, then "what is required, if I am to continue to believe rationally, is a defeater for that defeater," such as the "Free Will Defense." [12]

But this I find very disquieting. Since almost every intelligent, adult theist is bombarded throughout his education and adult life with multifarious defeaters for theism, it seems that for a great many, if not most, people, rational argument and evidence will be indispensable to the sustenance of their faith. But then belief that God exists will hardly be comparable to other basic beliefs, like "I see a tree" or "I had breakfast this morning," for it will have to be surrounded by an enormous and elaborately constructed citadel, bristling with defensive armaments to ward off the enemy. In such a case, one wonders how much has been gained by making belief in God properly basic. Such faith is a far cry from that spoken of by the Reformed theologians in whose train Plantinga claims to stand. True, one's apologetic defenses do not now come to supply the inferential basis of one's theistic belief, as Plantinga points out. [13] The failure of the antitheistic problem of evil does not, for example, constitute evidence *for* God's existence. Only if one's defeater-defeaters take the form of positive or offensive apologetic arguments—for example, defeating the problem of evil by arguing from the existence of evil to the objectivity of values and thence to God via a moral argument—might one's belief in God cease to be basic on account of one's apologetic (this would occur only if one also regarded his theistic belief as then inferred from his argument rather than just confirmed by it). It is also true that, according to Plantinga, one's defeater-defeater need not be a sophisticated argument, but perhaps simply the knowledge that someone else has argued responsibly against the defeater. But for all these qualifications, it is still the case that in order for one's faith to be rational, a great deal of argument and evidence may be necessary for the believer. So while Plantinga may not lapse back into evidentialism *per se*, he does seem to adumbrate a sort of neo-evidentialism. According to Plantinga, "the evidentialist objector . . . should be construed as holding that the theist who believes without evidence thereby violates an intellectual obligation or at any rate displays a flawed noetic structure." [14] But with regard to most any intelligent, adult believer, this is a statement with which Plantinga must be in whole-hearted agreement. Belief in God unaccompanied by evidence is irrational.

The problem with such a religious epistemology, it seems to me, is that it still, like theological rationalism, sanctions what Martin Luther called the magisterial use of reason. That is to say, theistic belief is still subject to potential rational defeaters and cannot be rationally held unless such defeaters are defeated. But a little reflection will show that such an epistemology is as religiously inadequate as evidentialism. Consider, for example, a young German student of pietistic Lutheran upbringing who, desiring to become a pastor himself, goes off to the University of Marburg to study theology. There he sits under various professors of Bultmannian stripe and finds his orthodox theistic faith constantly under attack. He looks about for answers, but finds none in either his reading or in discussions with other persons. He feels utterly defenseless before his professors' criticisms, having nothing but the reality of his own experience of a personal God to oppose to their arguments. Now on Plantinga's view as thus far explained, such a student seems to be irrational to continue to believe in God; he has an epistemic obligation to give up his faith. But surely this is unconscionable. For it makes being a theistic believer a matter of historical and geographical accident. Some persons simply lack the ability, time, or resources to come up with successful defeaters of the anti-

theistic defeaters they encounter. Plantinga claims to have shown that there are, to his knowledge, no irrefutable defeaters of theism. Well and good; but what about all the millions of persons prior to Plantinga who were not so ingenious, who did not, for example, see the distinction between a defense and a theodicy, and who, like Plantinga, found all proposals of the latter sort "tepid, shallow, and ultimately frivolous?"[15] Even Plantinga's colleague Philip Quinn, himself a distinguished theistic philosopher, confesses that he sees no solution to the problem of evil and therefore has "very substantial reasons" for believing that God does not exist.[16] The point is not whether Quinn is correct-indeed, Plantinga does, it seems to me, supply defeaters of the purported defeaters of theism-, but rather that there must be millions of people like Quinn, who, due to contingent factors of geography and history, are at a loss as to how to answer the objections to theism they confront. Are we going to deny them, on pain of irrationality, the joy and privilege of personal faith in God? If so, will they therefore be eternally lost for not believing in God? To answer affirmatively seems unthinkable; but to answer negatively seems contrary to the biblical teaching that all men are "without excuse" if they do not believe in God (Rom. 1:20). So long as we retain the magisterial use of reason, the sting of evidentialism has not been removed.

It is for this reason, therefore, that Plantinga's clarification and development of his view of the relationship between a basic belief and potential defeaters in the second selection in this volume is so welcome. In this selection, which is a portion of his reply to Quinn, Plantinga deals with the issue of whether an intellectually sophisticated adult can take belief in God as properly basic. In dealing with defeaters of theistic belief, Plantinga now differentiates between two types of refutation the theist might give: he might produce an *undercutting* defeater for the purported defeater, that is, show that the defeater has not been proved; or he might offer a *rebutting* defeater, that is, show that the purported defeater is false. We may call both types of responses *refutatory* defeaters because they attack the purported defeater itself and aim to show that it is not rationally compelling. But there is another way to defeat an alleged defeater: one may produce what we might call an *overwhelming* defeater of the defeater, that is, produce a defeater which, while not directly refuting the potential defeater, nevertheless exceeds it in warrant and is incompatible with it, so that the potential defeater is overpowered by the new defeater. Now what Plantinga asks is why some belief itself may not have sufficient warrant to overwhelm its potential defeaters; it would in that case be an intrinsic defeater-defeater. He provides an engaging illustration of someone who knows that he has not committed a crime, but against whom all the evidence stands. Such a person is perfectly rational to believe in his innocence even if he cannot refute the evidence against him. In the same way, says Plantinga, why could not belief in God be so warranted that it constitutes an intrinsic defeater of any considerations brought against it?

With this Plantinga has moved, I think, in the direction of the Reformers and the New Testament. For the Reformed theologians, the basis of faith which could withstand all rational attacks was the *testimonium spiritus sancti internum*. For Calvin, apologetics was a useful discipline to confirm the Spirit's testimony, but it was by no means necessary. A believer who was too uninformed or ill-equipped to refute anti-theistic arguments was rational in believing on the basis of the witness of the Spirit in his heart even in the face of such unrefuted objections. The Reformer's doctrine was grounded squarely on the New Testament teaching about the work of the Holy Spirit. According to both Paul and John, it is the inner witness of the Holy Spirit that provides the ultimate assurance that one's faith is true (Gal. 4-6; Rom. 8:15-16; Jn. 14:16-26; I Jn. 2:20, 26-7; 3:24; 4:13; 5:7-10a). Paul uses the term *plerophoria* (complete confidence, full assurance) to indicate the surety that the believer possesses as a result of the Spirit's work (Col. 2:2; I Thess. 1:5; cf. Rom. 4:21; 14:5; Col. 4:12). Nor is the

Spirit's work restricted to believers; He is at work in the hearts of unbelievers in order to draw them to God (Jn. 16:7-11). Being a theist, then, is not a matter left to historical and geographical accident; even a person confronted with what are for him unanswerable objections to theism is, because of the work of the Holy Spirit, within his epistemic rights, nay, under epistemic obligation, to believe in God.

It seems to me, therefore, that the biblical theist ought to hold that among the circumstances that rationally warrant and, indeed, justify theistic belief is the witness of the Holy Spirit, and that non-propositional warrant is an intrinsic defeater of any potential defeater that might be brought against it. It is here that William Alston and Iltyd Trethowan's contributions on religious and moral experience as the grounds for properly basic belief in God become relevant. Though their philosophical viewpoints are diverse, each attempts in his own way to show how an immediate experience of God constitutes the circumstances for a non-inferential knowledge of God's existence.

II.

Even if one agrees that belief in God is a properly basic and justified, true belief, that fact does not evacuate argumentative theism of all significance, for the formulation of sound arguments for and the refutation of objections to theism are an important enterprise which serves as confirmation of the believer's faith and perhaps as persuasion for the unbeliever to embrace theistic belief. C. Stephen Evans's contribution, which opens this section, lays out nicely some of the prolegomena to natural theology and focuses in particular on the "signal of transcendence" in human personhood. Evans stands in the tradition of Pascal (though without the latter's disdain for philosophic proofs of theism) in his emphases on the proper basicity of theistic belief (cf. "reasons of the heart"), on our being created at an epistemic distance from God so as not to be rationally coerced into belief (cf. Pascal's dictum that God has given us evidence sufficiently clear to convince those with an open heart, but sufficiently vague so as not to compel those whose hearts are closed), on the risk of atheism and the need for existential involvement in this quest (cf. Pascal's Wager), and on the mystery of human personhood (cf. "What a chimaera, then is man . . . !"). Evans's comments on "the burden of proof" can be contrasted profitably with Nielsen's account in his contribution. One of the healthiest general features of Evans's approach is its taking seriously the sort of themes developed in existentialism and interacting with these as a theist. Too much philosophy of religion has become a sort of game of spectators; but Evans reminds us that we are all involved in the quest of life's meaning and cannot, therefore, afford to affect the standpoint of the disinterested spectator. These are life and death issues, and we are involved, like it or not, and must decide. A cumulative case for theism may be built, he believes, and the traditional theistic arguments-some of which shall be examined in this volume-are a part of that case.

The project of natural theology which Evans and others want to carry out, however, collapsed, in the minds of many, with the critiques offered by David Hume and Immanuel Kant in the eighteenth century. This impression persists, as Hugo Meynell notes in his contribution, despite the fact that these objections are often system-dependent and that system roundly refuted and rejected. Meynell does not essay so much to rehabilitate the traditional arguments in light of Hume and Kant's objections, but chooses rather principally to argue for God on a basis that is immune to their attacks. He argues that the intelligibility of the universe points, as Kant realized, to a source of intelligibility in terms of mind, but, taking his cue from the Idealists, proceeds to contend that this source cannot be the human mind, but some Absolute Mind. I should be interested to learn how German thinkers would react to Meynell's

reasoning, appealing as he does so strongly to their own philosophical traditions, traditions which, it must be said, are once again exercising a powerful influence on German theological thought.

Richard Swinburne, as a result of his trilogy *Faith and Reason*, *The Coherence of Theism*, and *The Existence of God*,^[17] has emerged as perhaps the world's foremost exponent of argumentative theism. He argues that the cumulative evidence of the cosmological argument, the teleological argument, the argument from mind, the evidence of miracles, and religious experience is such that the hypothesis that God exists is more probable than its denial. Although critics have attacked Swinburne's analysis and use of the notion of probability,^[18] it seems to me that the worth of his arguments does not stand or fall with the framework of the probability theory in which he presents them, that his simpler claim in the contribution to this volume, which briefly summarizes his arguments, that "the hypothesis of the existence of God makes sense of the whole of our experience and...does so better than any other explanation which can be put forward" stands regardless of any failings which might be found in his epistemological superstructure.

Swinburne's nemesis was his late predecessor at Oxford University, John Mackie, whose posthumously published *Miracle of Theism* promoted Mackie to the status of theism's leading critic. Indeed, in a phenomenon reminiscent of seventeenth century Deism's influx from England into Germany, a recent German reviewer of the translation of Mackie's book exclaimed that belief in God now seemed all but impossible in light of Mackie's objections. And yet, upon analysis, many of Mackie's objections can be seen to be false and, in fact, superficial.^[19] The closing section of Swinburne's article contains his response to some of Mackie's criticisms of Swinburne's arguments.

Professor H. D. Lewis invites us in his paper to contemplate a fundamental question concerning the mystery of existence, a question which Aristotle characterized as the apex of philosophical wonder and which in my own life seized me as a child: *How does one explain the origin of the universe?* Despite the asseverations of Hume and Mackie, I can only agree with Lewis that the notion of the universe's popping into being uncaused out of non-being cannot be honestly affirmed by a sincere seeker after truth. And yet, as Lewis maintains, is it not also rationally inconceivable that the universe be beginningless, that the series of past events should regress *ad infinitum*? The idea that there should be a transcendent being in a timeless state beyond the beginning which brought space and time into existence might also strike us as fantastic and incredible. The least incredible scenario might seem to be that nothing at all exists and that, therefore, there is nothing to be explained-but as Lewis says, that alternative is simply not open to us. A transcendent cause of the universe's origin is admittedly a *mysterium tremendum et fascinans*, to borrow Otto's phrase, but I believe that analysis does not disclose it to be incoherent or unintelligible. In my own contribution, I push Lewis's argument farther and argue that we must conclude to a personal Creator of the universe. Lewis appeals to other considerations like the objectivity of moral value, the complexity of the universe, and religious experience to render more perspicuous the nature of the universe's Creator, and the rough outline of a natural theology thereby emerges.

As one moves from questions concerning the origin of the universe to questions concerning the nature of the universe, one encounters in contemporary discussions the hotly debated "anthropic principle," which served to rekindle interest in the teleological argument for God's existence. Swinburne touches this issue in his response to Mackie's critique of the argument. Swinburne seems clearly correct in saying both that in a deck of cards there is a strong

presumption of random order and that the discovery of order by suits and seniority in all packs sampled warrants the inference that the other packs are so arranged. Similarly, we should believe both that the ordered sample of the universe we observe is not discontinuous with the whole and that such orderedness calls for explanation. But the difficulty with Swinburne's application is that since the complex conditions of the universe (unlike those of the cards) are necessary for our existence, we *cannot* observe anything but an ordered sample. The universe at large could be a desert of chaos, but we should not realize it because necessarily we can observe only a segment containing conditions requisite for our existence. This principle-that necessarily, intelligent life must observe conditions compatible with its existence-has come to be known as the Anthropic Principle. Proponents of anthropic reasoning join with the theist in holding that the complex order of the observable universe does require an explanation other than chance coincidence, but they part with the theist by offering an explanation in terms of some sort of wider Universe or World-Ensemble theory according to which the Universe-as-a whole is not ordered as is our observable universe and that our observing the ordered segment (which arises by chance) is not surprising, since it is impossible for us to observe anything else.

The philosopher who has occupied himself most extensively with the Anthropic Principle is John Leslie, to whom Swinburne alludes. Though self-confessedly neither a Christian nor even a traditional theist, Leslie has argued repeatedly that the observed delicate balance of conditions requisite for the existence of intelligent life at this point in cosmic history does require an explanation and that the explanation of intelligent design is superior to any alternative. He argues against those who would short-circuit the demand for an explanation by objecting that since the universe is unique, the probability of its present complexity cannot be assessed, or that though the balance of conditions in the universe is improbable, still any improbable condition will obtain once and that "once" could be the first time.[20] According to Leslie, without the Many-Worlds cosmology, the claim that no explanation of the universe's order is needed is "ludicrous"; it is like a person emerging unscathed after being machine-gunned from fifty yards for fifty minutes and who shrugs off the need for any explanation of his being alive by saying that all the bullets' missing, though improbable, could happen and that he wouldn't be there to ask about it unless that possibility were realized.[21] According to Leslie, the standard objections to the design argument threaten to delay the development of science, for if these objections were correct, there would be no reason for developing Many-Worlds cosmologies, which are important to science. He notes that there is no independent evidence for the existence of many worlds *except* for the existence of intelligent life itself and that the attraction of the Many-Worlds scenario for many scientists shows that they recognize that the fine-tuning apparently present in the universe does cry out for explanation. But the evidence for a Many- Worlds model is equally evidence for an intelligent designer. Both hypotheses are rendered more probable by the observed features of the universe than they would be in the absence of such features. This conclusion alone, it seems to me, is highly significant, for it confronts us with a dilemma, both horns of which involve heavy metaphysical commitments. Are we going to posit God or a World Ensemble? According to Leslie, this is the choice that we must make if we do not choose simply to ignore the problem.

Leslie has so far made only tentative thrusts at an adjudication of this dilemma, though his preference is clear.[22] He points out that most of the Many-Worlds theories are obscure and incomplete and that the God- hypothesis is neither unscientific nor more obscure than those theories. Moreover, individual models for generating the World Ensemble can be criticized. A Many-Worlds proponent might appeal to the Many-Worlds Interpretation of quantum physics,

or inflationary cosmologies involving a multiplicity of bubble universes, or oscillating models in which the worlds exist serially in time, or a spatially infinite universe of causally disjoint regions. But, for example, the oscillating model is both observationally and theoretically flawed, since there apparently exists neither sufficient density of matter to close the universe nor any physics to produce a re-expansion after a contraction. Inflationary models have problems of their own, but in any case still require certain precise conditions of the Universe-at-large in order to generate bubbles. In a spatially infinite Universe not sharing on the large scale the delicate balance of conditions in our local region it is vastly more probable that a small area of order should develop than that our local region should be so large as it is; moreover, as our horizon continues to expand we do not observe a limit to the order displayed in our local region, but perceive continuity with the region(s) juxtaposed to it. Despite such problems, people continue to believe in Many-Worlds scenarios, opines Leslie, because they feel that without them there is no explanation of how intelligent life did originate.[23]

But what about the hypothesis of divine design? Leslie admits that if we conceive of God along the lines of a personal being for whose existence and attributes there is no explanation, then the Many-Worlds scenario is preferable. But Leslie plumps for what he characterizes as a Neo-Platonic concept of God as the creativity of ethical requiredness. That is to say, if I understand Leslie correctly, the universe exists as it does because it *should*; it is morally necessary that a universe of free agents exist. This ethical requiredness of the universe has a sort of creative power to it that makes the world exist. If there is a personal deity, he, too, is the result of this more fundamental principle. Presumably, Leslie calls this conception Neo-Platonic because according to that metaphysic the One, which takes the place of Plato's Good, produces the world in being, the first emanation being the Mind, which in turn produces the world. The God of traditional theism would be like Plotinus' Mind and Leslie's God like the ultimate form of the Good.

But why is the traditional concept of God so unpalatable? Leslie's critique on this score is disappointing and surprisingly weak.[24] Proceeding from the Leibnizian question, "why is there something rather than nothing?" Leslie rejects the answer of God conceived as either a factually or a logically necessary being. For if God is only factually necessary, then He exists logically contingently, albeit eternally, and no reason is supplied for His contingent existence. On the other hand, God cannot be shown to exist necessarily in the logical sense, for when the ontological argument asserts, "It is possible that God exists," this possibility is epistemic only and, hence, does not show that God's existence is logically possible.

But this objection seems confused. If God is merely a factually necessary being, then there are possible worlds in which He does not exist. But then it is logically impossible for Him to exist in all possible worlds, that is to say, it is logically necessary that He exist contingently. But then, assuming that God is the explanatory ultimate, it makes no sense to seek a reason for His existence. To demand a reason for His existence is to ask for a logically necessary being which accounts for the fact that God exists. But on this hypothesis, it is logically impossible that there be such a being, for if it were possible it would exist in every possible world, including this one, and so God would not be the explanatory ultimate. Hence, if God is a merely factually necessary being, it is logically impossible for there to be a reason for His existence. One need only add that it is wrong-headed to indict a position for not supplying what is logically impossible.

On the other hand, why hold that God is merely factually necessary? The Leibnizian principle of Sufficient Reason might lead us to reject the concept of God as a merely factually

necessary being and hold instead that He is logically necessary. The failure of the ontological argument as a piece of natural theology is irrelevant to the coherence of this conception of God. Leslie correctly points out that when the ontological argument asserts that the proposition "a maximally great being exists" (where maximal greatness entails being omnipotent, omniscient, and morally perfect in every possible world) is possible, there is an ambiguity between "epistemically possible" and "logically possible." To say that such a proposition is epistemically possible is only to say that for all we know it is true. So understood, it makes sense to say, "Possibly a maximally great being exists, and possibly He doesn't." This sense is insufficient for the purposes of ontological argument. But if we are talking about logical possibility, then to say "A maximally great being exists" is possible entails that He does exist. For if He exists in any possible world, then by definition He exists in all. Thus, if this proposition is possibly true in the logical sense, it is necessarily true. Now I agree with Leslie that the ontological argument seems to fail because all we intuit is that a maximally great being is epistemically possible, but we cannot say *a priori* whether His existence is logically possible. But how is this even relevant to the issue at hand? The coherence of the logical necessity of God's existence does not depend on the success of the ontological argument or our intuitions. It is possible that the ontological argument fails to prove God's existence, and yet for all we know God's existence is logically necessary. Philosophers such as Plantinga, Robert Adams, and William Rowe have, wholly apart from the ontological argument, defended the coherence of God as a logically necessary being,[25] and Leslie says nothing to impugn this notion. Using the Leibnizian query as his starting point, Leslie ought to conclude to the existence of a being which is by nature such that if it exists in any possible world, it exists in all; such a being must exist in *this* world in order to explain why something exists rather than nothing, and, therefore, in *all* worlds, thereby obviating the need for an explanation of its existence.[26] In this way Leslie's quite legitimate demand for a reason for the existence of something rather than nothing would yield an answer for the universe's existence without requiring one for God's existence, and this without examining the ontological argument.

As for Leslie's own alternative conception of God, I think that its lack of explanatory power seems painfully clear. How can there be design without the previsioning of an intelligent mind? Personal agents, not impersonal principles, design things. If one says that the traditional God is a sort of personal demiurge who designed the world, then how can he be produced in being by an abstract principle? Abstract objects such as numbers, propositions, and properties have no spatio-temporal locations and sustain no causal relations with concrete objects. So how does the abstract object posited by Leslie cause a concrete object like God to exist?

Still, I do not want to depreciate Leslie's insight that value may provide a key to developing one's metaphysics. But I believe this insight can be (and has been) appropriated by traditional theistic philosophers. I am thinking here of William Sorely, whose Gifford lectures of 1918, *Moral Values and the Idea of God*, are perhaps the finest defense of the moral argument for God's existence. Beginning from the disunity of existence and value, Sorely notes that these seem disjoined because one cannot deduce "ought" from "is." But Sorely believes this procedure is mistaken and needs to be stood on its head: he believes that "ought" is the guide to what is, that is to say, that ethics is fundamental to metaphysics. Sorely goes on to argue on the basis of our apprehension of objective moral value that in order for the moral ideal to be valid, it must be ontologically anchored in a personal and eternal existent, that is, God, who is the ground of both the natural and moral orders; in so arguing, he rejects (what approximates to Leslie's view) spiritual pluralism, which posits values independent of persons. In Professor

Leslie's writings, I have not detected an acquaintance with Sorely's work, and it is my sincere hope that he might find in Sorely a kindred spirit who might redirect his thinking so as to embrace traditional theism, while retaining his insights on the importance of value for existence.

I think it is clear as a result of these contributions that philosophical theism is very much alive and well today-indeed, when one recalls the bleak days of the "Death of God" movement in the sixties, it is not unfair to speak of a veritable resurrection of theism. The selections in this volume show that specifically religious epistemology is philosophically *au courant* and that new life has been breathed into the cosmological and teleological arguments as well. One could say the same of the ontological and moral arguments, too, though these have not been featured in this volume. Although the authors contributing to this volume include some of theism's ablest defenders, what is remarkable is that there are scores of others not included in this volume, many of whom are equally or even more gifted, and many of whom are young and up-coming as philosophers, who are also defending the theistic world view. It is an exciting time to be doing Philosophy of Religion.

NOTES

[1]"Modernizing the Case for God," *Time*, April 7, 1980, pp. 65- 6.

[2]Alvin Plantinga, *God and Other Minds* (Ithaca, N.Y.: Cornell University Press, 1967).

[3]James Tomberlin, "Is Belief in God Justified?" *Journal of Philosophy* 67(1970): 31-8.

[4]Alvin Plantinga, "The Reformed Objection to Natural Theology," *Proceedings of the Catholic Philosophical Association* 15 (1970): 49-62; cf. Alvin Plantinga, "Is Belief in God Rational?" in *Rationality and Religious Belief*, ed.C. F. Delaney (Notre Dame, Ind.: University of Notre Dame Press, 1979), pp.7-27.

[5]Alvin Plantinga, "Reason and Belief in God," in *Faith and Rationality*, ed.Alvin Plantinga and Nicholas Wolterstorff (Notre Dame, Ind.: University of Notre Dame Press, 1983), p. 72.

[6]See, for example, Alvin Plantinga, "Justification," unpublished paper read at various conferences.

[7]Alvin Plantinga, "Self-Profile," in *Alvin Plantinga*, ed. James E. Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht, Holland: D. Reidel, 1985), p.64.

[8]Any lingering doubts about Plantinga's being a fideist ought to be laid permanently to rest by his lecture "Two Dozen (or so) Theistic Arguments," 33rd Annual Philosophy Conference, Wheaton College, October 23-5, 1986.

[9]Plantinga, "Reason and Belief," p. 83.

[10]*Ibid.*, p. 84. It is noteworthy that the youngster who believes in theism is in no better epistemic condition than the youngster who believes in the Great Pumpkin or Santa Claus. For in such cases the belief is grounded in the testimony of the youngster's parents. Indeed, the child who believes in Santa Claus is better off than the pubescent theist, for the former has all sorts of empirical confirmation of his belief. Thus, there are circumstances in which

outlandish beliefs can be properly basic. On Plantinga's view, the theistic youngster, however, enjoys the advantage that as he matures intellectually his belief in God may be sustained and reinforced by his being in the sort of circumstances that rationally warrant his believing that God exists. In fact, these circumstances may provide for him *prima facie* justification, so that in the absence of contravening conditions he then *knows* that God exists (Ibid., pp. 86-7).

[11]Ibid., p. 84.

[12]Ibid.

[13]Ibid., pp. 84-5.

[14]Plantinga, "Self-Profile," p. 59.

[15]Ibid., p. 55.

[16]Philip Quinn, "In Search of the Foundations of Theism," *Faith and Philosophy* 2 (1985): 481.

[17]Richard Swinburne, *The Coherence of Theism* (Oxford: Clarendon Press, 1977); idem, *The Existence of God* (Oxford: Clarendon Press, 1979); idem, *Faith and Reason* (Oxford: Clarendon Press, 1981).

[18]See Robert Prevost, "Swinburne, Mackie, and Bayes's Theorem," *International Journal for Philosophy of Religion* 17 (1985): 175-84; Robert Prevost, "Theism as an Explanatory Hypothesis: Swinburne on the Existence of God" (Ph.D. thesis, Oxford University, 1986).

[19]See, for example, Alvin Plantinga, "Is Theism Really A Miracle?" *Faith and Philosophy* 3 (1986): 109-34. Mackie's critique of miracles is particularly shockingly superficial. Contrast Stephen S. Bilynskyj, "God, Nature, and the Concept of Miracle" (Ph.D. diss., University of Notre Dame, 1982).

[20]See John Leslie, "God and Scientific Verifiability," *Philosophy* 53 (1978): 71-9; John Leslie, "Cosmology, Probability, and the Need to Explain Life," in *Scientific Explanation and Understanding*, CPS Publications in Philosophy of Science (Lanham, Maryland: University Press of America, 1983), pp. 53-82.

[21]John Leslie, "Modern Cosmology and the Creation of Life," in *Evolution and Creation*, ed. E. McMullin, University of Notre Dame Studies in Philosophy of Religion (Notre Dame, Ind.: University of Notre Dame Press, 1985), p. 105.

[22]See John Leslie, "Anthropic Principle, World Ensemble, Design," *American Philosophical Quarterly* 19 (1982): 141-51; John Leslie, "Observership in Cosmology: the Anthropic Principle," *Mind* 92 (1983): 573-9; John Leslie, "Probabilistic Phase Transitions and the Anthropic Principle," in *Origin and Early History of the Universe* (Liege: University of Liege Press, forthcoming).

[23]Leslie, "Observership in Cosmology," p. 575.

[24]See John Leslie, "The World's Necessary Existence," *International Journal for Philosophy of Religion* 11 (1980): 207-24.

[25]Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), pp. 197-221; Robert Adams, "Has It Been Proved That All Real Existence is Contingent?" *American Philosophical Quarterly* 8 (1971): 284-91; William L. Rowe, *The Cosmological Argument* (Princeton: Princeton University Press, 1975), chap. 4.

[26]See the helpful comments by Thomas V. Morris, review of *The Quest for Eternity*, by J.C.A. Gaskin, *Faith and Philosophy* 3 (1986): 334.

Creation and Big Bang Cosmology

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Recent discussions have raised the issue of the metaphysical implications of standard Big Bang cosmology. Grünbaum's argument that the causal principle cannot be applied to the origin of the universe rests on a pseudo-dilemma, since the cause could act neither before nor after $t=0$, but at $t=0$. Lévy-Leblond's advocacy of a remetrication of cosmic time to push the singularity to - involves various conceptual difficulties and is in any case unavailing, since the universe's beginning is not eliminated. Maddox's aversion to the possible metaphysical implications of the standard model evinces a narrow scientism. Standard Big Bang cosmogeny does therefore seem to have those metaphysical implications which some have found so discomfiting.

Source: "Creation and Big Bang Cosmology." *Philosophia Naturalis* 31 (1994): 217-224.

Several years ago popular science writer Robert Jastrow ruffled scientific feathers by asserting in his little book *God and the Astronomers* [(1978), pp. 113-116] that many cosmologists have a deep-seated aversion to the possible metaphysical and, indeed, theological implications of classical Big Bang cosmogeny. Recent correspondence to the British science magazine *Nature* seems to bear out this judgment [Maddox (1989), Lévy-Leblond (1989), Grünbaum (1990)]. J. Maddox eagerly anticipates the downfall of the Big

Bang model because in it creationists have "ample justification" for their theistic creed; J.-M. Lévy-Leblond seeks instead to subvert the metaphysical implications of the Big Bang theory by a remetrication of cosmic time so as to push the origin of the universe back to infinity, where "it seems to belong"; A. Grünbaum sees no exigency for such a device, since the conception of a cause of the initial cosmological singularity is self-contradictory and the question of what caused the universe's origin therefore a "pseudo-problem."

In reflecting on this dispute, it seems to me that Grünbaum's attempt to elicit a contradiction from the conception of a cause of the Big Bang fails and that Maddox is therefore correct in holding that the classical model does have certain metaphysical implications; on the other hand, the attempts of Maddox and Lévy-Leblond to avert or discredit those implications also fail.

Grünbaum's argument is that even if we assume that *to* is a well-defined instant at which the Big Bang singularity occurred, that "event" cannot have a prior cause because there simply did not exist any instants before *to*. The Big Bang singularity "cannot have any cause at all in the universe" (presumably because backward causation is impossible) nor can it "be the effect of any prior cause" (because time did not exist prior to *to*). As Grünbaum elsewhere makes clear [(1991), p. 248], this argument does not depend essentially upon the assumption that *to* was the first instant of time, rather than a singular point constituting the boundary of time, which, on the analogy of a series of fractions converging toward zero as the limit, has no first instant. In either case, the objection remains the same: since no instants of time existed prior to *to*, there can be no antecedent cause of the initial cosmological singularity. Therefore, that singularity must be uniquely uncaused and the ultimate origin question posed by Maddox inappropriate.

Unfortunately, Grünbaum's objection is pretty clearly a pseudo-dilemma. For he fails to consider the obvious alternative that the cause of the Big Bang operated *at to*, that is, simultaneously (or coincidentally^{1}) with the Big Bang. Philosophical discussions of causal directionality routinely treat simultaneous causation, the question being how to distinguish A as the cause and B as the effect when these occur together at the same time [Dummett and Flew (1954); Mackie (1966); Suchting (1968-69); Brier (1974), pp. 91-98; Brand (1979)].^{2} Even on a mundane level, we regularly experience simultaneous causation; to borrow an example from Kant, a heavy ball's resting on a cushion being the cause of a depression in that cushion.^{3} Indeed, some philosophers argue that *all* efficient causation is simultaneous, for if the causal conditions sufficient for some event *E* were present prior to the time *t* of *E*'s occurrence, then *E* would happen prior to *t*; similarly if the causal conditions for *E* were to vanish at *t* after having existed at $t_n < t$, then *E* would not occur at *t*. In any case, there seems to be no conceptual difficulty in saying that the cause of the origin of the universe acted simultaneously (or coincidentally) with the origination of the universe. We should therefore say that the cause of the origin of the universe is causally prior to the Big Bang, though not temporally prior to the Big Bang. In such a case, the cause may be said to exist spacelessly and timelessly *sans* the universe, but temporally subsequent to the moment of creation.

But why think that such a cause exists at all? Very simply, the causal inference is based in the metaphysical intuition that *something cannot come out of absolutely nothing*. A pure potentiality cannot actualize itself. In the case of the universe (including any boundary points), there was not anything physically prior to the initial singularity.^{4} The potentiality for the existence of the universe could not therefore have lain in itself, since it did not exist prior to the singularity. On the theistic hypothesis, the potentiality of the universe's existence

lay in the power of God to create it. On the atheistic hypothesis, there did not even exist the potentiality for the existence of the universe. But then it seems inconceivable that the universe should become actual if there did not exist any potentiality for its existence. It seems to me therefore that a little reflection leads us to the conclusion that the origin of the universe had a cause.

From the nature of the case involved, that cause must have transcended space and time (at least *sans* the universe) and therefore be uncaused, changeless, eternal, immaterial, and enormously powerful. Moreover, as I have argued elsewhere [Craig (1979), pp. 149-153; (1991), pp. 104-108], the cause is most plausibly construed to be personal. For the only way in which a temporal effect could originate from an eternal, changeless cause would seem to be if the cause is a personal agent who eternally chooses to create an effect in time. A changeless, mechanically operating cause would produce either an immemorial effect or none at all; but an agent endowed with free will can have an eternal determination to operate causally at a (first) moment of time and thereby to produce a temporally first effect. Therefore, the cause of the universe is plausibly regarded as personal. This conclusion receives confirmation from the incredible complexity of the initial conditions given in the early universe, which bespeak intelligent design [Leslie (1990)]. These attributes are some of the core properties of what theists mean by "God."

Lévy-Leblond will avoid this metaphysical implication by adopting Misner's remetrication of cosmic time, which converts the range of physical time from $]t_0, \infty[$ to $]-\infty, +\infty[$. He apparently thinks that by making the initial cosmological singularity infinitely distant in the metric past, one can thereby safely ignore the metaphysical issues it raises. But why should we regard Misner's temporal metric as a factually objective description of the actual past of the universe rather than the standard metric? Lévy-Leblond seems to suggest three reasons: (i) since the singularity does not belong to the past of the universe, lying as it does on the boundary of the past, this "out-of-reach instant" may be said to be infinitely remote; (ii) on the analogy of the limit velocity c and absolute zero, we should accept "the idea of a time origin before which the concept of time makes no sense"; (iii) since according to GTR the choice of coordinates used to describe the universe is arbitrary, we are at liberty to modify the spatio-temporal parameters through which the Robertson-Walker metric is expressed and thus send the origin of time back to minus infinity.

But these are insufficient grounds for preferring Misner's remetrication: (i) The singularity is out-of-reach on the standard metric only if one proceeds toward it through an open interval instant by instant; but if we regress by distances of equal non-zero temporal intervals, then we do reach an absolute origin of the universe in a finite number of steps, in that we arrive at a first year, or hour, or second, or what have you, even though those temporal segments lack a first instant [Smith (1985)]. The singularity is the boundary point of the first temporal segment and therefore is not infinitely remote. (ii) On the standard metric we *already* have a time origin before which the concept of time makes no sense, so that this provides no justification for a remetrication. (iii) While GTR, when considered *in abstracto*, does not lay down any formula for slicing up the spacetime manifold of points, certain models of spacetime, like the Friedman model, have a dynamic, evolving physical geometry that is tied to the boundary conditions of homogeneity and isotropy of the cosmological fluid and which results in certain natural symmetries which serve as markers for the preferred foliation of spacetime and the assigning of a cosmic time parameter [Misner, *et. al.* (1973), p. 714]. The underdetermination of the theory *in abstracto* is simply irrelevant to preferring some non-standard clock to record cosmic time over the standard clock.

On the other hand, there are positive reasons for rejecting Lévy-Leblond's prescription: (i) While the metric of time is conventional in a trivial sense shared by all physical quantities, our choice of a metric is constrained by our pre-theoretical conceptions of temporal congruence. A metric which assigned equal temporal intervals to, say, my eating my lunch and to the period of galaxy formation may satisfy all the formal axioms for congruence and yet it would still just not be a theory of *temporal congruence*; any property shared to an equal degree by the interval of galaxy formation and by my lunch just is not temporal duration [Friedman (1973), pp. 231-232]. In the same way, a metric which assigns to the universe an infinite age and infinite past temporal duration, as Milne realized in proposing his parameter t [Milne (1948)], just is not factually objective, but is a mathematical artifice. (ii) By sending the initial cosmological singularity back to minus infinity ($1 + \infty$), Lévy-Leblond lands himself squarely in the absurdity of an infinite past as argued by G. J. Whitrow [1980], namely, that it is impossible for any present event to retreat infinitely distant into the past. Typically, one responds to Whitrow by pointing out that an infinite past does not entail infinitely distant events; but for Lévy-Leblond such a recourse is not open because he has made the origin of the universe into an infinitely distant "event" or entity on the boundary of the past. (iii) In the same vein, Misner's remetrication, despite his protestations, does fall prey to Zeno's Paradoxes of motion in that it would be impossible to proceed through the infinite series of intervals separating any time t from the singular origin of the universe [Bartels (1986), p. 112]. The usual escape route--that the intervals converge in size toward zero--cannot work for Misner because, by redefining what counts as temporally congruent in order to achieve an infinite age for the universe, he has, in effect, made the intervals equal in length, so that Zeno's Dichotomy paradox goes through with a vengeance. (iv) Since Misner's time scale does not remove the *physical* beginning of the universe at the initial cosmological singularity, but merely reassigns its date, it ultimately does nothing to avoid the metaphysical problems associated with an absolute origin. We should only be required to say that on this peculiar time scale, the universe came into being and so was created an infinite time ago.^{5} Lévy-Leblond's prescription for avoiding the metaphysical implications so feared by Maddox thus seems utterly unavailing.

Which brings us back to Maddox's concern: is it discreditable to draw these sorts of metaphysical inferences? Maddox seems to think that such inferences obfuscate "an important issue, that of the ultimate origin of the world." But it seems to me that he has made up his mind in advance as to what sort of answers to that question are going to be deemed acceptable. That seems to be philosophical prejudice on his part. As Jastrow emphasized, the scientist's pursuit of the past ends at the moment of creation; but simply as thinking men and women desiring to discover the meaning of life and the universe, are we to be debarred *a priori* from drawing what may seem to us plausible metaphysical conclusions?

Of course, as Grünbaum reminds us, it is an empirical question as to whether classical Big Bang cosmogeny is a realistic account of the origin of the universe. But alternative models, whether quantum models [Craig (1993)] or plasma models [Kevles (1991)], have not yet proved to be convincing. Therefore, it seems to me that, like it or not, currently accepted cosmological theory does lend tangible support to the theistic doctrine of *creatio ex nihilo*.

Endnotes

^{1}--coincidentally in case "simultaneity" is strictly defined in terms of occurrence *at the same time*. Since the singularity is not an instant or moment of time, but a boundary of time, a cause producing its effect at the singularity could not be strictly said to be simultaneous with

its effect. Nonetheless they both occur coincidentally (in the literal sense of the word), that is, they both occur at *to*.

{2} In the case of God's creating the universe, it is, of course, evident which is the cause and which the effect, since it is metaphysically impossible for God to have an external cause.

{3} It would be in vain to object to the proposed solution that simultaneous causation is impossible due to the finite velocity of the propagation of physical causal influences, for (i) the objection fails to reckon with the fact that remote causes are linked by causal chains to the immediate causes of the events in question, such that for any arbitrarily chosen non-zero interval of time in which the event occurs simultaneously with its cause, one can denominate non-zero subintervals in which remote, intermediate, and immediate causes can be identified in the causal chain, with the result that simultaneous causation is never eliminated, and (ii) the objection is irrelevant to the case of creation, since God is not a physical object dependent upon finite velocity causal signals, but, as one who transcends space, is immediately present through His knowledge and power to every point in space (or on its boundary).

{4} This should not be interpreted to mean that there was an empty time prior to the singularity, for time begins *ex hypothesi* at the moment of creation. I mean that it is false that something existed prior to the singularity.

{5} Notice, therefore, that Lévy-Leblond's article has been mistitled, for on his view the universe has an infinitely distant beginning point.

REFERENCES

Bartels, Andreas. [1986]. *Kausalitätsverletzungen in allgemeinrelativistischen Raumzeiten*. Erfahrung und Denken 68. Berlin: Dunker & Humboldt.

Brand, Miles. [1979]. "Causality." In *Current Research in Philosophy of Science: Proceedings of the P.S.A. Critical Research Problems Conference*, pp. 252-281. Ed. P.D. Asquith and H.E. Kyburg, Jr. East Lansing, Mich.: Philosophy of Science Association.

Brier, Bob. [1974]. *Precognition and the Philosophy of Science: An Essay on Backward Causation*. New York: Humanities Press.

Craig, William Lane. [1993]. "The Caused Beginning of the Universe: a Response to Quentin Smith." *British Journal for the Philosophy of Science* 44, pp. 623-639.

Craig, William Lane. [1979]. *The Kalam Cosmological Argument*. Library of Philosophy and Religion. London: Macmillan.

Craig, William Lane. [1991]. "The Kalam Cosmological Argument and the Hypothesis of a Quiescent Universe." *Faith and Philosophy* 8, pp. 104-108.

Craig, William Lane. [1990]. "'What Place, then, for a Creator?': Hawking on God and Creation." *British Journal for the Philosophy of Science* 41, pp. 473-491.

Dummett, A.E. and Flew, A. [1954]. "Can an Effect Precede its Cause?" In *Belief and Will*, pp. 27-62. Aristotelian Society Supplementary Volume 28. London: Harrison & Sons.

Friedman, Michael. [1973]. "Grünbaum on the Conventionality of Geometry." In *Space, Time and Geometry*, pp. 231-232. Ed. Patrick Suppes. Dordrecht: D. Reidel.

Grünbaum, Adolf. [1990]. "Pseudo-Creation of the Big Bang." *Nature* 344, pp. 821-822.

Grünbaum, Adolf. [1991]. "Creation as a Pseudo-Explanation in Current Physical Cosmology." *Erkenntnis* 35, pp. 233-254.

Jastrow, Robert. [1978]. *God and the Astronomers*. New York: W.W. Norton.

Kevles, D.J. [May 16, 1991]. "The Final Secret of the Universe?" *New York Review of Books* 38/9, p. 31.

Leslie, John. [1990]. *Universes*. London: Routledge.

Lévy-Leblond, Jean-Marc. [1989]. "The Unbegun Big Bang." *Nature* 342, p. 23.

Mackie, J.L. [1966]. "The Direction of Causation." *Philosophical Review* 75, pp. 441-466.

Maddox, John. [1989]. "Down with the Big Bang." *Nature* 340, p. 425.

Milne, E.A. [1948]. *Kinematic Relativity*. Oxford: Clarendon Press.

Misner, C.W.; Thorne, K.S.; Wheeler, J.A. [1973]. *Gravitation*. San Francisco: W.W. Norton.

Smith, Quentin. [1985]. "On the Beginning of Time." *Noûs* 19, pp. 579-584.

Suchting, W.A. [1968-69]. "Professor Mackie on the Direction of Causation." *Philosophy and Phenomenological Research* 29, pp. 289-291.

Whitrow, G.J. [1980]. *The Natural Philosophy of Time*. 2d ed. Oxford: Clarendon Press.

God and the Initial Cosmological Singularity: A Reply to Quentin Smith

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Q. Smith contends (i) an atheistic interpretation of the Big Bang is *better* justified than a theistic interpretation because the latter is inconsistent with the standard Big Bang model and (ii) his atheistic interpretation offers a coherent and plausible account of the origin of the universe. But Smith's argument for (i) is multiply flawed, depending on premisses which are false or at least mootable and a key invalid inference. Smith's attempt to demonstrate the plausibility of the atheistic interpretation on the basis of its greater simplicity is based on false parallels between God and the initial cosmological singularity. Smith's effort to prove that the atheist's contention that the universe came into being uncaused out of absolutely nothing is coherent rests upon a confusion between inconceivability and unimaginability and assumes without argument that the causal principle could not be a metaphysically necessary *a posteriori* truth. In any case, there are good grounds for taking the principle to be a metaphysically necessary, synthetic, *a priori* truth, in which case the atheistic interpretation is incoherent.

"God and the Initial Cosmological Singularity: A Reply to Quentin Smith." *Faith and Philosophy* 9 (1992): 237-247.

Introduction

"The most efficacious way to prove that God exists is on the supposition that the world is eternal," advised Thomas Aquinas. "For, if the world and motion have a first beginning, some cause must clearly be posited to account for this origin of the world and of motion . . . , since nothing brings itself from potency to act, or from non-being to being."^{1} In Thomas's thinking, once it is conceded that the world began to exist, the argument is for all practical purposes over: it is obvious that a First Cause must exist. He therefore sought to prove God's existence on the more neutral presupposition of the eternity of the world; besides, the temporal finitude of the world could be known only by revelation, since the philosophical arguments for a beginning of the universe were, in his opinion, unsound.

The discovery during this century that the universe is in a state of isotropic expansion has led, via a time-reversed extrapolation of the expansion, to the startling conclusion that at a point in the finite past the entire universe was contracted down to a state of infinite density, prior to which it did not exist. The standard Big Bang model, which has become the controlling paradigm for contemporary cosmology, thus drops into the theologian's lap just that crucial premiss which, according to Aquinas, makes God's existence practically undeniable.

Quentin Smith disagrees. He argues that the standard model "is actually *inconsistent* with theism" and that, therefore, an atheistic interpretation of the Big Bang "is in fact *better justified* than the theistic interpretation."^{2} He claims, indeed, to have established "a coherent and plausible atheistic interpretation" of the origin of the universe.

In support of this remarkable position, Smith presents the following argument:

1. The Big Bang singularity is the earliest state of the universe.
2. The earliest state of the universe is inanimate.

3. No law governs the Big Bang singularity, and consequently there is no guarantee that it will emit a configuration of particles that will evolve into an animate universe.

4. Therefore, the earliest state of the universe is not guaranteed to evolve into an animate state of the universe.

5. If God creates a universe, He creates an animate universe.

6. Therefore, if God created the earliest state of the universe, then He would have ensured that this state is animate or evolves into animate states of the universe.

7. Therefore, God did not create the earliest state of the universe.

Smith takes this argument to be a Big Bang cosmological argument for the non-existence of God.

Critique of Smith's Argument

Smith's argument seems multiply flawed. Consider, for example, premiss (1). The premiss is patient of two very different interpretations. This fact emerges in the argument's conclusion. From (1) and (7) it follows that

8. God did not create the Big Bang singularity.

This Smith takes to mean

8'. The Big Bang singularity was an actual state uncreated by God,

which is alleged to be inconsistent with classical theism's doctrine of creation. But (8) could be taken to mean

8". God refrained from creating the Big Bang singularity,

that is to say, He, on the pattern of certain contemporary cosmologists, chose to "cut out" the singularity from the space-time manifold and create that manifold without that initial singular point. If this is all that Smith's argument proves, then it is not inconsistent with classical theism. If we take his argument to imply (8"), then by (1) we understand

1". The Big Bang singularity is the earliest state of the universe in the standard model,

whereas Smith takes it to mean

1'. The Big Bang singularity described by the standard model was the actual, earliest state of the universe.

The theist who finds himself convinced by Smith's line of argument could escape inconsistency by denying (1'). Such a move would raise interesting epistemological questions concerning the rationality of belief in *creatio ex nihilo* to which Smith has yet to give attention.{3}

But (1') is vulnerable on other, more plausible grounds than this. For the question arises as to the ontological status of the singularity. It needs to be emphasized that this is *not* the same question as the reality of the singularity, as that expression is usually employed in contemporary cosmological theory. Certain singularities in physical theory are merely apparent, resulting from the coordinate system being used. For example, the Schwarzschild solution to Einstein's field equations in the General Theory of Relativity involves a coordinate singularity when the radius of the body in question equals twice its mass. This singularity results merely from the fact that Schwarzschild chose coordinates for his solution which are not applicable on this surface. By contrast, when the body's radius equals zero, a real, and not merely coordinate, singularity occurs. Now the initial cosmological singularity was certainly a real singularity. But that does not settle the question of its ontological status.

The ontological status of the Big Bang singularity is a *metaphysical* question concerning which one will be hard-pressed to find a discussion in scientific literature. The singularity does not exist in space and time; therefore it is not an event. Typically it is cryptically said to lie on the boundary of space-time. But the ontological status of this boundary point is virtually never discussed.

For that reason I am not terribly impressed with Smith's statement that "Cosmologists find no difficulty in the concept of a space that has zero dimensions (a spatial point) and that exists for an instant. . . ." {4} My own experience is that a question concerning the ontological status of the initial cosmological singularity is likely to be met with bewilderment or disclaimers about not being a philosopher. Mathematical models containing singular points do not carry their metaphysical interpretation on their faces.

Now to my mind, at least, a good case can be made for the assertion that this singular point is ontologically equivalent to nothing. {5} Smith attempts a *reductio* of my argument by claiming that a continuous space-time manifold could then not exist, since it is composed of point- events. {6} By now I think it is evident that I am dubious whether an ontological continuum does exist; instants and points seem to me to be mathematical fictions. But let that pass, for Smith's *reductio* fails on less controversial grounds than these. For instants of time and points of space are not typically conceived to be themselves intervals of time and of space, but mere *boundaries* of intervals. And it is consistent to hold that boundary points cannot exist independently of the intervals which they bound. If instants and points exist only as boundaries of intervals, then they have no independent ontological status and so cannot subsist alone. But in the case of the initial cosmological singularity, this point-instant is said to exist independently. Therefore, point-instants of the manifold can exist (as boundaries of intervals), while the singularity cannot.

The B-theorist would deny this distinction, since the singularity bounds the space-time manifold. But this response is not open to the A-theorist because on his view temporal becoming is real and objective, and so, if temporal becoming is instantaneous, at the instant the singularity comes to exist, all other instants are non-existent, mere future potentialities. Therefore, it would exist alone. {7} Indeed, it seems to me in general very difficult to reconcile the A-theory of time with the view that instants are not mere boundary points, but subsist as independent, degenerate intervals of zero duration. Not only does this raise the ancient puzzle of how the present moment can be an interval of zero temporal duration, given that past and future are ontologically unreal, {8} but the notion that the present is a solitary instant also seems to pose insuperable problems for the reality of temporal becoming, since instants have no immediate successors, so that one after another cannot elapse. {9}

Be that as it may, so long as it is consistent to hold that points and instants have reality only insofar as they bound intervals, Smith's *reductio* argument fails. He offers no direct refutation of the claim that a physical object existing for no time and having no extension is not a physical object at all. If the initial cosmological singularity is a mere conceptualization ontologically equivalent to nothing, Smith's premiss (1) is false and his argument fallacious, since the universe did not begin at the singularity. Rather the universe, the space-time manifold, does not possess a first temporal instant, but exists at any moment arbitrarily close to the initial, cosmological singularity. It is therefore governed throughout its existence by natural laws so that its becoming animate could be physically guaranteed from any arbitrarily designated initial temporal segment.

But the theist need not prove even so much in order to remove the teeth from Smith's argument. Plantinga has reminded us that in dealing with defeaters of theism, it is not necessary to supply a rebutting defeater-defeater: an undercutting defeater-defeater may do.^{10} So long as my interpretation of the ontological status of the singularity has even equal, if not superior, plausibility to Smith's, his argument for God's non-existence is undercut. At the very least, I think, Smith must in all honesty admit that the ontological status of the singularity is so poorly understood today that such an interpretation is as equally valid as his own. But if that is so, then premiss (1') is at best unsubstantiated and therefore his argument fails to prove that the theistic interpretation is inconsistent and, therefore, that the atheistic interpretation is better justified, since the latter claim rests solely on the alleged inconsistency of the theistic interpretation.

Premises (2) and (5) are also problematic. Smith's argument seems tacitly to assume that the only finite, animate life that exists is that which exists in the physical universe, for he equates God's intending "his creation to be animate" with God's intention to create an animate universe. But the problem is that according to Christian theism the physical universe does not exhaust the created order. There are also realms of spiritual substances, or angels, which are part of the created order. Suppose God created the angelic realms prior to creating the physical universe. In such a case, creation is already animate before the work of physical creation has begun. So why is God obliged to guarantee *ab initio* that the physical order is animate? Indeed, why must the physical order ever become animate in such a case? What these considerations suggest is that even if Smith's argument were effective against some bare-boned theism, it still might not have any relevance to Christian theism.

But premiss (5) has more serious shortcomings than this. For, we may ask, is (5) necessarily true? Are there no possible worlds in which God creates an inanimate universe? Smith thinks that "It is essential to the idea of God in the Judaeo-Christian-Islamic tradition that if he creates a universe he creates an animate universe. . . ." and that God's creating an inanimate universe is therefore "at odds" with classical theism.^{11} But if we take Aquinas as our guide, that does not seem to be the case. On his view, rational creatures enhance the goodness of the universe, but there is no necessity that God create them. He writes, "God wills man to have a reason in order that man may be; He wills man to be so that the universe may be complete; and He wills that the good of the universe be because it befits His goodness."^{12} Thomas goes on to explain that some things are willed by God with a necessity of supposition (for example, that man be endowed with reason, if God wills that man exist), others as useful but not necessary to some end, and still others as merely befitting His goodness. This last relation is conceived by him to be extremely weak; something so willed is willed by God's good pleasure as appropriate to, but not required by, His goodness. Hence, even if it is necessary that God will man's existence in order for the goodness of the universe to be complete, there is

no necessity that God will that the goodness of the universe be complete. God could have willed that a universe without intelligent life-- or without life at all--exist. This does not imply that God therefore has no reason for willing that animate beings exist. On the contrary, Aquinas affirms that a reason can be assigned for the divine will, but that this reason is *contingent*. Smith is therefore mistaken in thinking that willing an inanimate universe is impossible for God according to classical theism.

But Smith also argues that God cannot have a contingent reason for creating an animate universe since this "contradicts his omnibenevolence." {13} It is impossible that God have a reason for creating an inanimate universe because "omnibenevolence requires living creatures in relation to which God can exercise his benevolence." {14} But this point precisely supplies the thread for the unraveling of Smith's argument: benevolence is a relational property connoting *willing the good of others*. Since God is not morally obligated to create any world at all, the theist may hold that omnibenevolence is therefore, like *sovereignty* and *providence*, a contingent property of God. Smith does not deny that it is not immoral of God to refrain from creating; but if that is the case, it follows that omnibenevolence is not essential to God's nature. Rather goodness is; the property of being disposed to will the good of any others that exist. Such a dispositional property does not entail the existence of others to whom benevolence would be shown. Smith denies that God is good if He creates an inanimate universe, when He could have brought into existence a world with animals and persons. But this is just the old "best of all possible worlds" argument in new guise; if there is no best possible world, then a similar complaint could be voiced about any world that God creates, so the objection is vacuous. Smith would perhaps deny this, claiming that within the inanimate type of world there is no best possible inanimate world and within the animate type of world there is no best possible animate world, but that God is morally obligated to choose a world from the latter type over the former type. But it is not obvious why this is so, since we can imagine innumerable many worlds of the former type which would exceed in goodness worlds of the latter type (for example, inanimate worlds of great beauty compared with animate worlds filled with unredeemed and gratuitous evil). To say that God must choose one of the latter type which exceeds in goodness all of the former type immediately starts one down the infinite regress, since the lines of one's typology are arbitrarily drawn by certain chosen standards and one can always find better and better types of world, just as one can find better and better worlds.

Besides all this, the Christian theist will deny Smith's assumption that omnibenevolence requires living *creatures* as the objects of God's benevolence. One of the beauties of the Christian doctrine of the Trinity is that God is not a lonely monad, but a triad of persons united in one nature. In the absence of creation, God enjoys the fullness of the love and joy of the inner-Trinitarian fellowship; each of the divine persons wills the good of the others. In the tri-unity of His own being God's benevolence is fully expressed, and the wonder of creation is that God should voluntarily and out of no necessity of His own nature graciously choose to create finite persons and invite them into this inner fellowship of the Godhead. God's omnibenevolence, whether taken to be a contingent or essential property of God, does not therefore constrain Him to create an animate universe, anymore than two artists are morally obligated to beget children.

Now consider the inference drawn in premiss (6), which seems clearly invalid. Smith understands (6) to mean that if God "creates a first state of the universe, he creates a state that is, or is guaranteed to evolve into, an animate state." {15} But even if we concede the truth of (5), how does it follow that (6) is true? There are two ways in which a provident God could

create an animate universe out of a necessarily inanimate initial singularity: (i) By His middle knowledge, God could have known that had He actualized the Big Bang singularity, an animate universe would have evolved from it, or (ii) By His miraculous intervention, God could causally bring about an animate universe.

With respect to God's ensuring an animate universe by means of His middle knowledge, Smith is content to rest his case on the final validity of the possible worlds semantics for counterfactual conditionals.{16} But until such semantics show us how to deal with intuitively true or false counterfactuals with impossible antecedents, their adequacy must remain in doubt and with them Smith's argument.

Smith's original charge against the middle knowledge position was that it is viciously circular.{17} I attempted to answer this charge by explaining that those states of affairs which make counterfactuals of freedom true or false are actual logically prior to God's decree to create and therefore serve as one measure of similarity among worlds, an account which is not *viciously* circular.{18} Smith's rejoinder to this is curious. He asserts,

According to these semantics, 'counterfactual states of affairs' are not the truth-makers of counterfactual propositions. There are no such states of affairs The truth-makers are rather the similarity relations among worlds that are grounded upon the world-histories and the laws themselves.{19}

There are at least two things wrong with this response: (1) It confuses truth conditions with grounds of truth of a proposition. Possible worlds semantics does not even aspire to tell us *why* certain counterfactuals are true/false or the *grounds* of their truth. As a semantical theory it merely lays out the semantical conditions for a certain class of propositions' taking the values *T* or *F* respectively. It is a sort of calculus, if you will, that tells us what it means to say that a counterfactual proposition is true/false, but it neither tells us what makes it true/false nor makes any ontological pronouncement on whether counterfactual states of affairs exist.{20} (2) More importantly, it is irrelevant. Suppose that the grounds of the truth of counterfactuals are just the similarity relations among worlds, as Smith maintains. Plantinga's salient point remains that *included* in these similarity relations is the worlds' degree of shared counterfactuals. The counterfactual propositions true at a world are true logically prior to the truth or falsity of contingent categorical propositions at that world and so can be known by God logically prior to His creative decree. It matters not whether we order logically prior to the full instantiation of a world either the relevant states of affairs or else the relevant similarity relations. So long as some such ordering is coherent--and the burden of proof is on Smith to show otherwise--, the middle knowledge solution to God's ensuring an animate creation is viable.

Turning, then, to the second alternative of divine miraculous intervention, Smith claims that it is irrational and inefficient for God to create a first state of the universe which does not tend to the end for which the universe is created.{21} I argued that perfect being theology does not, *pace* Smith, entail a Deist account of creation.{22} Surprisingly, Smith erroneously interprets me to hold that his argument counts *against* Deism, but not against Christian theism.{23} Smith correctly follows the classical theologians in distinguishing originating creation (*creatio originans*) from continuing creation (*creatio continuans*). But Deists and Christians alike affirmed both of these. What divided them was a further distinction drawn by the classical theologians concerning God's governance (*gubernatio*) of the world. They distinguished between God's ordinary providence (*providentia ordinaria*) and His exceptional

providence (*providentia extraordinaria*). The governance of His ordinary providence roughly coincides with what Smith calls "rational continuous creation." {24} But the world also includes events governed by His extraordinary providence, which we would call "miracles." Such events need not be characterized as "violations of the laws of nature," since natural laws have implicit *ceteris paribus* clauses stipulating that no natural or supernatural causes are intervening. {25} An act of God's exceptional providence is an event which He brings about at time *t* and location *l* which could not have been brought about at *t*, *l* solely as the effect of natural causes and agents. Smith's position is Deistic in that he rejects works of exceptional providence.

But other than simply *labeling* ordinary providence or conservation "rational" (and thus tacitly relegating exceptional providence to the realm of the "irrational"), I do not see any new argument on Smith's part for denying the possibility of exceptional providence. According to Aquinas, ". . . it can be manifested in no better way, that the whole of nature is subject to the divine will, than by the fact that sometimes He does something outside the order of nature. Indeed, this makes it evident that the order of things has proceeded from Him, not by natural necessity, but by free will." {26} In this respect the God of revelation and the God of the philosophers coincide, what Morris has aptly called "the God of Abraham, Isaac, and Anselm." {27} The God Smith describes is not the God of classical theism, but the God of Spinoza's *Tractatus* and Enlightenment rationalism.

As for Smith's argument from efficiency, it will be recalled that I made two points: (1) efficiency is relative to the ends desired, and (2) efficiency is significant only to someone with limited time and/or power. In response to (2), Smith now claims that being efficient is a positive aesthetic value which God must have. {28} This strikes me as an extremely tenuous value judgement on which to deny the existence of God. But even if we grant this, its importance depends, as Smith says, on "all else being equal." Mitigating factors pertinent to one's desired ends easily override the importance of the aesthetic value of efficiency. Would we dare to call an artist wanting in aesthetic value for preferring the creative labor of executing his oil on canvas rather than simply having, if he could, the finished painting? I suggested that the Creator likewise perhaps delights in the work of creation. Smith responds that this is impossible because it would be inefficient and irrational. This renewed charge of inefficiency closes a vicious circle on Smith's part and condemns artists, chefs, and boys building model airplanes as persons who "'delight' in doing something inefficient, irrational or aesthetically disvaluable." {29} The point is that the delight of engaging in creative activity can itself be a justification for what the rationalist deems inefficient and aesthetically disvaluable activity.

Smith's further charge of irrationality is based on the premiss that a person is irrational if he performs some action which fails to advance his goals rather than an action within his power which would advance his goals. {30} But God's creating the initial singularity *does* serve to advance His goals, for it furnishes Him with the raw material for His creative activity. Moreover, what if His goals include, not merely the having of a created order, but the divine pleasure of fashioning a creation? By focusing too narrowly on the end product, Smith fails to see the wider purposes which God may have in view. Smith's is the viewpoint of the manufacturer, God's the viewpoint of the artist.

I also suggested that God may have created the world as He did in order to leave a general revelation of Himself in nature. Smith responds that this gets things backwards; the evolution of an animate universe through random chance and improbable occurrences suggests that God

does not exist. But this is surely a misreading of the evidence on Smith's part, as is evident from the heated debate surrounding the Anthropic Principle and the new life which this has breathed into the teleological argument.{31} Popularized in novels like Updike's *Roger's Version* or meticulously examined as in John Leslie's *Universes*, the anthropic coincidences are seen by many as so unlikely and finely tuned that they bespeak divine design.{32} Tony Rothman muses,

It's not a big step from the [Anthropic Principle] to the Argument from design . . . When confronted with the order and beauty of the universe and the strange coincidences of nature, it's very tempting to take the leap of faith from science into religion. I am sure many physicists want to. I only wish they would admit it.{33}

P. C. W. Davies is a good example of a physicist who does admit that the anthropic coincidences persuade him of God's existence.{34} The point is that it is inconceivably more probable that the universe should be life-prohibiting rather than life-permitting, and the best explanation for the cosmos as it is may well be intelligent design. Of course, God could have broadcast His existence even more clearly in creation, but if, as John Hick surmises, God wanted to place creation at a certain "epistemic distance" from Himself so as not to be coercive, then we should expect His revelation to be somewhat subtle, ambiguous, and discernible only to those who have eyes to see.{35}

Finally, in response to my suggestion that God may have reasons for creating as He did which we are unaware of, Smith admits that this blocks a deductive argument against God's existence, but leaves a probabilistic argument intact. Here I think we can learn a lesson from recent work in the philosophy of religion on the problem of evil. There, too, we have a deductive and an inductive (or probabilistic) version of an argument against God's existence, and it is now generally recognized that the deductive version is a failure, since it seems at least possible that God has morally sufficient reasons for permitting evil, even if these remain unknown to us. But some non-theists insist that it is nonetheless highly improbable that God has morally sufficient reasons for permitting the evils in the world. One response to this inductive version of the argument is to point out that there is no probability that we *should* be able to discern all God's reasons for permitting evil, so that our failure to do so does not render it improbable that God has such reasons. In a recent development of this response, William Alston exposit six "cognitive limits" which make it impossible for us to judge that God lacks morally sufficient reasons for permitting evil. One of these limits, particularly relevant to our discussion, is the difficulty of knowing what is metaphysically possible. Alston writes,

We don't have a clue as to what essential natures are in God's creative repertoire and still less do we have a clue as to which combinations of these into total lawful systems are do-able. We are in no position to make a sufficiently informed judgment as to what God could or could not create by way of a natural order that contains the goods of this one without its disadvantages.{36}

Take quantum mechanics, for example. I dare say that we have no idea of whether God could have created a world order comparable in goods to this one while sacrificing quantum physics. This is important because a physical universe governed by quantum mechanical laws not merely allows for the *possibility* of miracles, but, if God is to be provident and sovereign without recourse to middle knowledge, actually *necessitates* acts of extraordinary providence. For quantum indeterminacy serves to render certain macroscopic systems chaotic, that is,

sensitive to small changes in their initial conditions and therefore unpredictable in their outcome. John Barrow gives a striking example from a game of billiards:

What could be more deterministic than the motion of billiard balls on a billiard table? . . . However, cue games like billiards and pool exhibit that extreme sensitivity and instability . . . If we could know the starting state as accurately as the quantum Uncertainty Principle of Heisenberg allows, then this would enable us to reduce our uncertainty as to the starting position of the cue-ball to a distance less than one billion times the size of a single atomic nucleus (this is totally unrealistic in practice of course, but suspend all practicality for one moment). Yet, after the ball is struck, this uncertainty is so amplified by every collision with other balls and with the edges of the table that after only fifteen such encounters our irreducible infinitesimal uncertainty concerning its initial position will have grown as large as the size of the entire table. We can then predict nothing at all about the ensuing motion of the ball on the table using Newton's laws of motion.{37}

Barrow points out that all the important laws of nature are described by equations which exhibit this chaotic sensitivity. What this seems to imply is that if quantum indeterminacy is not merely epistemic, but ontic, then, in the absence of middle knowledge, it is simply impossible for God to providentially direct a world governed by such laws to His previsioned ends without miraculous intervention; in particular, it is impossible for Him to ensure (even with high probability) that an animate universe should evolve from an initially inanimate state. Given the chaotic nature of macro-systems, miracles are not merely necessary, but recurrent, at a very fundamental and probably indiscernible level. Given this exigency, what possible rationale remains for debarring God's interventions prior to the Planck time and at the singularity? What Smith must say is that God could have created a universe of animate creatures described by different laws of nature which are neither indeterministic nor chaotic:

. . . the proponent of the atheological argument may grant that God could not have created an animate universe [governed by the laws of quantum mechanics] without creating a big bang singularity, but he will point out that it would be irrational and incompetent on the part of God to create an animate universe; the rational thing to do is to create an animate universe₁, or an animate universe₂, etc., such that these systems do not require divine interventions for animate states to be ensured.{38}

But this is where Alston's point becomes relevant: we simply have no idea whether God could have created such a world-order and even less whether it would have involved the goods which this system does without greater disadvantages. We can imagine such worlds, but that does nothing to prove that they are either possible or feasible. Paraphrasing Alston, I should say that

. . . the judgments required by the inductive argument from [Big Bang cosmology] are of a very special and enormously ambitious type and our cognitive capacities are not equal to this one

. . . . We are simply not in a position to justifiably assert that God would have no sufficient reason for [creating the Big Bang singularity]. And if that is right, then the inductive argument from [Big Bang cosmology] is in no better shape than its late lamented deductive cousin.{39}

It seems to me, therefore, that Smith's argument is based on such multiply mootable premisses that we can repose no confidence in it.

Atheistic vs. Theistic Interpretation of the Big Bang

But what, in any case, is Smith's "atheistic interpretation" of the Big Bang and what warrant does it enjoy? Although he does not develop this interpretation at any length, it would appear to be that the initial, cosmological singularity inexplicably "exists and emits the four-dimensional spatio-temporal universe."^{40} But at this point one must be very careful. For although Smith uses here tenseless language to describe the origin of the universe, Smith is no B-theorist of time who thinks that the entire spacetime manifold (plus any singular points) exists tenselessly. Rather Smith is an ardent A-theorist who rejects strictly tenseless language and regards even abstract objects as having temporal duration. Hence, in no sense of the term are we to think of the initial cosmological singularity as possessing the property of *permanence*, which has been so effectively analyzed elsewhere by Smith.^{41} On an A-theory of time, the singularity is neither sempiternal, omnitemporal, everlasting, infinite in the past and future, beginningless and endless in time, endlessly recurrent, eternal, nor merely timeless. In order for any of these predicates to apply to the singularity, one must adopt a B-theory, according to which the singularity does not come to be or pass away, but tenselessly exists. On Smith's A-theoretic view, the first physical state of the universe came to be without any temporally preceding states whatsoever and immediately emitted the spacetime manifold. Moreover, this coming to be is admitted to be unexplained, that is, without cause or reason.^{42}

What possible warrant could there be for such an incredible scenario? If it enjoys no independent support or inherent plausibility apart from the alleged inconsistency of the theistic interpretation, then with the failure of Smith's argument, its epistemic warrant shrinks to zero. Smith, however, does offer an argument in favor of his interpretation: *it is simpler than the theistic hypothesis*. Noting that the singularity has zero spatial volume, zero temporal duration, and non-finite values for its density, temperature, and curvature, Smith contends that it is the simplest possible physical object, even as God is the simplest possible person. They are thus on a par with each other. Both God and the initial, cosmological singularity exist unexplained and so are also on a par in this respect. But "It is simpler to suppose that the 4D physical universe began from the simplest instance of the same basic kind as itself, viz., something physical, than it is to suppose that this universe began from the simplest instance of a different kind, viz., something nonphysical and personal."^{43}

Smith's argument, however, depends on a parallelism between God and the initial cosmological singularity which seems clearly exaggerated. For the sense in which God is unexplained is radically different from the sense in which the initial, cosmological singularity is unexplained. Both can be said to be without cause or reason. But when we say that God is uncaused we imply that He is eternal, that He exists either timelessly or sempiternally. His being uncaused implies that He exists *permanently*. But the singularity is uncaused in the sense that it comes into being without any efficient cause. It is *impermanent*, indeed, vanishingly so. These hypotheses can therefore hardly be said to be on a par with each other. Moreover, God is without a reason for His existence in the sense that His existence is metaphysically necessary. But the singularity's coming to be is without a reason in the sense that, despite its contingency, it lacks any reason for happening. Again these hypotheses are fundamentally different. The hypothesis that the universe was brought into being by an eternal, metaphysically necessary being hardly seems on a par with the hypothesis that the singularity inexplicably and causelessly came into being. Thus, Smith's parallelism between God and the singularity evaporates once the alleged parallels are examined.

As for the simplicity argument itself, Smith's case for the superiority of the atheistic interpretation is, in effect, that only on the atheistic hypothesis does the spacetime universe have a material cause, namely, the singularity. But that is a red herring. For the theist could also maintain that the universe emerged from a physical singularity, adding that the latter was created by God. The real issue is rather the origin of the singularity itself. On the theistic hypothesis the spacetime manifold plus its initial singular point was brought into being by God. But on Smith's hypothesis the spacetime manifold plus its initial singularity came to be without any cause or reason. Hence, atheism is not explanatorily simpler than theism after all, since physical reality did not begin from an "instance of the same basic kind as itself, viz., something physical." {44} In fact, on Smith's own principle concerning simplicity and difference in kind, theism is arguably a simpler hypothesis, since, as Duns Scotus put it, there is an infinite distance between being and non-being, and theism posits the origin of being by being, whereas atheism posits the origin of being from non-being.

Smith opened his paper with the confession that "the reason for the apparent embarrassment of non-theists" when faced with the prospect of the beginning of the universe "is not hard to find": they must believe that "the universe came from nothing and by nothing." Like C. D. Broad, I find this notion insupportable, and any world view taking this thesis on board will be eventually pulled under by its weight. The principle that something cannot come out of absolutely nothing strikes me as a sort of metaphysical first principle, one of the most obvious truths we intuit when we reflect philosophically. Smith, on the other hand, maintains that this principle is neither a necessary *a posteriori* nor a necessary *a priori* truth. {45} It cannot be necessary *a posteriori* because the sentence "Everything that begins to exist has a cause" cannot express different propositions in different possible worlds while obeying its actual rule of use. Now I personally see no reason at all to think that all necessary *a posteriori* truths must conform to the analysis Smith lays down. According to Kripke, all of his examples of metaphysically necessary *a posteriori* truths have a character such that we see that if they are true at all, they are necessarily true, so that any empirical knowledge of their truth is automatically empirical knowledge of their necessity. {46} So why is it implausible that we should see that the proposition "Everything that begins to exist has a cause" is necessarily true, if true at all, and see on the basis of experience that it is true? I can think of other metaphysically necessary truths that seem analogous; for example, "No effect precedes its cause" and "No event precedes itself," which are metaphysically necessary due to the A-theoretical nature of time and becoming, {47} but which perhaps require some experience of time in order to be seen as true.

In any case, can we not construct a scenario meeting Smith's criteria? When I say that "Everything that begins to exist has a cause," the sentence is significantly tensed and expresses a tensed fact. Everything that did, does, or will begin to exist had, has, or will have a cause. Let us imagine, then, a world *W* exactly like the actual world except that it is devoid of ontological tense. All things in *W* exist tenselessly at their appointed spacetime coordinates and so never really begin (significantly tensed) to exist. Things begin (tenselessly) to exist only in the sense that their world lines have front edges, or are finite in the "earlier than" direction of time. Persons in *W* believe and utter the tensed sentence, "Everything that begins to exist has a cause," but that sentence does not express the same fact that it does in the actual world, for there are no tensed facts in *W*. Indeed, I should say that the tenseless proposition it expresses, that "Everything that *begins* to exist *has* a cause" is not necessarily true, since such things never undergo temporal becoming, that is, they never come (significantly tensed) to exist and so do not need a cause of their world lines' being finite in the "earlier than" direction.

Smith might reject this example because such a tenseless world is metaphysically impossible and, hence, strictly inconceivable. I should agree that it is *inconceivable*; but it is not *unimaginable*. In general it seems to me that Smith confuses conceiving a world with imagining a world. To the same extent that we can imagine a world in which water is not H₂O, we can imagine a world in which tense does not exist or in which things come into being without a cause. But this amounts to no more than our ability to form mental pictures and to give them labels like "A World in which Water Is Not H₂O" or "A World in which Something Begins without a Cause." Strictly speaking, they are alike inconceivable.

This prompts us to ask why "Everything that begins to exist has a cause" cannot be a necessary *a priori* truth which can be immediately known. Smith's response is, in effect, that we can imagine a world in which, say, the universe comes into being without a cause. I agree that we can form such a picture in our imagination. But that does nothing to prove that the proposition is not a necessary *a priori* truth. Consider Aquinas's point with which we began this paper. A pure potentiality cannot be conceived to actualize itself. Therefore, there must be an actual cause for anything's coming to exist. In the case of creation, there was not anything physically prior to the singularity. Therefore, it is impossible that the potentiality of the existence of the universe lay in itself, since it did not exist. On the theistic view, the potentiality of the universe's existence lay in the power of God to create it. On the atheistic interpretation, on the other hand, there did not even exist any potentiality for the existence of the universe. But then it seems inconceivable that the universe should come to be actual if there did not exist any potentiality for its existence. It seems to me therefore that a little reflection discloses that our mental picture of the universe arising uncaused out of absolutely nothing is just that: pure imagination. Philosophical reflection reveals it to be inconceivable.

Hence, far from being simpler than the theistic hypothesis of creation, the atheistic interpretation is less simple, has zero explanatory power, and in the end degenerates into metaphysical absurdity.

Conclusion

Enjoying no greater consistency than its theistic rival, with no positive argument to commend it, and unable to escape the charge of metaphysical absurdity leveled against it, Smith's atheistic interpretation of the Big Bang appears to be untenable. If the standard model is correct, it does seem to constitute a powerful argument for the existence of a Creator of the universe. Smith leaves it open that the model may be false and some other model not involving an initial cosmological singularity be true. Perhaps, though there are reasons to doubt that an absolute beginning can be avoided through such models; but that is a debate for another day.

Endnotes

{1} Thomas Aquinas *Summa contra gentiles* 1.13.30. (Pegis translation.)

{2} Quentin Smith, "[A Big Bang Cosmological Argument for God's Non-Existence](#)," *Faith and Philosophy* 9 (1992): 218.

{3} See Thomas V. Morris, "Creatio ex nihilo," in *Anselmian Investigations* (Notre Dame, Ind.: University of Notre Dame Press, 1987), pp. 151-60. Morris argues that belief in *creatio*

ex nihilo gains in rationality as the number of empirical beliefs it forces us to abandon decreases. Cutting out the singularity would sacrifice a minimal number of such beliefs.

{4}Smith, "Cosmological Argument," p. 225.

{5} See William Lane Craig, "Theism and Big Bang Cosmology," *Australasian Journal of Philosophy* 69 (1991): 492-503. Analogous equivalencies elsewhere in science may help to drive home the point. For example, in discussions of the conventionality of simultaneity in relativity theory, one speaks of synchronization of spatially separated clocks by means of the slow transport of clocks from one place to another. It is claimed that by transporting clocks at progressively slower velocities, one can approach absolute synchronization, which would result from a clock transported from one place to another at infinitely slow velocity. But no one takes infinitely slow transport of clocks as describing an actual procedure, since infinitely slow velocity is ontologically equivalent to rest, that is, to no transport at all!

{6}William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology*, (Oxford: Clarendon Press, 1993), p. 245

{7}If the A-theorist adopts an atomistic view of time, then he could maintain that the singularity is the boundary of the first chronon of time. But this would undermine Smith's argument because then the first state of reality would not be lawless and unordered.

{8}Aristotle *Physics* 4. 10. 217b33-218a9. For an excellent discussion of the early history of this conundrum, see Richard Sorabji, *Time, Creation and the Continuum* (Ithaca, N.Y.: Cornell University Press, 1983), pp. 7-63. Augustine in particular agonized eloquently over this problem (Augustine *Confessions* 9. 15-28).

{9}See discussion in Adolf Grünbaum, "Relativity and the Atomicity of Becoming," *Review of Metaphysics* 4 (1950-51): 143-186. Recall that Grünbaum solves the problem only by denying the reality of temporal becoming. My own solution is not to adopt an atomistic view of time, but to maintain that only intervals of time are real or present and that the present interval (of arbitrarily designated length) may be subdivided into subintervals which are past, present, and future respectively. Thus, there is no such time as "the present" *simpliciter*; it is always "the present hour," "the present second," *etc.* The process of division is potentially infinite and never arrives at instants. For a fine treatment see Andros Loizou, *The Reality of Time* (Brookfield, Ver.: Gower, 1986), pp. 44-45.

{10}Alvin Plantinga, "Foundations of Theism," *Faith and Philosophy* 3 (1986): 298-313.

{11}Smith, "Big Bang Cosmological Argument," p. 223.

{12}Thomas Aquinas *Summa contra gentiles* 1.86.5.

{13}William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 236-39.

{14}Ibid.

{15}Ibid.

{16}Ibid., p.p. 247-49.

{17}Quentin Smith, "[Atheism, Theism, and Big Bang Cosmology](#)," *Australasian Journal of Philosophy* 69 (1991): 62-65.

{18}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, p. 223.

{19}Ibid., p. 248-49.

{20}This is especially evident if there are bivalent counterfactuals of freedom, for these cannot be made true or false on the basis of similarity relations alone, since counter-causal freedom requires that one be able to choose differently in worlds having exactly similar world histories up to the time of choice. Such a counterfactual cannot therefore be made true by the fact that in all the antecedent-permitting worlds most similar to the actual world up to the point of decision, one chooses the alternative described in the consequent.

{21}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 248-49.

{22}Ibid., pp. 227-29.

{23}Ibid., pp. 242-44.

{24}However, providence also involves the intentional aspect that the states of the world are in some way planned or arranged by God. Moreover, nomological conservation would not be interpreted to abrogate creaturely freedom of the will.

{25}For an outstanding treatment of the relation between natural law and miracle see Stephen Bilinskyj, "God, Nature, and the Concept of Miracle" (Ph.D. dissertation, University of Notre Dame, 1982).

{26}Thomas Aquinas *Summa contra gentiles* 3.100.10.

{27}Thomas V. Morris, *Anselmian Explorations* (Notre Dame, Ind.: University of Notre Dame Press, 1987), p. 10.

{28}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, p. 242.

{29}Ibid., p. 244.

{30}Ibid., pp. 242-243.

{31}See William Lane Craig, "The Teleological Argument and the Anthropic Principle," in *The Logic of Rational Theism*, ed. Wm. L. Craig and Mark S. McLeod, *Problems in Contemporary Philosophy* 24 (Lewiston: Edwin Mellen, 1990), pp. 127-153; L. Stafford Betty and Bruce Cordell, "New Life for the Teleological Argument," *International Philosophical Quarterly* 27 (1987): 409-435.

{32}John Updike, *Roger's Version* (London: Deutsch, 1986); John Leslie, *Universes* (London: Routledge, 1989).

{33}Tony Rothman, "A 'What You See Is What You Beget' Theory," *Discover*, (May 1987), p. 99.

{34}Paul Davies, *The Mind of God: Science and the Search for Ultimate Meaning* (New York: Simon and Schuster, 1992).

{35}As Pascal wrote,

"It was not then right that He should appear in a manner manifestly divine, and completely capable of convincing all men; but it was also not right that He should come in so hidden a manner that He could not be known by those who should sincerely seek Him. He has willed to make Himself quite recognizable by those; and thus, willing to appear openly to those who seek Him with all their heart, and to be hidden from those who flee from Him with all their heart, He so regulates the knowledge of Himself that He has given signs of Himself, visible to those who seek Him, and not to those who seek Him not. There is enough light for those who only desire to see, and enough obscurity for those who have a contrary disposition" (Blaise Pascal, *Pensées*, trans. W.F. Trotter London: J.M. Dent & Sons, 1932, No. 430, p. 118).

{36}William Alston, "The Inductive Problem of Evil," *Philosophical Perspectives* 5 (1991): 65.

{37}John D. Barrow, *The World within the World* (Oxford: Clarendon Press, 1988), p. 277.

{38}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 254-255. Of course, God could have created a quantum universe without the extrapolated initial state, but then we run into the same problem mentioned in note 3.

{39}Alston, "Inductive Problem," pp. 65, 61.

{40}Smith, "Cosmological Argument for God's Nonexistence," p. 228

{41}See Smith's helpful analysis in "A New Typology of Temporal and Atemporal Permanence," *Nôus* 23 (1989): 307-30.

{42}In discussing the origin of the universe, one runs the risk of being bamboozled by his own language, for expressions like "The universe came to be" or "The universe came into being out of nothing without a cause" or "God created the universe out of nothing" might lead the uninitiated to infer that one means that there was a state of nothingness temporally prior to the first event from which the universe was created. But as Aquinas recognized, the import of *creatio ex nihilo* is that there was not anything temporally or metaphysically prior to the universe out of which it was made (*Summa contra gentiles* 2.16.4; 2.17.2; 2.36.7). It is very difficult to express this idea in a non-misleading way because the mere assertion that the universe or time began to exist can be interpreted by the B-theorist in such a way as to obscure the radicalness of this claim, whereas attempts to capture the A-theoretic sense of the assertion (e.g., "The universe came into being out of nothing") may sound analogous to the statement "John came into the house out of the rain," which betrays one's true meaning. What one means is that the universe started to exist without any temporal or causal antecedents and that this is a tensed fact. Fortunately, Smith understands this and nowhere objects to such expressions and occasionally even uses them himself.

{43}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, p. 251.

{44}Ibid.

{45}Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*, pp. 178-185. Cf. Smith, "Big Bang Cosmological Argument," pp. 230-233, to which my remarks were originally directed.

{46}Saul A. Kripke, *Naming and Necessity*, rev. ed. (Oxford: Basil Blackwell, 1980), p. 159.

{47}See discussion in William Lane Craig, *Divine Foreknowledge and Human Freedom*, *Studies in Intellectual History* 19 (Leiden: E. J. Brill, 1991), pp.111-113, 150-153.

A Response to Grünbaum on Creation and Big Bang Cosmology

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

In response to my article "Creation and Big Bang Cosmology" Adolf Grünbaum argues against God's being a simultaneous cause of the Big Bang and against the inference that the Big Bang had a cause. His critique of simultaneous causation, once validly formulated, is based on an obviously false premiss, namely, that in order for simultaneous causation to be possible we must have a generally accepted criterion for discerning such causes. His most important reason for rejecting the causal inference with respect to the Big Bang is predicated on a B-Theory of time, which I find good reasons to reject.

Source: "A Response to Grünbaum on Creation and Big Bang Cosmology." *Philosophia Naturalis* 31 (1994): 237-249.

It is an exhilarating experience to be on the receiving end of one of Professor Grünbaum's trenchant critiques, and I am grateful both for his criticisms and this opportunity to respond. Without further ado, then, let us get down to the enjoyable details.

Grünbaum's lengthy critique is actually directed at only two paragraphs of my original article (the fourth and the fifth). In the first of these I charge that Grünbaum's objection that the Big Bang singularity cannot have been caused (because it could have had neither a subsequent cause nor an antecedent cause) is a pseudo-dilemma because the cause of the initial cosmological singularity could be simultaneous (or coincident^{1}) with that singularity. In response, Grünbaum presents the following argument:

1. Only events can qualify as the momentary effects of other events or of the action of an agency.
2. The Big Bang singularity is technically a non-event.
3. Therefore, the singularity cannot be the effect of any cause in the case of event causation or agent causation.

If this argument is sound, then it is imply irrelevant whether the putative cause of the Big Bang singularity is antecedent to, simultaneous with, or subsequent to the singularity, since any sort of cause of the singularity is excluded.

It seems to me, however, that this argument is invalid, since it equivocates on the meaning of the term "event." The sense in which the initial cosmological singularity is not an event is, as Grünbaum notes, a technical sense employed in GTR. Since that singular point is not Hausdorff isolated, that is to say, since its coordinates cannot be specified independently of all other space-time points, it cannot be classed as an event as that term is technically used in GTR. But the word "event" as it is used in (1) cannot be this *terminus technicus* if (1) is to be plausibly regarded as true. For we can easily envision happenings which are not "events" in the technical sense in which that word is used in GTR, but which do qualify as the momentary effects of other events or agent causes: (i) The initial cosmological singularity is causally linked to later space-time points and events, so that in this case we have events which are the momentary effects of a non-event. Now consider the final cosmological singularity in a universe caught in gravitational self-collapse: here we have a case in which a non-event is the momentary effect of other events, which contradicts (1), if that premiss uses "event" in the technical sense at issue. (ii) In the quantum realm, occurrences take place (such as the collision of two elementary particles) which cannot be termed "events" in GTR's technical sense. Classical conceptions of space and time finally break down within the quantum regime. Yet these quantum occurrences are doubtlessly causally conditioned by macroscopic physical states which are classifiable as (series of) events (such as a quantum experiment's being carried out by a researcher). (iii) The technical sense of "event" in GTR is inapplicable to mental events such as the perception of an object or the experience of being surprised. Yet such occurrences in consciousness are clearly in part the momentary effects of events in the physical world and also, plausibly, of the action of agents, as, say, when I force myself to concentrate on some subject or to get my mind off something else. (iv) If God exists, why could He not cause momentary effects which are not events in the GTR sense of the word? Could He not create a universe not governed by GTR in which there are momentary effects of His action which are not "events" in the technical sense of the term? Since GTR is not metaphysically necessary, why is this impossible? And why could not mental processes, quantum occurrences, and singularities be causally produced by God? In short, (1) is plausibly true only if "event" is understood in a broader, non-technical sense (for example, "that which

happens") than the sense which that term carries in GTR. But in that case (3) does not follow from (1) and (2), since the notion of "event" in these two premisses is not univocal. {2}

The failure of Grünbaum's general argument forces upon us again the question of whether the cause of the Big Bang singularity might not have been simultaneous with it. Although he presents four objections to my suggestion, only the last specifically addresses the issue of simultaneous causation. Let us therefore temporarily bypass the other three and deal immediately with Grünbaum's misgivings about the Big Bang's having a simultaneous cause. Grünbaum presents the following argument:

4. The proponent of simultaneous, asymmetric causation must give us a criterion for distinguishing one of two causally connected simultaneous events as the cause of the other.
5. There is no generally accepted account of causal directionality.
6. Therefore, there can be no simultaneous, asymmetric cause of the Big Bang.

Now as an argument against simultaneous, asymmetric causation in general and of the Big Bang in particular, this objection is singularly unimpressive. At face value, the argument is invalid, since there is just no logical connection between premisses (4) and (5) and the conclusion (6). Let us therefore try to tighten up the reasoning a bit. The "must" in (4) suggests that Grünbaum understands (4) as a conditional. Grünbaum insists that he does not deny the existence of simultaneous, asymmetric causation in the world, but he seems to think that the obtaining of such causal relations somehow depends on our having a conceptually sound explication of causal priority which licenses their possibility. Accordingly, (4) is plausibly taken to lay down a necessary condition for the possibility of such causation. We may cast Grünbaum's reasoning in a valid argument form by replacing (4) with

- 4.' The proponent of simultaneous, asymmetric causation must give us a criterion for distinguishing one of two causally connected simultaneous events as the cause of the other, if simultaneous, asymmetric causation is possible.

Unfortunately, the argument is still not valid, since (4') requires only that *some* criterion be given, while (5) refers to the absence of a *generally accepted* criterion. So we must replace (4') with

- 4." The proponent of simultaneous, asymmetric causation must give us a generally accepted criterion for distinguishing one of two causally connected simultaneous events as the cause of the other, if simultaneous, asymmetric causation is possible.

From (4") and (5) it follows that simultaneous asymmetric causation is impossible, which entails (6).

The argument is still unsound, however, because (4") is so evidently false. (i) Why must the proponent of simultaneous, asymmetric causation furnish a *generally accepted* criterion of causal directionality in order for such causation to be possible? Is this not an extravagant demand? What Grünbaum's gloss on Woodward's communication masks is that there is no generally accepted account of the direction of causation *überhaupt*, including accounts which appeal to temporal priority as a condition of causal priority. Indeed, I should dare to say that there is no generally accepted account of causation at all today. But should we therefore infer that causation is impossible or non-existent? Compare the situation in contemporary epistemology. There is today no generally accepted account of justification or rational warrant

with respect to beliefs we hold as true; but should we therefore infer that knowledge is impossible? {3} Deconstructionists and other post-modernists may think so, but I doubt that Grünbaum would be ready to follow in their train. There is no reason to think that the possibility of simultaneous causation depends upon our being able to come up with an uncontroversial criterion of causal directionality. (ii) Indeed, what reason is there to think that the possibility of simultaneous, asymmetric causation depends upon my being able to come up with any kind of criterion of causal directionality at all? My enunciation of a criterion for distinguishing a cause from its effect is an epistemic affair; the existence of simultaneous causation is a matter of ontology. A criterion helps us to *discern* simultaneous, asymmetric causes in the world; but to suggest that said criterion somehow *constitutes* such causal relations in reality is verificationism at its most implausible. Grünbaum has not suggested any incoherence or difficulty in simultaneous, asymmetric causation; if there are such causes in the world, they do not have to wait around for us to discover some criterion for distinguishing them. (iii) There is no reason to think that in order for specific cases of simultaneous, asymmetric causation to be possible or discernible, one must be able to furnish a general criterion broad enough to cover all such alleged cases. All one needs is a way of distinguishing cause from effect in the specific case. Now in the case of the hypothesis of theological creationism, we have, as I noted, a logically airtight means of distinguishing cause from effect, namely, it is *metaphysically impossible* for God to be caused by the world, since if God exists, His nature is such that He exists necessarily, whereas the world's existence is metaphysically contingent (as is evident from its beginning to exist). That entails that there is *no possible world* in which God is caused by the Big Bang singularity. Hence, it is easy for the theist to explain in what sense God is causally prior to the universe or the Big Bang: God and the universe are causally related, and if the universe were not to exist, God would nevertheless exist, whereas there is no possible world in which the universe exists without God. {4} Grünbaum responds that my distinguishing God as the asymmetric cause of the universe based on the metaphysical impossibility of God's having a cause is "unavailing" in the face of Grünbaum's demonstration of the failure of my argument for a (simultaneous) cause of the Big Bang. He thus tacitly acknowledges that his argument against the notion of a simultaneous, asymmetric cause of the Big Bang cannot stand alone, but ultimately collapses back into his first three arguments against the Big Bang's being caused *simpliciter*. If the Big Bang has, then, an external cause, no independent reason remains to deny that the cause could operate simultaneously (or coincidentally) with the Big Bang. {5}

Let us turn, then, to Grünbaum's three arguments against inferring a cause of the Big Bang, which strike against the second of my two paragraphs on which he comments. The first objection is based on my claim that the universe came into being out of absolutely nothing. Grünbaum asks,

But in what sense and on what grounds does Craig claim that the universe did *become* actual if, as he grants, there was no 'empty time prior to the singularity'? It does not follow from the *de facto* or actual existence of the universe that it ever 'became' actual! Precisely by postulating such '*becoming* actual,' Craig begs the question when he offers such purported *actualization* as grounds for inferring that there must have been a 'potentiality of the universe's existence.'

I think that this is an extremely important and interesting objection which goes right to the heart of the difference between us. Grünbaum is a well-known advocate of what J. M. E. McTaggart called a B-theory of time, according to which events in time are ordered by tenseless relations of *earlier than*, *simultaneous with*, and *later than*, while the distinction

between past, present, and future is merely a subjective feature of consciousness; temporal becoming is not objective, and all events are on an ontological par, existing tenselessly at their appointed stations. On such a metaphysic of time, the universe, while having a beginning, never really came into existence. It is tenselessly actual and begins to exist only in the sense that a meter stick has a beginning. By contrast, I subscribe to what McTaggart called the A-theory of time, according to which the distinction between past, present, and future is objective, not merely subjective. There are tensed facts about the universe, and temporal becoming is real, the future being a realm of unrealized possibilities. Temporal events are not on an ontological par, and events do not tenselessly subsist; rather they elapse, and things come into being and pass away. On such a metaphysic, the initial cosmological singularity does not tenselessly exist as merely the front edge, so to speak, of the tenselessly existing four-dimensional block universe. Rather it *happens*, and this happening is tensed. It is the initial exemplification of temporal becoming, the first actualization of a physical state of affairs, and yet it becomes actual without any antecedent physical conditions to bring about its actualization. It is in that sense that it came to be out of nothing.

The debate between us therefore comes down to whether the A- or the B-theory of time is true. In this short paper, I can only outline my justification for preferring the metaphysic of an A-theory of time:

I. Arguments for the A-Theory

A. Linguistic tense, which is ineliminable and irreducible, mirrors the tensed facts which are characteristic of reality.{6}

B. The experience of temporal becoming, like our experience of the external world, should be regarded as veridical.{7}

II. Refutation of Arguments against the A-Theory

A. McTaggart's Paradox is based upon the illicit assumption that there should exist a unique tenseless description of reality, as well as the illicit conflation of A-theoretic becoming with a B-theoretic ontology.{8}

B. The passage of time is not a myth, but a metaphor for the objectivity of temporal becoming, a notion which can be consistently explicated on a presentist metaphysic.{9}

III. Refutation of Arguments for the B-Theory

A. Temporal becoming is wholly compatible with Relativity Theory, as can be shown in a number of ways.{10}

B. Time, as it plays a role in physics, is an abstraction of a richer metaphysical reality, omitting indexical elements such as the "here" and the "now" in the interest of universalizing the formulations of natural laws.{11}

IV. Arguments against the B-Theory

A. In the absence of objective distinctions between past, present, and future, the relations ordering events on the B-theory are only gratuitously regarded as genuinely temporal relations of *earlier/later than*.{12}

B. The subjective illusion of temporal becoming involves itself an objective temporal becoming of contents of consciousness.{13}

C. The B-theory entails perdurantism, the view that objects have spatio-temporal parts, a doctrine which is metaphysically counter-intuitive, is incompatible with moral accountability, and entails the bizarre counterpart theory of transworld identity.{14}

I plan to develop all these points in a forthcoming book entitled *God, Time, and Eternity*. If I am correct that an A-theory of time turns out to be preferable to a B-theory, then Grünbaum's first objection is voided, and the demand for a cause of the universe's coming to be seems to be quite justified.

Grünbaum's second objection is irrelevant to our *Auseinandersetzung*, since it concerns a cause of the *being*, rather than of the *becoming*, of the universe. It concerns divine conservation, not creation, of the universe. It is natural that as a B-theorist who believes that the universe never came into being, but just exists tenselessly, Grünbaum should enquire after the arguments for a cause of the universe's being; but as my arguments in no way rest upon the success of arguments for divine conservation, we may leave it to those whom Grünbaum criticizes to defend their own views.{15}

Given that an A-theory of time is true, would the beginning of the universe require a cause? Grünbaum's third and final objection seeks to undercut an affirmative answer to this question. He asserts that there is no reason *a priori* or *a posteriori* to think that whatever begins to exist *ex nihilo* has a creative cause. Now the first thing to notice is the modesty of this objection. It does not essay to *refute* the causal premiss; it merely denies that there are any grounds for *affirming* it.{16} Such an objection is, however, wholly compatible with the view that the causal principle is a sort of metaphysical first principle, a properly basic belief. I have maintained from the beginning that any argument for the principle is apt to be less obvious than the principle itself. In the absence of any good reason to deny the causal principle, I am quite content to rest my case on the perspicacity of that very principle.

But to consider Grünbaum's objection on its own merits: in the case of *a priori* knowledge of the causal principle, Grünbaum fails to distinguish between strictly logical necessity and metaphysical necessity. I have always maintained that the causal principle is not strictly logically necessary, in that its negation is not a contradiction. In that sense, an uncaused beginning *ex nihilo* is not analytically impossible. But such considerations only prove that the causal principle is synthetic, not that it is metaphysically contingent. Indeed, given the A-theory of time, it is very plausible to take the causal principle as a synthetic, metaphysically necessary truth, since, as I have argued, the becoming actual of the first physical state plausibly requires a cause. Grünbaum's only response to that argument was to deny the A-theory of time on which it was predicated.{17}

In the case of *a posteriori* knowledge of the causal principle, all Grünbaum does is allege that the Steady State model does not require a supernatural cause for the creation of matter *ex nihilo*, since it posits a physical cause of matter creation. But the failure of that model to require a divine creative cause does absolutely nothing to support Grünbaum's objection that there is no empirical evidence for the causal principle. (In fact, in positing a physical cause of matter creation the model actually supports the causal principle.) I should say that the empirical evidence overwhelmingly confirms the principle that things do not come into existence uncaused out of nothing. Even the late J. L. Mackie, himself no friend of philosophical theism, in his critique of theological creationism conceded that "this principle . . . is constantly confirmed in our experience (and also used, reasonably, in interpreting our

experience)" [Mackie (1982), p. 89]. In short, I think we have quite good reasons, both philosophical and empirical, for sticking with the intuitively plausible causal principle.

In summary, I hope to have sustained my original charge that Grünbaum's rejection of theological creationism is based on a pseudo-dilemma. Since the universe began to exist, it plausibly requires a cause of its origination, even if the initial cosmological singularity is not an "event" in the technical sense of that term in GTR. Since the cause cannot be physically prior or subsequent to the Big Bang, it must be simultaneous or coincident with the Big Bang, a conclusion which is in no way obviated by the want of a generally accepted criterion of causal directionality.

Endnotes

{1} The terminological issue here is analogous to Grünbaum's complaint that the initial cosmological singularity is not technically speaking an "event." If nothing can be, technically speaking, "simultaneous" with the singularity, since it is not an instant of time, then we can substitute other locutions to convey the idea, like "coincidence," *i.e.*, two incidents co-occurring, or occurring together. If this is not clear enough, we can say further that two incidents co-occur iff they both occur and there is no time between their occurrences. One might note furthermore that even though $t = 0$ is not an instant of time, nevertheless it functions *logically* like an instant of time, so that it makes perfectly good sense to say that God created the universe at $t = 0$.

{2} Permit me to note that, *pace* Grünbaum, I have never asserted the ontological legitimacy of Grünbaum's case (i) scenario as support for *creatio ex nihilo*. My own position has been to regard the initial cosmological singularity as ontologically equivalent to nothing, so that $t = 0$ is a mathematical idealization and any initial interval of time is open in the *earlier than* direction [Craig and Smith (1993), pp. 43-44, 146-147, 224-227, 258-261]. Since Grünbaum brought up the case (i) scenario, I have argued *ex concessione* that the initial cosmological singularity, if ontologically real, requires a cause, whether or not any arbitrarily chosen initial temporal interval is closed or open in the *earlier than* direction. I must say, too, that I see no reason to think that Lovell or the Pope (of all people) was presupposing a case (i) ontology [Lovell, A.C.B. (1961), p. 106; Pius XII (1952), pp. 143-146].

{3} See the excellent survey of the field in Plantinga (1993).

{4} It is very interesting that Hausman's criterion for causal priority fails not only in the case of God, but (on the hypothesis of naturalism) also for the Big Bang singularity. For the initial cosmological singularity is causally connected to everything else, so that Hausman's condition that in order for X to cause Y there must be something causally connected to Y, but not to X, fails. Hausman tries to escape this counter-example by alleging that "there is no reason why one need regard the complex state of the world just after the big bang as having a single cause or causal condition [Hausman (1993), p. 447]), but this reply is clearly inadequate, as the initial cosmological singularity is the source and therefore causal condition of everything physical. Hausman senses the difficulty and goes on to confess, "I might also be able to justify making an exception in the case of the big bang, which is surely an exceptional event." -- Indeed, as is God's creation of the universe, which is also a plausible exception to Hausman's analysis.

{5} The rationale behind Grünbaum's discussion of purported instances of simultaneous, asymmetric causation is unclear. For if he were arguing that from the actuality of such causation we could infer in the absence of any sound criterion the possibility of such causation, that would contradict (4"). Perhaps he would say that in the very act of experiencing simultaneous, asymmetric causation we should apprehend a criterion for distinguishing cause from effect. But that seems enormously implausible. When I hold a pencil in the air, I am intentionally aware that it is I who am the simultaneous, asymmetric cause of its suspension, rather than its being the support upon which my hand rests, and I need no criterion of causal directionality to know this. It is thus hard to avoid the impression that on Grünbaum's view it is impossible ever to discern simultaneous, asymmetric causation through experience alone, which seems to be just the sort of *a priori* theorizing about causation against which he warns.

Notice that his chief difficulty with the considered examples is not the simultaneity of the cause and its effect, but their *asymmetry*. I suppose that the implication is that the cause of the Big Bang must have a symmetric causal relation with the singularity. His argument fails because in the examples he does not show causal symmetry *in the same respect*. In the example of the ball resting on the cushion, the ball is the asymmetric, simultaneous cause of the depression in the cushion; the depression is in no way the cause of the ball's resting on it. Of course, due to its elasticity, the cushion exerts force against the ball, but that is simply irrelevant and in fact constitutes another example of simultaneous, asymmetric causation, since in this case the cushion supports the ball; the ball does not support the cushion. In the case of the Big Bang, one could allow, I suppose, other respects in which the Creator and the singularity are differently related, *e.g.*, perhaps the singularity's occurring asymmetrically causes the Creator to know the truth of the proposition "The singularity is occurring." But even such a concession is far from necessary, since causal relations between material objects will not be isomorphic to relations between an immaterial being and a material object.

My rejection of the relevance of the finite velocity of physical causal influences in STR is not question-begging because (i) as the Creator of physical space-time, the Creator must transcend space and so be non-physical and immaterial and (ii) so long as it is even *possible* that God created the universe, it is not necessary that all causal influences be physically mediated. I can clarify my point that even remote causation involves simultaneous causation by stating that the remote cause produces its effect through the final mediation of a simultaneous cause. In physics, such mediation is through contact forces, *i.e.*, forces which are such that the effect is not produced until the mediating photon is actually absorbed by the patient entity. I am not claiming that all causation is like this, but the assertion that an upper bound to velocity precludes simultaneous causation is thereby seen to be fatuous. Finally, proponents of simultaneous, efficient causation are certainly not unaware of causal chains, such as pregnancy resulting from intercourse, but insist that in any such chain the final link will be simultaneous with the commencement of the effect. That is not obviously absurd.

{6} For an outstanding defense of this point, see Smith (1993). In choosing to collaborate with Smith, an ardent A-theorist, in his battle against theological creationism, Grünbaum may have unwittingly admitted a Trojan horse within his walls.

{7} One of the most eloquent spokesmen for this point of view has been George Schlesinger (1980), pp. 34-39, 138-139.

{8} The most helpful here are still Broad (1938) and Dummett (1960).

{9} This point needs further work, but see Prior (1968), pp. 1-14; Loizou (1986), pp. 44-45.

{10} See Smith (1993), chap. 7 and McCall (1994).

{11} See the remarks of Black (1962).

{12} There is no good treatment of this yet, but see Gale (1968), pp. 90-97 and Mellor (1981), p. 140.

{13} Again, this point needs to be better developed, but see Geach (1972), p. 306 and McGilvray (1979).

{14} See the excellent study by Merricks (1994); see also Lewis (1986) and the incisive piece by Van Inwagen (1990).

{15} Just a note to say that Grünbaum conflates three versions of the cosmological argument. The *kalam* version, which I have defended, says nothing about a *causa/ratio essendi*. The Thomist version, as it comes to expression in Aquinas's *Tertia Via*, argues for a *causa essendi* on the basis of the real distinction between essence and existence in contingent things, a distinction which disposes them to nothingness. The Leibnizian version in no way presupposes a disposition toward nothingness in contingent things, but seeks a *ratio* for the existence of anything, even an eternal thing which has no disposition to nothingness, in a being which is metaphysically necessary. Other philosophers and theologians merely seek to explicate the notion of divine conservation, accepted on the basis of revelation or church teaching, without trying to construct an argument for God's existence from contingency. Thus, Grünbaum's demand for evidence of the spontaneity of nothingness is not in every case a relevant demand.

{16} Smith's arguments, alluded to by Grünbaum, against the necessity of the causal principle are refuted in Craig and Smith (1993), pp. 271-275.

{17} It must be said that Grünbaum misrepresents Swinburne's views on this question. Swinburne is arguing against the antithesis of Kant's First Antinomy concerning time for the eternity of the universe. Arguing for the possibility of the universe's beginning to exist, Swinburne states that the antithesis "assumes as a logically necessary truth that every state has a cause in the sense of a preceding state which brings it about" [Swinburne (1981), p. 250]. I should agree that this principle is not necessary; indeed, it is false. Swinburne therefore justifiably rejects any attempt to rule out the standard Big Bang model because in it the first state of the universe is a state uncaused by a precedent state [pp. 254-255]. He does not deny that a first state requires a cause which is an agent cause, rather than a precedent physical state [p. 251, n. 1]. For more on God as the agent cause of creation, see Craig [1994].

References

Black, Max. [1962]. Review of *The Natural Philosophy of Time*. *Scientific American* 206 (April), pp. 181-183.

Broad, C.D. [1938]. *An Examination of McTaggart's Philosophy*. 2 vols. Cambridge: Cambridge University Press.

- Craig, William Lane. [1994]. "Prof. Grünbaum on Creation." *Erkenntnis* 40, pp. 325-341.
- Craig, William Lane and Smith, Quentin. [1993]. *Theism, Atheism, and Big Bang Cosmology*. Oxford: Clarendon Press.
- Dummett, Michael. [1960]. "A Defense of McTaggart's Proof of the Unreality of Time." *Philosophical Review* 69, pp. 497-504.
- Gale, Richard. [1968]. *The Language of Time*. International Library of Philosophy and Scientific Method. London: Routledge & Kegan Paul.
- Geach, Peter. [1972]. "Some Problems about Time." In *Logic Matters*, pp. 302-318. Berkeley: University of California Press.
- Hausman, Daniel M. [1993]. "Linking Causal and Explanatory Asymmetry." *Philosophy of Science* 60, pp. 435-451.
- Lewis, Delmas. [1986]. "Persons, Morality, and Tenselessness." *Philosophy and Phenomenological Research* 47, pp. 305-309.
- Loizou, Andros. [1986]. *The Reality of Time*. Brookfield, Ver.: Gower.
- Lovell, A.C.B. [1961]. *The Individual and the Universe*. New York: New American Library.
- McCall, Storrs. [1994]. *A Model of the Universe*. Clarendon Library of Logic and Philosophy. Oxford: Clarendon Press.
- McGilvray, James. [1979]. "A Defense of Physical Becoming." *Erkenntnis* 14, pp. 275-299.
- Mackie, J.L. [1982]. *The Miracle of Theism*. Oxford: Clarendon Press.
- Mellor, D.H. [1981]. *Real Time*. Cambridge: Cambridge University Press.
- Merricks, Trenton. [1994]. "Endurance and Indiscernibility." *Journal of Philosophy* 91, pp. 165-184.
- Pius XII. [1952]. "Science and the Catholic Church: Two Documents." *Bulletin of the Atomic Scientists* 8, 142-146, 165.
- Plantinga, Alvin. [1993]. *Warrant: the Current Debate*. New York: Oxford University Press.
- Prior, Arthur N. [1968]. "Changes in Events and Changes in Things." In *Papers on Time and Tense*, pp. 1-14. Oxford: Clarendon Press.
- Schlesinger, George. [1980]. *Aspects of Time*. Indianapolis: Hackett.
- Smith, Quentin. [1993]. *Language and Time*. New York: Oxford University Press.
- Swinburne, Richard. [1981]. *Space and Time*. 2d ed. London: Macmillan.

Van Inwagen, Peter. [1990]. "Four Dimensional Objects." *Noûs* 24, pp. 245-255.

Graham Oppy on the Kalam Cosmological Argument

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Graham Oppy has attempted to re-support J. L. Mackie's objections to the *kalam* cosmological argument, to which I responded in my article "Professor Mackie and the *Kalam* Cosmological Argument." Oppy's attempt to defend the possibility of the existence of an actual infinite is vitiated by his conflation of narrowly and broadly logical possibility. Oppy's attempt to defend the possibility of the formation of an actual infinite by successive addition founders on misinterpretations. Oppy's objections to the premiss that whatever begins to exist has a cause and to God's being that cause are based on modal confusions.

Source: "Graham Oppy on the *Kalam* Cosmological Argument." *Sophia* 32 (1993): 1-11.

Graham Oppy has recently attempted to re-support J. L. Mackie's objections to the *kalam* cosmological argument. [1](#) In this discussion note, I shall try to state succinctly why I think this attempt does not succeed.

The Existence of an Actual Infinite

If an actual infinite cannot exist, then the series of past events cannot be actually infinite; therefore the universe began to exist, which is the second premiss of the *kalam* argument. I argued that the existence of an actual infinite is ontologically impossible and that Mackie's objection that infinite set theory forms a logically consistent system is insufficient to warrant the conclusion that the existence of an actual infinite is really possible. But Oppy holds that

... Mackie's reply ... is decisive if this sub-argument is meant to be based on *a priori* considerations; for Cantorian set theory shows that it is possible for there to be worlds in which there are infinities.

... Once we grant--as Craig does--that Cantorian set theory reveals that worlds with actual infinities are logically possible, there can be no good *a priori* argument against actual infinite temporal sequences.{2}

But how does Cantorian set theory show that there are possible worlds in which there are actual infinities? And even if there are, how does that show that an actual infinite is ontologically possible? The issues involved here are more subtle than Oppy seems to realize. He states, "[Craig] concedes that infinite set theory is a logically consistent system; consequently, it seems that he concedes that there are logically possible worlds in which various 'infinities' obtain." {3} But it is by no means obvious that this second alleged concession follows from the first. The validity of this inference depends on how broadly one construes the logical modality involved in one's possible world semantics. Oppy, like Mackie, seems to take a proposition's freedom from inconsistency in first-order logic to be indicative of that proposition's being true in some possible world. But this involves a notion of possibility which is much broader than that normally countenanced in possible world semantics. Criticizing Mackie on this score, Plantinga points out that broadly logical possibility cannot plausibly be defined in terms of a proposition's freedom from inconsistency in first-order logic, for the resources of first order logic do not permit us to deduce a contradiction from propositions like " $2+1=7$ " or "Some prime numbers weigh more than Jackie Gleason," but we should not regard such propositions as therefore possible. {4} Typically, the notion of broadly logical modality is left undefined, but is said to employ a notion of possibility narrower than that of strictly logical possibility (which characterizes a proposition just in case it is not the negation of a thesis of first order logic, for example) but broader than physical possibility (which characterizes a proposition just in case it does not violate a law of nature), and examples of broadly logically possible/impossible propositions are given. Actualists like Plantinga and Stalnaker construe the possibility of the abstract objects which are possible worlds to consist in their instantiability and hold that the framework of possible worlds is grounded in these abstract objects' possessing the modal property of being possibly instantiated. {5} Broadly logical possibility/necessity is therefore frequently identified with metaphysical possibility/necessity. A state of affairs which is strictly logically possible may, in fact, be metaphysically impossible, incapable of being instantiated. If we follow the majority lead on matters modal, then, the alleged concession that there exists a possible world containing actual infinities does not follow from the admitted logical consistency of axiomatized infinite set theory.

If, on the other hand, we follow Oppy in defining a sphere of accessibility containing strictly logically possible worlds, then a state of affairs' comprising (part of) such a world does not imply its instantiability, as Plantinga's above examples clearly show. The logical consistency of axiomatized infinite set theory, given its axioms and conventions, is no indication of its ontological or metaphysical possibility. Therefore, even if there are (strictly logically) possible worlds containing actual infinities, it does not follow that the existence of an actual infinite is ontologically, or metaphysically, possible.

On the contrary, I think the counter-intuitive situations engendered by the existence of an actually infinite number of things shows that an actual infinite cannot exist. Moreover, neither Mackie nor Oppy have addressed the contradictions entailed by inverse arithmetic operations performed with transfinite numbers, operations which are conventionally prohibited in

transfinite arithmetic in order to preserve logical consistency. Thus, the proponent of the *kalam* cosmological argument need carry no brief for driving mathematicians from their Cantorian paradise; rather he may echo the sentiments of Wittgenstein:

I would say, 'I wouldn't dream of trying to drive anyone from this paradise.' I would do something quite different: I would try to show you that it is not a paradise--so that you'll leave of your own accord. I would say, 'You're welcome to this; just look about you.'[{6}](#)

Once we take a good, sensible look at the counter-intuitive and, in the end, contradictory situations which could be engendered by the existence of an actual infinite, then I think we ought to welcome ontological parsimony and reject the metaphysical possibility of the existence of an actual infinite. Of course, I could be completely wrong about this; but if I am, it will take more than a passing reference to the logical consistency of axiomatized infinite set theory to prove it.

The Formation of an Actual Infinite by Successive Addition

I also argued that an actual infinite cannot be formed by successive addition and that Mackie's allegation that the argument illicitly assumes an infinitely distant starting point is groundless; moreover, Mackie seems to commit the fallacy of composition in inferring that because any finite segment of an infinite series can be formed by successive addition, therefore the whole series can be so formed. Here I feel virtually certain that Oppy has misunderstood Mackie's objection. Mackie is merely reiterating a traditional objection to the *kalam* argument which states that although an infinite series cannot be formed by beginning at a point and successively adding to it, an infinite past does not involve a beginning point and so evades the thrust of the argument. Mackie nowhere endorses Oppy's claim that infinite series of ordinal type ω can be traversed. Indeed, Oppy's assertion that a series like 1, 2, 3, . . . , 3, 2, 1 is an infinite which can be traversed seems bizarre. For this is apparently a series consisting of an infinite series of order type ω plus three non-ordinal numbers (unless he has forgotten the minus-signs before the last three numbers, in which case the order type is $\omega + \omega^*$). But how is such a series completable? One could count forever and never complete the series, much less arrive at the second 3. If I started counting now, when would I arrive at that second 3? Let us have no fictional suggestions about counting progressively faster so that the infinite super-task is completed in a finite time, for such scenarios are wholly unrealistic (and do not represent in any case how the temporal series of events is formed). The fact is that I would *never* arrive at the second 3. Mackie, as I say, never disputes this. On the contrary, he charges that the *kalam* proponent surreptitiously treats the series of past events as an ω -type series and the present event as existing after the completion of that series, which is impossible. I denied that the *kalam* arguer makes any such assumption, claiming that the formation by successive addition of an ω^* series is as inconceivable as the formation by successive addition of an ω series.

Oppy, however, charges that I myself make the alleged, illicit assumption. He apparently thinks that I do (or should) concede the possibility of the formation of an actual infinite by successive addition in case the infinite series has a starting point, but that I deny such a possibility in case the series is beginningless. Such an attitude, he says, is just "a prejudice, against certain sorts of infinities, which relies on the unsupported assumption that any temporal sequence must have a first member."[{7}](#) Oppy's interpretation is mistaken, however: if I am prejudiced, it is against the formation by successive addition of *any* actual infinite. But how does my argument beg the question by taking as an "unsupported assumption" what

appears to be the conclusion of the argument? Oppy says, "What [Craig] says is that it is a legitimate objection to infinities which have no first member that they cannot be traversed. But what does this mean? Well, as far as I can see, it means that it is a legitimate objection to infinities which have no first member that they have no first member!"{8} I must say that it is not obvious to me that to say that a beginningless infinite series cannot be traversed means that it has no first member. The best sense I can make of Oppy's claim is that the notion of traversal entails a beginning point, so that a series with no beginning point cannot be traversed. But such a construal of traversal seems clearly wrong: a man who has just finished counting all the negative numbers, for example, has "traversed" a beginningless, infinite series. To traverse a series means just to cross it or pass through it one member at a time. Hence, I am quite at a loss to understand how the *kalam* cosmological argument begs the question by assuming implicitly that the past has a beginning point.

As for my charge that Mackie fallaciously infers that because every proper part of an infinite series can be formed by successive addition the whole series can be so formed, Oppy puts the following charitable reading on Mackie's point: ". . . Mackie's point reveals that the whole series is formed by successive addition--in the sense that, for each point in the series, there is an earlier one from which it derives by addition."{9} But this point follows simply from the temporal character of the series at issue and, far from being in dispute, is a premiss in the *kalam* cosmological argument, namely, "The temporal series of past events is a collection formed by successive addition," which must be defended against B-theoretical detractors of temporal becoming.

In short, it seems to me that Mackie's objections to the second premiss of the *kalam* cosmological argument are unsound and that Oppy's attempt to reinstate them is no more successful than Mackie's original statement of them. If either one of my arguments is sound, the series of past events cannot be infinite and, hence, the universe began to exist.

Whatever Begins to Exist Has a Cause

Oppy's lack of differentiation between logical and ontological modality resurfaces in his discussion of the *kalam* cosmological argument's intuitively plausible and empirically verified first premiss, that whatever begins to exist has a cause. He states, "Essentially, Mackie's view is that, given the standard test for judgments of possibility (i.e. conceivability in which there is no appearance of logical consistency), we have good reason to suppose that it is possible for something to begin to exist uncaused."{10} But we have already seen that mere freedom from logical inconsistency is no indication of metaphysical possibility. Indeed, since Kripke, it is widely acknowledged that there are even synthetic, metaphysically necessary, *a posteriori* truths, whose contradictories are quite conceivable in Oppy's sense.{11} I cannot think of any good reason to believe that something's coming to exist out of nothing is metaphysically possible, even if there is no logical inconsistency in so conceiving. Hence, Oppy is mistaken when he says, "If the proponent of the *kalam* cosmological argument wishes to deny that it is possible for something to begin to exist uncaused, then s/he needs to provide some argument which shows that there is a logical inconsistency in this claim."{12} Not only does this assertion conflate logical and ontological modality, but even more fundamentally, I do not see that the *kalam* proponent is obligated to provide any sort of *argument* for his causal premiss. We do not require arguments against the possibility of solipsism or for the existence of other minds, for the truth concerning these matters is obvious and any argument in this regard would be based on premisses less obvious than the conclusion. In the same way, the premiss

ex nihilo nihil fit is so obvious that even Hume accepted it without argument, regarding its denial as an instance of unlivable Pyrrhonic scepticism.

Consider, nonetheless, Jonathan Edwards's argument on behalf of the causal principle: if something can come into being uncaused out of nothing, then it is inexplicable why anything and everything does not do so. Oppy says that any and everything does not come into being uncaused out of nothing because some things have actual causes. Of course, they do; but what is the *explanation* for that fact and for the fact that people, televisions, and Eskimo villages do not pop into being uncaused out of nothing, if this is, as Oppy proceeds to assert, possible? He seems to answer that ". . . our universe is governed by certain conservation laws which ensure that such things do not actually happen." {13} But this explanation is inadequate because insofar as natural laws are inductive generalizations, they are merely descriptions of what does or does not happen in the universe; and insofar as they are invested with nomic necessity, such necessity derives solely from the causal powers and dispositions of things that actually exist. In neither case is any sort of constraint placed on things' springing uncaused out of nothingness into being. After all, there is nothing there to be constrained. So does it not strike one as peculiar that it is only the universe which comes magically into being out of nothing rather than all sorts of other things as well?

God and the Origin of the Universe

It seems to me that the plain fact of the matter is that no reason exists to deny the causal principle with respect to the origin of the universe, *except* for the fact that it implies theism. But what is the matter with that? Mackie merely asserts without explanation or argument that God's being timeless is "completely mysterious." I offered an account of God's relationship to time in terms of God's being timeless without creation and in time subsequent to creation. {14} All Oppy has to say about this is, "How does God's existing 'changelessly and timelessly' differ from his coming into existence uncaused at the very moment at which time is created?" {15} But this is an easy one; in the latter case He would begin to exist (and would therefore, incidentally, require a cause), whereas in the former case He would not. Not only is the account I offered conceivable in the strictly logical sense, but it also involves no metaphysical absurdity, as does the universe's coming into being uncaused out of nothing--or at least, its detractors have yet to expose any such absurdity.

Oppy's ensuing remarks on the factual versus broadly logical necessity of God's existence seem evidently confused. Let me set the context for this *Auseinandersetzung*. Some thinkers eschew philosophical arguments for a beginning of time and the universe and hold on the basis of scientific evidence alone that the universe began to exist. Such persons may hold that God exists for infinite time prior to the creation of the universe. Mackie objected that in such a case the theist is assuming that God's existence is self-explanatory in the sense of being broadly logically necessary, which Mackie finds unintelligible. I rejoined that the *kalam* argument requires only that God's existence be factually necessary, that is, eternal and uncaused, a notion to which Mackie could hardly object, since this is exactly what he as an atheist thinks could be true of the universe. To which Oppy retorts:

But, if this 'necessity' is not the (allegedly) unintelligible notion which is required by the Leibnizian cosmological argument, then it seems to me that one is entitled to suggest that perhaps the universe itself is 'an eternal and uncaused being.' I do not see how there can be a principled way of allowing that God has this property and yet the universe cannot have it.

(The universe exists changelessly and timelessly with an eternal determination to become a temporal world. Sounds fine to me!){16}

In his first sentence Oppy shifts ground from Mackie's charge that God's being self-explanatory is unintelligible to re-affirming exactly what I said: the atheist holds that the universe could be a factually necessary being--so how is the theist's similar affirmation of God unintelligible? In his second sentence Oppy demands what reason there is to think that the universe cannot be factually necessary like God--thereby forgetting that in the case under consideration we are talking about our having merely scientific evidence for a beginning of the universe, which shows that although the universe *could* be factually necessary, in fact it is not. Then in the third sentence, he shifts from the hypothesis under consideration (God's existing for infinite time prior to creation) back to my suggestion that God without creation exists timelessly with an eternal determination to create a temporal world, and he hypothesizes that the universe could exist in a similar manner. But the "eternal determination" of which I spoke was a free decision of the will, so that it seems silly to predicate this of the universe. If Oppy means to suggest that the universe existed in an absolutely quiescent state and became temporal only upon the occurrence of the first event, then I had already dealt with such a hypothesis in *The Kalam Cosmological Argument* and elsewhere.{17} In short, there is nothing unintelligible about God's being a factually necessary being, whether one denies the universe's factual necessity on the basis of philosophical considerations (infinite regress arguments) or scientific considerations (empirical cosmology).

Mackie's final gambit was to assert that if we are convinced that whatever begins to exist has a cause, then we should simply reject the scientific evidence that the universe began to exist. Oppy likewise charges that the standard Big Bang model does not require *creatio ex nihilo* because the claim that it does depends on the assumption that the initial singular point of infinite density is equivalent to nothing. I confess that I do think the initial cosmological singularity has no positive ontological status, though not on the basis of the impossibility of an actual infinite, as Oppy surmises. I recognize that such an interpretation is controversial, and I have defended my interpretation elsewhere.{18} But we may let that pass; for the more important point is that the scientific evidence for the absolute origin of the universe does not depend on this interpretation. For if one thinks that the initial cosmological singularity is a real, physical state, and therefore in some sense part of the universe, it is still the case that the singularity and, hence, the universe comes into being without any material or efficient cause and therefore originates *ex nihilo*. Thus the standard model, whatever one's interpretation of the ontological status of the initial singularity, points to an origin of the universe *ex nihilo*.{19}

Conclusion

In conclusion, then, I think that the refutations proffered by Mackie of the *kalam* cosmological argument were all too quick and easy. Nor do I think Oppy has succeeded in rehabilitating those refutations.

Endnotes

{1}Graham Oppy, "Craig, Mackie, and the *Kalam* Cosmological Argument," *Religious Studies* 27 (1991): 189-97; in response to William Lane Craig, "Prof. Mackie and the *Kalam* Cosmological Argument," *Religious Studies* 20 (1984): 367-75; itself a response to J.L. Mackie, *The Miracle of Theism* (Oxford: Clarendon Press, 1982), pp. 93-95; a refutation of

the argument in William Lane Craig, *The Kalam Cosmological Argument*, Library of Philosophy and Religion (London: Macmillan, 1979).

{2}Oppy, "Kalam Cosmological Argument," pp. 194, 195.

{3}Ibid., p. 193.

{4}Alvin Plantinga, "Is Theism Really a Miracle?" *Faith and Philosophy* 3 (1986): 117.

{5}See discussion in Michael J. Loux, "Introduction: Modality and Metaphysics," in *The Possible and the Actual*, ed. Michael J. Loux (Ithaca, N.Y.: Cornell University Press, 1979), pp. 48-49.

{6}Ludwig Wittgenstein, *Lectures on the Foundations of Mathematics*, ed. Cora Diamond (Sussex, England: Harvester Press, 1976), p. 103.

{7}Oppy, "Kalam Cosmological Argument," p. 195.

{8}Ibid., p. 194.

{9}Ibid., p. 195.

{10}Ibid.

{11}Saul A. Kripke, *Naming and Necessity*, rev. ed. (Oxford: Basil Blackwell, 1980), pp. 140-42.

{12}Oppy, "Kalam Cosmological Argument," p. 195.

{13}Ibid., p. 196.

{14}I refer again to my account in "God, Time, and Eternity," *Religious Studies* 14 (1978): 497-503 and add my "Julian Wolfe and Infinite Time," *International Journal for Philosophy of Religion* 11 (1980): 133-35. I hope to provide a fuller and more satisfactory account in a forthcoming book on divine eternity.

{15}Oppy, "Kalam Cosmological Argument," p. 196.

{16}Ibid., pp. 196-97.

{17}Craig, *Kalam Cosmological Argument*, pp. 99-102; idem, "The Kalam Cosmological Argument and the Hypothesis of a Quiescent Universe," *Faith and Philosophy* 8 (1991): 104-08.

{18}William Lane Craig, "God and the Initial Cosmological Singularity," *Faith and Philosophy* 9 (1992): 237-47; idem, "Theism and Big Bang Cosmology," *Australasian Journal of Philosophy* 69 (1991): 496-99.

{19}See the concurrence of my atheist interlocutor Quentin Smith, "The Uncaused Beginning of the Universe," *Philosophy of Science* 55 (1988): 39-57. Our bone of contention is whether

the origin *ex nihilo* of the universe requires a cause; see William Lane Craig, "The Caused Beginning of the Universe," *British Journal for the Philosophy of Science* 44 (1993): 623- 39.

The Indispensability of Theological Meta-Ethical Foundations for Morality

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Theism and naturalism are contrasted with respect to furnishing an adequate foundation for the moral life. It is shown that on a theistic worldview an adequate foundation exists for the affirmation of objective moral values, moral duties, and moral accountability. By contrast, naturalism fails in all three respects. Insofar as we believe that moral values and duties do exist, we therefore have good grounds for believing that God exists. Moreover, a practical argument for believing in God is offered on the basis of moral accountability.

Source: "The Indispensability of Theological Meta-ethical Foundations for Morality." *Foundations* 5 (1997): 9-12.

Can we be good without God? At first the answer to this question may seem so obvious that even to pose it arouses indignation. For while those of us who are Christian theists undoubtedly find in God a source of moral strength and resolve which enables us to live lives that are better than those we should live without Him, nevertheless it would seem arrogant and ignorant to claim that those who do not share a belief in God do not often live good moral lives--indeed, embarrassingly, lives that sometimes put our own to shame.

But wait. It would, indeed, be arrogant and ignorant to claim that people cannot be good without belief in God. But that was not the question. The question was: can we be good without God? When we ask that question, we are posing in a provocative way the meta-ethical question of the objectivity of moral values. Are the values we hold dear and guide our lives by mere social conventions akin to driving on the left versus right side of the road or

mere expressions of personal preference akin to having a taste for certain foods or not? Or are they valid independently of our apprehension of them, and if so, what is their foundation? Moreover, if morality is just a human convention, then why should we act morally, especially when it conflicts with self-interest? Or are we in some way held accountable for our moral decisions and actions?

Today I want to argue that if God exists, then the objectivity of moral values, moral duties, and moral accountability is secured, but that in the absence of God, that is, if God does not exist, then morality is just a human convention, that is to say, morality is wholly subjective and non-binding. We might act in precisely the same ways that we do in fact act, but in the absence of God, such actions would no longer count as good (or evil), since if God does not exist, objective moral values do not exist. Thus, we cannot truly be good without God. On the other hand, if we do believe that moral values and duties are objective, that provides moral grounds for believing in God.

Consider, then, the hypothesis that God exists. First, if God exists, objective moral values exist. To say that there are objective moral values is to say that something is right or wrong independently of whether anybody believes it to be so. It is to say, for example, that Nazi anti-Semitism was morally wrong, even though the Nazis who carried out the Holocaust thought that it was good; and it would still be wrong even if the Nazis had won World War II and succeeded in exterminating or brainwashing everybody who disagreed with them.

On the theistic view, objective moral values are rooted in God. God's own holy and perfectly good nature supplies the absolute standard against which all actions and decisions are measured. God's moral nature is what Plato called the "Good." He is the locus and source of moral value. He is by nature loving, generous, just, faithful, kind, and so forth.

Moreover, God's moral nature is expressed in relation to us in the form of divine commands which constitute our moral duties or obligations. Far from being arbitrary, these commands flow necessarily from His moral nature. In the Judaeo-Christian tradition, the whole moral duty of man can be summed up in the two great commandments: First, you shall love the Lord your God with all your strength and with all your soul and with all your heart and with all your mind, and, second, you shall love your neighbor as yourself. On this foundation we can affirm the objective goodness and rightness of love, generosity, self-sacrifice, and equality, and condemn as objectively evil and wrong selfishness, hatred, abuse, discrimination, and oppression.

Finally, on the theistic hypothesis God holds all persons morally accountable for their actions. Evil and wrong will be punished; righteousness will be vindicated. Good ultimately triumphs over evil, and we shall finally see that we do live in a moral universe after all. Despite the inequities of this life, in the end the scales of God's justice will be balanced. Thus, the moral choices we make in this life are infused with an eternal significance. We can with consistency make moral choices which run contrary to our self-interest and even undertake acts of extreme self-sacrifice, knowing that such decisions are not empty and ultimately meaningless gestures. Rather our moral lives have a paramount significance. So I think it is evident that theism provides a sound foundation for morality.

Contrast this with the atheistic hypothesis. First, if atheism is true, objective moral values do not exist. If God does not exist, then what is the foundation for moral values? More particularly, what is the basis for the value of human beings? If God does not exist, then it is

difficult to see any reason to think that human beings are special or that their morality is objectively true. Moreover, why think that we have any moral obligations to do anything? Who or what imposes any moral duties upon us? Michael Ruse, a philosopher of science from the University of Guelph, writes,

The position of the modern evolutionist . . . is that humans have an awareness of morality . . . because such an awareness is of biological worth. Morality is a biological adaptation no less than are hands and feet and teeth Considered as a rationally justifiable set of claims about an objective something, ethics is illusory. I appreciate that when somebody says 'Love thy neighbor as thyself,' they think they are referring above and beyond themselves Nevertheless, . . . such reference is truly without foundation. Morality is just an aid to survival and reproduction, . . . and any deeper meaning is illusory ¹

As a result of socio-biological pressures, there has evolved among homo sapiens a sort of "herd morality" which functions well in the perpetuation of our species in the struggle for survival. But there does not seem to be anything about homo sapiens that makes this morality objectively true.

Moreover, on the atheistic view there is no divine lawgiver. But then what source is there for moral obligation? Richard Taylor, an eminent ethicist, writes,

The modern age, more or less repudiating the idea of a divine lawgiver, has nevertheless tried to retain the ideas of moral right and wrong, not noticing that, in casting God aside, they have also abolished the conditions of meaningfulness for moral right and wrong as well.

Thus, even educated persons sometimes declare that such things as war, or abortion, or the violation of certain human rights, are 'morally wrong,' and they imagine that they have said something true and significant.

Educated people do not need to be told, however, that questions such as these have never been answered outside of religion.²

He concludes,

Contemporary writers in ethics, who blithely discourse upon moral right and wrong and moral obligation without any reference to religion, are really just weaving intellectual webs from thin air; which amounts to saying that they discourse without meaning.³

Now it is important that we remain clear in understanding the issue before us. The question is not: Must we believe in God in order to live moral lives? There is no reason to think that atheists and theists alike may not live what we normally characterize as good and decent lives. Similarly, the question is not: Can we formulate a system of ethics without reference to God? If the non-theist grants that human beings do have objective value, then there is no reason to think that he cannot work out a system of ethics with which the theist would also largely agree. Or again, the question is not: Can we recognize the existence of objective moral values without reference to God? The theist will typically maintain that a person need not believe in God in order to recognize, say, that we should love our children. Rather, as humanist philosopher Paul Kurtz puts it, "The central question about moral and ethical principles concerns this ontological foundation. If they are neither derived from God nor anchored in some transcendent ground, are they purely ephemeral?"⁴

If there is no God, then any ground for regarding the herd morality evolved by homo sapiens as objectively true seems to have been removed. After all, what is so special about human beings? They are just accidental by-products of nature which have evolved relatively recently on an infinitesimal speck of dust lost somewhere in a hostile and mindless universe and which are doomed to perish individually and collectively in a relatively short time. Some action, say, incest, may not be biologically or socially advantageous and so in the course of human evolution has become taboo; but there is on the atheistic view nothing really wrong about committing incest. If, as Kurtz states, "The moral principles that govern our behavior are rooted in habit and custom, feeling and fashion,"⁵ then the non-conformist who chooses to flout the herd morality is doing nothing more serious than acting unfashionably.

The objective worthlessness of human beings on a naturalistic world view is underscored by two implications of that world view: materialism and determinism. Naturalists are typically materialists or physicalists, who regard man as a purely animal organism. But if man has no immaterial aspect to his being (call it soul or mind or what have you), then he is not qualitatively different from other animal species. For him to regard human morality as objective is to fall into the trap of specie-ism. On a materialistic anthropology there is no reason to think that human beings are objectively more valuable than rats. Secondly, if there is no mind distinct from the brain, then everything we think and do is determined by the input of our five senses and our genetic make-up. There is no personal agent who freely decides to do something. But without freedom, none of our choices is morally significant. They are like the jerks of a puppet's limbs, controlled by the strings of sensory input and physical constitution. And what moral value does a puppet or its movements have?

Thus, if naturalism is true, it becomes impossible to condemn war, oppression, or crime as evil. Nor can one praise brotherhood, equality, or love as good. It does not matter what values you choose--for there is no right and wrong; good and evil do not exist. That means that an atrocity like the Holocaust was really morally indifferent. You may think that it was wrong, but your opinion has no more validity than that of the Nazi war criminal who thought it was good. In his book *Morality after Auschwitz*, Peter Haas asks how an entire society could have willingly participated in a state-sponsored program of mass torture and genocide for over a decade without any serious opposition. He argues that

far from being contemptuous of ethics, the perpetrators acted in strict conformity with an ethic which held that, however difficult and unpleasant the task might have been, mass extermination of the Jews and Gypsies was entirely justified. . . . the Holocaust as a sustained effort was possible only because a new ethic was in place that did not define the arrest and deportation of Jews as wrong and in fact defined it as ethically tolerable and even good.⁶

Moreover, Haas points out, because of its coherence and internal consistency, the Nazi ethic could not be discredited from within. Only from a transcendent vantage point which stands above relativistic, socio-cultural mores could such a critique be launched. But in the absence of God, it is precisely such a vantage point that we lack. One Rabbi who was imprisoned at Auschwitz said that it was as though all the Ten Commandments had been reversed: thou shalt kill, thou shalt lie, thou shalt steal. Mankind has never seen such a hell. And yet, in a real sense, if naturalism is true, our world is Auschwitz. There is no good and evil, no right and wrong. Objective moral values do not exist.

Moreover, if atheism is true, there is no moral accountability for one's actions. Even if there were objective moral values and duties under naturalism, they are irrelevant because there is

no moral accountability. If life ends at the grave, it makes no difference whether one lives as a Stalin or as a saint. As the Russian writer Fyodor Dostoyevsky rightly said: "If there is no immortality, then all things are permitted."⁷

The state torturers in Soviet prisons understood this all too well. Richard Wurmbrand reports,

The cruelty of atheism is hard to believe when man has no faith in the reward of good or the punishment of evil. There is no reason to be human. There is no restraint from the depths of evil which is in man. The Communist torturers often said, 'There is no God, no hereafter, no punishment for evil. We can do what we wish.' I have heard one torturer even say, 'I thank God, in whom I don't believe, that I have lived to this hour when I can express all the evil in my heart.' He expressed it in unbelievable brutality and torture inflicted on prisoners.⁸

Given the finality of death, it really does not matter how you live. So what do you say to someone who concludes that we may as well just live as we please, out of pure self-interest? This presents a pretty grim picture for an atheistic ethicist like Kai Nielsen of the University of Calgary. He writes,

We have not been able to show that reason requires the moral point of view, or that all really rational persons should not be individual egoists or classical amorlists. Reason doesn't decide here. The picture I have painted for you is not a pleasant one. Reflection on it depresses me Pure practical reason, even with a good knowledge of the facts, will not take you to morality.⁹

Somebody might say that it is in our best self-interest to adopt a moral life-style. But clearly, that is not always true: we all know situations in which self-interest runs smack in the face of morality. Moreover, if one is sufficiently powerful, like a Ferdinand Marcos or a Papa Doc Duvalier or even a Donald Trump, then one can pretty much ignore the dictates of conscience and safely live in self-indulgence. Historian Stewart C. Easton sums it up well when he writes, "There is no objective reason why man should be moral, unless morality 'pays off' in his social life or makes him 'feel good.' There is no objective reason why man should do anything save for the pleasure it affords him."¹⁰

Acts of self-sacrifice become particularly inept on a naturalistic world view. Why should you sacrifice your self-interest and especially your life for the sake of someone else? There can be no good reason for adopting such a self-negating course of action on the naturalistic world view. Considered from the socio-biological point of view, such altruistic behavior is merely the result of evolutionary conditioning which helps to perpetuate the species. A mother rushing into a burning house to rescue her children or a soldier throwing his body over a hand grenade to save his comrades does nothing more significant or praiseworthy, morally speaking, than a fighter ant which sacrifices itself for the sake of the ant hill. Common sense dictates that we should resist, if we can, the socio-biological pressures to such self-destructive activity and choose instead to act in our best self-interest. The philosopher of religion John Hick invites us to imagine an ant suddenly endowed with the insights of socio-biology and the freedom to make personal decisions. He writes:

Suppose him to be called upon to immolate himself for the sake of the ant-hill. He feels the powerful pressure of instinct pushing him towards this self-destruction. But he asks himself why he should voluntarily . . . carry out the suicidal programme to which instinct prompts him? Why should he regard the future existence of a million million other ants as more

important to him than his own continued existence? . . . Since all that he is and has or ever can have is his own present existence, surely in so far as he is free from the domination of the blind force of instinct he will opt for life--his own life.¹¹

Now why should we choose any differently? Life is too short to jeopardize it by acting out of anything but pure self-interest. Sacrifice for another person is just stupid. Thus the absence of moral accountability from the philosophy of naturalism makes an ethic of compassion and self-sacrifice a hollow abstraction. R. Z. Friedman, a philosopher of the University of Toronto, concludes, "Without religion the coherence of an ethic of compassion cannot be established. The principle of respect for persons and the principle of the survival of the fittest are mutually exclusive."¹²

We thus come to radically different perspectives on morality depending upon whether or not God exists. If God exists, there is a sound foundation for morality. If God does not exist, then, as Nietzsche saw, we are ultimately landed in nihilism.

But the choice between the two need not be arbitrarily made. On the contrary, the very considerations we have been discussing can constitute moral justification for the existence of God.

For example, if we do think that objective moral values exist, then we shall be led logically to the conclusion that God exists. And could anything be more obvious than that objective moral values do exist? There is no more reason to deny the objective reality of moral values than the objective reality of the physical world. The reasoning of Ruse is at worst a text-book example of the genetic fallacy and at best only proves that our subjective perception of objective moral values has evolved. But if moral values are gradually discovered, not invented, then such a gradual and fallible apprehension of the moral realm no more undermines the objective reality of that realm than our gradual, fallible perception of the physical world undermines the objectivity of that realm. The fact is that we do apprehend objective values, and we all know it. Actions like rape, torture, child abuse, and brutality are not just socially unacceptable behavior--they are moral abominations. As Ruse himself states, "The man who says that it is morally acceptable to rape little children is just as mistaken as the man who says, $2+2=5$."¹³ By the same token, love, generosity, equality, and self-sacrifice are really good. People who fail to see this are just morally handicapped, and there is no reason to allow their impaired vision to call into question what we see clearly. Thus, the existence of objective moral values serves to demonstrate the existence of God.

Or consider the nature of moral obligation. What makes certain actions right or wrong for us? What or who imposes moral duties upon us? Why is it that we ought to do certain things and ought not to do other things? Where does this 'ought' come from? Traditionally, our moral obligations were thought to be laid upon us by God's moral commands. But if we deny God's existence, then it is difficult to make sense of moral duty or right and wrong, as Richard Taylor explains,

A duty is something that is owed But something can be owed only to some person or persons. There can be no such thing as duty in isolation The idea of political or legal obligation is clear enough Similarly, the idea of an obligation higher than this, and referred to as moral obligation, is clear enough, provided reference to some lawmaker higher . . . than those of the state is understood. In other words, our moral obligations can . . . be understood as those that are imposed by God. This does give a clear sense to the claim that

our moral obligations are more binding upon us than our political obligations But what if this higher-than-human lawgiver is no longer taken into account? Does the concept of a moral obligation . . . still make sense? the concept of moral obligation [is] unintelligible apart from the idea of God. The words remain, but their meaning is gone.¹⁴

It follows that moral obligations and right and wrong necessitate God's existence. And certainly we do have such obligations. Speaking recently on a Canadian University campus, I noticed a poster put up by the Sexual Assault & Information Center. It read: "Sexual Assault: No One Has the Right to Abuse a Child, Woman, or Man." Most of us recognize that that statement is evidently true. But the atheist can make no sense of a person's right not to be sexually abused by another. The best answer to the question as to the source of moral obligation is that moral rightness or wrongness consists in agreement or disagreement with the will or commands of a holy, loving God.

Finally, take the problem of moral accountability. Here we find a powerful practical argument for believing in God. According to William James, practical arguments can only be used when theoretical arguments are insufficient to decide a question of urgent and pragmatic importance. But it seems obvious that a practical argument could also be used to back up or motivate acceptance of the conclusion of a sound theoretical argument. To believe, then, that God does not exist and that there is thus no moral accountability would be quite literally demoralizing, for then we should have to believe that our moral choices are ultimately insignificant, since both our fate and that of the universe will be the same regardless of what we do. By "de-moralization" I mean a deterioration of moral motivation. It is hard to do the right thing when that means sacrificing one's own self-interest and to resist temptation to do wrong when desire is strong, and the belief that ultimately it does not matter what you choose or do is apt to sap one's moral strength and so undermine one's moral life. As Robert Adams observes, "Having to regard it as very likely that the history of the universe will not be good on the whole, no matter what one does, seems apt to induce a cynical sense of futility about the moral life, undermining one's moral resolve and one's interest in moral considerations."¹⁵ By contrast there is nothing so likely to strengthen the moral life as the beliefs that one will be held accountable for one's actions and that one's choices do make a difference in bringing about the good. Theism is thus a morally advantageous belief, and this, in the absence of any theoretical argument establishing atheism to be the case, provides practical grounds to believe in God and motivation to accept the conclusions of the two theoretical arguments I just gave above.

In summary, theological meta-ethical foundations do seem to be necessary for morality. If God does not exist, then it is plausible to think that there are no objective moral values, that we have no moral duties, and that there is no moral accountability for how we live and act. The horror of such a morally neutral world is obvious. If, on the other hand, we hold, as it seems rational to do, that objective moral values and duties do exist, then we have good grounds for believing in the existence of God. In addition, we have powerful practical reasons for embracing theism in view of the morally bracing effects which belief in moral accountability produces. We cannot, then, truly be good without God; but if we can in some measure be good, then it follows that God exists.

Notes

¹ Michael Ruse, "Evolutionary Theory and Christian Ethics," in *The Darwinian Paradigm* (London: Routledge, 1989), pp. 262, 268-9.

² Richard Taylor, *Ethics, Faith, and Reason* (Englewood Cliffs, N.J.: Prentice-Hall, 1985), pp. 2-3.

³ Ibid., p. 7.

⁴ Paul Kurtz, *Forbidden Fruit* (Buffalo, N.Y.: Prometheus Books, 1988) p. 65.

⁵ Ibid., p. 73.

⁶ Critical notice of Peter Haas, *Morality after Auschwitz: The Radical Challenge of the Nazi Ethic* (Philadelphia: Fortress Press, 1988), by R. L. Rubenstein, *Journal of the American Academy of Religion* 60 (1992): 158.

⁷ Fyodor Dostoyevsky, *The Brothers Karamazov*, trans. C. Garnett (New York: Signet Classics, 1957), bk. II, chap. 6; bk. V, chap. 4; bk. XI, chap. 8.

⁸ Richard Wurmbrand, *Tortured for Christ* (London: Hodder & Stoughton, 1967), p. 34.

⁹ Kai Nielsen, "Why Should I Be Moral?" *American Philosophical Quarterly* 21 (1984): 90.

¹⁰ Stewart C. Easton, *The Western Heritage*, 2d ed. (New York: Holt, Rinehart, & Winston, 1966), p. 878.

¹¹ John Hick, *Arguments for the Existence of God* (New York: Herder & Herder, 1971), p. 63.

¹² R. Z. Friedman, "Does the 'Death of God' Really Matter?" *International Philosophical Quarterly* 23 (1983): 322.

¹³ Michael Ruse, *Darwinism Defended* (London: Addison-Wesley, 1982), p. 275.

¹⁴ Taylor, *Ethics, Faith, and Reason*, pp. 83-4.

¹⁵ Robert Merrihew Adams, "Moral Arguments for Theistic Belief," in *Rationality and Religious Belief*, ed. C. F. Delaney (Notre Dame, Ind.: University of Notre dame Press, 1979), p. 127.

THE TELEOLOGICAL ARGUMENT AND THE ANTHROPIC PRINCIPLE

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two

teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

The discovery during our generation of the so-called anthropic coincidences in the initial conditions of the universe has breathed new life into the teleological argument. Use of the Anthropic Principle to nullify our wonder at these coincidences is logically fallacious unless conjoined with the metaphysical hypothesis of a World Ensemble. There are no reasons to believe that such an Ensemble exists nor that, if it does, it has the properties necessary for the Anthropic Principle to function. Typical objections to the alternative hypothesis of divine design are not probative.

"The Teleological Argument and the Anthropic Principle." In *The Logic of Rational Theism: Exploratory Essays*, pp. 127-153. Edited by Wm. L. Craig and M. McLeod. Problems in Contemporary Philosophy 24. Lewiston, N.Y.: Edwin Mellen, 1990.

Introduction

Widely thought to have been demolished by Hume and Darwin, the teleological argument for God's existence has nonetheless continued during this century to find able defenders in F.R. Tennant, Peter Bertocci, and Stuart C. Hackett.

All of these have appealed to what Tennant called "wider teleology," which emphasizes the necessary conditions for the existence and evolution of intelligent life, rather than specific instances of purposive design. Unfortunately, they could speak of this wider teleology for the most part only in generalities, for example, "the fitness of the inorganic to minister to life," but could furnish few specific examples of experimental fact to illustrate this cosmic teleology.

In recent years, however, the scientific community has been stunned by its discovery of how complex and sensitive a nexus of conditions must be given in order for the universe to permit the origin and evolution of intelligent life on Earth. The universe appears, in fact, to have been incredibly fine-tuned from the moment of its inception for the production of intelligent life on Earth at this point in cosmic history. In the various fields of physics and astrophysics, classical cosmology, quantum mechanics, and biochemistry, various discoveries have repeatedly disclosed that the existence of intelligent carbon-based life on Earth at this time depends upon a delicate balance of physical and cosmological quantities, such that were any one of these quantities to be slightly altered, the balance would be destroyed and life would not exist.

Let us briefly review some of the cosmological and physical quantities that have been found to exhibit this delicate balance necessary for the existence of intelligent life on Earth at this epoch in cosmic history.^{1}

Examples of Wider Teleology

Physics and Astrophysics

To begin with the most general of conditions, it was shown by G. J. Whitrow in 1955 that intelligent life would be impossible except in a universe of three basic dimensions. When formulated in three dimensions, mathematical physics possesses many unique properties which are necessary prerequisites for the existence of rational information-processing observers like ourselves. Moreover, dimensionality plays a key role in determining the form of the laws of physics and in fashioning the roles played by the constants of nature. For example, it is due to its basic three-dimensionality that the world possesses the chemistry that it does, which furnishes some key conditions necessary for the existence of life. Whitrow could not answer the question why the actual universe happens to possess three dimensions, but noted that if it did not, then we should not be here to ask the question.

More specifically, the values of the various forces of nature appear to be fine-tuned for the existence of intelligent life. The world is conditioned principally by the values of the fundamental constants α (the fine structure constant, or electromagnetic interaction), m_p/m_e (proton to electron mass ratio), a_G (gravitation), a_w (the weak force), and a_s (the strong force). When one mentally assigns different values to these constants or forces, one discovers that in fact the number of observable universes, that is to say, universes capable of supporting intelligent life, is very small. Just a slight variation in any one of these values would render life impossible.

For example, if a_s were increased as much as 1%, nuclear resonance levels would be so altered that almost all carbon would be burned into oxygen; an increase of 2% would preclude formation of protons out of quarks, preventing the existence of atoms. Furthermore, weakening a_s by as much as 5% would unbind deuteron, which is essential to stellar nucleosynthesis, leading to a universe composed only of hydrogen. It has been estimated that a_s must be within 0.8 and 1.2 its actual strength or all elements of atomic weight greater than four would not have formed. Or again, if a_w had been appreciably stronger, then the Big Bang's nuclear burning would have proceeded past helium to iron, making fusion-powered stars impossible. But if it had been much weaker, then we should have had a universe entirely of helium. Or again, if a_G had been a little greater, all stars would have been red dwarfs, which are too cold to support life-bearing planets. If it had been a little smaller, the universe would have been composed exclusively of blue giants which burn too briefly for life to develop. According to Davies, changes in either a_G or electromagnetism by only one part in 10^{40} would have spelled disaster for stars like the sun. Moreover, the fact that life can develop on a planet orbiting a star at the right distance depends on the close proximity of the spectral temperature of starlight to the molecular binding energy. Were it greatly to exceed this value, living organisms would be sterilized or destroyed; but were it far below this value, then the photochemical reactions necessary to life would proceed too slowly for life to exist. Or again, atmospheric composition, upon which life depends, is constrained by planetary mass. But planetary mass is the inevitable consequence of electromagnetic and gravitational interactions. And there simply is no physical theory which can explain the numerical values of α and m_p/m_e that determine electromagnetic interaction.

Moreover, life depends upon the operation of certain principles in the quantum realm. For example, the Pauli Exclusion Principle, which states that no more than one particle of a particular kind and spin is permitted in a single quantum state, plays a key role in nature. It guarantees the stability of matter and the size of atomic and molecular structures and creates the shell structure of atomic electrons. In a world not governed by this principle, only compact, superdense bodies could exist, providing little scope for complex structures or living organisms. Or again, quantization is also essential for the existence and stability of atomic systems. In quantum physics, the atom is not conceived on the model of a tiny solar system with each electron in its orbit around the nucleus. Such a model would be unstable because any orbit could be an arbitrary distance from the nucleus. But in quantum physics, there is only one orbital radius available to an electron, so that, for example, all hydrogen atoms are alike. As a consequence, atomic systems and matter are stable and therefore life-permitting.

Classical Cosmology

Several of the constants mentioned in the foregoing section also play a crucial role in determining the temporal phases of the development of the universe and thus control features of the universe essential to life. For example, a_G , and m_n/m_e constrain (i) the main sequence stellar lifetime, (ii) the time before which the expansion dynamics of the expanding universe are determined by radiation rather than matter, (iii) the time after which the universe is cool enough for atoms and molecules to form, (iv) the time necessary for protons to decay, and (v) the Planck time.

Furthermore, a fine balance must exist between the gravitational and weak interactions. If the balance were upset in one direction, the universe would have been constituted by 100% helium in its early phase, which would have made it impossible for life to exist now. If the balance were tipped in the other direction, then it would not have been possible for neutrinos to blast the envelopes of supernovae into space and so distribute the heavy elements essential to life.

Furthermore, the difference between the masses of the neutron and the proton is also part of a very delicate coincidence which is crucial to a life-supporting environment. This difference prevents protons from decaying into neutrons, which, if it happened, would make life impossible. This ratio is also balanced with the electron mass, for if the neutron mass failed to exceed the proton mass by a little more than the electron mass, then atoms would simply collapse.

Considerations of classical cosmology allow us to introduce a new parameter, S , the entropy per baryon in the universe, which is about 10^9 . Unless S were $< 10^{11}$, galaxies would not have been able to form, making planetary life impossible. S is itself a consequence of the baryon asymmetry in the universe, which arises from the inexplicably built-in asymmetry of quarks over anti-quarks prior to 10^{-6} seconds after the Big Bang.

In investigating the initial conditions of the Big Bang, one is also confronted with two arbitrary parameters governing the expansion of the universe: W_0 , related to the density of the universe, and H_0 , related to the speed of the expansion. Observations indicate that at 10^{-43} seconds after the Big Bang the universe was expanding at a fantastically special rate of speed with a total density close to the critical value on the borderline between recollapse and everlasting expansion. Hawking estimated that even a decrease of one part in a million million when the temperature of the universe was 10^{10} degrees would have resulted in the universe's

recollapse long ago; a similar increase would have precluded the galaxies from condensing out of the expanding matter. At the Planck time, 10^{-43} seconds after the Big Bang, the density of the universe must have apparently been within about one part in 10^{60} of the critical density at which space is flat. This results in the so-called "flatness problem": why is the universe expanding at just such a rate that space is Euclidean rather than curved? A second problem that arises is the "homogeneity problem." There is a very narrow range of initial conditions which must obtain if galaxies are to form later. If the initial inhomogeneity ratio were $> 10^{-2}$, then non-uniformities would condense prematurely into black holes before the stars form. But if the ratio were $< 10^{-5}$, inhomogeneities would be insufficient to condense into galaxies. Because matter in the universe is clumped into galaxies, which is a necessary condition of life, the initial inhomogeneity ratio appears to be incredibly fine-tuned. Thirdly, there is the "isotropy problem." The temperature of the universe is amazing in its isotropy: it varies by less than one part in a thousand over the whole of the sky. But at very early stages of the universe, the different regions of the universe were causally disjointed, since light beams could not travel fast enough to connect the rapidly receding regions. How then did these unconnected regions all happen to possess the same temperature and radiation density? Penrose has calculated that in the absence of new physical principles to explain this, "the accuracy of the Creator's aim" when he selected this world from the set of physically possible ones would need to have been at least of the order of one part in $10^{10(123)}$!

Contemporary cosmologists have found an answer to these three problems--or at least seem certain that they are on its track--in inflationary models of the early universe. According to this adjustment to the standard Big Bang cosmology, between 10^{-43} and 10^{-35} seconds after the Big Bang, the universe underwent an exponentially rapid inflation of space faster than the speed of light. This inflationary epoch resulted in the nearly flat curvature of space, pushed inhomogeneities beyond our horizon, and served to bury us far within a single region of space-time whose parts were causally connected at pre-inflationary times.

Inflationary scenarios have problems of their own --such as getting inflation started, getting it to end without excess turbulence, and having it produce irregularities just right for galaxy formation. Indeed, it is interesting to note that Hawking has recently declared both the so-called "old inflationary model" and the "new inflationary model" to be "now dead as a scientific theory"--though he still holds out hope for Linde's more recent "chaotic inflationary model."^{2} Whether this model proves to be any more successful than its predecessors remains yet to be seen; the whole inflationary scenario seems rather *ad hoc*, and one cannot help but suspect that much of the attraction to such models is due to the desire to escape the sort of inferences as Penrose's conclusion above. More importantly, however, inflationary scenarios seem to require the same sort of fine-tuning which some theorists thought these models had eliminated. For example, in order to proceed appropriately, inflation requires that the two theoretical components of Einstein's cosmological constant, "bare lambda" and "quantum lambda," cancel each other out with an enormously precise though inexplicable accuracy. A change in the strengths of either a_G or a_w by as little as one part in 10^{100} would destroy this cancellation on which our lives depend. So although inflationary models may succeed in providing a unifying explanation of some of the forces which play a role in classical cosmology, it does not thereby dispense with the appearance of fine-tuning or teleology.

Biochemistry

Life which is descended from a simpler form of life and which ultimately came into existence spontaneously must be based on water, carbon dioxide, and the basic compounds of the elements C, H, O, and N. Each of these possesses unique properties which, while not sufficient for the existence of life, are necessary conditions of it.

Water, for example, is one of the strangest substances known to science. Its specific heat, surface tension, and most of its other physical properties have anomalous values higher or lower than any other known material. The fact that its solid phase is less dense than its liquid phase, so that ice floats, is virtually a unique property in nature. Its melting point, boiling point, and vaporization point are all anomalously higher than those of other substances. For example, when calculated by atomic weight and number, the boiling point of water would be expected to be -100°C rather than $+100^{\circ}\text{C}$. The disparity is due to its strong hydrogen bonds, which are difficult to break. Furthermore, because the H-O-H angle in water is so close to the ideal tetrahedral structure, water can form such a structure with very little strain on the bonds. As a result, it tends to polymerize into an open structure, so that ice is less dense than water. This property of water is essential to life, for were ice more dense than water, it would sink to the bottom of bodies of water, where it would remain in the deepest parts until eventually all lakes and oceans would be solidly frozen. Instead, ice forms a protective skin on the surface of reservoirs of water. Water also has a higher specific heat than almost any organic compound. This property allows water to be a store of heat and so stabilize the environment. The thermal conductivity of water is also higher than that of most liquids, which again permits water to act as a temperature stabilizer on the environment. Water has, moreover, a higher heat of vaporization than any known substance. This makes water the best possible coolant by evaporation, and living creatures make extensive use of it in temperature control. Water's high surface tension, exceeded by very few substances, serves to make biochemical reactions more rapid; and the way water bonds shapes organic molecules such as enzymes and nucleic acids into their biologically active forms and permits the formation of cell walls and membranes.

The elements H, O, and C are the most abundant elements in living organisms. They possess many unique properties and are vital to chemical reactions necessary to sustain life. For example, CO_2 has the property, unique among gases, of having at ordinary temperatures about the same concentration of molecules per unit volume in water as in air. This enables CO_2 to undergo perpetual exchange between living organisms and their environment, so that it is everywhere available for photosynthesis and thereby for molecular synthesis. The element N, on the other hand, is a rare element on Earth, but it does make up 80% of the earth's atmosphere, which is a unique stroke of fortune for Earth's living organisms.

This selective sampling of physical and cosmological quantities which are necessary conditions of the existence of intelligent life on Earth at this point in cosmic history illustrates the sort of wider teleology which Tennant emphasized, but could only dimly envision. The discoveries of contemporary science in this regard are particularly impressive for two reasons: (1) The delicate balance of conditions upon which life depends is characterized by the interweaving of conditions, such that life depends for its existence, not merely upon each individual condition's possessing a value within very narrow limits, but also upon ratios or interactions between values and forces which must likewise lie within narrow parameters. The situation is thus not comparable to a roulette wheel in Monte Carlo's yielding a certain winning number; nor even yet to all the roulette wheels (each representing a physical quantity or constant) in Monte Carlo's turning up simultaneously certain numbers within narrowly circumscribed limits (say, wheel 1 must show 72 or 73 while wheel 2 must show 27-29, etc.);

rather it is like all the roulette wheels in Monte Carlo's yielding simultaneously numbers within narrowly prescribed limits and those numbers bearing certain precise relations among themselves (say, the number of wheel 3 must be one-half the square of the number of wheel 17 and twice the number of wheel 6). It seems clear that worlds not permitting intelligent life are vastly more to be expected than life-permitting worlds. (2) The constants and quantities which go to make up this complex nexus of conditions are apparently independent of one another. The development of inflationary models ought to cause us to be cautious in making such a claim; nevertheless, it is the case that there seems to be no nomological necessity requiring the quantities and constants of nature to be related as they are. The value of S , for example, seems to be utterly unrelated to the parameters W , H_0 , or inflationary scenarios. But even if it were possible to reduce all the physical and cosmological quantities to a single equation governing the whole of nature, such a complex equation could itself be seen as the supreme instance of teleology and design. Hence, some of those whose hopes seem to lie in the discovery of such an equation are forced to assert that such an equation must be necessarily true; that is to say, there is really only one logically possible set of physical constants and forces. But such a hypothesis seems clearly outlandish. As Nagel observes, none of the statements of natural laws in the various sciences are logically necessary, since their denials are not formally contradictory; moreover, the appropriate procedure in science should then cease to be experimentation, but be deductive proofs in the manner of mathematics.^{3} Hence, the notion that the nomological necessity of such an equation should reduce to logical necessity seems obviously false.

The Anthropic Principle

This pattern of discoveries has compelled many scientists to conclude that such a delicate balance cannot be simply dismissed as coincidence, but requires some sort of account. Traditionally, such considerations would have been taken as evidence of divine design--one thinks of Paley's teleological argument in his *Natural Theology*, for example. Loath to admit the God-hypothesis, however, many scientists are seeking an alternative in the Anthropic Principle, and a tremendous debate involving both scientists and philosophers has broken out concerning this principle, a debate which has spilled over into the popular press and captured the attention of science-minded laymen. The attempt to come to grips with the appearance of cosmic teleology has forced many scientists beyond physics into meta-physics, so that the boundaries between science and philosophy have become ineradicably blurred, well-illustrating George Gale's remark that "we are now entering a phase of scientific activity during which the physicist has out-run his philosophical base-camp, and, finding himself cut off from conceptual supplies, he is ready and waiting for some relief from his philosophical comrades-in-arms."^{4} The theistic philosopher can therefore without apology or embarrassment introduce his metaphysical commitment to theism as an at least equally plausible, if not superior, alternative explanation to metaphysical, naturalistic accounts of the complex order of the universe.

Exposition

First proposed by Brandon Carter in 1974,^{5} the Anthropic Principle has assumed a number of different forms, generating a great deal of confusion concerning what it is precisely that the principle means to assert. In their recent monumental book, *The Anthropic Cosmological Principle*, physicists John Barrow and Frank Tipler state various versions of the principle, the most fundamental being the Weak Anthropic Principle (WAP):

WAP: The observed values of all physical and cosmological quantities are not equally probable, but they take on values restricted by the requirement that there exist sites where carbon-based life can evolve and by the requirement that the Universe be old enough for it to have already done so.{6}

Barrow and Tipler regard WAP as "in no way speculative or controversial,"{7} since it is "just a restatement . . . of one of the most important and well-established principles of science: that it is essential to take into account the limitations of one's measuring apparatus when interpreting one's observations."{8} For example, if we were calculating the fraction of galaxies that lie within certain ranges of brightness, our observations would be biased toward the brighter ones, since we cannot see the dim ones so easily. Or again, a ratcatcher may say that all rats are bigger than six inches because that is the size of his traps. Similarly, any observed properties of the universe which may initially appear astonishingly improbable can only be seen in their true perspective after we have accounted for the fact that certain properties could not be observed by us, were they to obtain, because we can only observe those compatible with our own existence. "The basic features of the Universe, including such properties as its shape, size, age, and laws of change must be *observed* to be of a type that allows the evolution of the observers, for if intelligent life did not evolve in an otherwise possible universe, it is obvious that no one would be asking the reason for the observed shape, size, age, and so forth of the universe."{9} Thus, our own existence acts as a selection effect in assessing the various properties of the universe. For example, a life form which evolved on an earthlike planet "must necessarily see the universe to be at least several billion years old and . . . several billion light years across," for this is the time necessary for the production of the elements essential to life and so forth.{10}

Now, we might ask, why is the "observed" in the quotation in the above paragraph italicized? Why not omit the word altogether? The answer is that the resulting statement

1. The basic features of the universe must be of a type that allows the evolution of observers

is undoubtedly false; for it is not logically or nomologically necessary that the universe embrace intelligent life. Rather what seems to be necessarily true is

2. If the universe is observed by observers which have evolved within it, then its basic features must be of a type that allows the evolution of observers within it.

But (2) seems quite trivial; it does nothing to explain why the universe in fact has the basic features it does.

But Barrow and Tipler contend that while WAP appears to be true, but trivial, it has "far-reaching implications."{11} For the implication of WAP, which they seem to interpret along the lines of (2), is that no explanation of the basic features of the universe need be sought. This contention seems to be intimately connected with what is appropriate to be *surprised at*. The implication of WAP is that we ought not to be surprised at observing the universe to be as it is, for if it were not as it is, we could not observe it. For example, "No one should be surprised to find the universe to be as large as it is."{12} Or again, ". . . on Anthropic grounds, we should expect to observe a world possessing precisely three spatial dimensions."{13} Or again,

We should emphasize once again that the enormous improbability of the evolution of intelligent life in general and *Homo sapiens* in particular does not mean we should be amazed we exist at all. This would make as much sense as Elizabeth II being amazed she is Queen of England. Even though the probability of a given Briton being monarch is about 10^{-8} , *someone* must be. Only if there is a monarch is it possible for the monarch to calculate the improbability of her particular existence. Similarly, only if an intelligent species does evolve is it possible for its members to ask how probable it is for an intelligent species to evolve. Both are examples of WAP self-selection in action.¹¹⁰

¹¹⁰ F. B. Salisbury, *Nature* 224, 342 (1969), argued that the enormous improbability of a given gene, which we computed in the text, means that a gene is too unique to come into being by natural selection acting on chance mutations. WAP self-selection refutes this argument, as R. F. Doolittle in *Scientists confront creationism*, L. R. Godfrey (Norton, NY, 1983) has also pointed out.[{14}](#)

Here we have a far-reaching implication that goes considerably beyond the apparently trivial WAP. Accordingly, although Barrow and Tipler conflate WAP and the implications thought to follow from it, I want to distinguish these sharply and shall refer to these broader implications as the Anthropic Philosophy. It is this philosophical viewpoint, rather than WAP itself, that I believe, despite initial impressions, stands opposed to the teleological argument and constitutes scientific naturalism's most recent answer to that argument. According to the Anthropic Philosophy, an attitude to surprise at the delicately balanced features of the universe essential to life is inappropriate; we should expect the universe to look this way. While this does not explain the origin of those features, it shows that no explanation is necessary. Hence, to posit a divine Designer is gratuitous.

Critique

WAP and Self-Selection

Now it needs to be emphasized that what the Anthropic Philosophy does *not* hold, despite the sloppy statements on this head often made by scientists, is that our existence as observers *explains* the basic features of the universe. The answer to the question "Why is the universe isotropic?" given by Collins and Hawking, ". . . the isotropy of the Universe is a consequence of our existence,"[{15}](#) is simply irresponsible and brings the Anthropic Philosophy into undeserved disrepute, for literally taken, such an answer would require some form of backward causation whereby the conditions of the early universe were brought about by us acting as efficient causes merely by our observing the heavens. But WAP neither asserts nor implies this; rather WAP holds that we must observe the universe to possess certain features (not that the universe must possess certain features) and the Anthropic Philosophy says that therefore these features ought not to surprise us or cry out for explanation. The self-selection effect affects our observations, not the basic features of the universe itself. If the Anthropic Philosophy held that the basic features of the universe were themselves brought about by our observations, then it could be rightly dismissed as fanciful. But the Anthropic Philosophy is much more subtle: it does not try to explain why the universe has the basic features it does, but contends that no explanation is needed, since we should not be surprised at observing what we do, our observations of those basic features being restricted by our own existence as observers.

But does the Anthropic Philosophy follow from the Anthropic Principle, as Barrow and Tipler claim? Let us concede that it follows from WAP that

3. We should not be surprised that we do not observe features of the universe which are incompatible with our own existence.

For if the features of the universe were incompatible with our existence, we should not be here to notice it. Hence, it is not surprising that we do not observe such features. But it follows neither from WAP nor (3) that

4. We should not be surprised that we do observe features of the universe which are compatible with our existence.

For although the object of surprise in (4) might at first blush appear to be simply the contrapositive of the object of surprise in (3), this is mistaken. This can be clearly seen by means of an illustration (borrowed from John Leslie^{16}): suppose you are dragged before a firing squad of 100 trained marksmen, all of them with rifles aimed at your heart, to be executed. The command is given; you hear the deafening sound of the guns. *And you observe that you are still alive*, that all of the 100 marksmen missed! Now while it is true that

5. You should not be surprised that you do not observe that you are dead,

nonetheless it is equally true that

6. You should be surprised that you do observe that you are alive.

Since the firing squad's missing you altogether is extremely improbable, the surprise expressed in (6) is wholly appropriate, though you are not surprised that you do not observe that you are dead, since if you were dead you could not observe it. Similarly, while we should not be surprised that we do not observe features of the universe which are incompatible with our existence, it is nevertheless true that

7. We should be surprised that we do observe features of the universe which are compatible with our existence,

in view of the enormous improbability that the universe should possess such features.

The reason the falsity of (7) does not follow from (3) is that subimplication fails for first order predicate calculus. For (3) may be schematized as

3'. $\sim S: (x) ([Fx \times \sim Cx] \dot{\rightarrow} \sim Ox)$

where "S:" is an operator expressing "we should be surprised that" and "F" is "is a feature of the universe," "C" is "is compatible with our existence," and "O" is "is observed by us." And (7) may be schematized as

7'. $S: (x) (Fx \times Cx \times Ox)$

It is clear that the object of surprise in (7') is not equivalent to the object of surprise in (3'); therefore the truth of (3') does not entail the negation of (7').^{17}

Therefore, the attempt of the Anthropic Philosophy to stave off our surprise at the basic features of the universe fails. It does not after all follow from WAP that our surprise at the basic features of the universe is unwarranted or inappropriate and that they do not therefore cry out for explanation. But which features of the universe should thus surprise us? --those which are necessary conditions of our existence and which seem extremely improbable or whose coincidence seems extremely improbable. Thus, we should amend (7) to read

7*. We should be surprised that we do observe basic features of the universe which individually or collectively are excessively improbable and are necessary conditions of our own existence.

Against (7*), the WAP is impotent.{18}

WAP and a World Ensemble

Now proponents of the Anthropic Philosophy will no doubt contend that I have missed the whole point of the WAP. For (7*) is true only if the basic features of our observable universe are co-extensive with the basic features of the Universe as a whole. But proponents of the Anthropic Philosophy avoid (7*) by conjoining to WAP the hypothesis of a World Ensemble, that is to say, the hypothesis that our observable universe is but one member of a collection of diverse universes that go to make up a wider Universe-as-a-Whole. Given the existence of this wider Universe, it is argued that all possible universes are actualized and that the WAP reveals why surprise at our being in a universe with basic features essential to life is inappropriate.

Various theories, some of them quite fantastic, have been offered for generating a World Ensemble. For example, Wheeler proposes a model of the oscillating universe in which each cycle emerges with a new set of physical laws and constants.{19} Linde suggests an inflationary model according to which our observable universe is but one of many different mini-universes which inflated from the original larger Universe.{20} One of the most widely discussed World Ensemble scenarios is Everett's Many Worlds Interpretation of quantum physics, according to which all possible states of a quantum interaction are actualized, the observer himself splitting off into each of these different worlds.{21}

Now it needs to be emphasized that there is no evidence for any of these theories *apart from the fact of intelligent life itself*. But as John Leslie, the philosopher of science who has occupied himself most thoroughly with the Anthropic Principle, points out, any such evidence for a World Ensemble is equally evidence for a divine Designer.{22} Moreover, each of the above scenarios faces formidable scientific and philosophical objections.{23} Wheeler's theory, for example, not only succumbs to the problems generic to oscillating models,{24} but insofar as it posits singularities at the termini of each cycle, it is not even a model of an oscillating universe at all, but of just a series of unrelated worlds. Inflationary models not only face the problems of how to get the inflation started, how to get it to end without excess turbulence, and how to get it to allow galaxy formation, but more importantly they themselves require an extraordinary amount of fine-tuning prior to inflation, so that the appearance of design is not eluded. The Many Worlds Interpretation of quantum physics is so fantastic that philosopher of science John Earman characterizes its postulated splitting of space-time as a "miracle." "Not only is there no hint as to what causal mechanism would produce such a splitting," he complains, "there is not even a characterization of where and when it takes place." {25} In fact, Quentin Smith indicts the theory as incoherent, since the many worlds are

supposed to exist in a timeless superspace, which is incompatible with the stipulation that they branch off serially as quantum interactions occur.{26}

Objections can be raised against each of the theories proposed for generating many worlds; but even if we conceded that a multiple universe scenario is unobjectionable, would such a move succeed in rescuing us from teleology and a cosmic Designer? This is not at all obvious. The fundamental assumption behind the Anthropic philosopher's reasoning in this regard seems to be something along the lines of

8. If the Universe contains an exhaustively random and infinite number of universes, then anything that can occur with non-vanishing probability will occur somewhere.

But why should we think that the number of universes is actually infinite? This is by no means inevitable, not to mention the paradoxical nature of the existence of an actually infinite number of things.{27} And why should we think that the multiple universes are exhaustively random? Again, this is not a necessary condition of many-worlds hypotheses. In order to elude the teleological argument, we are being asked to assume much more than the mere existence of multiple universes.

In any case, the move on the part of Anthropic philosophers to posit many worlds, even if viable, represents a significant concession because it implies that the popular use of the WAP to refute teleology in a Universe whose properties are coextensive with the basic features of our universe is fallacious. In order to stave off the conclusion of a Designer, the Anthropic philosopher must take the metaphysically speculative step of embracing a special kind of multiple universe scenario. That will hardly commend itself to some as any less objectionable than theism.

The point is that the Anthropic Principle is impotent unless it is conjoined with a profoundly metaphysical vision of reality. According to Earman, "Some anthropic theorists seem all too eager to embrace any form of world making that gives purchase to their *modus operandi*." {28} Why this desperation? John Leslie explains that although the idea of a World Ensemble is sketchy and faces powerful objections, still people think that it *must* be correct, for how else could life originate? {29} But Leslie argues that the God hypothesis is no more obscure than the World Ensemble nor less scientific, since natural laws and initial conditions are not generally taken to be scientifically explicable. {30} A scientist should consider the interpretation of a divine Designer, or else admit that he simply has no personal interest in the problem, for the only alternative to the World Ensemble is the God hypothesis, so that if we reject the latter we are stuck with the former. {31}

Martin Gardner, quoting physicist Heinz Pagels, says that the Anthropic Principle raises a new mystery:

"How can such a sterile idea," Pagels asks, "reproduce itself so prolifically?" He suspects it may be because scientists are reluctant to make a leap of faith and say: "The reason the universe seems tailor-made for our existence is that it *was* tailor-made Faced with questions that do not neatly fit into the framework of science, they are loath to resort to religious explanations; yet their curiosity will not let them leave matters unaddressed. Hence, the anthropic principle. It is the closest that some atheists can get to God." {32}

Similarly physicist Tony Rothman writes,

It's not a big step from the [Anthropic Principle] to the Argument from Design When confronted with the order and beauty of the universe and the strange coincidences of nature, it's very tempting to take the leap of faith from science into religion. I am sure many physicists want to. I only wish they would admit it.{33}

But if for atheist and timorous theist alike the World Ensemble and Anthropic Principle are functioning as a sort of God surrogate, what is so sad about this situation is that it is so unnecessary. For with the World Ensemble we have already launched our bark out onto the metaphysical deep; if the God hypothesis provides us a surer passage, why not avail ourselves of it? As Leslie reminds us, those who think that "science proper" has boundaries which are easy to fix are becoming increasingly rare.{34}

The Hypothesis of Divine Design

In any case, the philosopher who is a theist is certainly at liberty *qua* philosopher, if not *qua* scientist, to introduce God as his explanatory ultimate. What objections then might be raised against the theistic hypothesis? No friend of the Anthropic Principle, Earman seems sympathetic to the hypothesis of divine design, but in the end does not find it compelling because there is no need to adopt a creation theory of actuality, which this hypothesis presupposes:

If one adopts a creation story of actuality and if one calculates that the probability of creation of a big bang model having the features in question is nil, then no anthropic principle, construed as a selection principle, is going to resolve the problem. The resolution calls rather for something akin to the traditional argument from Design.

Alternatively, the need for a creation story of actuality and the need to wrestle with improbabilities of actualization can be obviated by treating actuality as a token-reflexive property of possible worlds not unlike the 'nowness' property of instants of time (see Lewis 1986). On this view all possible worlds, including the merely logically possible as well as the physically possible, are all equally 'actual'. No Creator is needed to anoint one of these worlds with the magical property of 'actuality' and the question of why this property was conferred upon a world having the features in question is mooted.{35}

Here we see the metaphysically extravagant lengths to which philosophers seem compelled to go in order to avoid a divine Designer. Earman, while excoriating Anthropic philosophers for their unwarranted postulate of a World Ensemble, shows himself quite willing to go even further, postulating the actual existence of all logically possible worlds. This involves a metaphysical commitment which is so enormous ontologically and so superfluous for explaining modal locutions that most philosophers have dismissed it as science fiction. Indeed, Plantinga has shown that such a theory of actuality entails the outrageous view that I have all my properties essentially, since it is not I, but a counterpart of me, who exists and possesses different properties in other logically possible worlds.{36} In comparison with Earman's commitment, the hypothesis of theism seems modest indeed.

Barrow and Tipler also object to the hypothesis of divine design, maintaining that "careful thinkers" would not today "jump so readily" to a Designer, for (i) the modern viewpoint stresses time's role in nature; but since an unfinished watch does not work, arguments based on omnipresent harmony have been abandoned for arguments based on co-present coincidences; and (ii) scientific models aim to be realistic, but are in fact only approximations of reality; so we hesitate to draw far-reaching conclusions about the nature of ultimate reality

from models that are at some level inaccurate.{37} But Barrow and Tipler seem unduly diffident here. A careful thinker will not readily jump to any conclusion, but why may he not infer a divine Designer after a careful consideration of the evidence? Point (i) is misleading, since the operations of nature always work; at an earlier time nature is not like an *unfinished* watch, rather it is just a *less complex* watch.{38} In any case, the most powerful design argument will appeal to both present adaptedness and co-present coincidences. Point (ii) loses much of its force in light of two considerations: (a) this is a condition that affects virtually all our knowledge, which is to say that it affects none of it in particular, so that our only recourse is simply to draw conclusions based on what we determine most accurately to reflect reality; fortunately, the evidence at issue here is rather concrete and so possesses a high degree of objectivity; (b) Barrow and Tipler do not feel compelled to exercise such restraint when proposing metaphysically speculative but naturalistic accounts of the universe's basic features, for example, their defense of the Many Worlds Interpretation of quantum physics or scenarios for the origin of the universe *ex nihilo*, which leads one to suspect that a double standard is being employed here. Their objections, therefore, seem to have little force.

John Leslie's reservations with the theistic hypothesis are somewhat different: while concurring with the necessity of positing a divine Designer of the cosmos, he nonetheless argues that the ultimate explanation of the order in the universe cannot be God as traditionally conceived. Leslie plumps for what he characterizes as a Neo-platonic concept of God as the creativity of ethical requiredness. That is to say, if I understand Leslie correctly, the universe exists as it does because it *should*; it is morally necessary that a universe of free agents exist. This ethical requiredness of the universe has a sort of creative power to it that makes the world exist. If there is a personal deity, he, too, is the result of this more fundamental principle. Presumably, Leslie calls this conception Neo-platonic because according to that metaphysic the One, which takes the place of Plato's Good, produces being, the first emanation being the *Nous*, or Mind, which in turn produces the world. The God of traditional theism would be like Plotinus's *Nous* and Leslie's God like the ultimate form of the Good.

But why is the traditional concept of God so unpalatable? Leslie's critique on this score is disappointing and surprisingly weak.{39} Proceeding from the Leibnizian question, "Why is there something rather than nothing?" Leslie rejects the answer of God conceived as either a factually or a logically necessary being. For if God is only factually necessary, then He exists logically contingently, albeit eternally, and no reason is supplied for His contingent existence. On the other hand, God cannot be shown to exist necessarily in the logical sense, for when the ontological argument asserts, "It is possible that God exist," this possibility is epistemic only and, hence, does not show that God's existence is logically possible.

But this objection seems confused. If God is merely a factually necessary being, then there are possible worlds in which He does not exist. But then it is logically impossible for Him to exist in all possible worlds, that is to say, it is logically necessary that He exist contingently. But then, assuming that God is the explanatory ultimate in any world in which He exists, it makes no sense to seek a reason for His existence. To demand a reason for His existence is to ask for a logically necessary being which accounts for the fact that God exists. But on this hypothesis, it is logically impossible that there be such a being, for if it were possible such a being would exist in every possible world, including this one, and so God would not be the explanatory ultimate. Hence, if God is a mere factually necessary being, it is logically impossible for there to be a reason for His existence. One need only add that it is wrong-headed to indict a position for not supplying what is logically impossible.

On the other hand, why hold that God is merely factually necessary? The Leibnizian Principle of Sufficient Reason might lead us to reject the concept of God as a merely factually necessary being and hold instead that He is logically necessary. The failure of the ontological argument as a piece of natural theology is irrelevant to the coherence of this conception of God. Leslie correctly points out that when the ontological argument asserts that the proposition "A maximally great being exists" (where maximal greatness entails being omnipotent, omniscient, and morally perfect in every possible world) is possible, there is an ambiguity between "epistemically possible" and "logically possible." To say that such a proposition is epistemically possible is only to say that for all we know it is true. So understood, it makes sense to say, "Possibly a maximally great being exists, and possibly He doesn't." This sense is insufficient for the purposes of the ontological argument. But if we are talking about logical possibility, then to say that the proposition "A maximally great being exists" is possible is to say that He does exist. For if He exists in any possible world, then by definition He exists in all. Thus, if this proposition is possibly true in the logical sense, it is necessarily true. Now I agree with Leslie that the ontological argument seems to fail because all we intuit is that a maximally great being is epistemically possible, but we cannot say if His existence is logically possible. But how is this even relevant to the issue at hand? The coherence of the logical necessity of God's existence does not depend on the success of the ontological argument or our intuitions. It is possible that the ontological argument fails to prove God's existence, and yet for all we know God's existence is logically necessary. Philosophers such as Plantinga, Robert Adams, and William Rowe have defended the coherence of God as a logically necessary being, {40} and Leslie says nothing to impugn this notion. Using the Leibnizian query as his starting point, Leslie ought to conclude to the existence of a being which is by nature such that if it exists in any possible world, it exists in all; such a being must exist in *this* world in order to explain why something exists rather than nothing, and, therefore, in *all* worlds, thereby obviating the need for an explanation of its existence. {41} In this way Leslie's quite legitimate demand for a reason for the existence of something rather than nothing would yield an answer for the universe's existence without requiring one for God's existence, and this without endorsing the ontological argument.

As for Leslie's own alternative conception of God, I think that its lack of explanatory power seems painfully clear. How can there be design without the previsioning of an intelligent mind? Personal agents, not impersonal principles, design things. If one says that the traditional God is a sort of personal demiurge who designed the world, then how can he be produced in being by an abstract principle? Abstract objects such as numbers, propositions, and properties have no spatio-temporal locations and sustain no causal relations with concrete objects. So how does the abstract object posited by Leslie cause a concrete object like God to exist? It thus seems clear that traditional theism is the preferable explanation of the world's design.

Concluding Remarks

Teleologists and Anthropic philosophers enjoy a peculiar "love/hate" relationship: they agree that the delicate balance of cosmological and physical conditions necessary for intelligent life does cry out for some sort of interpretation which will render it intelligible; but they differ radically as to what that interpretation should be. Theistic philosophers view this sensitive nexus of conditions as evidence of wider teleology and therefore indicative of a cosmic Designer. Anthropic philosophers contend that due to the self-selection effect imposed by our own existence we can only observe a limited number of worlds; therefore, we should not be surprised at observing this one. Moreover, if a Word Ensemble exists in which all possible

values of cosmological and physical quantities are somewhere instantiated, it follows necessarily that our world with its delicate balance of conditions will also obtain. We have seen, however, that in the absence of the hypothesis of the World Ensemble the reasoning of the Anthropic philosopher, based on the trivial WAP is simply logically fallacious. As for the World Ensemble, there is not only no evidence that such an ensemble of worlds exists, but there are substantive objections against each of the proposed means of generating such an ensemble. In any case, the postulation of a world ensemble is metaphysically extravagant, for it must involve the existence of an infinite number of exhaustively random worlds if one is to guarantee that our world will by chance alone obtain in the ensemble. Theism is certainly no more objectionable than this.

Finally, I should like to say a word concerning the religious value of the hypothesis of divine design as an explanation for the wider teleology we have discovered in nature. As the debate over the Anthropic Principle has spread, it has even taken on literary dimensions, finding its way into the contemporary novel *Roger's Version* by John Updike. When Dale Kohler explains that physicists are proving the existence of God, Roger Lambert, a professor of theology, replies:

For myself I must confess that I find your whole idea aesthetically and ethically repulsive. Aesthetically because it describes a God Who lets Himself be intellectually trapped, and ethically because it eliminates faith from religion, it takes away our freedom to believe or doubt. A God you could prove makes the whole thing immensely, oh, uninteresting. Pat. Whatever else God may be, He shouldn't be pat.{42}

Roger's objections, so typical of contemporary theology, reveal fundamental misunderstandings about the revelation of God and the nature of faith. God's handiwork in nature is not a matter of His being intellectually trapped, but of His revelation of Himself to His creation, a self-disclosure which is aesthetically beautiful; as the Psalmist says, "The heavens are telling the glory of God and the firmament proclaims his handiwork" (Ps. 19.1). And the decision to believe in God or not is not so much a matter of *assensus*, but of *fiducia*. The demonstration of His existence on the basis of His created order in no way removes our freedom to trust in ourselves rather than in Him; as Paul wrote, "although they knew God, they did not honor him as God . . ." (Rom. 1.21). The teleological argument, then, if successful, hardly makes belief in God pat.{43} Rather it helps to bring us more quickly to the true crisis of faith.

Endnotes

{1}I depend for this section on the impressive compilations by John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1986) and John Leslie, "The Prerequisites of Life in Our Universe," in *Newton and the New Direction in Science*, ed. G.V. Coyne, M. Heller, J. Zycinski (Vatican: Citta del Vaticano, 1988). Detailed discussion and documentation may be found there.

{2}Stephen Hawking, *A Brief History of Time: from the Big Bang to Black Holes* (N.Y.: Bantam Books, 1988), p.132.

{3}Ernst Nagel, *The Structure of Science*, 2d ed. (Indianapolis: Hackett, 1979), pp. 53-54.

{4}George Gale, "Some Metaphysical Perplexities in Contemporary Physics," paper presented at the 1985 meeting of the Society of Metaphysics.

{5}Brandon Carter, "Large Number Coincidences and the Anthropic Principle," in *Confrontation of Cosmological Theories with Observational Data*, ed. M.S. Longair (Boston: D. Reidel, 1974), pp. 291-98.

{6}Barrow and Tipler, *Anthropic Principle*, p. 15.

{7}Ibid., p. 16.

{8}Ibid., p. 23.

{9}Ibid., pp. 1-2.

{10}Ibid., p. 3.

{11}Ibid., p. 2.

{12}Ibid., p. 18.

{13}Ibid., p. 247.

{14}Ibid., pp. 566, 575.

{15}C.B. Collins and S.W. Hawking, "Why Is the Universe Isotropic?" *Astrophysical Journal* 180 (1973):317.

{16}John Leslie, "Anthropic Principle, World Ensemble, Design," *American Philosophical Quarterly* 19 (1982):150.

{17} Similarly, the falsity of (6) does not follow from the truth of (5), for (5) may be schematized as $\sim S: \sim (\$x) ([Mx \times \sim Ax] \times Ox)$, where M is 'is me', Ox is 'is observed by me', and A is 'is alive'. From this it does not follow that $\sim S: (\$x) ([Mx \times Ax] \times Ox)$, which is the negation of (6).

{18}Once the central fallacy is thus removed, Barrow and Tipler's argument in the lengthy quotation in the text seems to amount to little more than the old objection that any state of affairs is highly improbable and therefore the obtaining of the actual state of affairs requires no special explanation. But this objection is surely misconceived. What unprejudiced and right-minded person could possibly regard a chimpanzee's haphazardly typing out the complete plays and sonnets of Shakespeare as equally probable with any chaotic series of letters? The objection fails to reckon with the difference between randomness, order, and complexity. On the first level of randomness, there is a non-denumerably infinite number of chaotic sequences, e.g., "adfwj," each of which is equally improbable and which collectively could serve to exhaust all sequences typed by the ape. But the meta-level of ordered letters, e.g., "crystalcrystalcrystal," need never be produced by his random efforts, were he to type for eternity. Even more improbable is the meta-meta-level of complexity, in which information is supplied, e.g., "To be or not to be, that is the question." Hence, it is fallacious to assert that

since some set of conditions must obtain in the universe, the actual set is in no way improbable or in need of explanation.

{19} John A. Wheeler, "From Relativity to Mutability," in *The Physicist's Conception of Nature*, ed. J. Mehra (Dordrecht: D. Reidel, 1973).

{20} A.D. Linde, "The Inflationary Universe," *Reports on Progress in Physics* 47 (1984):925-986.

{21} Hugh Everett, "'Relative State' Formulation of Quantum Mechanics," *Reviews of Modern Physics* 29 (1957):454-462.

{22} John Leslie, "Modern Cosmology and the Creation of Life," in *Evolution and Creation*, ed. Ernan McMullin, University of Notre Dame Studies in the Philosophy of Religion (Notre Dame, Ind.: University of Notre Dame Press, 1985), pp. 97-77.

{23} See, for example, the critiques in Quentin Smith, "World Ensemble Explanations," *Pacific Philosophical Quarterly* 67 (1986):73-81; Leslie, "Prerequisites of Life."

{24} Viz., (i) there is no known physics which could cause the universe to oscillate, (ii) the density of the universe appears to be far below the critical level needed to bring about re-contraction, and (iii) the thermodynamic properties of oscillating models reveal that while they have an infinite future, they possess only a finite past. For discussion, see my *The Kalam Cosmological Argument*, Library of Philosophy and Religion (London: Macmillan, 1979), pp. 122-30, 135-36.

{25} John Earman, "The SAP Also Rises: A Critical Examination of the Anthropic Principle," *American Philosophical Quarterly* 24 (1987):312.

{26} Smith, "World Ensemble Explanations," pp. 77-78. It is not clear to me why Smith does not think that his own view of the universe as a quantum fluctuation does not succumb to this same objection, since the superspace of quantum geometrodynamics is atemporal. Perhaps he thinks of the superspace as also temporal, but then one is caught in positing time beyond time, which seems incoherent. And even if a temporal superspacetime is coherent, in infinite time some random fluctuation would have spawned an open universe, which would by this time have so expanded as to coalesce with any other universe produced in the superspacetime by a quantum fluctuation, since it has had eternity to do so, thereby eliminating any ensemble of distinct worlds.

{27} The paradoxical nature of the infinite was emphasized by Hackett, *Theism*, pp. 194-95, 294, whose exposition was the seed of my own *Kalam Cosmological Argument*, pp. 69-102.

{28} Earman, "SAP Also Rises," p. 312. He adds, "That anthropic theorists stand ready to make use of any such speculation which proves handy tells us something about their methodology" (Ibid, p. 311).

{29} John Leslie, "Observership in Cosmology: the Anthropic Principle," *Mind* 92 (1983):575.

{30} Leslie, "Cosmology and the Creation of Life," pp. 98, 112.

{31} John Leslie, "God and Scientific Verifiability," *Philosophy* 53 (1978):79.

{32} Martin Gardner, "WAP, SAP, PAP, & FAP," *New York Review of Books*, (May 8, 1986), p. 23. The quotation from Pagels is from Heinz Pagels, "A Cozy Cosmology," *The Sciences* (March/April, 1985).

{33} Tony Rothman, "A 'What You See Is What You Beget' Theory," *Discover*, (May 1987), p. 99.

{34} Leslie, "God and Scientific Verifiability," p. 79.

{35} Earman, "SAP also Rises," p. 310. Earman's reference is to D. Lewis, *On the Plurality of Worlds* (London: Basil Blackwell, 1986).

{36} Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), pp. 102-20.

{37} Barrow and Tipler, *Anthropic Principle*, p. 30.

{38} The response to this objection would also seem appropriate with regard to Earman's proposed satirical antidote to our surprise at the fine-tuning of the universe: "Imagine . . . the wonderment of a species of mud worms who discover that if the constant of the thermometric conductivity of mud were different by a small percentage they would not be able to survive" (Earman, "SAP also Rises," p. 314). For if our argument has been correct, then, if mud worms possessed self-conscious intelligence, they should indeed be stunned at the fine-tuning requisite for their existence. For even if mud worms were the highest form of life, the delicate balance of conditions necessary for life itself, not to mention the unbelievable complexity involved in an organism so highly developed as a mud worm, remains unaffected by such an attenuation. Indeed, many teleologists argue for the hypothesis of design simply on the basis of a single cell, a gene, or even a DNA molecule, not to speak of organisms so fantastically intricate as a lowly mud worm. (See, *e.g.*, Charles B. Thaxton, Walter L. Bradley, and Roger L. Olsen, *The Mystery of Life's Origin* [New York: Philosophical Library, 1984]; Hubert Yockey, "A Calculation of the Probability of Spontaneous Biogenesis by Information Theory," *Journal of Theoretical Biology* 67 [1977]:377.) The argument based on the existence of intelligent human life simply heaps on the complexity to be explained.

The truth in Earman's argument is the same point made by Deist satires of the teleological argument: the mud worms could not infer that their existence was the target at which the Creator aimed nor that the Creator was some Great Mud Worm. (Cf. McMullin's similar complaint that one cannot infer from the evidence that man is the goal of creation or that it was necessary for God to create this sort of universe in order to produce man [Ernan McMullin, "How Should Cosmology Relate to Theology?" in *The Sciences and Theology in the Twentieth Century*, ed. A.R. Peacocke (Notre Dame, Ind.: University of Notre Dame Press, 1981), pp. 44-45].) But the teleological argument need not be so anthropocentrically construed. It contends merely that the complex order of the universe requires as its most plausible explanation a Cosmic Intelligence which designed the universe. To show that man (or mud worms) is the goal of creation would require additional arguments, say, the moral argument, or revelation.

{39} See John Leslie, "The World's Necessary Existence," *International Journal for Philosophy of Religion* 11 (1980):207-24.

{40} Plantinga, *Nature of Necessity*, pp. 197-221; Robert Adams, "Has It Been Proved that All Real Existence is Contingent?" *American Philosophical Quarterly* 8 (1971):284-91; William L. Rowe, *The Cosmological Argument* (Princeton: Princeton University Press, 1975), chap. 4.

{41} See the helpful comments by Thomas V. Morris, review of *The Quest for Eternity* by J.C.A. Gaskin, *Faith and Philosophy* 3 (1986):334.

{42} John Updike, *Roger's Version* (London: Deutsch, 1986).

{43} One thinks in this connection of Aristotle's God, who served in his physics and metaphysics as an explanatory principle, but was not an object of religious devotion or worship. Aristotle's conception of deity ought to make quite clear that the postulate of a divine Designer does not settle for us the religious question.

Middle Knowledge, Truth-Makers, and the "Grounding Objection"

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

The so-called "grounding objection" is the most commonly raised misgiving which philosophers have to the doctrine of divine middle knowledge: how can counterfactuals of creaturely freedom be true when there is no ground of their truth? I hope to show that the theory of truth known as Truth-Maker Theory can help to shed considerable light on this objection, revealing just how difficult it is to formulate a compelling version of the objection. For it is far from evident that counterfactuals of creaturely freedom must have truth-makers or, if they must, that appropriate candidates for their truth-makers are not available.

"Middle Knowledge, Truth-Makers, and the Grounding Objection." *Faith and Philosophy* 18 (2001): 337-52.

Thomas Flint has observed that the so-called "grounding objection" is in the minds of many philosophers "the principal obstacle" to endorsing the Molinist doctrine of divine middle knowledge.^{1} I share Flint's impression. What is ironic about this situation is not merely the fact that the many Molinist responses to the grounding objection remain largely ignored or unrefuted in the literature, nor yet again the fact that Molinist solutions to the objection tend to be far more sophisticated philosophically than the almost casual statements of the objection itself; rather the irony is that this allegedly powerful objection has virtually never been articulated or defended in any depth by its advocates. Contrary to Flint's claim that the objection "is as easy to state as it is difficult fully to resolve,"^{2} I hope to show that this objection is far from easy to state adequately—we shall see that Flint's own formulation is inadequate—and far from easy to defend.

No anti-Molinist has, to my knowledge, yet responded to Alvin Plantinga's simple retort to the grounding objection: "It seems to me much clearer that some counterfactuals of freedom are at least possibly true than that the truth of propositions must, in general, be grounded in this way."^{3} What Plantinga understands—and grounding objectors apparently by and large do not—is that behind the grounding objection lies a theory about the relationship of truth and reality which needs to be articulated, defended, and then applied to counterfactuals of freedom if the grounding objection is to carry any probative force. Anti-Molinists have not even begun to address these issues.

What is the grounding objection? It is the claim that there are no true counterfactuals concerning what creatures would freely do under certain specified circumstances—the propositions expressed by such counterfactual sentences are said either to have no truth value or to be uniformly false—, since there is nothing to make these counterfactuals true. Because they are contrary-to-fact conditionals and are supposed to be true logically prior to God's creative decree, there is no ground of the truth of such counterfactual propositions. Thus, they cannot be known by God.

Warrant for the Molinist Assumption

Before scrutinizing this objection, it deserves to be underlined just how radical a claim it makes. It asserts that there are no true counterfactuals about how creatures would freely act under any given set of circumstances. This assertion is no mere ostensibly *undercutting* defeater of Molinism, but a putatively *rebutting* defeater. It makes a bold and positive assertion and therefore requires warrant in excess of that which attends the Molinist assumption that there are true counterfactuals about creaturely free actions. And the warrant for the Molinist belief that there are such truths is not at all inconsiderable: *First*, we ourselves often appear to know such true counterfactuals. Very little reflection is required to reveal how pervasive and indispensable a role such counterfactuals play in rational conduct and planning. We not infrequently base our very lives upon the assumption of their truth or falsity. *Second*, it is plausible that the Law of Conditional Excluded Middle (LCEM) holds for counterfactuals of a certain special form, usually called "counterfactuals of creaturely freedom." Counterfactuals of creaturely freedom are counterfactuals of the form *If S were in C, S would freely do A*, where *S* is a created agent, *A* is some action, and *C* is a set of fully specified circumstances including the whole history of the world up until the time of *S*'s free action. According to LCEM for any counterfactual $p \text{ } ^{\text{TM}} \tilde{O} q$, $(p \text{ } ^{\text{TM}} \tilde{O} q) \vee (p \text{ } ^{\text{TM}} \tilde{O} \neg q)$. Molinists need not and should not endorse LCEM unqualifiedly. There is no reason to think, for example, that if Suarez were to have scratched his head on June 8, 1582, then either Freddoso would have scratched his head on June 8, 1982 or would not have scratched his head on June

8, 1982. But it is plausible that counterfactuals of the very specialized sort we are considering must be either true or false. For since the circumstances *C* in which the free agent is placed are fully specified in the counterfactual's antecedent, it seems that if the agent were placed in *C* and left free with respect to action *A*, then he must either do *A* or not do *A*. For what other alternative is there? {4} *Third*, the Scriptures are replete with counterfactual statements, so that the Christian theist, at least, should be committed to the truth of certain counterfactuals about free, creaturely actions. The Church has never, until the modern age, doubted that God possesses knowledge of true counterfactuals concerning free, creaturely decisions; the whole dispute focused on whether He possessed that knowledge logically prior to the divine creative decree or only posterior to the divine decree. The Church's confidence that God knows such truths is rooted in the Scriptures themselves. To pick but one example, Paul, in reflecting upon God's eternal salvific plan realized in Christ, asserts, "None of the rulers of this age understood this; for if they had, they would not have crucified the Lord of Glory" (I Cor. 2.8). By "the rulers of this age" Paul means either the Jewish and Roman authorities such as Herod and Pilate who were the historical agents who instigated or carried out the crucifixion (cf. Acts 4. 27–28) or, more plausibly, the spiritual principalities and powers who rule "this present evil age" (Gal. 1. 4; cf. I Cor. 2. 6). In either case, we have here a counterfactual about creaturely free actions. So is Paul's assertion true or not? Will we have the temerity to say that Paul was wrong? Since the Church believes that Paul was inspired by the Holy Spirit to write these words, she accepts them as revealed truth from God. Thus, we have strong *prima facie* warrant for holding that there are true counterfactuals concerning what creatures would freely do under various circumstances.

In light of these considerations the grounding objector might retreat to the position that although there are now true counterfactuals about creaturely free acts, there are none logically prior to the divine creative decree. But then the grounding objector owes us a still more nuanced account of the grounding objection, since there seems to be no more ground now for many counterfactuals about creaturely free acts than there is logically prior to God's decree. Moreover, limiting the truth of such counterfactuals to a moment logically posterior to God's decree appears to make God the author of sin and to obliterate human freedom, since in that case it is God who decrees which counterfactuals about creaturely free acts are true, including counterfactuals concerning sinful human decisions. Thus, we have good reason for thinking that if such counterfactuals are now true or false, they must have been so logically prior to God's decree.

The point of these considerations is simply to underscore that the grounding objection, if it is to be successful, must, as a rebutting defeater, have more warrant than that enjoyed by the Molinist assumption that there are true counterfactuals concerning creaturely free actions. The Molinist is under no obligation to provide warrant for that assumption, since he is merely proposing a model which is intended as one possible solution to the alleged antinomy of divine sovereignty and human freedom. Nevertheless, if the model's detractors aim to defeat that solution by rebutting one of its elements, namely, the assumption that there are true counterfactuals about how creatures would freely behave under certain circumstances, then it is worth emphasizing the warrant that can be given for that assumption, since such warrant makes it all the more difficult to defeat that feature of the Molinist model.

The Grounding Objection and Truth-Maker Theory

So what can be said on behalf of the grounding objection? I have said that the grounding objection seems to assume a particular theory about the relationship of truth and reality. The

theory presupposed by the grounding objection appears to be a certain construal or version of a view of truth as correspondence which has come to be known as the theory of *truth-makers*.^{5} During the realist revival in the early years of the twentieth century various philosophers turned their attention to the question of the ontology of truth. Logical Atomists such as Russell and Wittgenstein thought that in addition to truth-bearers, whether these be sentences, thoughts, propositions, or what have you, there must also be entities in virtue of which such sentences and/or propositions are true. Various names were employed for these entities, such as "facts" or "states of affairs." Among contemporary philosophers they have come to be known as "truth-makers."

A truth-maker is typically defined as *that in virtue of which a sentence and/or a proposition is true*. According to Peter Simons, "Truth-maker theory accepts the role of something which makes a proposition true, that is, whose existence suffices for the proposition to be true. But it does not automatically pronounce on the ontological category of the truth-maker."^{6} "Indeed," he insists, "*anything whatever* is a truth-maker."^{7} But historically the orthodox view has identified truth-makers with such abstract realities as facts or states of affairs—more often than not, the fact stated as a proposition's truth condition, as disclosed by the disquotation principle. Thus, what makes the statement "Al Plantinga is an avid rock-climber" true is the fact that *Al Plantinga is an avid rock-climber* or the state of affairs of *Al Plantinga's being an avid rock-climber*.

Now we immediately see the potentially misleading connotations of the term "truth-maker" for such entities. For *making* sounds like a causal relation between a truth-bearer and some concrete object, but truth-maker theorists are quite clear that the relation is by no means causal. An entity *a* **makes a proposition *p* true** if and only if that *a* exists entails that *p*.^{8} That truth-makers are usually conceived to be such abstract entities as facts or states of affairs underlines the point that a causal relation is not at issue here.

That the relation between a truth-maker and a truth-bearer is not causal is especially evident if we require truth-makers for negative existential statements like "Baal does not exist." According to Kevin Mulligan, Peter Simons, and Barry Smith, "Not only Wittgenstein, but indeed almost all other philosophers who have investigated the relation of making true, have felt compelled in the face of the problems raised by negative propositions to adopt an ontology of truth makers as special, non-objectual entities having a complexity which is essentially logical."^{9} Obviously a fact like Baal's non-existence, which is sufficient for the truth that Baal does not exist, is not a cause of anything.

A proper understanding of truth-makers, then, invalidates at once the crude construal of the grounding objection expressed in Robert Adams's statement of the problem and again in Alfred Freddoso's and Thomas Flint's respective formulations of the grounding objection:

Counterfactuals of freedom . . . are supposed to be contingent truths that are not caused to be true by God. Who or what does cause them to be true?^{10}
. . . metaphysically contingent propositions . . . require *causal* grounding in order to be true. That is, they must be *caused to be true* by some agent or agents, since it is not of their nature to be true.^{11}

But if such conditionals are contingent, they might not have been true. Who, then, *makes* them true? Or, to phrase this question more carefully: Who or what actually *causes* the ones that are true to be true and the ones that are false to be false?

. . . neither God nor his free creatures cause counterfactuals of creaturely freedom to be true . . . The conclusion that seems forced upon us, then, is that nobody actually causes the counterfactuals in question to be true.{12}

The truth-maker theorist would take it as understood that nobody actually causes counterfactuals or any other sort of proposition to be true.{13} The demand for a cause of a proposition's being true is inept, unless the anti-Molinist is presupposing some very special causal theory of truth-makers, in which case he owes us an articulation of that theory and a defense, not merely of its adequacy, but of its superiority to customary truth-maker theories.

It might be said that the demand for a cause of the truth of true counterfactuals of creaturely freedom is a mere rhetorical flourish on the part of the anti-Molinist. But even if we give him the benefit of the doubt in this regard, the fact remains that the anti-Molinist still seems to be presupposing that in order to be true, counterfactuals of freedom must have truth-makers that either are or imply the existence of concrete objects. Not only does he owe us some explanation and justification for restricting truth-makers in this way, but such an assumption seems quite implausible. For we can think of other types of true propositions whose truth-makers neither are nor imply the existence of concrete objects. Consider, for example, the following statements:

1. No physical objects exist.
2. Dinosaurs are extinct today.
3. All ravens are black.
4. Torturing a child is wrong.
5. Napoleon lost the Battle of Waterloo.
6. The U. S. President in 2070 will be a woman.
7. If a rigid rod were placed in uniform motion through the aether, it would suffer a FitzGerald-Lorentz contraction.

Statement (1) could be true and statement (2) is true, yet they preclude truth-makers which are or imply the existence of the relevant concrete objects (such as dinosaurs). If such statements have truth-makers they would seem to be such things as the state of affairs of *there being no universe* or of *dinosaurs' no longer existing*. Some truth-maker theorists have maintained that such negative existential statements are true without having any truth-makers. For example, Mulligan, Simons, and Smith assert, "it seems more adequate to regard sentences of the given kind as true not in virtue of any truth maker of their own, but simply in virtue of the fact that the corresponding positive sentences have no truth maker." {14} But this assertion is self-contradictory. For a truth-maker is precisely that entity in virtue of which a sentence and/or proposition is true, and on their account a true, negative existential statement like "Baal does not exist" is true *in virtue of the fact* that the corresponding positive statement "Baal exists" lacks a truth-maker. Thus, this negative existential statement does have a truth-maker after all, namely, the fact that "*Baal exists*" *has dno truth-maker*. A similar problem seems to attend D. M. Armstrong's attempt to eliminate truth-makers for negative existential statements on the basis of the second-order state of affairs of there being all the first-order states of affairs there are. {15} Presumably the idea is that if the state of affairs described by the corresponding positive existential statement is not included in the second-order state of affairs cataloging all the first order states of affairs, then the negative statement is true without having a truth-maker. But, we may ask, is it not then the case that the negative statement is true in virtue of the fact that the relevant positive state of affairs is not included in the totality

of states of affairs or in virtue of existence of the state of affairs of the positive state's not being so included?

A further difficulty for such accounts is that the want of a truth-maker for an affirmative existential statement or the absence of a positive state of affairs from a second-order state of affairs does not always seem to constitute plausible grounds for denying truth-makers to a negative statement. Take (2), for example. The want of a truth-maker for "Dinosaurs are alive today" or the absence of the relevant state of affairs from the totality of states does not seem to make it true that dinosaurs are extinct today. The same goes for "Dinosaurs are still alive today," for the negation of that sort of statement is notoriously ambiguous. The difficulty is that (2) seems to imply the positive assertion that dinosaurs were once alive and so needs more than just the lack of a truth-maker in order to be true. It seems to require as its truth-maker the fact that dinosaurs were once alive and now are not alive. In any case, even if negative existential statements are not made true in virtue of some fact or state of affairs, the anti-Molinist can hardly be encouraged by the prospect that we have here an exception to notion that true statements require truth-makers. If there can be true statements without any truth-makers of those statements, how do we know that counterfactual statements cannot be true without truth-makers?

Statement (3) is a universally quantified statement which as such does not apply merely to any ravens which happen to exist. Therefore, it cannot be true just in virtue of existing ravens' being black, much less in virtue of the black ravens there are. Statement (4) is an ethical judgement which implies neither that children exist nor that any are ever actually tortured. It is hard to see how ethical and aesthetic judgements can be made true apart from ethical and aesthetic facts being among their truth-makers.

Statements (5) and (6) are tensed statements about persons who no longer or do not yet exist (at least on a dynamic theory of time^{16}) and so cannot have such persons among their truth-makers. Truth-maker theorists have yet to grapple seriously with problems posed by tense and temporal becoming. But in a recent discussion Barry Smith offers two proposals: either we "need to introduce an explicit temporal dimension into our account of truthmaking, along the lines of: this liquid makes it true *at t* that it is odourless," or alternatively, we "might embrace a strictly presentist reading of '*x* makes it true that *p*'. Some true contingent past and future tense judgments will then be such that, while their truthmakers do not exist, they did or will exist."^{17} These brief suggestions are merely programmatic; but the first seems to contemplate tenselessly existing truth-makers of tensed sentences along the lines of a static theory of time,^{18} while the second appears to involve tensed truth-makers of tensed sentences such as might be postulated in a dynamic theory of time.^{19} Smith's suggestion for this latter view is to assert that past- and future-tensed statements literally have (present-tense) no truth-makers, although they either did or will. This suggestion is problematic, however, because when the truth-maker of, say, a future-tense sentence like "Bush will be inaugurated as our forty-second President" becomes present, then that statement, far from being true, is false, and the corresponding present-tense statement, "Bush is being inaugurated as our forty-second President" is or becomes true. Thus, we should more plausibly say either that true past- and future-tense statements have no truth-makers at all, though their present-tense counterparts did or will have or that their truth-makers are the present-tense statements' having been or going to be true, or more simply the tensed facts stated as their tensed truth conditions, as disclosed by the disquotation principle. None of this is encouraging to the anti-Molinist, for again we find an important class of statements which

either are true without having truth-makers or else have as their truth-makers abstractions like facts or states of affairs.

Finally, statement (7) is a true counterfactual about the aether of nineteenth century mechanics, which does not exist. One cannot say that the aether's properties serve as the truth-maker of (7), for the aether, being non-existent, has no properties. Of course, if the aether did exist, the aether would have properties, so perhaps one could say that what makes (7) true is the fact that in the most similar possible worlds in which the antecedent is realized, the indicative version of the consequent has a truth-maker—but this would be of no comfort to anti-Molinists who presuppose that truth-makers must be or imply the existence of concrete objects.

All of the above types of truths are matters of vigorous discussion among truth-maker theorists. These illustrations and the controversies they engender underscore just how naïve an understanding grounding objectors generally have of the nature of truth-makers. The idea that the truth-makers of counterfactuals of creaturely freedom must be literal people or any sort of concrete object is extraordinary.{20}

Do Counterfactuals of Creaturely Freedom Need Truth-Makers?

Now, as I say, it is a matter of considerable debate whether true propositions do have truth-makers at all. Truth-maker theory is, after all, a minority position, associated in analytic philosophy with thinkers in the tradition of Logical Atomism. Simons admits that since Tarski's development of truth-theory without truth-makers, it has been widely held that there is "no need" for truth-makers, such as Russell and Wittgenstein advocated.{21} In a recent critique, Greg Restall demonstrates that given the customary axioms of truth-maker theory, it follows that every true proposition is made true by every truth-maker there is, so that, for example, *Grass is green* is made true by snow's being white. In a monumental understatement, Restall muses, "This is clearly not acceptable for any philosophically discriminating account of truthmakers." {22} Perhaps these difficulties in truth-maker theory can be ironed out; {23} but the point remains that the doctrine is controversial and cannot just be assumed to be true.

In any case many truth-maker theorists themselves reject the doctrine of *truth-maker maximalism*, {24} the doctrine that every true statement has a truth-maker. I have yet to encounter an argument for the conclusion that counterfactuals of creaturely freedom cannot be among those types of truths lacking a truth-maker. Indeed, when one reflects on the fact that such statements are *counterfactual* in nature, then such statements might seem to be prime candidates for belonging to that diverse class of statements which are true without having any truth-makers. Truth-maker theory, which is still in its nascence, has not yet, to my knowledge, been applied to such counterfactuals. But the analogy with past- and future-tensed statements is suggestive. Freddoso has argued that just as future-tense statements or propositions are grounded in the fact that a relevant present-tense proposition will have grounds of its truth, so a counterfactual of creaturely freedom is grounded in the fact that a relevant indicative proposition would have grounds of its truth. He explains,

A realist about the absolute future will claim that there are *now* adequate metaphysical grounds for the truth of a future-tense proposition *Fp* just in case there *will* be at some future time adequate metaphysical grounds for the truth of its present-tense counterpart *p*

But if this is so, then it seems reasonable to claim that there are now adequate metaphysical grounds for the truth of a conditional future contingent $F^t(p) \text{ on } H$ just in case there would be adequate metaphysical grounds at t for the truth of the present-tense proposition p on the condition that H should obtain at t .{25}

On Freddoso's account, contingent propositions of the form Fp or $F^t(p) \text{ on } H$ do have truth-makers, namely the fact or state of affairs that p will have a truth-maker or p would have a truth-maker under the relevant condition respectively.

In his analysis of Freddoso's view, Timothy O'Connor maintains that it would be more accurate simply to say that future contingent propositions have no grounds of their truth, but that they are true just in case their relevant present-tense counterparts will have grounds of their truth.{26} That is to say, propositions of the form Fp have *truth-conditions* which may be satisfied even though they lack *truth-makers*. This revision of Freddoso's view is along the lines of Barry Smith's second suggestion for dealing with future-tense statements. Analogously, O'Connor proposes, we should reinterpret Freddoso's truth-makers for counterfactuals of creaturely freedom as giving truth-conditions for propositions of the form $F^t(p) \text{ on } H$, while maintaining that such propositions do not have truth-makers. Although O'Connor, as an anti-Molinist, is none too happy about this analogy between future contingent propositions and counterfactuals of creaturely freedom, he grudgingly acknowledges its coherence and chooses to attack Molinism elsewhere.{27} But the point remains that it is far from obvious that counterfactuals of creaturely freedom have to have truth-makers in order to be true. Anti-Molinists have not even begun the task of showing that counterfactuals of creaturely freedom are members of the set of propositions or statements which require truth-makers if they are to be true.

Do Counterfactuals of Creaturely Freedom Have Truth-Makers?

But suppose that future-tense statements and counterfactuals of creaturely freedom do belong to that class of propositions or statements requiring truth-makers in order to be true. What is wrong with the facts or states of affairs proposed by Freddoso as the truth-makers of such propositions? O'Connor's declamation, "Freddoso's suggestion is just wrong, for there is not anything 'there' in the world which is its grounds"{28} reveals that he is presupposing the same naïve understanding of truth-makers exposed earlier. Facts or states of affairs such as Freddoso mentions routinely serve as perfectly respectable truth-makers. Perhaps one could try to exclude Freddoso's truth-makers by putting a nominalistic spin on facts and states of affairs, but the anti-Molinist can hardly think that an objection based on so controversial a metaphysical thesis as that will have more warrant than the affirmation that there are true future tense statements and counterfactuals of creaturely freedom.

O'Connor also argues that Freddoso's view spawns a vicious infinite regress of grounds of truth. For a true future-tense proposition Fp is said to have grounds of its truth just in case there will be grounds of the truth of p at some future time. Here the grounds of the truth of Fp are stated by means of another statement which is also of the form Fp . We are off on an infinite regress, O'Connor insists, which is vicious because no statement has unconditional grounds of its truth.{29} But O'Connor has conflated the truth-maker of Fp with the truth-conditions of the statement that Fp has a truth-maker. On Freddoso's view the truth-maker of any proposition Fp is the fact that *there will be a truth-maker of p* . Facts do not themselves have truth-makers, so there is no regress.

Nevertheless, O'Connor's objection is helpful in that it draws attention to the fact that even Freddoso's account of the truth-makers of future-tense propositions requires the existence of tensed facts, a point which is insisted upon independently by advocates of a dynamic theory of time, {30} which, it will be recalled, is presupposed by this version of truth-making for tensed sentences. That raises the question whether we might not as well just let the relevant tensed facts be the truth-makers of tensed propositions. The regress spotted by O'Connor concerns the truth-conditions of the sentence "There are now grounds for the truth of Fp ," and this regress is benign, since it is simply a series of entailments of one future-tense proposition by another.

Indeed, O'Connor had better hope that such a regress is benign, since on his own view Freddoso's formula does successfully give the truth-conditions of any future-tense proposition Fp , viz.:

$Fp \equiv p$ will have grounds at some future time t .

Since the right-hand side of the equivalence has itself the form Fp , one embarks on an infinite regress. In agreeing that Freddoso's formula does successfully give the truth conditions of a future-tense proposition despite the infinite regress involved, O'Connor tacitly agrees that such a regress is benign. O'Connor protests that he does not face the same problem as Freddoso because "this biconditional is not intended to prescribe a procedure by which it may be determined whether a future contingent is *grounded*—it is simply indicating that it . . . is in fact true." {31} This alleged difference, however, is rooted in O'Connor's confusion noted above concerning the truth-maker of Fp and the truth-conditions of " Fp has a truth-maker"; there is on his own view still a (benign) infinite regress because the right-hand side of the above equivalence has itself the form Fp . O'Connor also defends himself by saying that his adaptation of Freddoso's formula is not a prescription of "how one may determine whether such propositions are true." {32} But, of course, neither is Freddoso intending to provide a prescription for determining in O'Connor's epistemic sense whether Fp does have a truth-maker or not.

Similarly, when we turn from future-tense propositions to counterfactual propositions and consider Freddoso's proposed truth-makers for counterfactuals of creaturely freedom, we see that O'Connor's denial that "there is something 'there' objectively" to be known" {33} is rooted in the same crude understanding of truth-makers already exposed. As for the supposedly vicious infinite regress, it is again a benign regress of entailments generated by the truth-conditions of the statement " $F^t(p)$ on H has a truth-maker."

That the regress concerns truth-conditions, not truth-makers, is especially evident in Flint's defense of Freddoso's position. Flint proposes the following formula to give the truth-maker of a counterfactual of creaturely freedom $c \rightarrow z$:

F. "It *would be* the case (if c were true) that z " is now grounded iff " z is grounded" *would be* the case (if c were true). {34}

It is evident that what is provided here are truth conditions for the claim that " $c \rightarrow z$ is now grounded," not a truth-maker for $c \rightarrow z$. In fact, ironically, Flint never really does tell us what the truth-maker of $c \rightarrow z$ is! He misconstrues his own account when he says, for example, that a person's activity in a nearby possible world is what grounds a counterfactual of creaturely freedom which is true in the actual world. {35} Such an interpretation conjures up ghostly

images of merely possible agents doing things in their worlds which produce causal effects in ours, surely a bizarre and untenable picture! Rather on the Freddoso–Flint view, the truth-maker of $c \rightarrow z$ is something like the fact that *the statement "z has a truth-maker" would be true (if c were true)*. This fact or state of affairs exists or obtains as robustly in the actual world as any other actual fact or state of affairs and is an unobjectionable truth-maker. Thus it is a misconceived worry to wonder how merely possible activities ground actual truths, just as it is a misconceived worry to puzzle over how non-existent past or future activities could ground present truths. They do not.

For my part, I should say that if true counterfactuals of creaturely freedom have truth-makers, then the most obvious and plausible candidates are the facts or states of affairs disclosed by the disquotation principle. Thus, what makes it true that "If I were rich, I would buy a Mercedes," is the fact that if I were rich I would buy a Mercedes. Just as there are tensed facts about the past or future which now exist, even though the objects and events they are about do not, so there are counterfactuals which actually exist, even though the objects and events they are about do not. If counterfactuals of creaturely freedom require truth-makers, then it is in virtue of these facts or states of affairs that the corresponding propositions are true. And since these counterfactuals are not the result of God's decree, the relevant states of affairs must obtain even logically prior to God's decree to create any concrete objects.

In his development of the grounding objection, Hasker does seem to countenance states of affairs as truth-makers. But, he insists, "In order for a (contingent) conditional state of affairs to obtain, its obtaining must be grounded in some categorical state of affairs. More colloquially, truths about 'what *would be the case* . . . *if*' must be grounded in truths about what *is in fact* the case." {36} For example, the truth of counterfactuals like "If the glass were struck, it would shatter" is grounded "in the natures, causal powers, inherent tendencies, and the like, of the natural entities described in them." {37}

Hasker's claim is, however, very muddled. An obtaining state of affairs just is the ground or truth-maker of some truth and so is not itself "grounded" in the relevant sense. Moreover, truths do not have other truths as their grounds or truth-makers, but rather states of affairs. With respect to counterfactuals concerning instances of natural kinds like the glass, the truth of the counterfactual is arguably grounded in a dispositional property of the object, such as in this case the glass's fragility. Such a dispositional property may be plausibly taken to be the truth-maker of the relevant counterfactual and even to ensure its necessary truth. {38} Moreover, it is correct to say that dispositional properties have a causal basis in the categorical properties of a natural object, such as the molecular structure of the glass. But it is a *non sequitur* to conclude that the causal basis of a disposition is the truth-maker of the relevant counterfactual. For if there were different laws of nature, that same molecular structure might not serve to make glass fragile. It is the glass's fragility which is the truth-maker of the counterfactual at issue, and the causal basis of the disposition is at most responsible, not for the glass's fragility, but for the manifestation of that fragility, that is to say, for the actual shattering of the glass. Thus, in Armstrong's analysis the truth-maker for the categorical statement "The glass is fragile" is the glass's having a certain molecular structure plus the laws of nature. {39} But the rub is that laws of nature, as Plantinga observes, {40} are equivalent to various counterfactual propositions, like "If x were cooled to 0^0 , it would expand," so that one might just as well have said that the truth-maker of "The glass is fragile" is the glass's having a certain molecular structure plus certain counterfactuals of nature. Thus, even a categorical statement concerning dispositional properties of a natural object arguably has among its truthmakers certain counterfactuals, not to speak of a

counterfactual statement grounded in the dispositional properties of an object. Thus, Hasker's claim that counterfactuals must be purely categorically grounded is unwarranted.

How much more dubious is Hasker's claim when it comes to personal agents endowed with freedom of the will! For free choice is not a matter of natural dispositions involving causal bases. Indeed, as I have elsewhere charged,{41} the grounding objection seems implicitly to reject libertarian freedom, for on a libertarian view there is no further "grounding" to be sought for why there obtains a certain counterfactual state of affairs about how some agent would freely act under certain circumstances. To seek an answer to the question "Why is *F* a fact?" or "What makes *F* a fact?" is implicitly to deny libertarian freedom. It is simply a fact that that is how that agent would freely choose to act under those circumstances..

Conclusion

In conclusion, I think that it is evident that anti-Molinists have not even begun to do the necessary homework in order for their grounding objection to fly. They have yet to articulate their ontology of truth, including the nature of truth-bearers and truth-makers. Nor have they yet presented a systematic account of which truth-bearers require truth-makers. Neither have they applied their theory to counterfactuals of creaturely freedom, much less shown its superiority to competing theories. Of course, it is open to grounding objectors to abjure a theory of truth-makers altogether and to assert that in construing their talk about grounds of truth for counterfactuals of creaturely freedom in terms of truth-makers I have misunderstood or misrepresented them. Perhaps grounds of truth are different from truth-makers. But if this is the case, then anti-Molinists owe us all the more a careful account of what they are talking about. Until they provide that, their grounding objection cannot even hope to get off the ground.

In short, I agree with Plantinga that I am far more confident that there are true counterfactuals of creaturely freedom than I am of the theory which requires that they have truth-makers.{42} And if they do require truth-makers, no reason has been given why their truth-makers cannot be the facts or states of affairs which are disclosed by the disquotational principle.{43}

Notes

{1} Thomas P. Flint, *Divine Providence*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1998), p. 123. The doctrine of divine middle knowledge (*media scientia*), first articulated by the Counter-Reformation theologian Luis de Molina in 1588, holds that God's decree concerning which world to create is based upon and, hence, explanatorily posterior to His knowledge of what every free creature He could possibly create would do in any appropriately specified set of circumstances in which God might place him. Thus logically prior to His creative decree, God knows the truth of propositions describing how some creature would freely act in a specific set of circumstances, *e.g.*, *If Goldwater were to win the U.S. presidential election in 1964, he would order the invasion of North Viet Nam*. The doctrine presupposes that there are such true counterfactuals and that their truth is logically independent of the divine decree. For an outstanding introduction to and translation of a crucial portion of Molina's *Concordia*, see Luis de Molina, *On Divine Foreknowledge*, trans. with an Introduction and Notes by Alfred J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988).

{2} Flint, *Divine Providence*, p. 123.

{3} Alvin Plantinga, "Reply to Robert Adams," in *Alvin Plantinga*, ed. James E. Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht: D. Reidel, 1985), p. 378.

{4} Van Inwagen's objection that it might be the case that the agent would on one occasion do *A* and on a second go-around not do *A* actually supports the Molinist case, for these are two *different* turns and thus different sets of circumstances, and by Van Inwagen's own lights on each turn the agent would do something (Peter Van Inwagen, "Against Middle Knowledge," lecture dated April 12, 1996).

{5} See the seminal article by Kevin Mulligan, Peter Simons, and Barry Smith, "Truth-Makers," *Philosophy and Phenomenological Research* 44 (1984): 287–321. An informative survey of the historical background of truth-maker theory may be found in *Historisches Wörterbuch der Philosophie*, ed. Joachim Ritter and Karlfried Gründer (Basel: Scwabe, 1971), s.v. "Tatsache II," by Peter Simons. See further John F. Fox, "Truthmaker," *Australasian Journal of Philosophy* 65 (1987): 188–207; Herbert Hochberg, "Truth Makers, Truth Predicates, and Truth Types," in *Language, Truth, and Ontology*, ed. Kevin Mulligan, Philosophical Studies Series 51 (Dordrecht: Kluwer Academic Publishers, 1992), pp. 87–117.

{6} Peter Simons, "How the World Can Make Propositions True: A Celebration of Logical Atomism," in *Sktonnosci Metafizyczna [Metaphysical Inclinations]* (Warsaw: Uniwersytet Warszawski, 1998), p. 119.

{7} Peter Simons, "Existential Propositions," in *Criss-Crossing a Philosophical Landscape*, ed. Joachim Schulte and Göran Sundholm, Grazer Philosophische Studien 42 (Amsterdam: Rodopi, 1992), p. 257.

{8} Ibid. The theist must regard this characterization as untenable, however, since (unless one denies with William Alston that God has beliefs) God's beliefs then count as truth-makers for the propositions He believes. For God's beliefs are usually taken to be entities in a sense countenanced by truth-maker theory, often being characterized as "hard" or "soft" facts about the past. But taking God's beliefs as truth-makers seems to stand things on their head, since intuitively something is not true because God believes it, but God believes it because it is true. Moreover, if God's beliefs are explanatorily prior to the truth of propositions about human actions, then creaturely freedom would seem to be eliminated, just as divine freedom would be eliminated if counterfactuals of divine freedom were true explanatorily prior to God's decree. Bigelow states the truth-maker principle more acceptably: "What Truthmaker says is: 'For each truth *A* there must be something *a* such that, *necessarily, if a exists then A is true*' " (John Bigelow, *The Reality of Numbers* [Oxford: Clarendon Press, 1988], p. 127). Unfortunately this principle is false because it entails truth-maker maximalism (see below); but at least it captures the idea that truth-making is essentially a logical relation. Perhaps the truth-maker theorist should say that for any truth-bearer *A* which has a truth-maker *a*, *A* is true in virtue of *a* (or *a* makes *A* true) =_{def.} *a*'s existence entails that *A* has the value *true*.

{9} Mulligan, Simons, and Smith, "Truth-Makers," p. 315.

{10} Robert Adams, "Plantinga on the Problem of Evil," in *Alvin Plantinga*, p. 232. Cf. William Hasker's demand, "Who or what is it (if anything) that *brings it about* that these

propositions are true?" (William Hasker, "A Refutation of Middle knowledge," *Noûs* 20 (1986): 547.

{11} Alfred J. Freddoso, "Introduction" to *On Divine Foreknowledge* by Luis de Molina, trans. with Notes by Alfred J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988), p. 70.

{12} Flint, *Divine Providence*, pp. 123, 125. I should add that Freddoso and Flint are simply accurately reporting the objection as formulated by the detractors of middle knowledge.

{13} "Making to be the case is of course not *causal*" (D. M. Armstrong, *A World of States of Affairs*, Cambridge Studies in Philosophy [Cambridge: Cambridge University Press, 1997], p. 115); "The notion 'makes it true that' has nothing to do with causality" (Peter Simons, "Logical Atomism and Its Ontological Refinement: A Defense," in *Language, Truth, and Ontology*, p. 159); "A truthmaker should 'make' something true, not in a causal sense, but rather, in what is presumably a logical sense. . . . the 'making' in 'making true' is essentially logical entailment" (Bigelow, *Reality of Numbers*, p. 125).

{14} Mulligan, Simons, and Smith, "Truth-Makers," p. 315.

{15} Armstrong, *World of States of Affairs*, pp. 27, 135.

{16} According to a dynamic or tensed theory of time (often, in nomenclature borrowed from McTaggart, called an A-Theory of time), the distinction between past, present, and future is an objective feature of reality, whereas on a static or tenseless theory of time (often called the B-Theory of time), moments of time are not objectively past, present, or future but are ordered by the unchanging relations *earlier than*, *simultaneous with*, and *later than*. Moreover, on a dynamic theory, temporal becoming is real, and things come into being and go out of existence; whereas on the static theory temporal becoming is but a subjective feature of consciousness, and all things are equally real regardless of their temporal location.

{17} Barry Smith, "Truthmaker Realism," *Australasian Journal of Philosophy* 77 (1999): 274–291.

{18} See, for example, D. H. Mellor, *Real Time II* (London: Routledge, 1998), p. 34.

{19} Compare the tensed truth-conditions given by Graham Priest, "Tense and Truth Conditions," *Analysis* 46 (1986): 162–166; see further D.H. Mellor, "Tense's Tenseless Truth Conditions," *Analysis* 46 (1986): 167–172; Graham Priest, "Tense, *Tense*, and TENSE," *Analysis* 47 (1987): 184–187.

{20} And, of course, the same holds for counterfactuals about how creatures would freely act under various circumstances which are not, technically speaking, counterfactuals of creaturely freedom because the circumstances mentioned in their antecedents are not fully specified. So as to avoid pedantry, I shall henceforth not distinguish such counterfactual truths from counterfactuals of creaturely freedom.

{21} Simons, "Logical Atomism," p. 158. Bigelow is embarrassed by the "linguistic magic" that guides truth-maker theory—"inferring the *existence* of certain things from the *truth* of certain claims: a way of calling things into existence by linguistic magic—*defining* things into existence" (Bigelow, *Reality of Numbers*, p. 7).

{22} Greg Restall, "Truthmakers, Entailment, and Necessity," *Australasian Journal of Philosophy* 74 (1996): 334.

{23} Restall proposes to solve the problem by an account of truth-makers in which he leaves his truth-makers undefined. The abstractness of the account only reinforces how ham-fisted is the handling of truth-makers by grounding objectors.

{24} This is Barry Smith's term.

{25} Freddoso, "Introduction," p. 72. A future-tense proposition may be understood as a proposition whose linguistic expression in English must involve the future-tense.

{26} Timothy O'Connor, "The Impossibility of Middle Knowledge," *Philosophical Studies* 66 (1992): 155–156. Thus, O'Connor provides a semantics more consistent with a dynamic theory of time than does David Paul Hunt, "Middle Knowledge: The 'Foreknowledge Defense'," *International Journal for Philosophy of Religion* 28 (1990): 7, who says that future-tense statements "are true in virtue of corresponding to an actual state of affairs, albeit one that lies in the future."

{27} Ibid., pp. 158–9. O'Connor retreats from denying the *truth* of counterfactuals of creaturely freedom to denying their *knowability*. His denial is based on the assumption that "God's infallible knowledge of a genuinely contingent proposition p involves or just consists of an immediate acquaintance with the grounds for p " (Ibid., p. 158). This is an astonishing claim. It entails that God is ignorant of all true contingent propositions which lack truth-makers. Why think that the way in which God knows true propositions is by knowing what are their truth-makers? O'Connor answers, "One cannot, after all, discern the truth of a contingent proposition by having a specially penetrating insight into the nature of the proposition itself" (Ibid., p. 159). If O'Connor is correct in this assertion, then God will be ignorant not only of all contingent truths which lack truth-makers, but He will also be ignorant of all non-analytic necessary truths as well, since those also lack truth-makers, according to standard truth-maker theory. O'Connor's position is thus incompatible with classical theism. In any case, his justification for restricting God's knowledge to propositions which have truth-makers is wholly implausible. For given the ontology of truth presupposed by the theory of truth-makers, there really are entities, like propositions, which serve as truth-bearers. These are real property-bearing entities, and one of the properties they bear is truth (or falsity). This is a genuine property inhering in some, but not all, of these entities. Therefore, God most certainly can by an immediate inspection of the proposition itself discern whether it bears the property of truth or not.

Indeed, thinkers like O'Connor and Hasker, who admit the bivalence of counterfactuals of creaturely freedom or future contingent propositions (see Flint, *Divine Providence*, p. 130) but deny God's knowledge of the same, find themselves in an ultimately incoherent position. For what must they say concerning a present-tense proposition q to the effect that a particular future contingent proposition Fp or counterfactual of creaturely freedom $F^*(p)$ on H , is true? If q is now true, then, as a present-tense proposition, God must know it. Indeed, q seems to have an evident truth-maker, namely, the inherence of the property of truth in Fp or $F^*(p)$ on H . The state of affairs of Fp 's *being true* is not only a contingent state of affairs which presently obtains in the world, but Fp 's *being true* is literally an event, since Fp may change in its truth value once p becomes true, in which case q undergoes an intrinsic change from being true to being false. Thus, if q , God must know that q and, hence, know that Fp and F

'(p) on H are true. But if He knows that these propositions are true, then He knows the facts which they state. Thus, anyone who agrees that the Principle of Bivalence governs future contingent propositions or counterfactuals of creaturely freedom and who holds that God knows all presently true propositions or is immediately acquainted with all existing truth-makers cannot on pain of incoherence deny that God knows the truth of future contingent propositions and counterfactuals of creaturely freedom. This conclusion presents a real crisis for thinkers like Hasker whose only escape from theological fatalism is to deny God's foreknowledge of true future contingent propositions.

{28} O'Connor, "Impossibility," p. 155.

{29} Ibid., pp. 155–156.

{30} See discussion in my *The Tensed Theory of Time: a Critical Examination*, Synthèse Library (Dordrecht: Kluwer Academic Publishers, forthcoming). Michael Tooley would be a rare exception.

{31} O'Connor, "Impossibility," pp. 164–165.

{32} Ibid., p. 165.

{33} Ibid., p. 160.

{34} Flint, *Divine Providence*, p. 133.

{35} Ibid. Cf. his remark that "counterfactuals of creaturely freedom do have grounds, though (as with propositions about the past or future or about what is metaphysically possible) we might not find such grounds at the present time or in the actual world" *Routledge Encyclopedia of Philosophy*, s.v. "Omniscience," by Thomas P. Flint.

{36} William Hasker, *God, Time, and Knowledge*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1989), p. 30.

{37} Ibid.

{38} See Frank Jackson, Robert Pargetter, and Elizabeth W. Prior, "Three Theses about Dispositions," *American Philosophical Quarterly* 19 (1982): 251–258; Robert Pargetter and Elizabeth W. Prior, "The Dispositional and the Categorical," *Pacific Philosophical Quarterly* 63 (1982): 366–370.

{39} Armstrong, *States of Affairs*, pp. 70–73, 129.

{40} Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), p. 178.

{41} William Lane Craig, *Divine Foreknowledge and Human Freedom: The Coherence of Theism: Omniscience*, Brill's Studies in Intellectual History 19 (Leiden: E. J. Brill, 1991), pp. 261–262.

{42} Cf. The remark of Mulligan, Simons, and Smith, "Truth-Makers," p. 299: it is "perfectly rational for us to know *that* a sentence is true and yet not know completely *what* makes it true."

{43} I am indebted to Thomas Flint, Peter Simons, and Barry Smith for stimulating discussion and comments on this paper.

'Men Moved By the Holy Spirit Spoke From God' (2 Peter 1.21): A Middle Knowledge Perspective on Biblical Inspiration

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Scriptural inspiration has traditionally been understood by Christian theologians to be plenary, verbal, and confluent. But how is the plenary, verbal inspiration of Scripture compatible with Scripture's being a truly divine-human product? How can one hold to the verbal inspiration of the whole of Scripture without lapsing into a dictation theory of inspiration which, in effect, extinguishes the human author? A theory of divine inspiration based upon God's middle knowledge is proposed, according to which God knew what the authors of Scripture would freely write when placed in certain circumstances. By arranging for the authors of Scripture to be in the appropriate circumstances, God can achieve a Scripture which is a product of human authors and also is His Word. Such a theory is compared and contrasted with similar views expressed by Lessius and Wolterstorff.

"'Men Moved By The Holy Spirit Spoke From God' (2 Peter 1.21): A Middle Knowledge Perspective on Biblical Inspiration." *Philosophia Christi* NS 1 (1999): 45-82.

The Church has traditionally affirmed that the Bible is inspired by God and is therefore God's Word to mankind, authoritative in all that it teaches. The deeper appreciation of the role of the human authors in the composition of the books of the Bible, which dawned during the Enlightenment, put a question mark behind the claim that the Bible is God's Word. How could the Scriptures be at once the Word of God and the word of man? In this paper I shall argue that the doctrine of divine "middle knowledge" (*media scientia*) provides the key to the resolution of this conundrum. I shall first show that it has, indeed, been the historic position of the Church that Scripture is characterized by plenary, verbal inspiration. This demonstration is important because post-Enlightenment scepticism concerning Scripture's inspiration runs so deep that some have attempted to deny that the Church ever embraced so faulty a doctrine. I shall then explain the challenge posed to the traditional doctrine by incipient biblical criticism which won a new appreciation of the human side of Scripture. Finally, in conversation with contemporary philosophers of religion, I shall defend the coherence of the traditional doctrine of inspiration by means of the doctrine of middle knowledge.

The Divinity of Scripture

On the basis of biblical texts like 2 Pet. 1.21 and 2 Tim. 3.16 ("All Scripture is inspired by God"), Church Fathers from the earliest time on unanimously regarded the Scriptures as "holy," "sacred," and "divine" and therefore as absolutely authoritative, being the very words of God Himself. Thus Clement of Rome advised the Corinthian church, "Look carefully into the Scriptures, which are the true utterances of the Holy Spirit." The Sacred Scriptures are "the oracles of God." Clement can thus introduce his quotations from Scripture with the simple formula, "The Holy Spirit says. . . ." Even Paul's recent Corinthian correspondence is regarded as written "under the inspiration of the Spirit."

The fact that it is God Who speaks in Scripture is especially evident in the case of prophetic utterances. According to Justin Martyr, "the prophets are inspired by the divine Word." Thus, "when you hear the utterances of the prophets spoken as it were personally, you must not suppose that they are spoken by the inspired themselves, but by the Divine Word who moves them." So Justin, commenting on Deut. 10.16–17, remarks, "God Himself proclaimed by Moses" and on Is. 7.14, "God predicted by the Spirit of prophecy" what should come to pass. But even when people speak in answer to God in Scripture, it is the Divine Word which speaks. No doubt this conviction lies at the base of Justin's confidence that "no Scripture contradicts another."

Clement of Alexandria emphasizes both the breadth and the depth of Scripture's inspiration. With respect to the former he asserts, "I could adduce ten thousand Scriptures of which not 'one tittle shall pass away' without being fulfilled; for the mouth of the Lord the Holy Spirit hath spoken these things." And of the latter, he declares, "For truly holy are those letters that sanctify and deify; and the writings or volumes that consist of those holy letters and syllables, the same apostle consequently calls 'inspired of God'"

The great Church Father Irenaeus puts this same conviction into practice when he indicts the Gnostics for accepting part of the Gospel of Luke without accepting all of it and when, in refutation of the Gnostic distinction between Jesus (the Son born of Mary) and Christ (the Father who descended upon Jesus), he bases his argument on the Holy Spirit's use of a single word:

Matthew might certainly have said, 'Now the birth of *Jesus* was on this wise;' but the Holy Ghost, foreseeing the corrupters [of the truth], and guarding by anticipation against their deceit, says by Matthew, 'But the birth of *Christ* was on this wise;' and that He is Emmanuel, lest perchance we might consider Him as a mere man

Irenaeus is so bold as to declare that "the writings of Moses are the words of Christ" and "so also, beyond a doubt, the words of the other prepuce are His." In sum, "the Scriptures are indeed perfect, since they were spoken by the Word of God and His Spirit"

The Fathers did not engage in an extensive analysis of the means by which Scripture was inspired, but contented themselves with similes and analogies. Athenagoras seems to think of a sort of Spirit-possession akin to the Hellenistic model of the Sibylline oracles, the human spokesmen being mere instruments of the Spirit:

I think that you . . . cannot be ignorant of the writings either of Moses or of Isaiah and Jeremiah, and the other prophets, who, lifted in ecstasy above the natural operations of their minds by the impulses of the Divine Spirit, uttered the things with which they were inspired, the Spirit making use of them as a flute-player breathes into a flute

Athenagoras is willing to grant that pagan poets and philosophers have "an affinity with the afflatus from God," but whereas they are moved by their own souls, "we have for witnesses of the things we apprehend and believe, prophets, men who have pronounced concerning God and the things of God, guided by the Spirit of God." Similarly, Athenagoras's contemporary Theophilus states that the Spirit of God "came down upon the prophets and through them spoke of the creation of the world and of all other things." Thus, "Moses . . . , or, rather, the Word of God by Him as by an instrument, says, 'In the beginning God created the heavens and the earth'." Like Athenagoras, Theophilus considers this sufficient to set the "divine writing" apart from the works of the philosophers, writers, and poets, for while they all have "a mixture of error" in them, the prophets, possessed by the Holy Spirit of God, wrote what is accurate, harmonious, and "really true."

The author of the pseudo-Justinian tractate *Cohortatio ad Graecos* also employed the simile of musical instruments to characterize the sacred writers:

For neither by nature nor by human conception is it possible for men to know things so great and divine, but by the gift which then descended from above upon the holy men, who had no need of rhetorical art, nor of uttering anything in a contentious or quarrelsome manner, but to present themselves pure to the energy of the Divine Spirit, in order that the divine plectrum itself, descending from heaven, and using righteous men as an instrument like a harp or lyre, might reveal to us the knowledge of things divine and heavenly.

The analogy of musical instruments is an interesting one. It might appear to depreciate the human role in the production of Scripture. However, it does, in fact, succeed in emphasizing both the divine and human aspects of Scripture, since the type of instrument selected by the musician will determine the character of the musical sounds produced by his playing. But there is no denying that the analogy does reduce the role of the human spokesmen as free agents.

For example, although Pseudo-Justin emphasizes the simple and artless diction of the prophets, still their role as human instruments is subsumed under the controlling influence of

the Holy Spirit; they "use with simplicity the words and expressions which offer themselves and declare to you whatever the Holy Ghost, who descended upon them, choose to teach through them" In a similar fashion, Irenaeus, in trying to correct the inference that 2 Cor. 4.4 teaches that there is a second "God of this world," explains that "according to Paul's custom . . . he uses transposition of words," thereby seemingly emphasizing the role of the human author in the production of Scripture. But then the left hand takes back what the right hand has given: "the apostle frequently uses a transposed order in his sentences, due to the rapidity of his discourses, and the impetus of the Spirit which is in him."

Hippolytus continues to employ the simile of the divine plectrum playing the human instruments, but there is no trace of the Athenagoran idea that the prophets' natural faculties have been transcended. Rather the indwelling Spirit is conceived to enlighten and empower their faculties to speak the truths revealed to them by God:

For these fathers were furnished with the Spirit, and largely honored by the Word Himself; and just as it is with instruments of music, so had they the Word always, like the plectrum, in union with them, and when moved by Him the prophets announced what God willed. For they spake not of their own power (let there be no mistake as to that), neither did they declare what pleased themselves. But first of all they were endowed with wisdom by the Word, and then again were rightly instructed in the future by means of visions. And then, when thus themselves fully convinced, they spake those things which were revealed by God to them alone, and concealed from all others.

Although the spokesmen are here compared to instruments, Hippolytus's conception of God's working through them is more personalistic than what such a comparison might at first seem to suggest.

Jerome also employed a more personalistic model, styling inspiration along the lines of dictation. The Epistle to the Romans, he says, was dictated by the Holy Spirit through the Apostle Paul. Since God is the author of Scripture, "every word, syllable, accent, and point is packed with meaning." Augustine had a similar conception of the composition of Scripture. Christ, he explains, stands in relation to his disciples as does the head to the body.

Therefore, when those disciples have written matters which He declared and spake to them, it ought not by any means to be said that He has written nothing Himself; since the truth is, that His members have accomplished only what they became acquainted with by the repeated statements of the Head. For all that He was minded to give for our perusal on the subject of His own doings and sayings, He commanded to be written by those disciples, whom He thus used as if they were His own hands. Whoever apprehends this correspondence of unity and this concordant service of the members, all in harmony of the discharge of diverse offices under the Head, will receive the account which he gets in the Gospel through the narratives constructed by the disciples, in the same kind of spirit in which he might look upon the actual hand of the Lord Himself, . . . were he to see it engaged in the act of writing.

Here Scripture is understood to be the product of a concordance of human and divine agents, the human authors writing what Christ commanded them to, so that He is ultimately the author of what they wrote. Little wonder that Augustine should therefore insist that Scripture is uniquely authoritative and "completely free from error"!

The view that God is the author of Scripture in all its breadth and depth and that it is therefore authoritative and errorless was the common prepossession of the Church Fathers. However the inspiration of Scripture was conceived to be brought about, the human authors of Scripture were regarded as instrumental causes only, doing what the Spirit moved them to do. Origen thus spoke for all the Fathers when he asserted, "the sacred books are not the compositions of men, but . . . they were composed by the inspiration of the Holy Spirit, agreeably to the will of the Father of all things through Jesus Christ."

Precisely because of this unanimity, the inspiration and inerrancy of Scripture did not achieve creedal expression. As Cadoux points out, "The fact that Biblical inerrancy was not incorporated in any formal creed was due, not to any doubt as to its being an essential item of belief, but to the fact that no one challenged it." Medieval theologians continued in the conviction of the Church Fathers. In his review of this period Sasse remarks, "during all these centuries no one doubted that the Bible in its entirety was God's Word, that God was the principal author of the Scriptures, as their human authors had written under the inspiration of God the Holy Spirit, and that, therefore, these books were free from errors and contradictions, even when this did not seem to be the case." Thus, for example, Thomas Aquinas affirms, "The Spirit is the principal author of sacred Scripture; and inspired man is the instrument." The Holy Spirit never utters what is false; therefore, nothing false can underlie even the literal sense of Scripture. Augustine, says Thomas, was right in affirming that the authors of Scripture have not erred.

The Protestant Reformation brought a renewed emphasis on Scripture's authority. Committed as they were to the principle of *sola scriptura*, the Protestant Reformers were champions of the doctrine of biblical inspiration and authority. Luther dared to stand against the authority of the Catholic church because he believed that the Bible, which he took to support his teachings, is the true Word of God. The Holy Scriptures, he declared, are "the Holy Spirit's book." Thus, in his comment on Ps. 90 Luther states that "we must, therefore, believe that the Holy Spirit Himself composed this psalm." Quoting David's words in 2 Sam. 23. 2 "The Spirit of the Lord has spoken by me, and His word is upon my tongue," Luther marvels,

What a glorious and arrogant arrogance it is for anyone to dare to boast that the Spirit of the Lord speaks through him and that his tongue is voicing the Word of the Holy Spirit! He must obviously be sure of his ground. David, the son of Jesse, born in sin, is not such a man, but it is he who has been called to be a prophet by the promise of God.

Though David was a sinner, he spoke the very words of God because he was a prophet through whom the Holy Spirit spoke. Luther remarks, "Neither we nor anyone else who is not a prophet may lay claim to such honor." Luther thus portrays David as in effect saying, "My speech is not really mine, but he who hears me hears God.'" The entirety of the canonical Scriptures are God's inspired Word: "Thus, we attribute to the Holy Spirit all of Holy Scripture." Even the trivialities in Scripture (the *levicula*) are inspired. Commenting on an incident in Gen. 30.14–16, Luther remarks,

this is ridiculous and puerile beyond measure, so much so that nothing more inconsequential can be mentioned or recorded. Why, then is it recorded? I reply: One must always keep in view what I emphasize so often, namely, that the Holy Spirit is the Author of this book. He Himself takes such delight in playing and trifling when describing things that are unimportant, puerile, and worthless; and He hands this down to be taught in the church as though it redounded to the greatest education.

Luther affirms that the very words of Scripture are divinely inspired. Thus, in defending the interpretation of Is. 7.14 as a prophecy of the Virgin Birth, Luther asserts, "Even though an angel from heaven were to say that *almah* does not mean virgin, we should not believe it. For God the Holy Spirit speaks through St. Matthew and St. Luke; we can be sure that He understands Hebrew speech and expressions perfectly well." Because the Holy Scriptures are God's Word, inspired by the Holy Spirit, Luther, citing Augustine's letter to Jerome, could therefore affirm, "The Scriptures. . . have never erred."

In the era of Protestant scholasticism following the Reformation, the Lutheran theologians insisted forcefully on the inspiration of the very words of Scripture. Abraham Calov, commenting on 2 Pet. 1.21 wrote,

The φ ο ρ α ' embraces both an inner enlightenment of the mind and communication of what was to be said and written, and an external urge of such a nature that the tongue and pen no less than the intellect and mind acted by that impulse. The result was that not only the *forma*, or content was suggested, but the words also, which are placed in their mouth and dictated to their pen by the Holy Spirit, were committed to the original amanuenses, or men of God.

Or again, in the words of J. A. Quenstedt:

The Holy Spirit not only inspired in the prophets and apostles the content and the sense contained in Scripture, or the meaning of the words, so that they might of their own pleasure clothe and furnish these thoughts with their own style and their own words; but the Holy Spirit actually supplied, inspired, and dictated the very words and each and every term individually.

As for Aquinas, so for these Protestant scholastics, God is the *causa efficiens principalis* of Scripture; human authors are the *causae instrumentales*. They are compared to quills used by the Holy Spirit, who dictates each and every word they write. Inspiration involves not only an *impulsus ad scribendum* and a *suggestio rerum* from the Holy Spirit, but also a *suggestio verborum* as well. Now of course these divines were aware of the stylistic differences and peculiarities of the authors of Scripture, but these were explained as a sort of condescension on God's part whereby He accommodates Himself to speak in the vocabulary and style appropriate to each respective author.

The Reformed Protestant tradition took an equally strong stand on the doctrine of inspiration. Calvin's favorite characterization of the means by which Scripture was inspired is dictation. Thus, he affirms, "Whoever then wishes to profit in the Scriptures, let him, first of all, lay down this as a settled point, that the Law and the Prophets are not a doctrine delivered according to the will and pleasure of men, but dictated by the Holy Spirit." He calls the human authors "amanuenses" of the Holy Spirit; they are His "organs" and "instruments." Calvin goes so far as to assert that the prophet brings "forth nothing from his own brain," but merely delivers what the Lord commands. Thus, commenting on Jeremiah's prophecies, Calvin states that while "the words were his," Jeremiah "was not the author of them," since "he only executed what God had commanded."

Paradoxically, Calvin combined with the dictation theory of inspiration the affirmation that the biblical authors wrote freely in their own styles:

The Spirit of God, who had appointed the Evangelists to be his clerks, appears purposely to have regulated their style in such a manner, that they all wrote one and the same history, with the most perfect agreement, but in different ways. It was intended, that the truth of God should more clearly and strikingly appear, when it was manifest that his witnesses did not speak by a preconcerted plan, but that each of them separately, without paying any attention to another, wrote freely and honestly what the Holy Spirit dictated.

Despite the affirmation of the authors' freedom, the weight of the passage falls on the divine sovereignty which determined that four differing accounts should be dictated.

Like their Lutheran counterparts, the Reformed scholastic theologians emphasized the inspiration and authority of Scripture. According to T. R. Phillips, "That God is the author of all Scripture; and thus inspired not only the substance but even the words, was unquestioned within seventeenth-century Reformed scholasticism." Three emphases characterized Reformed thought on Scripture. First, "Everything within Scripture was regarded as being free from the 'peril of error' and thus absolutely certain." On this basis the statements of Scripture could serve as the authoritative premises for the deduction of theological conclusions. Second, inspiration of the Scriptures by God was conceived as the basis of the Bible's authority. Third, "because inspiration . . . has become the ground for Scripture's authority, the nature of this authority assumes more externalistic and legalistic qualities. Scripture is viewed as a book of authoritative sentences: what Scripture says, God says." Reformed theologians, while continuing to employ terms like "dictation" and "amanuenses" when explicating the means of inspiration, did not, according to Phillips, intend such terms to be taken literally, since they conceived of inspiration as a *habitus* or charism, a special divine gift of knowledge and volition which inwardly supplies the human author with the capacities for carrying out God's mandate to write. Nevertheless, some Reformed theologians like Voetius could speak straightforwardly of a *suggestio verborum* in the process of inspiration:

The Holy Spirit has spoken immediately and extraordinarily all that was to be written and has been written, either the things or the words . . . The Holy Spirit has provoked them, and has suggested to them so that they were writing this rather than that . . . the Holy Spirit ordered, arranged and constructed all of their concepts and sentences namely so that they deployed this sentence at the first, that at the second, and another at the third place, and so on in succession and as a result they are being sealed and authenticated by having been written down: in the strict sense to produce and to compose a book entails this.

Other Reformed thinkers like Rivet, Thysius, and Ames denied that the process of inspiration involved a *suggestio verborum*, but all were one in the belief that the extent of inspiration in the final product included the very words of Scripture.

For their part, Catholic theologians of the Counter-Reformation also insisted on the inspiration and authority of Scripture. In the fourth session of the Council of Trent, the Catholic Church declared that the Old and New Testaments have God as their author, having been dictated by the Holy Spirit (*a Spiritu Sancto dictatas*). Protestants and Catholics alike were thus united in seeing God as the author of Scripture who employed human scribes to write down what He by His Spirit dictated. In so doing, they were reaffirming what the Christian Church had always believed and taught.

The Humanity of Scripture

Although Christian theologians had always recognized the idiosyncrasies of the human authors of Scripture, the role of human agents in the writing of Scripture was undeniably minimized. In the latter half of the sixteenth century, rumblings of discontent with the classical doctrine of inspiration began to be heard among Catholic theologians. But these misgivings broke into public view with Benedict de Spinoza's publication of his *Tractatus theologico-politicus* in 1670. In addition to denying Mosaic authorship of the Pentateuch, Spinoza attacked the traditional doctrine of inspiration. The prophets, he observes, were only inspired when speaking directly the words of God; when they spoke in ordinary conversation as private individuals, their words were not inspired. Although the apostles were prophets, it is evident when we read their writings that they were not speaking as inspired prophets in those writings. For their style of writing and their use of argumentation is incompatible with direct revelatory utterances:

Now if we examine the style of the Epistles, we shall find it to be entirely different from that of prophecy. It was the constant practice of the prophets to declare at all points that they were speaking at God's command, as in the phrases, 'Thus saith the Lord,' 'The Lord of hosts saith,' 'The commandment of the lord,' and so on . . . , But in the Epistles of the Apostles we find nothing like this; on the contrary, in I h. 7 v. 40 Paul speaks according to his own opinion. Indeed, there are numerous instances of expressions far removed from the authoritativeness of prophecy

Furthermore, if we examine the manner in which the Apostles expound the Gospel in their Epistles, we see that this, too, is markedly different from that of the prophets. For the Apostles everywhere employ argument, so that they seem to be conducting a discussion rather than prophesying

Therefore the modes of expression and discussion employed by the Apostles in the Epistles clearly show that these originated not from revelation and God's command but from their own natural faculty of judgment

By associating inspiration only with revelatory, prophetic utterances, Spinoza undercuts the inspiration of the non-prophetic portions of Scripture, including the bulk of the New Testament. Far from being dictated by the Holy Spirit, "the Epistles of the Apostles were dictated solely by the nature light" The Gospels fare no better:

There are four Evangelists in the New Testament; and who can believe that God willed to tell the story of Christ and impart it in writing to mankind four times over? Each Evangelist preached his message in a different place, and each wrote down in simple style what he had preached with view to telling clearly the story of Christ, and not with view to explaining the other Evangelists. If a comparison of their different versions sometimes produces a readier and clearer understanding, this is a matter of chance, and it occurs only in a few passages

Scripture is called the "Word of God" only in virtue of its prophetic passages, and God is understood to be the author of the Bible only because "true religion" is taught therein.

Spinoza's *Tractatus* sparked an eruption of controversy throughout Europe. In effect Spinoza was insisting that one must take seriously the humanity of Scripture and argued that doing so is incompatible with the traditional doctrine of inspiration. There was no denying the human element in Scripture to which Spinoza had drawn attention; the question was whether his inference followed that inspiration must therefore be circumscribed to direct prophecy. The Dutch theologian Jean Le Clerc, shaken by Spinoza's critique, advocated abandonment of the classical doctrine of inspiration, while insisting on the general reliability of the non-inspired

portions of the Bible. Le Clerc distinguishes prophecies, histories, and doctrines within Scripture. The doctrines taught by Christ and the apostles he takes to be divinely inspired. But he claimed that even prophecies need not be inspired. For example, a prophet may report visions or voices from God by giving back in his own words the sense of what he heard or saw. The fact that the various prophets differ in their style of writing disproves the dictation theory of inspiration. In the same way with respect to histories: since the Evangelists differ in precise wording of Jesus's teaching, they are merely giving back the sense of what Jesus said, for which task they needed only good memory and honesty, not divine inspiration. Citing Lk. 1.1–4 Le Clerc comments, "You may observe in these words a Confirmation of what I have been saying, and a full Proof that St. *Luke* learn'd not that which he told us by Inspiration, but by Information from those who knew it exactly." Le Clerc maintains that his position does not undermine Scripture's authority because we are rationally obliged on the basis of the evidence to believe that the historical narratives of the New Testament are substantially true. Thus, in response to Spinoza he grants "that the Sacred Pen–Men were not inspired, neither as to the Stile, nor as to those things which they might know otherwise than by revelation," but insists "that the Authority of the Scriptures ought not for all that to be esteemed less considerable."

Richard Simon, an early French biblical critic, attacked Le Clerc's concessions to Spinoza in *Réponse au Livre intitulé Sentimens de quelques Theologiens de Hollande* and in his epochal *Histoire Critique du Texte du Nouveau Testament*. The central presupposition of Spinoza and Le Clerc attacked by Simon is their assumption that biblical inspiration is to be understood woodenly in terms of *dictation*. "Il n'est pas nécessaire qu'un Livre pour être inspiré ait été dicté de Dieu mot pour mot." Instead Simon proposes to understand inspiration in terms of God's *direction* of the authors of Scripture. Elsewhere he explains,

Immediate revelation takes place when the Holy Spirit reveals to a sacred author what he writes in such a way that this author does nothing but receive and give us what the Holy Spirit has dictated to him. It is thus that the prophets were inspired concerning things of the future, which they learned directly from God. This inspiration can also extend to words, should it happen that the Holy Spirit suggests to a writer the words he uses.

One speaks of special direction when the Holy spirit does not reveal directly to an author what he puts into writing, but when he stirs him to write simply what he already knew, having learned it before, or understood it through his own perception. The Spirit assists and directs him in such a way that he will choose nothing that will not conform to the truth and the purpose for which the Sacred Books were composed, to know how to edify us in faith and charity. It is for that reason that Luke wrote in the Acts several incidents which he heard from the Apostles, and from those who were witnesses to them, as the preaching and miracles of St. Peter; or those he saw himself, as the arrival of St. Paul at Malta. It was not absolutely necessary that the facts he knew by himself be revealed to him.

Spinoza and Le Clerc's objections are predicated entirely on a false understanding of the nature of inspiration, which they took to exclude human reasoning. But if inspiration is understood in terms of direction, not dictation, then there is no incompatibility between inspiration and the human phenomena noted by Spinoza. The Evangelists, for example, were not divested of memory and reason when composing the Gospels, but they were assisted by God in such a way as to prevent them from falling into error. Simon writes,

God has guided their pen in such a way that they do not fall into error. It is men who write; and the Spirit who directs them has not robbed them of their reason or their memory in order

to inspire in them facts which they know perfectly well. But He haws in general determined them to write instead of certain facts rather than others which they know equally well.

Simon thus denies that "the Evangelists were sheer instruments of the Holy Spirit, who dictated to them word for word what they wrote."

Le Clerc responded to Simon's critique by falling back to a more modest position: "My argument proves not directly that there was no Inspiration on these occasions, but only that there was nothing in the thing itself to induce us to believe that there was any" As for Simon's idea of inspiration as direction or guidance, this is unobjectionable so long as the direction extends no further than the selection of the subject matter. With respect to Simon's contention that divine inspiration and human reasoning are not mutually exclusive, Le Clerc maintains that either the Holy Spirit gave the apostles fully framed arguments or only general principles. If He gave complete arguments, then there was no need for the author's reasoning. But if He gave only general principles, then the apostles were still dependent on fallible reasoning to make their deductions, and nothing has been gained.

In his counter-response to Le Clerc Simon defended the inspiration of all Scripture on the basis of 2 Tim. 3. 16. But he agrees that inspiration does not extend to the words of Scripture: "it is not at all necessary to extend it to the words or to the style of each sacred author; it is enough that the substance be inspired." There is no need to fear that the apostle's use of fallible reasoning renders their writings errant, for God's direction will prevent this. "The Holy Spirit guided them in such a way that they never made a mistake in what they have written; but one need not therefore believe that there is nothing in their expressions other than the divine and supernatural." As we shall later see, whether Simon meant to deny verbal inspiration will depend upon some very subtle issues arising out of the tradition of Jesuit theology in which Simon operated.

These seventeenth century debates over the nature of biblical inspiration awakened the Church to the human side of Scripture. It now seemed altogether implausible to suppose that the means of biblical inspiration was divine dictation to human authors. The authors' variety of styles, their divergence in narrating identical events, their evident effort in gathering information, their trivial remarks and grammatical mistakes all seemed to point to a more important role for them to play than that of mere scribes. Thus, free human agency had to be an essential element of any adequate doctrine of biblical inspiration. Together with the Church's historic commitment to the full breadth and depth of biblical inspiration, the element of human agency implies, in Pinnock's words, that "Divine inspiration is plenary, verbal, and confluent." By *plenary* inspiration it is meant that all of Scripture, not just portions of it, is inspired. Along with the great doctrines, even the *levicula* are God's Word. This does not imply that all parts of Scripture are equally important or equally relevant at various times and places, but all of it is God-breathed. By *verbal* inspiration it is meant that the very words of Scripture are inspired. The Bible, as a linguistic deposit, is God's Word. Hence, not merely the thoughts expressed, but the very language of Scripture is God-breathed. Finally, by *confluent* inspiration it is meant that Scripture is the product of dual authorship, human and divine. The human authors wrote freely and spontaneously, and yet God somehow was also at work through them to produce His Word. Hence, the writers of Scripture were not mere stenographers, but real authors, whose individuality shines through their works. At the same time, God is the author of Scripture, so that it can truly be affirmed, "The Holy Spirit said by David . . .," thereby guaranteeing Scripture's authority and inerrancy.

The Apparent Incoherence of Plenary, Verbal, Confluent Inspiration

But the obvious difficulty is that the above properties of inspiration seem to constitute an inconsistent triad. John Cardinal Newman wrestled aloud with the tension they present:

In what way inspiration is compatible with that personal agency on the part of its instruments, which the composition of the Bible evidences, we know not; but if any thing is certain, it is this,—that, though the Bible is inspired, and therefore, in one sense, written by God, yet very large portions of it, if not far the greater part of it, are written in as free and unconstrained a manner, and (apparently) with as little consciousness of a supernatural dictation or restraint, on the part of His earthly instruments, as if He had had no share in the work. As God rules the will, yet the will is free,—as He rules the course of the world, yet men conduct it,—so He has inspired the Bible, yet men have written it. Whatever else is true about it, this is true,—that we may speak of the history, or mode of its composition, as truly as of that of other books; we may speak of its writers having an object in view, being influenced by circumstances, being anxious, taking pains, purposely omitting or introducing things, supplying what others had left, or leaving things incomplete. Though the bible be inspired, it has all such characteristics as might attach to a book uninspired,—the characteristics of dialect and style, the distinct effects of times and places, youth and age, or moral and intellectual character; and I insist on this, lest in what I am going to say, I seem to forget (what I do not forget), that in spite of its human form, it has in it the spirit and the mind of God.

One will look in vain among the classical defenders of plenary, verbal inspiration for a resolution of this difficulty. Of the Lutheran dogmatists, Robert Preus confesses frankly,

The Lutheran doctrine of inspiration presents a paradox. On the one hand it was taught that God is the *auctor primarius* of Scripture, that He determined and provided the thoughts and actual words of Scripture and that no human cooperation concurred *efficienter* in producing Scripture. On the other hand it was maintained that the temperaments (*ingenia*), the research and feelings (*studia*), and the differences in background (*Nationes*) of the inspired writers are all clearly reflected in the Scriptures; that there is nothing docetic about Scripture; that God's spokesmen wrote willingly, consciously, spontaneously, and from the deepest personal spiritual conviction and experience; that psychologically and subjectively (*materialiter et subjective*) they were totally involved in the writing of Scripture. These two salient features of the doctrine of inspiration must be held in tension

Now it may seem utterly inconsistent that the Spirit of God could in one and the same action provide the very words of Scripture and accommodate Himself to the linguistic peculiarities and total personality of the individual writer so that these men wrote freely and spontaneously. But this is precisely what took place according to the Biblical evidence and data. And if Scripture does not inform us how both of these facts can be true, we must not do violence to either or try to probe the mystery of inspiration beyond what has been revealed. The Lutheran teachers are well aware that there is a lacuna in their theology at this point ...; and they are content to retain this logical gap and accept the paradox.

We should not sell the doctrine of accommodation short. After all, in choosing to inspire the biblical books at all, God has already accommodated Himself to speaking in the languages of Hebrew and Greek and has thus limited His expression to what the grammar and vocabulary of those languages permit. Having stooped so low, is it incredible that He should also take account of the further limitations and idiosyncrasies of each individual author, so that through one He speaks in the language of a shepherd, through another in the language of a civil

servant, and so on? To achieve truly idiomatic speech, perhaps God even deigns to speak ungrammatically on occasion. Perhaps, as Aquinas believed, God's instruction might be so subtle and mysterious that the human mind could be subjected to it without a person's knowing it, so that one is unable to discern whether his thoughts are produced by the divine instinct or by one's own spirit. Whether accommodation plausibly explains the *levicula* in Scripture is more doubtful. But the salient point is that accommodation still falls short of confluence: if the author's thoughts and sentences are the product of either the divine instinct or his own spirit, rather than both, then Scripture is not the product of dual authorship. There is then one author of Scripture, God, and one stenographer, man, to whom God dictates Scripture in a vernacular that makes it indistinguishable from the writer's own expression. Inspiration is not confluent. How inspiration can be confluent as well verbal and plenary is admitted to be a paradox.

Nor will we find much help *chez* the Reformed divines. B. B. Warfield of the old Princeton school maintains that the classical doctrine of inspiration "purposely declares nothing as to the mode of inspiration. The Reformed Churches admit that this is inscrutable. They content themselves with defining carefully and holding fast the effects of the divine influence, leaving the mode of divine action by which it is brought about draped in mystery." But what about Calvin's heavy use of the notion of dictation with respect to Scripture's inspiration? Warfield admits that Calvin "is somewhat addicted to the use of language which, strictly taken, would imply that the mode of their [*i.e.*, the Scriptures'] was 'dictation'." But he contends that "dictation" refers to the result or the effect of inspiration, not to its mode. The Scriptures have, in virtue of their inspiration, the quality of a dictation from God; but they were not dictated by God. "It is by no means to be imagined," declares Warfield, that the classical doctrine of inspiration "is meant to proclaim a mechanical theory of inspiration. The Reformed Churches have never held such a theory: though dishonest, careless, ignorant or overeager controverters of its doctrine have often brought the charge." The assertion that Calvin's notion of dictation is not "mechanical" is frequently made by Reformed thinkers. Taken literally, mechanical dictation would be dictation involving only one agent, the speaker, such as would take place when one utilizes a machine like a dictaphone or tape-recorder to register one's words. Non-mechanical dictation would then involve two agents, not only a speaker but also a secretary, who freely writes down the speaker's words and perhaps concurs with what the speaker is saying. Unfortunately, this sort of non-mechanical dictation is still insufficient for true confluence because while the secretary exercises freedom in agreeing to write or not, he exercises no freedom at all with respect to content or style: the words are not truly his. As Warfield rightly emphasized, "the gift of Scripture through its human authors took place by a process much more intimate than can be expressed by the term 'dictation'" Kenneth Kantzer believes that such an intimate process may be found in Calvin's own conception of inspiration:

In ordinary dictation . . . the secretary is active only to recognize and to copy words originating outside the mind of the secretary. This sort of dictation is by no means consistent with Calvin's view of the method of inspiration. As he interprets the facts, the sacred authors are active with their minds and whole personalities in the selection both of ideas and words. Scripture really originates in the mind of God, who is its ultimate author in the sense that He controls the mind and personality of the men He has chosen to write Scripture. By this means, God inspires the writers of Scripture (better breathes out through them as instruments) to speak to man exactly His chosen words as He wills. When, in Calvin's thought, the prophet is referred to as an instrument, he is by no means an instrument which simply passes on words mechanically given to him. Rather, because of God's sovereign control of his being, he is an

instrument whose whole personality expresses itself naturally to write exactly the words God wishes to speak. Only in this large and comprehensive sense are the words of Scripture dictated by God.

The difficulty of Kantzer's account is that while it seems to express the *desideratum* of confluence, it does not explain how this is achieved. How is it that God "sovereignly controls the mind and personality" of a biblical author so that his "whole personality expresses itself naturally to write exactly the words God wishes to speak"? Given Calvin's strong views on divine providence, the answer would seem to be that a very rigid determinism is in place whereby God, through the use of all causes under His control, shapes the biblical author like clay in such a way that he writes what God has pre-determined. But this is worse than secretarial dictation; it is, in fact, strict mechanical dictation, for man has been reduced to the level of a machine. God's causally determining Paul to write his Epistle to the Romans is incompatible with Paul's freely writing that epistle, on any plausible account of freedom. Absent human freedom, we are not only back to mechanical dictation, but also to mere accommodation as the ultimate account of the humanity of Scripture, since God is the only agent who determines what an author shall write. Genuine confluence, then, requires human freedom, such that there are at least two authors of any book of Scripture. That inspiration is plenary prevents confluence's being understood as the divine and human authors each writing different portions of Scripture; that inspiration is verbal precludes confluence's being interpreted to mean that God is the author of the ideas and a man the author of the words. The whole of Scripture, down to its very words, is the freely written word of both God and man. How can this be?

The tension in the classical doctrine of inspiration has in our own day been more precisely formulated by Randall and David Basinger. They are concerned to show that the traditional affirmation of biblical authority and inerrancy is inseparably wedded to the dictation theory of inspiration. If God alone were the author of Scripture, its inerrancy would be unproblematic; but given that the human authors write freely, how can God guarantee that they write what He desires? The defender of the classical doctrine of inspiration must argue along the following lines:

1. The words of the Bible are the product of free human activity.
2. Human activities (such as penning a book) can be totally controlled by God without violating human freedom.
3. God totally controlled what human authors did in fact write.
4. Therefore, the words of the Bible are God's utterances.
5. Whatever God utters is errorless.
6. Therefore, the words of the Bible are errorless.

This argument is as much an argument for the verbal, plenary inspiration of Scripture on the assumption of confluence as it is an argument for inerrancy. The key premiss is (2). Detractors of plenary, verbal inspiration will regard (2) as self-contradictory. The only way God could have totally controlled (an expression Basinger and Basinger take to be synonymous with "infallibly guaranteed") what the human authors wrote would have been to take away their freedom. The defender of classical inspiration, on the other hand, must affirm (2) if he is not to fall into a dictation theory of inspiration. Although Basinger and Basinger go on to argue that the defender of classical inspiration cannot, in view of his endorsement of (2), utilize the Free Will Defense with respect to the problem of evil, I think that the price of "placing direct responsibility on God for each instance of moral evil in the world" is so great

that their appeal to the problem of evil is more perspicuously understood in terms of evil's constituting evidence against (2). Given the reality of human evil and the fact that God cannot be the author of evil, (2) must be false. Accordingly, one can then argue:

1. The words of the Bible are the product of free human activity.
- 2'. Human activities (and their products) cannot be totally controlled by God without violating human freedom.
7. The doctrine of the verbal, plenary inspiration of the Bible entails God's total control of the words of the Bible.
8. Therefore, the doctrine of the verbal, plenary inspiration of the Bible is false.

If one persists in affirming the doctrine of verbal, plenary inspiration, then, since (7) is true virtually by definition, one must deny (1); that is to say, verbal, plenary inspiration implies dictation. The bottom line is that the doctrine of the plenary, verbal, confluent inspiration of Scripture is incoherent.

The response to Basinger and Basinger on the part of defenders of classical inspiration has not been encouraging. New Testament scholar D. A. Carson agrees that their argument that "is valid," by which he evidently means "sound," since he does not dispute the truth of their premisses. Carson agrees that the classical doctrine of inspiration is incompatible with the Free Will Defense. But he does not see this as in any way problematic. On the one hand, the notion of divine/human confluent activity lies at the very heart of the Christian faith, since the major redemptive acts of history were wrought by both God and man:

. . . the conspirators did what God Himself decided beforehand should happen. Yet the conspirators are not thereby excused: they are still regarded as guilty. Any other view will either depreciate the heinousness of the sin or render the Cross a last minute arrangement by which God cleverly snatched victory out of the jaws of defeat, rather than the heart of His redemptive purposes.

If we permit divine human *concursum* in redemptive history, Carson asks, why not also in biblical inspiration? This line of response seems to indicate that Carson would accept (2) and reject the Free Will Defense. In fact, he does go on to dismiss that defense; but he does so in such a way as to call into question his commitment to (2). For he says, "human responsibility can be grounded in something other than 'free will,' where free will is understood to entail absolute power to the contrary" and footnotes Jonathan Edwards and other defenders of a compatibilist view of freedom. But if one is a compatibilist about human freedom, then (wholly apart from the difficulties this occasions for theodicy) the sort of freedom envisioned in (1) seems inadequate to secure confluence. One has advanced no further than a deterministic doctrine of providence which turns the authors of Scripture into robots. One has not lived up to the charge of Carson's co-editor John Woodbridge that "We must spell out unequivocally our full commitment to the human authorship and full freedom of the biblical writers as human authors" nor have we stayed true to what Carson himself calls "the central line of evangelical thought . . . : God in His sovereignty . . . super-intended the freely composed human writings we call the Scriptures." Rather we have simply watered down the concept of freedom so as to be able to affirm determinism and, hence, God's total control.

Norman Geisler, on the other hand, argues that the Basingers' argument is not sound. Unfortunately, his critique is not as clear as it could be, and the Basingers are able to point out a number of misunderstandings in their reply to Geisler. These misunderstandings not

withstanding, there are, I think, a couple of points in Geisler's critique to which Basinger and Basinger have not given due attention. First, Geisler, in effect, challenges (3). He observes that a purely human utterance may be inerrant; if, then, a true statement is made by both God and man, God need not totally control the human author in order for the statement to be without error. By extension all the statements of Scripture could be errorless and have both God and human beings as their authors, yet without God's exercising total control over what the human authors wrote. If (3) is false, then the defender of biblical inerrancy does not assume (2) in defense of his doctrine; rather he defends his position on the basis of (4–6) alone. Now Geisler is obviously correct that total divine control of human authors is not a necessary condition of the inerrancy of their writings. Nonetheless the denial of (3) is so outrageously improbable that (3) is doubtlessly true. Otherwise we should be forced to say that the biblical authors of their own free will just *happened* to write exactly the sentences which God wanted as His own utterances. In any case, if I am correct that what is at stake here is not so much inerrancy as plenary, verbal inspiration, then (7) tells us that the truth of that doctrine entails (3). For God and man did not merely *concur* in tokening separately the same Scriptural sentence–types; rather the doctrine of inspiration holds that the human author's sentence–tokens are identical with God's sentence–tokens; God tokens the sentences *through* the human author; his words are God's words. Thus, God must in some way so control the author as to speak through him. The control is "total" in that it extends to the very words of Scripture. Hence, Geisler's first objection fails to show why the defender of inspiration is not committed to (3) and, if he wishes to avoid dictation, therefore (2).

But Geisler has a second line of attack. He exposes a hidden assumption in Basinger and Basinger's reasoning, towit,

9. If God can infallibly guarantee what some men will do, then He can do the same
for all,

an assumption which Geisler rejects as false. Geisler is quite correct that the Basingers make this assumption, for (2) may be taken in the sense of

2*. Some human activities (such as penning a book) can be totally controlled by God without violating human freedom, *i.e.*, $(\exists x) (Hx \cdot Cx \cdot \sim Vx)$

or

2**. All human activities (such as penning a book) can be totally controlled by God without violating human freedom, *i.e.*, $(\forall x) (Hx \supset [Cx \cdot \sim Vx])$.

The Basingers require (2**) for their argument to be sound. But one could maintain that while it is within God's power to control the writing of Scripture without violating human freedom, that does not imply that God can so control human activity in general that no one ever freely does evil. In order for the classical doctrine of inspiration to be incompatible with the Free Will Defense, (2) must be taken as universally quantified rather than as existentially quantified. But now a familiar move in the Free Will defense may be turned against Basinger and Basinger: (2), so understood, is neither necessary nor essential to Christian theism nor a logical consequence of propositions that are; nor is the person who fails to see that (2) has these qualities intellectually deficient in some way. Therefore, no incompatibility has been

demonstrated between the classical doctrine of inspiration and the Free Will defense. Basinger and Basinger's reply at this point is faltering:

Geisler . . . denies that people who believe that God infallibly guaranteed that the writers of Scripture freely produced an inerrant work must also believe that God can infallibly guarantee that all individuals will always freely do what he wants

But is this true? Can God infallibly guarantee that any single human action will *freely* occur if he cannot totally control all *free* human action ...? We believe not if ([2]) is false, then God can never *guarantee* that any human will freely do what he wants.

But this amounts to nothing but a personal confession of belief on the Basinger's part. It needs to be remembered that Basinger and Basinger are making the very strong claim that "Any person wanting to *both* use the free will defence in his theodicy *and*, at the same time, defend inerrancy against dictation is attempting the impossible One cannot have it both ways" But in order to show these doctrines to be broadly logically incompatible, they must come up with a proposition whose conjunction with the propositions formulating each doctrine is logically inconsistent and which meets the above stipulated conditions, and (2) is definitely not it.

A Middle Knowledge Perspective

But where does this leave us? I suggested that Basinger and Basinger's argument might be more perspicaciously understood as claiming that human evil constitutes evidence against (2). That is to say, given (2*) , (2**) is highly probable. For if God can control human activities in such exquisite detail as to produce through free agents a Scripture which is verbally and plenarily inspired, then there seems no reason why He could not control human activities such that people always freely refrain from sin. Given, then, the evil in the world, (2') is probably true. But if (2') is probably true, then, as argued, the doctrine of verbal, plenary inspiration is probably false.

To defeat this argument what is needed is some plausible, positive account of how God can control free human activities in such a way as to yield inspired Scripture without being able simultaneously to control free human activities in such a way as to prevent evil. Here Geisler is less helpful. He suggests,

The way God 'can' guarantee that some do not perform evil (or err) is by knowing infallibly that they will freely do good. It does not follow that God can do this for those who freely choose to do evil. For in this case God would have to force them to do contrary to their free choice.

On Geisler's view, "since God knows (and so determines) which men will utter truth and when, then God can also affirm these truths as his infallibly true Word." There are two problems with this suggestion: (1) It appears to endorse an untenable theological fatalism springing from the fact of divine foreknowledge. The suggestion seems to be that future acts, whether good or bad, are somehow fixed in virtue of God's infallible foreknowledge of them. But as numerous thinkers have shown, such an inference is simply logically fallacious. Since God's foreknowledge is counterfactually dependent upon future contingents, they can fail to happen until they do happen; were they to fail to happen, then God would have foreknown differently than He does. (2) Divine foreknowledge is insufficient for providential control of the authors of Scripture. Foreknowledge only informs God of what the authors of Scripture

will freely write; but such knowledge comes too late in the order of explanation for God to do anything about it. The problem is not that God would have to "force them to do contrary to their free choice." Rather it is logically impossible to *change* the future. Geisler in effect misplaces the divine creative decree *later* in the order of explanation than divine foreknowledge, rather than *before*. Thus on his view God must consider Himself extraordinarily lucky that He finds Himself in a world in which the writers of Scripture just happen to freely respond to their circumstances (including the promptings of His Spirit) in just the right ways as to produce the Bible. This is incompatible with a robust view of divine providence.

Geisler does, however, hint at the account we are looking for. In asking why some men were providentially preserved from error while others were not kept from error (or evil) at every time, he suggests,

It may have been because only some men freely chose to co-operate with the Spirit so that he could guide them in an errorless way. Or it may have been that the Holy Spirit simply chose to use those men and occasions which he infallibly knew would not produce error.

Here we are speaking not of simple foreknowledge, but of God's counterfactual knowledge. It involves His knowledge of what some creature would freely do, were he to be placed in a specific set of circumstances. If God has such knowledge explanatorily prior to His creative decree then such knowledge is what theologians have called middle knowledge (*media scientia*). Largely the product of the creative genius of the Spanish Jesuit of the Counter-Reformation Luis Molina (1535–1600), the doctrine of middle knowledge proposes to furnish an analysis of divine knowledge in terms of three logical moments. Although whatever God knows, He has known from eternity, so that there is no temporal succession in God's knowledge, nonetheless there does exist a sort of logical succession in God's knowledge in that His knowledge of certain propositions is conditionally or explanatorily prior to His knowledge of certain other propositions. That is to say, God's knowledge of a particular set of propositions depends asymmetrically on His knowledge of a certain other set of propositions and is in this sense posterior to it. In the first, unconditioned moment God knows all *possibilia*, not only all individual essences, but also all possible worlds. Molina calls such knowledge "natural knowledge" because the content of such knowledge is essential to God and in no way depends on the free decisions of His will. By means of His natural knowledge, then, God has knowledge of every contingent state of affairs which could possibly obtain and of what the exemplification of the individual essence of any free creature could freely choose to do in any such state of affairs that should be actual.

In the second moment, God possesses knowledge of all true counterfactual propositions, including counterfactuals of creaturely freedom. That is to say, He knows what contingent states of affairs would obtain if certain antecedent states of affairs were to obtain; whereas by His natural knowledge God knew what any free creature *could* do in any set of circumstances, now in this second moment God knows what any free creature *would* do in any set of circumstances. This is not because the circumstances causally determine the creature's choice, but simply because this is how the creature would freely choose. God thus knows that were He to actualize certain states of affairs, then certain other contingent states of affairs would obtain. Molina calls this counterfactual knowledge "middle knowledge" because it stands in between the first and third moment in divine knowledge. Middle knowledge is like natural knowledge in that such knowledge does not depend on any decision of the divine will; God

does not determine which counterfactuals of creaturely freedom are true or false. Thus, if it is true that

If some agent *S* were placed in circumstances *C*, then he would freely perform action *a*,

then even God in His omnipotence cannot bring it about that *S* would refrain from *a* if he were placed in *C*. On the other hand, middle knowledge is unlike natural knowledge in that the content of His middle knowledge is not essential to God. True counterfactuals of freedom are contingently true; *S* could freely decide to refrain from *a* in *C*, so that different counterfactuals could be true and be known by God than those that are. Hence, although it is essential to God that He have middle knowledge, it is not essential to Him to have middle knowledge of those particular propositions which He does in fact know.

Intervening between the second and third moments of divine knowledge stands God's free decree to actualize a world known by Him to be realizable on the basis of His middle knowledge. By His natural knowledge, God knows what is the entire range of logically possible worlds; by His middle knowledge He knows, in effect, what is the proper subset of those worlds which it is feasible for Him to actualize. By a free decision, God decrees to actualize one of those worlds known to Him through His middle knowledge. According to Molina, this decision is the result of a complete and unlimited deliberation by means of which God considers and weighs every possible circumstance and its ramifications and decides to settle on the particular world He desires. Hence, logically prior, if not chronologically prior, to God's creation of the world is the divine deliberation concerning which world to actualize.

Given God's free decision to actualize a world, in the third and final moment God possesses knowledge of all remaining propositions that are in fact true in the actual world. Such knowledge is denominated "free knowledge" by Molina because it is logically posterior to the decision of the divine will to actualize a world. The content of such knowledge is clearly not essential to God, since He could have decreed to actualize a different world. Had He done so, the content of His free knowledge would be different.

Molina's doctrine has profound implications for divine providence. For it enables God to exercise providential control of free creatures without abridging the free exercise of their wills. In virtue of His knowledge of counterfactuals of creaturely freedom and His freedom to decree that certain circumstances exist and certain free creatures be placed in those circumstances, God is able to bring about indirectly that events occur which He knew would happen as a direct result of the particular decisions which those creatures would freely make in those circumstances. Plantinga has provided an analysis of such providential control in terms of what he calls *strong* and *weak actualization*. God is said to strongly actualize a state of affairs *S* if and only if He causes *S* to be actual and also causes to be actual every contingent state of affairs *S** included in *S* (where *S* includes *S** if and only if it is impossible that *S* be actual and *S** not be actual). God is said to weakly actualize a state of affairs *S* if and only if He strongly actualizes a state of affairs *S** that counterfactually implies *S* (that is, were *S** to obtain, then *S* would obtain). Then God can weakly actualize any state of affairs *S* if and only if there is a state of affairs *S** such that (i) it is within God's power to strongly actualize *S**, and (ii) if God were to strongly actualize *S**, then *S* would be actual. Weak actualization is clearly compatible with human freedom, since the actualized state of affairs *S* obtains in virtue of the counterfactual of creaturely freedom which connects *S* to *S**. Thus, God knew, for example, that were He to create the Apostle Paul in just the circumstances he was in around AD 55, he would freely write to the Corinthian church, saying just what he did in fact say. It

needs to be emphasized that those circumstances included not only Paul's background, personality, environment, and so forth, but also any promptings or gifts of the Holy Spirit to which God knew Paul would freely respond.

The theological application to the doctrine of inspiration is obvious. By weakly actualizing the composition of the books of the Bible, God can bring it about that biblical inspiration is in the fullest sense confluent. The Epistle to the Romans, for example, is truly the work of Paul, who freely wrote it and whose personality and idiosyncrasies are reflected therein. The style is his because he is the author. The words are his, for he freely chose them. The argument and reasoning are the reflection of his own mind, for no one dictated the premisses to him. Neither did God dictate *levicula* like the greetings ("Greet Asyncritus, Phlegon, Hermes," etc.); these are spontaneous salutations which God knew Paul would deliver under such circumstances; so also the interjection of his amanuensis Tertius (Rom. 16.22). Paul's full range of emotions, his memory lapses (I Cor. 1.14–16), his personal asides (Gal. 6.11) are all authentic products of human consciousness. God knew what Paul would freely write in the various circumstances in which he found himself and weakly actualized the writing of the Pauline corpus. Perhaps some features of Paul's letters are a matter of indifference to God: maybe it would not have mattered to God whether Paul greeted Phlegon or not; perhaps God would have been just as pleased had Paul worded some things differently; perhaps the Scripture need not have been just as it is to accomplish God's purposes. We cannot know. But we can confess that Scripture as it does stand is God-breathed and therefore authoritative. The Bible says what God wanted to say and communicates His message of salvation to mankind.

Some of the statements of the defenders of the classic doctrine of verbal, plenary, confluent inspiration fairly cry out for such a middle knowledge perspective. Here is what Warfield, for example, has to say about the inspiration of Paul's letters:

So soon, however, as we seriously endeavor to form for ourselves a clear conception of the precise nature of the Divine action in this "breathing out" of the Scriptures—this "bearing" of the writers of the Scriptures to their appointed goal of the production of a book of Divine trustworthiness and indefectible authority—we become acutely aware of a more deeply lying and much wider problem, apart from which this one of inspiration, technically so called, cannot be profitably considered. This is the general problem of the origin of the Scriptures and the part of God in all that complex of processes by the interaction of which these books, which we call the sacred Scriptures, with all their peculiarities, and all their qualities of whatever sort, have been brought into being. For, of course, these books were not produced suddenly, by some miraculous act—handed down complete out of heaven, as the phrase goes; but, like all other products of time, are the ultimate effect of many processes cooperating through long periods. There is to be considered, for instance, the preparation of the material which forms the subject-matter of these books: in a sacred history, say, for example, to be narrated; or in a religious experience which may serve as a norm for record; or in a logical elaboration of the contents of revelation which may be placed at the service of God's people; or in the progressive revelation of Divine truth itself, supplying their culminating contents. And there is the preparation of the men to write these books to be considered, a preparation physical, intellectual, spiritual, which must have attended them throughout their whole lives, and, indeed, must have had its beginning in their remote ancestors, and the effect of which was to bring the right men to the right places at the right times, with the right endowments, impulses, acquirements, to write just the books which were designed for them. When "inspiration," technically so called, is superinduced on lines of preparation like these, it takes on quite a different aspect from that which it bears when it is thought of as an isolated action

of the Divine Spirit operating out of all relation to historical processes. Representations are sometimes made as if, when God wished to produce sacred books which would incorporate His will—a series of letters like those of Paul, for example—He was reduced to the necessity of going down to earth and painfully scrutinizing the men He found there, seeking anxiously for the one who, on the whole, promised best for His purpose; and then violently forcing the material He wished expressed through him, against his natural bent, and with as little loss from his recalcitrant characteristics as possible. Of course, nothing of the sort took place. If God wished to give His people a series of letters like Paul's He prepared a Paul to write them, and the Paul He brought to the task was a Paul who spontaneously would write just such letters.

Divine middle knowledge illumines such an interpretation, since God knew what Paul would write if placed in such circumstances and knew how to bring about such circumstances without extinguishing human freedom along the way. Warfield comments that when we give due weight in our thinking to the universality of providence, to the minuteness and completeness of its sway, to its invariable efficacy, then we may wonder that anything "is needed beyond this mere providential government to secure the production of sacred books, which should be in every detail absolutely accordant with the Divine will." Revelation will be needed in some cases for truths not accessible through natural reason. Moreover, we must never forget that the circumstances known to God include, not exclude, all those movements of the Holy Spirit in an author's heart to which God knew the writer would respond in appropriate ways.

Given the doctrine of middle knowledge, then, we see how plenary, verbal, confluent inspiration can, *pace* Spinoza, Le Clerc, and Simon, be coherently affirmed. The distinction between strong and weak actualization reveals how the control described in (2) by Basinger and Basinger is possible. We can understand how the divine/human confluence in the events of redemptive history as insisted on by Carson is possible without falling into determinism. Finally, we can see why Geisler was right to maintain that God's ability to control the free composition of Scripture does not imply His ability to so control the free actions of all persons that a world containing as much good as the actual world but with less evil would be actualized. God might well have requisite control of the authors of Scripture to ensure that Scripture would be freely written without having requisite control of all human beings to ensure that less evil, but the same amount of good, would be freely wrought. In fact, God's placing a premium on actualizing a world in which the requisite counterfactuals of creaturely freedom are true for the free composition of Scripture are true might require Him to forego worlds in which counterfactuals requisite for an otherwise better balance of good and evil are true. Indeed, the existence of Scripture in the world might actually serve to increase the amount of evil in the world by exacerbating sinful desires (Rom. 7.7–8)! It all depends on which counterfactuals of creaturely freedom are true, a contingency over which God has no control. A world in which Scripture is freely composed and in which the balance between good and evil is more optimal than it is in the actual world may not be feasible for God. Basinger and Basinger are in effect claiming that

10. A world in which an inspired, inerrant Scripture is freely written is feasible for God
and

11. A world containing as much good as the actual world without as much evil is not feasible for God

are broadly logically incompatible or, at least, improbable each with respect to the other. But such claims are pure speculation; we are simply not in an epistemic position to make responsibility such pronouncements. Thus, in the area of biblical inspiration, as in so many other areas of theology, the doctrine of divine middle knowledge proves to be a fruitful resource in shedding light on seemingly irresolvable old conundrums. The doctrine is, of course, controversial and has many detractors, but the objections lodged against that doctrine are far from compelling.

Historical Precedents

When one hits upon what one takes to be an original idea, it is somewhat deflating (but nonetheless encouraging) to discover that one is retracing largely forgotten paths explored previous thinkers. When I conceived the idea of enunciating a middle knowledge perspective on biblical inspiration, I was unaware that it, or something rather like it, had been done before. Indeed, I was chagrined to learn from Burtchaell that it was, in fact, "the most venerable" of those "discredited views from which practically every writer [in the nineteenth century] took comfort in disassociating himself in his footnotes."

In 1588, the same year that saw the publication of Molina's *Concordia*, a papal brief was issued declaring a moratorium on a controversy involving a young Jesuit theologian of the University of Louvain Leonard Leys (Lessius) concerning a long list of theological charges which had been brought against him. The previous year, the theological faculty had extracted from his students' notes 34 propositions which they publicly condemned. Three of these dealt with the subject of biblical inspiration. They read:

- i. For anything to be Holy Scripture, its individual words need not be inspired by the Holy Spirit.
- ii. The individual truths and statements need not be immediately inspired in the writer by the Holy Spirit.
- iii. If any book . . . were to be written through purely human endeavor without the assistance of the Holy Spirit, and He should then certify that there was nothing false therein, the book would become Holy Scripture.

The theological faculty of the University of Louvain censured Lessius for these propositions, stating that Sacred Scripture is not the word of man, but the Word of God, dictated by the Holy Spirit. The University of Douay joined in the censure, explaining that dictation is not just a suggestion in general, but of the words themselves: there is not a syllable or accent in Scripture which is trifling or superfluous.

Now among the other propositions condemned were statements concerning grace and free will which indicated that Lessius was groping for the doctrine of middle knowledge which Molina first succeeded in formulating clearly and accurately. According to Burtchaell,

The crux of the Louvain–Jesuit dispute was this issue of grace and free–will. The three censured propositions on inspiration formed but a small part of a total of thirty–two which bore on this larger problem. The faculty rightly saw that Lessius's inspiration hypotheses were the logical application of the general Jesuit idea of grace: they provided for both divine authorship and human literary freedom by making divine intervention only indirect.

Whether we regard Lessius as, in Woodbridge's epithet, a "slippery" theologian or a subtle dialectician will probably depend on our openness to the Molinist point of view. Claiming that he had been misunderstood, Lessius wrote an *Apologia* in which he explained how he interpreted the disputed propositions. By (i) and (ii) he meant that the authors of Scripture did not need a new and positive inspiration or new illumination from God to write down each word of Scripture. As he later explained,

We are teaching that, for anything to be Holy Scripture, its every word and statement need not be positively and absolutely inspired in the author, with the Holy Spirit supplying and forming in his mind the individual words and statements. It is enough that the sacred writer be divinely drawn to write down what he sees, hears, or knows otherwise, that he enjoy the infallible assistance of the Holy Spirit to prevent him from mistakes even in matters he knows on the word of others, or from his own experience, or by his own natural reasoning. It is this assistance of the Holy Spirit that gives Scripture its infallible truth.

He gave two reasons in support of his position: (1) The Evangelists did not need a new revelation to record the life of Jesus, since they either were witnesses themselves or had historical tradition of it. (2) The Holy Spirit chose competent instruments, gifted with the ability to express themselves, whom He then stirred to write of what they knew and whom He assisted to keep [them] from error.

Mangenot observes that taken literally Lessius's propositions (i) and (ii) would be incompatible with the inspiration of Scripture; but it is evident from the above that what he was really exercised to do was to deny the dictation theory of inspiration. Lessius insisted that the impulse and assistance of the Holy Spirit were compatible with the human author's recalling things from memory, organizing his material, utilizing his peculiar style of expression, and so on. He affirmed that the entire Scripture is the Word of God and was even, in a certain sense, dictated by the Holy Spirit. We have seen that even so redoubtable a champion of verbal inspiration as Warfield affirmed that dictation has reference to the result, not the mode, of inspiration, and Lessius seems to affirm the same.

According to Burtchaell, Lessius's three propositions reduce God's role in the production of Scripture to (i) the supplying of ideas, but not words, (ii) the protection from error, and (iii) the *post factum* guarantee of inerrancy. Eventually these became the official party line of the Jesuits. But it seems to me that these inferences arise from misunderstandings of the nature of inspiration which are no part of a middle knowledge perspective. Lessius seems to be guilty of two confusions: (1) He conflates the notions of inspiration and revelation, and (2) he thinks of inspiration as a property of the authors, rather than of the text, of Scripture. Both of these are common mistakes which were gestating since the time of the Church Fathers and would finally find their ugly issue in Spinoza's *Tractatus*. With respect to (1) the mistake arises by treating all Scripture on the model of prophecy. As a direct revelation from God, prophecy communicates information which transcends natural knowledge; things naturally known by the human authors of Scripture have not, therefore, been directly revealed to them by God. Thus, if inspiration is co-extensive with revelation, then when the authors of Scripture write of matters which they already know, it follows that they are not inspired. But since "all Scripture is inspired by God" (2 Tim. 3.16) this conflation is clearly a mistake, for not all Scripture is of the genre of prophecy. Even Scripture which does not involve the direct revelation of supernatural knowledge by God is inspired. Thus, Lessius's point that the Evangelists did not need a new revelation to record Jesus's life is no proof that the gospels are not inspired. With respect to (2), the Scripture states that it is the *text*, not the authors, of

Scripture which is inspired (2 Tim. 3.16). True, the prophets were moved by the Holy Spirit to speak (1 Pet. 1.21), but it is a mistake to equate inspiration with this movement, so as to imply that because Scripture is verbally inspired therefore the authors were moved immediately by the Holy Spirit to write *that* or *this* particular word. It is the Scripture which is God-breathed, not the authors. Thus, it is wholly erroneous to think that use of memory, research, effort, borrowing, and so forth, on the part of the author is incompatible with the final result of his labors, the text, being inspired. Thus, to speak, as Lessius does, of the authors' having no need of new and positive inspiration for writing what they did is to misconstrue inspiration as a sort of illumination of the author's mind—which, he rightly observes, seems unnecessary for much of Scripture—rather than as a quality of the final text, the quality of being God's Word. When Lessius denies that the Holy Spirit inspired Paul to write, "Luke alone is with me; Trophimus I left ill at Miletus" (2 Tim. 4.20), he is tilting at windmills.

Once we understand that inspiration is a property of the text, not the authors, then we shall not be tempted to embrace the view, popular among Lessius's successors until its condemnation at Vatican I, that inspiration consists merely in a sort of watchdog role for the Holy Spirit of preventing the biblical authors from falling into error. Such a role is compatible with human freedom and no doubt is part of the Spirit's superintendence of the composition of Scripture along with the providential preparation of the authors; but it is not what inspiration is. Nor shall we be tempted to embrace another vestige of Lessius, what is known in German theology as *Realinspiration*, the theory that God inspired the propositional content of Scripture and the human authors supplied its linguistic expression. Under the influence of the Jesuit tradition, this seems to have been the position adopted by Simon. This theory again misconstrues inspiration as a work of God in the authors' minds, providing them with propositional content which they clothe with words. A little reflection reveals that such a theory, besides misconstruing the nature of inspiration, actually constricts the authors' freedom, since they are not free to express whatever propositions they wish but only those God gives them. Moreover, the propositional content of Scripture may be so specific as to require certain words and expressions in a given language, so that we again approach dictation. The theory does nothing to explain the *levicula*. And it remains mysterious how God could communicate His propositional truth to someone wholly without linguistic formulation. Thus, once we distinguish inspiration from revelation and understand inspiration to be a property belonging to the text, we see that a middle knowledge perspective in no wise denies that the very words of Scripture are inspired nor does it limit the Spirit's role to the merely negative role of protection from error.

Lessius's third proposition and the inference drawn from it raise the issue of what distinguishes Scripture as God's Word, if it is not dictated by the Holy Spirit. The proposition presents a clear *non sequitur* in implying that a book would become Scripture merely in virtue of the Spirit's certifying it to be inerrant. Inerrancy is a necessary, but not a sufficient, condition of being God's Word. Lessius qualified his position by saying that a statement later certified to be true by the Holy Spirit would be as authoritative as if the Spirit had uttered it through a prophet. I see no reason to object; but again there is no reason to think that such a true statement should then be incorporated into the canon of Scripture. The real question raised by Lessius's third proposition is whether some book of Scripture might not have been written without any special assistance by the Holy Spirit and yet still be inspired in virtue of the Spirit's ratification of it as His Word. Lessius gives the very intriguing illustration of a King who by approving and signing a document his secretary has drawn up makes it his own royal decree. Now from a middle knowledge perspective, there is no question of God's later ratifying a document which He did not foreknow or did not providentially bring about. Rather

the question is whether God could be confronted with counterfactuals of creaturely freedom which are such as to permit Him to produce a book of Scripture by means of His providence alone without His acting as a primary cause influencing the act of writing itself. I see no reason to think that this is impossible. But then what, we may ask, would distinguish such a book as Scripture as opposed to any other product of human effort equally under the general providence of God? Presumably the answer would lie in God's intent to bring about a book designed to make us wise unto salvation and ultimately by His ratification of that book as His Word to us.

Now if such a middle knowledge perspective on biblical inspiration found expression, however inchoately, in the sixteenth and seventeenth centuries, why was it abandoned? Burtchaell mentions three reasons: (1) If the minimal requirement for biblical writing were divine preservation from error, then the Scripture are not distinguished from official Church proclamations which also enjoy this protection. Part of the answer to this objection, from a Protestant viewpoint, is that Scripture alone has this special protection and hence alone is authoritative (*sola Scriptura*). More fundamentally, what distinguishes a writing as Scripture is God's intent that that writing be His gracious Word to mankind. (2) Infallibility is insufficient to make a human utterance into the Word of God. I readily agree. Even if some book of Scripture were written without any special promptings or assistance of the Holy Spirit, it is Scripture, not in virtue of its inerrancy, but because God in His providence prepared such a book to be His Word to us. (3) The theory is too conservative and so was eclipsed. But it is not a middle knowledge theory of inspiration which is too conservative; rather what is deemed too conservative is the theory of verbal, plenary, confluent inspiration, since it implies the inerrancy of Scripture. That issue is not under discussion here; rather the question we have been exploring is whether the doctrine of the verbal, plenary, confluent inspiration of Scripture is coherent. Given a middle knowledge perspective, the coherence of the classical doctrine becomes perspicuous.

Conclusion

In conclusion, it seems to me that the traditional doctrine of the plenary, verbal, confluent inspiration of Scripture is a coherent doctrine, given divine middle knowledge. Because God knew the relevant counterfactuals of creaturely freedom, He was able to decree a world containing just those circumstances and persons such that the authors of Scripture would freely compose their respective writings, which God intended to be His gracious Word to us. In the providence of God, the Bible is thus both the Word of God and the word of man.

On Hasker's Defense of Anti-Molinism

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he

first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

In a pair of recent articles, William Hasker has attempted to defend Robert Adams's new anti-Molinist argument. But I argue that the sense of explanatory priority operative in the argument is either equivocal or, if a univocal sense can be given to it, it is either so generic that we should have to deny its transitivity or so weak that it would not be incompatible with human freedom.

"On Hasker's Defense of Anti-Molinism." *Faith and Philosophy* 15 (1998): 236-239.

In a pair of recent articles{1} William Hasker has endorsed and defended Robert Adams's new anti-Molinist argument{2}:

1. According to Molinism, the truth of all true counterfactuals of freedom about us is explanatorily prior to God's decision to create us.
2. God's decision to create us is explanatorily prior to our existence.
3. Our existence is explanatorily prior to all of our choices and actions.
4. The relation of explanatory priority is transitive.
5. Therefore it follows from Molinism (by 1-4) that the truth of all true counterfactuals of freedom about us is explanatorily prior to all of our choices and actions.
10. It follows also from Molinism that if I freely do action A in circumstances C, then there is a true counterfactual of freedom F*, which says that if I were in C, then I would (freely) do A.
11. Therefore, it follows from Molinism that if I freely do A in C, the truth of F* is explanatorily prior to my choosing and acting as I do in C.
12. If I freely do A in C, no truth that is strictly inconsistent with my refraining from A in C is explanatorily prior to my choosing and acting as I do in C.
13. The truth of F* (which says that if I were in C, then I would do A) is strictly inconsistent with my refraining from A in C.
14. If Molinism is true, then if I freely do A in C, F* both is (by 11) and is not (by 12-13) explanatorily prior to my choosing and acting as I do in C.
15. Therefore, (by 14) if Molinism is true, then I do not freely do A in C.

Hasker likes this argument because it has the advantage of avoiding reliance on one of the most controversial premisses of his own critique of middle knowledge; moreover, he considers it immune to objections which have been lodged against it.

In response to Adams's argument, I had complained that the notion of "explanatory priority" employed is equivocal and that if a univocal sense can be given it, there is no reason to expect it to be transitive.{3} I maintained that none of the senses of "explanatory priority" operative

in (1)-(3) have application to the peculiar priority inferred in (5). I offered the following parallel argument as an illustration: suppose my wife and I are considering starting a family and that we come to believe that

A.* If children were born to us, they would come to love God.

Since this is important to us, we decide to start a family. Accordingly,

1*. The truth of (A*) is explanatorily prior to our decision to have children.

It is also undeniably true that

2*. Our decision to have children is explanatorily prior to the existence of our children.

3*. Our children's existence is explanatorily prior to their coming to love God.

So if (4) is true, we must conclude that

5*. The truth of (A*) is explanatorily prior to our children's coming to love God.

But the sense of explanatory priority in (5*) is utterly obscure.

Hasker defends Adams's argument against the charge of equivocity by enunciating a very broad conception of explanatory priority which is univocal in (1)-(3) and yet transitive: for contingent states of affairs p and q ,

EP: p is explanatorily prior to q iff p must be included in a complete explanation of why q obtains

Hasker asserts, "It should be apparent that explanatory priority as explicated by (EP) is transitive: if p is explanatorily prior to q , and q to r , then clearly p must be included in a complete explanation of why r obtains." {4} But this is not at all clear. As Hasker observes, such a relation must also be irreflexive: "a contingent state of affairs cannot constitute an explanation (in whole or in part) of itself." {5} But if the relation described by (EP) is transitive, then it seems that the condition of irreflexivity is violated. My wife and I not infrequently find ourselves in the situation that I want to do something if she wants to do it, and she wants to do it if I want to do it. Suppose, then, that John is going to the party because Mary is going, and Mary is going to the party because John is going. It follows that if the (EP) relation is transitive, John is going to the party because John is going to the party, which conclusion is obviously wrong. Not only is such a conclusion explanatorily vacuous, but it also implies, in conjunction with (12), that John does not freely go to the party--the very conclusion Hasker wants to avoid. {6}

Hasker also rebuts my counter-example based on (A*), noting that what is explanatorily prior to our decision is merely our (fallible) *belief* that (A*) is true. But the disanalogy noted by Hasker is not an essential part of the illustration. My aim was to construct a parallel to Adams's (1)-(5) in which we as pro-creators take God's place as Creator and our children take our place as the products of (pro-)creation. (A*) is then explanatorily prior to our decision in the same way that counterfactuals of creaturely freedom are explanatorily prior to God's decision. It is incidental to the issue of the transitivity and equivocity of explanatory priority whether our belief that (A*) is knowledge or infallible; if desired, we can stipulate that we

acquired such knowledge via the psychic hotline or a prophetic word from God. Thus, the illustration succeeds in showing the equivocality of Adams's argument or the intransitivity of the explanatory priority involved.

Now, of course, in a certain sense the Molinist agrees that the truth of all true counterfactuals of freedom about us is explanatorily prior to all of our choices and actions, as (5) states, though this does not follow from (1)-(4). For presumably the divine creative decree was guided by God's knowledge of true counterfactuals of creaturely freedom. But I also argued that Adams's (12) is false, first, because it represents the fallacious reasoning of fatalism and, second, because my being able to refrain from doing A in C is not a necessary condition of my freely doing A in C, so that the argument is unsound.

In his "Middle Knowledge: a Refutation Revisited," Hasker endorses Adams's (12);{7} but he fails to respond to my two criticisms of it. Instead, he attempts to formulate an explication of "brings about" which is equivalent to his favored Power Entailment Principle.{8} That principle is vital to his inference that if one can bring it about that $A \& \sim B$, then one can bring it about that $A \Box \rightarrow \sim B$, which Hasker claims to have proven impossible. Unfortunately, Hasker has yet to answer either my intuitive objections to his principle{9} or my counter-examples to it.{10} If we accept my proposed alternative

PEP₅: If it is in S's power to bring it about that P, and "P" entails "Q" and "Q" is false, and Q is a consequence of P, then it is in S's power to bring it about that Q

then, plausibly, $A \Box \rightarrow \sim B$ is not a consequence of $A \& \sim B$, and so one's bringing about the latter does not entail that one brings about the former. Suppose, for example, that I hear a knock at the door and go to answer it. Then it is true that if I were to hear a knock at the door, I should go answer it. But the truth of that counterfactual is surely not a consequence of my actual actions, for even if I am asleep and so fail to hear the knock and answer the door, it may well still be true that if I were to hear a knock at the door, I should go answer it. So in the case at hand, my putative inability to bring about $A \Box \rightarrow \sim B$ does not entail my inability to bring about $A \& \sim B$.

Even if the Molinist simply concedes the truth of (5) in the sense of explanatory priority explicated in Hasker's (EP), that notion is so weak that (12) is all the more obviously false. For counterfactuals concerning our free actions may be explanatorily prior to those actions in Hasker's sense only because God's reason for creating us may have been in part that He knew we should freely do such things. But it is wholly mysterious how this sense of explanatory priority is incompatible with our performing such actions freely. In a footnote to his second piece, Hasker claims that Adams's argument can be freed from reliance on (12), referring the reader to his own argument against middle knowledge.{11} But the duly attentive reader will find in that discussion nothing but a reiteration of Hasker's previous argument on this score with no refutation of the several objections lodged against it in the literature.{12}

Thus, it seems to me that neither Adams nor Hasker has been able to explicate a sense of explanatory priority with respect to the truth of counterfactuals of creaturely freedom which is both transitive and inimical to human freedom. Either the notion of "explanatory priority" as it plays a role in the argument is equivocal or, if a univocal sense can be given to it, any such notion is either so generic that we should have to deny its transitivity or so weak that it would not be inimical to human freedom.

Endnotes

{1} William Hasker, "Middle Knowledge: a Refutation Revisited," *Faith and Philosophy* 12 (1995): 223-36; idem, "Explanatory Priority: Transitive and Unequivocal, A Reply to William Craig," *Philosophy and Phenomenological Research* 57 (1997): 1-5.

{2} Robert Merrihew Adams, "An Anti-Molinist Argument," in *Philosophical Perspectives*, vol. 5: *Philosophy of Religion*, ed. James E. Tomberlin (Atascadero, Calif.: Ridgeview Publishing, 1991), pp. 343-353.

{3} William Lane Craig, "Robert Adams's New Anti-Molinist Argument," *Philosophy and Phenomenological Research* 54 (1994): 857-861.

{4} Hasker, "Explanatory Priority," p. 3.

{5} Ibid.

{6} For $p \Box \rightarrow q$ is strictly inconsistent with $p \sim q$. Suppose, then, that John, unaware of Mary's affection for him, does not realize that Mary would go to the party if he went, but that he is determined to go if she does. Let $p \Box \rightarrow q$ be the proposition expressed by "If Mary were to go to the party, then I would go." This proposition is, in Hasker's sense, explanatorily prior to John's decision to go under the circumstances that Mary is going to the party. But it is strictly inconsistent with John's not going under those circumstances. According to (12), we must therefore say that John does not freely choose or go to the party, which seems ridiculous. When taken in Hasker's sense, (12) would often make it impossible to act freely for reasons.

Perhaps Hasker would say, in line with his response below, that all that is explanatorily prior to John's going to the party is his *belief* that Mary is going. But such a response appeals to a red herring, viz., the fact that John believes that Mary is going, whereas we are free simply to stipulate as part of our thought experiment that John would not go to the party if Mary were not to go.

{7} Hasker, "Middle Knowledge," p. 235, note 17.

{8} Ibid., pp. 229-232.

{9} William Lane Craig, "Hasker on Divine Knowledge," *Philosophical Studies* 67 (1992): 91-92.

{10} William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 (Leiden: E. J. Brill, 1990), pp. 89-90.

{11} Hasker, "Explanatory Priority," p. 1. The reference is to Hasker, "Middle Knowledge," pp. 223-236.

{12} In "Middle Knowledge," pp. 226-239, Hasker revises the *first* part of his argument in deference to Adams's version, but the *second* part he leaves unchanged and undefended--indeed, in footnote 17 on p. 235 he actually commends Adams's (12) as an alternative to his argument for those "who have qualms about some of the premises in my version of the argument."

Robert Adams's New Anti-Molinist Argument

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Robert Adams has presented a new argument to show the logical impossibility of divine middle knowledge of counterfactuals of creaturely freedom. However, Adams's reasoning is unsound because the notion of "explanatory priority" as it plays a role in the argument is either equivocal or not demonstrably transitive. Moreover, his argument contains a false (fatalistic) premiss.

See also my related article "[Adams on Actualism and Presentism](#)".

"Robert Adams's New Anti-Molinist Argument." *Philosophy and Phenomenological Research* 54 (1994): 857-861.

Although Thomas Flint considers the major objections to the Molinist doctrine of middle knowledge to have been answered, so that the job of applying this doctrine theologically can get underway,{1} Robert Adams, undeterred, has presented a new anti- Molinist argument aimed at showing the logical impossibility of middle knowledge of counterfactuals of creaturely freedom.{2} Inspired by William Hasker's argument that middle knowledge of such counterfactuals is incompatible with creaturely freedom,{3} Adams's new argument is directed toward the same conclusion, but avoids any appeal to Hasker's dubious--and, I should say, clearly false--premise that on the Molinist view counterfactuals of freedom are more fundamental features of the world than categorical facts.{4}

After summarizing the intuitive basis of his argument,{5} Adams develops the following more rigorous formulation:

1. According to Molinism, the truth of all true counterfactuals of freedom about us is explanatorily prior to God's decision to create us.
2. God's decision to create us is explanatorily prior to our existence.
3. Our existence is explanatorily prior to all of our choices and actions.
4. The relation of explanatory priority is transitive.
5. Therefore, it follows from Molinism (by 1-4) that the truth of all true counterfactuals of freedom about us is explanatorily prior to all of our choices and actions.
10. It follows also from Molinism that if I freely do action A in circumstances C, then there is a true counterfactual of freedom F*, which says that if I were in C, then I would (freely) do A.
11. Therefore, it follows from Molinism that if I freely do A in C, the truth of F* is explanatorily prior to my choosing and acting as I do in C.
12. If I freely do A in C, no truth that is strictly inconsistent with my refraining from A in C is explanatorily prior to my choosing and acting as I do in C.
13. The truth of F* (which says that if I were in C, then I would do A) is strictly inconsistent with my refraining from A in C.
14. If Molinism is true, then if I freely do A in C, F* both is (by 11) and is not (by 12-13) explanatorily prior to my choosing and acting as I do in C.
15. Therefore, (by 14) if Molinism is true, then I do not freely do A in C.

In his critique of Adams's earlier anti-Molinist argument, Plantinga charged that the argument is unsound because the dependency relation involved is not a transitive relation.^{6} It seems to me that the present argument shares a similar failing. The notion of "explanatory priority" as it plays a role in the argument seems to me equivocal, and if a univocal sense can be given it, there is no reason to expect it to be transitive.

Consider the explanatory priority in (2) and (3). Here a straightforward interpretation of this notion can be given in terms of the counterfactual dependence of consequent on condition:

- 2.' If God had not created us, we should not exist.
- 3.' If we were not to exist, we should not make any of our choices and actions.

Both (2') and (3') are metaphysically necessary truths. But this sense of explanatory priority is inapplicable to (1), for

- 1.' According to Molinism, if all true counterfactuals of freedom about us were not true, God would not have decided to create us

is false. Molinism makes no such assertion, since God might still have created us even if the actually true counterfactuals of creaturely freedom were false or even, *per impossible*, if no

such counterfactuals at all were true. The sense of explanatory priority in (1) must therefore be different than it is in (2) and (3).

The root of the difficulty seems to be a conflation of reasons and causes on Adams's part. The priority in (2) and (3) is a sort of causal or ontic priority, but the priority in (1) is not causal or ontic, since the truth of all counterfactuals of creaturely freedom is neither a necessary nor a sufficient condition of God's decision to create us. At best, the truth of such counterfactuals is prior to His decision in providing a partial reason for that decision. By contrast the truth of counterfactuals of divine freedom and of contingent, categorical propositions does not furnish reasons for the divine creative decree and so is not prior to that decree. Adams's mistake seems to be that he leaps from God's decision in the hierarchy of reasons to God's decision in the hierarchy of causes and by this equivocation tries to make counterfactuals of creaturely freedom explanatorily prior to our free choices.

The invalidity of this move is evident from the fact that none of the senses of "explanatory priority" discussed have application to the peculiar priority inferred in (5). For example, suppose my wife and I are considering starting a family and that we come to believe, perhaps on the basis of a Scripture like Proverbs 22.6, that

A.* If children were born to us, they would come to love God.

Since this is important to us, we decide to start a family. Accordingly,

1.* The truth of (A*) is explanatorily prior to our decision to have children.

It is also undeniably true that

2.* Our decision to have children is explanatorily prior to the existence of our children.

3.* Our children's existence is explanatorily prior to their coming to love God.

So if (4) is true, we must conclude that

5.* The truth of (A*) is explanatorily prior to our children's coming to love God.

But I do not even understand the sense of explanatory priority in (5*).

Perhaps Adams can enunciate a univocal sense of "explanatory priority" that is applicable to (1-3). But I suspect that any such notion would be so generic and so weak that in order to avoid conclusions like (5*) we should have to deny its transitivity. Since (5) is an invalid inference, so is (11), and the *reductio* fails.

But more than that; the *reductio* also fails because (12) is false. Adams's intuition seems to be that if F* were explanatorily prior to my doing A in C, then I could not refrain from A, which is a necessary condition of my doing A freely. But such an assumption seems doubly wrong. First, it represents the fallacious reasoning of fatalism. Though F* is (*ex concessiois*) in fact explanatorily prior to my freely doing A in C, it is within my power to refrain from doing A in C; only if I were to do so, F* would not then be explanatorily prior to my action nor a part of God's middle knowledge. Until Adams can show that the content of God's middle knowledge is a "hard fact," his argument based on (12) is undercut. Second, my being able to refrain from

doing A in C is not a necessary condition of my freely doing A in C. For perhaps I do A in C without any causal constraint, but it is also the case that God would not permit me to refrain from A in C. Flint's essay on papal infallibility, which appears in the same volume as Adams's, provides a good illustration: though God would not permit the Pope to promulgate false doctrine, nevertheless he freely promulgates correct doctrine.^{7} If such a scenario is coherent--and Flint seems to have refuted all objections to it--, then (12) is false.

Thus, it seems to me that both sides of Adams's *reductio* argument are unsound. His attempt to show that counterfactuals of creaturely freedom are explanatorily prior to our actions fails due to equivocation. And even if they were in some peculiar sense explanatorily prior to our actions because they are true and known by God logically prior to categorical contingent propositions, that would not be incompatible with the freedom of our actions.

Endnotes

^{1} Thomas P. Flint, "Middle Knowledge and the Doctrine of Infallibility," *Philosophical Perspectives*, vol. 5: *Philosophy of Religion*, ed. James E. Tomberlin (Atascadero, Calif.: Ridgeview Publishing, 1991), p. 374.

^{2} Robert Merrihew Adams, "An Anti-Molinist Argument," in *Philosophy of Religion*, pp. 343-353. Although Adams briefly reiterates his previous anti-Molinist arguments based on counterfactuals of freedom lacking a ground, he declines to answer refutations of his earlier objections (e.g., Alvin Plantinga, "Reply to Robert M. Adams," in *Alvin Plantinga*, ed. James E. Tomberlin and Peter Van Inwagen, Profiles 5 [Dordrecht: D. Reidel, 1985], pp. 371-382; Alfred J. Freddoso, "Introduction" to *On Divine Foreknowledge*, by Luis de Molina, trans. with Notes by A. J. Freddoso [Ithaca, N.Y.: Cornell University Press, 1988], pp. 68-75; William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 [Leiden: E.J. Brill, 1990], pp. 247-269). Therefore, I shall not comment on his remarks.

^{3} William Hasker, *God, Time, and Knowledge* (Ithaca, N.Y.: Cornell University Press, 1989), pp. 29-52.

^{4} For a critique of Hasker's views, see William Lane Craig, "Hasker on Divine Knowledge," *Philosophical Studies* 67 (1992): 89-110.

^{5} Adams's intuitive summary is misleadingly ambiguous and, oddly, bears little resemblance to either Hasker's argument or Adams's own detailed formulation of the argument; but space does not permit an interpretive discussion here.

^{6} Plantinga, "Reply to Robert Adams," p. 376.

^{7} Flint, "Infallibility," pp. 385-390.

Adams on Actualism and Presentism

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Robert Adams has defended an argument against the pre-existence of singular propositions about oneself on the grounds that it would have been possible for them to have existed even if one had never existed, which is absurd. But the crucial assumption underlying this reasoning, namely, that the only histories of a world which are possible at any time are continuations of that history up to that time, is false, as shown by the illustration of time travel. Furthermore, if Adams were correct, fatalism would follow. The failure of Adams's argument has important implications for the Molinist doctrine of divine middle knowledge.

See my related article "[Robert Adams's New Anti-Molinist Argument](#)".

"Adams on Actualism and Presentism." *Philosophia* 25 (1997): 401-405.

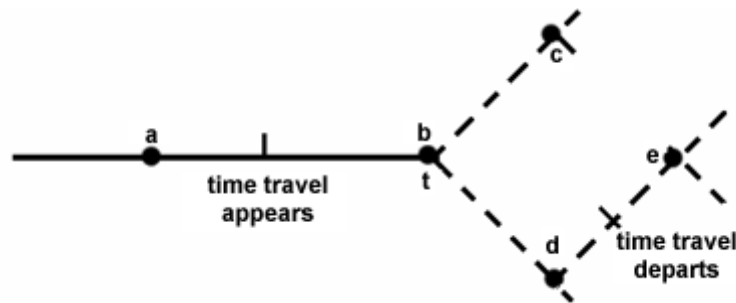
In his article, "Time and Thisness," Robert Adams had argued, "My thisness, and singular propositions about me, cannot have pre-existed me because if they had, it would have been possible for them to have existed even if I had never existed, and that is not possible."^{1} Jonathan Kvanvig has charged, however, that this reasoning is susceptible to the same response as is the argument for fatalism.^{2} Just as we have the power to act in such a way that were we to do so, future-tense propositions which were in fact true would not have been true, so things can happen differently than they will, in which case thisnesses and singular propositions which in fact exist(ed) would not have existed. While acknowledging the philosophical respectability of Kvanvig's position, Adams in his reply to Kvanvig sticks by his argument, observing that while he agrees "that things can be *true* about a time that would not have been true about it if . . . things had gone differently at a later time" and "that there are *facts* about 1935 . . . that could not have obtained if I had not been born later," still he thinks that we should not admit to our primitive ontology *entities* that depend on later events for their very *existence*.^{3}

But why should we think that the existence of things in the past cannot be counterfactually conditioned by future events? Adams states that the intuitive basis of his position lies in

. . . the appeal of the idea of metaphysically possible continuations of the history of any possible world from any time *t*, whose variation (since they are continuations) can affect what

beings contingently come into existence after t , but cannot affect what exists at or before t . . . My claim . . . is only that whatever *exists* in the history of W up until t must be metaphysically compatible with any possible continuation of that history after t .{4}

This is a powerful intuition; but a little reflection reveals that the power of its appeal springs from the fact that it is in reality an analytic truth. For *by definition* various future histories later than t are continuations of the history earlier than t if and only if they include that history as their past. That is just what it means to be a continuation of a history. Not only all entities prior to t must remain unaffected, but also all events in their temporal and spatial locations. Otherwise the histories later than t would be continuations of different histories. But from this analytic truth, the crucial inference does not follow that at any time t in a world W , all metaphysically possible histories later than t have the same history earlier than t . In other words, those histories which are continuations of the history earlier than t are only a proper subset of all the future histories possible at t . For example, consider the history of a world up to t which includes the appearance of a time traveller from a time later than t :



At the time of t , various future histories are metaphysically possible, including what we can infer to be the actual future history b, d, e, which is a continuation of the history a, b. But at t other future histories are also possible, like b, c, which are not continuations of a, b. Given our knowledge of the past history a, b, the path of the future until the time traveller's departure is certain (in the epistemic sense), but not necessary. If b, c were the path taken instead, then the time traveller would not have appeared prior to t and so the history a, b would have been different. It is a necessary truth that the actual future is a continuation of the actual past, but it does not follow that every possible future is a continuation of the actual past.

Finally, I think we should do well to challenge Adams's artificial bifurcation between entities and facts or truths. If tense is an objective feature of reality, as Adams and the presentist agree, then there are tensed facts which are every bit as much a part of any actual world's history as are entities. In possible worlds semantics tense is necessarily neglected because, as we learn from McTaggart's Paradox, there can be no maximal description of a world in tensed language.{5} In speaking of the history of any possible world W up until or from t , Adams thus overlooks the tense which is an essential feature of the exemplification of any world in which time exists. In any instantiation of a temporal world there will be tensed states of affairs that obtain in addition to the entities that exist (e.g., *Its being presently t_n*). If, then, future contingent propositions are bivalent, to what do they correspond? Even if we say that their truth is ultimately grounded in the future truth of their respective present-tense versions, they do not correspond to those present-tense states of affairs. Rather a view of truth as correspondence requires that they correspond to future-tense states of affairs which obtain right now. Since the history of any concrete temporal world includes such tensed states of affairs, it follows that all continuations of that history must include the same past states of affairs. If Adams is right that all future histories possible at t are continuations of the past

history at t , then fatalism follows. If, to escape fatalism, we allow possible future histories to include those involving different past-tense states of affairs, then a similar recourse must be open to the defender of thisnesses and singular propositions.{6}

Endnotes

{1} Robert Merrihew Adams, "Time and Thisness," *Midwest Studies in Philosophy* 11 (1986): 317.

{2} Jonathan L. Kvanvig, "Adams on Actualism and Presentism," *Philosophy and Phenomenological Research* 50 (1989): 89-98.

{3} Robert Merrihew Adams, "Reply to Kvanvig," *Philosophy and Phenomenological Research* 50 (1989): 300 (my emphasis).

{4} Ibid., pp. 299-300.

{5} See Michael Dummett, "A Defense of McTaggart's Proof of the Unreality of Time," *Philosophical Review* 69 (1960): 503.

{6} Such a recourse must also be open, *pari passu*, to the Molinist, whose doctrine of middle knowledge has been criticized by Adams on similar grounds. According to that doctrine God knows logically prior to His creative decree the truth of certain subjunctive conditionals concerning how creatures would freely act in any circumstances in which God might place them. Adams objects:

"Suppose it is not only true that P would do A if placed in circumstances C; suppose that truth was settled, as Molinism implies, prior to God's deciding what, if anything, to create, and it would therefore have been a truth even if P had never been in C--indeed even if P had never existed. Then it is hard to see how it can be up to P to determine freely whether P does A in C" (Robert Adams, "An Anti-Molinist Argument," *Philosophical Perspectives* 5 [1991]: 356).

The argument seems to assume as a premiss that there is a true counterfactual of creaturely freedom $\P$ with a true antecedent: *If P were in C, P would do A*. Adams seems to assert that P cannot freely bring about the truth of $\P$ because if, posterior to God's middle knowledge of $\P$, P were not in C or did not exist at all, $\P$ would still be true, though P never does A in C, which is absurd. This argument is parallel to the issue under discussion, counterfactuals of creaturely freedom and divine middle knowledge taking the place of thisnesses and singular propositions. A Molinist who holds that in the case of a true counterfactual with a true antecedent it is the agent who, by doing what the consequent states, freely brings about the truth of the counterfactual would also hold that if P failed to be in C, $\P$'s truth would not have been brought about by P. That does nothing to disprove the claim that $\P$'s truth is, in fact, freely brought about by P. It is within our power so to act that were we to do so, the truth of counterfactuals of creaturely freedom which is brought about by us would not have been brought about by us.

Moreover, if Adams's distinction between entities and facts or truths successfully averts fatalism, it would also undermine Adams's anti-Molinist argument, for the truth of counterfactuals of creaturely freedom is more akin to the truth of future contingent propositions than the existence of singular propositions. All entities and even truths in the past

would remain the same were P not to be in C; all that would be different is that the counterfactuals in question would no longer stand in the relation to P of "being brought about to be true by."

I should go even further and claim that we have it within our power to act in such a way that, were we to act in that way, different counterfactuals of creaturely freedom would have been true and so God's middle knowledge would have been different. Perhaps Adams would say that God's beliefs count as entities; if so, then if God has beliefs (but see William Alston, "Does God Have Beliefs?" *Religious Studies* 22 [1986]: 287-306) about not only conditional future contingents, but even absolute future contingents, His knowledge of both of these (assuming the soundness of Adams's argument) is still at worst inerrant, though fallible. Adams's anti-Molinist argument requires that it be more essential to theism to maintain the infallibility (as opposed to inerrancy) of God's beliefs than to preserve His foreknowledge and/or middle knowledge, which seems a very odd estimate of theological priorities.

Tachyons, Time Travel, and Divine Omniscience

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

For philosophers in either field, philosophy of science and philosophy of religion are too often viewed as mutually irrelevant disciplines. As a result, insights acquired in each field may not be appropriated by philosophers working in the other field. This is unfortunate, because sometimes the problems can be quite parallel and a consistent resolution is required. One especially intriguing case in point concerns, in philosophy of science, the possibility of tachyons and time travel and, in philosophy of religion, the relationship between divine foreknowledge and human freedom. It is rarely appreciated by discussants of these respective issues that the problems are quite parallel and that insights garnered in the resolution of the difficulty in one discipline may have provocative implications for the solution of the parallel problem in the other field.

"Tachyons, Time Travel, and Divine Omniscience." *The Journal of Philosophy* 85 (1988): 135-50. Reprinted in *The Philosopher's Annual* 11 (1988): 47-62.

For philosophers in either field, philosophy of science and philosophy of religion are too often viewed as mutually irrelevant disciplines. As a result, insights acquired in each field may not be appropriated by philosophers working in the other field. This is unfortunate, because sometimes the problems can be quite parallel and a consistent resolution is required. One especially intriguing case in point concerns, in philosophy of science, the possibility of tachyons and time travel and, in philosophy of religion, the relationship between divine foreknowledge and human freedom. It is rarely appreciated by discussants of these respective issues that the problems are quite parallel and that insights garnered in the resolution of the difficulty in one discipline may have provocative implications for the solution of the parallel problem in the other field.

I. Theological Fatalism

To begin, then, with philosophy of religion: Greek fatalism, embodied in Aristotle's argument of *De interpretatione* 9, posed a special threat to Christian theology. Committed to the biblical doctrine of divine foreknowledge as well as to human freedom, Christian thinkers had to explain how it is either that God knows future contingents without future contingent propositions' being antecedently true or false or that God's knowing the truth value of such propositions does not after all entail fatalism. The problem of theological fatalism seemed especially acute since God's foreknowledge of some future event is itself a fact of past history and therefore temporally necessary; that is to say, it no longer has any potential to be otherwise. Therefore, what God foreknew must necessarily come to pass, since it is impossible that God's knowledge be mistaken. In our own day, philosophers such as A. N. Prior, Richard Taylor, Steven Cahn, Nelson Pike, and Paul Helm have argued that from the temporal necessity of

1. God foreknew *p*.

and the logical necessity of

2. If God foreknows *p*, then *p*.

it follows, for any future-tense proposition *p*, that necessarily *p*. The majority of contemporary philosophers have, however, disputed the cogency of such reasoning. From the fact that God foreknows that I shall do *x*, it follows, not that I *cannot* do otherwise, but only that I *shall* not do otherwise. It remains within my power not to do *x*, but, given God's foreknowledge, we know that I shall not in fact exercise that power. Were I to do otherwise, then God *would have* known different future-tense propositions than He in fact knows.^{1} As for so-called "temporal necessity," this notion is notoriously difficult, and, if this is a legitimate kind of modality, it is not at all evident that God's foreknowledge of some future event is characterized by such necessity.^{2} This does not mean that it is within one's power to change the past. Rather it is to assert the truth of the counterfactuals:

3. If I were to do x , God would have foreknown that I would do x .

and

4. If I were not to do x , God would have foreknown that I would not do x .

From the fact that God foreknows that I shall do x , we may therefore infallibly infer that I shall do x , but it would be fallacious to infer that it is not within my power to refrain from doing x .

II. Tachyons

This rejoinder to theological fatalism, which seems to me altogether correct, has some disturbing consequences when we turn to philosophy of science to investigate the possibility of tachyons and of time travel. When Albert Einstein proposed his Special Theory of Relativity in 1905, he conceived of the speed of light c as a limiting velocity such that transmission of energy from point to point in space-time at superluminal velocities is impossible: "velocities greater than that of light," he concludes, "have no possibility of existence." {3} This is because the mass of a particle would become infinitely large as its velocity approaches c . The speed of light was therefore conceived to be an inviolable barrier for particle velocities. In the second half of the century, however, physicists such as Oleksa-Myron Bilaniuk, V. K. Deshpande, E. C. George Sudarshan, and Gerald Feinberg realized that Einstein's conclusion was overdrawn. {4} Although his equations prohibited the *acceleration* of particles traveling at subluminal velocities to or beyond c , they did not preclude the existence of particles whose velocities are always greater than or equal to c . After all, photons and neutrinos both travel with a velocity equal to c without ever having been accelerated from a subluminal speed to luminal velocity. So why could there not exist particles that travel at superluminal velocities without ever having been accelerated from speeds less than or equal to c ? In this case the speed of light remains an inviolable barrier, but that does not preclude the existence of particles on the other side of the barrier. Feinberg dubbed such particles tachyons, from $\tau\alpha\chi\iota\varsigma$ (swift), and the experimental search for these exotic entities was on.

And, indeed, if tachyons do exist, they are exotic. Apart from other oddities, the equations for energy and momentum for such particles reveal that tachyons would accelerate as they *lose* energy. Conversely, whenever energy was imparted to a tachyon, it would *decelerate*. This leads to one of the most peculiar characteristics of tachyons: their *prima facie* possession of negative energy. Let an observer at rest in a reference frame S observe a tachyon traveling with a velocity v relative to him. This same particle will travel with a different velocity u relative to another observer in a reference frame S^1 which is moving with respect to S with a velocity w . When the product vw exceeds c^2 , the tachyon will possess negative energy relative to S^1 . More peculiar still, such particles will seem to travel backward in time. To the observer in S^1 the negative-energy particle would appear to be absorbed first and emitted later.

The implications of such behavior were noticed by Richard Tolman as early as 1917 in what has come to be known as *Tolman's Paradox*, namely, that communication with the past is possible. {5} Let an observer O in a reference frame S send out a burst of infinitely fast tachyons at t_1 to an observer O' in a reference frame S' which is receding from S at the uniform velocity w . The reception of the tachyon signal in S^1 triggers a similar burst of tachyons back to O which travel with an infinite velocity relative to S' . The relativity equations dictate that

the second signal arrives in S at a time t_o before the burst of tachyons is sent at t_l . But, since the signal from O' to S was triggered by the signal from O to S' , it follows that the effect (O 's reception of O' 's signal) precedes the cause (O 's sending his signal to O') in S , or, in other words, tachyons furnish the mechanism for backward causation.

This implication alone was enough to warrant the rejection of the possibility of tachyons in the minds of many physicists. {6} Proponents of tachyons felt at first constrained to explain away Tolman's paradox with its attendant backward causation by means of a "reinterpretation principle." "It is precisely by putting together the two quizzical concepts of 'negative- energy' particles traveling *backward in time* that the resolution of the difficulty is found," stated Bilaniuk and Sudarshan; "A 'negative- energy' particle that has been absorbed first and emitted later is nothing else but a positive-energy particle emitted first and absorbed later, a perfectly normal situation." {7} By interpreting any negative-energy particle moving backward in time as a positive-energy particle moving forward in time, one may thereby eliminate the occurrence of an effect before its cause. In our previous case, for example, O^I will naturally regard the tachyon beam received from S as actually a signal that he is himself sending to S^I . O^I and O will regard these beams as spontaneous emissions from their own tachyon transmitters rather than as receptions from another reference frame.

Now, at face value, the reinterpretation principle sounds merely like the endorsement of what can only be characterized as a fantastic delusion. If O 's tachyon signal really does trigger O' 's transmitter to send a return signal, then it is simply irrelevant whether O or O' *believes* that no backward causation has occurred. Perhaps the best face to put on Bilaniuk and Sudarshan's remarks is to interpret them as claiming that the causal relation is itself relative to reference frames; that is to say, there is no absolute causal directionality in the same way that there is no absolute simultaneity according to Special Relativity. The world-line of the tachyon burst simply *exists* (tenselessly) between space-time points in S and S' , and whether the tachyons are moving from S to S' or vice versa is observer-dependent, as is also which event is conceived to be the cause and which the effect. Unfortunately, it has been shown that, even on this understanding, backward causation cannot be precluded. {8} More to the point, however, the notion that causal directionality is relative to reference frames seems clearly untenable. In their engaging discussion of a tachyonic antitelephone, Benford, Book, and Newcomb point out that causal directionality is independent of temporal considerations and is therefore not susceptible to arbitrary reinterpretation:

For example, let A be William Shakespeare and B Francis Bacon, and let V^I [the outgoing tachyonic velocity] be negative. If Shakespeare types out *Hamlet* on his tachyon transmitter, Bacon receives the transmission at some earlier time. But no amount of reinterpretation will make Bacon the author of *Hamlet*. It is Shakespeare, not Bacon, who exercises control over the content of the message (265). {9}

Thus, "the direction of information transfer is necessarily a relativistic invariant. An author's signature, for example, would always constitute an invariant indication of the source" (loc. cit.). The reinterpretation principle is thus seen to be essentially an exercise in self-delusion: causal directionality is invariant across reference frames, and to interpret events as related otherwise than as they are is only self-deception.

In light of these facts, proponents of tachyons began to reassess whether backward causation was after all so objectionable or paradoxical. {10} Some writers argued that the problem entailed by permitting tachyonic backward causation is fatalism. Feinberg, for example, called

this the "most serious qualitative objection" to tachyons; the transmission of signals into the past of a single observer "is in apparent conflict with the natural view that one is free to decide whether or not to carry out an experiment up until the time that one actually does so." {11} The objection seems to be that one could, for example, call oneself in the past on a tachyonic antitelephone and then, after receiving the call, decide not to place it after all. Our discussion of theological fatalism, however, makes the flaw in the reasoning clear: the fact that one has received a call from oneself entails not that one is not free to refrain from placing the call, but only that one will not in fact refrain from placing it. {12} If one were to refrain from placing the call, then one would not have received it in the first place. Thus, no fatalistic paradox is generated by the existence of negative-energy tachyons.

But, although objections to tachyons based on fatalism are unimpressive, a more substantive objection appears to arise when one considers cases in which tachyonic backward causation would entail the existence of what Paul Fitzgerald has called a "logically pernicious self-inhibitor" ("Retrocausality," 534/5). Benford, Book, and Newcomb invite us, for example, to envisage a situation in which observers *A* and *B* enter into the following agreement : *A* will send at 3:00 a tachyonic message to reach *B* at 2:00 if and only if he does not receive a message from *B* at 1:00. *B* will send at 2:00 a message to reach *A* at 1:00 if and only if he receives a message from *A* at 2:00. Therefore, the exchange of messages takes place if and only if it does not take place. They conclude that "Unless some truly radical solution is found to this paradox, we must conclude that tachyon experiments [such as those being currently carried out] can only yield negative results" (265). John Earman points out that such paradoxes do not depend on human agency, but may be constructed solely with machines. Thus, the reinterpretation principle is irrelevant. *A contradiction is generated by asking whether a certain event occurs; we find that it occurs if and only if it does not occur.* {13} Although the tachyon event might be interpreted differently by different observers, this difference is totally irrelevant to the contradictory nature of the conclusion.

Now, it is not the existence of tachyons as such, admits Earman, that entails the possibility of a logically pernicious self-inhibitor; rather it is the whole situation which is impossible, and this includes assumptions concerning the possibility of controlling tachyon beams, of detecting them, and so forth. By giving up one or some of these other assumptions, one may impose consistency conditions on hypothetical cases so that the paradox cannot arise. Thus, Fitzgerald maintains that we must conclude only that tachyons cannot be controlled in all ways required for the self-inhibitor to function. {14} When asked why such machines fail, he responds that it may be either for empirical reasons involving constructibility or controllability or owing to a fortuitous set of accidents each time one tries to experiment. The difficulty with the attempt to impose consistency conditions based on considerations of constructibility and controllability, however, Earman explains, is that we have good reason to believe that such devices are possible. The assertion that such experiments cannot be carried out is, therefore, "brazen," since the experiments involve "only operations which we know to be possible in our world." {15} Since such devices as are required for these experiments are apparently nomologically possible, it follows that tachyons are nomologically impossible and therefore do not exist. The threat of fortuitous accidents' preventing such experimentation seems utterly implausible, Fitzgerald himself confesses, for we should then have to posit a lawlike regularity of accidents to prevent the functioning of a machine which should be constructible if tachyons exist ("Tachyons," 428). Hence, the conclusion of the foregoing analysis would seem to be that, given the nomological possibility of tachyon emitters and detectors, one cannot avoid the paradoxes by denying assumptions concerning such devices, but is led instead to denying the possibility of the existence of tachyons. Although this

reasoning has, to my knowledge, gone unchallenged in the tachyon literature, there is, within the body of literature on the possibility of time travel, a significant challenge to the modal validity of inferring that tachyons are impossible from the nomological possibility of such devices, a challenge akin to the argument against theological fatalism. Let us therefore turn to that discussion.

III. Time Travel

Long the darling of science-fiction enthusiasts, time travel has come under serious scrutiny in this century. Scientists and philosophers agree that the sort of time machine envisioned by H. G. Wells in his popular novel is in fact an impossibility. Since Wells's machine was conceived to move only through time but not through space, it would, so to speak, "run into itself" as it traveled both forward and backward in time. {16} Moreover, it seemed to involve the contradiction of traversing, say, one hundred years of time in five minutes of time, since it was sitting in the same place. With the development of relativity theory, however, which posited the traveler's relative motion in space as well as time, time travel re-emerged as a new possibility. In 1949 Kurt Gödel drafted a model universe using Einstein's field equations which was similar to Einstein's in that it was both static and spatially homogenous, but which differed from Einstein's universe in that Gödel assigned a negative value to the cosmological constant (which Einstein had introduced into the equations to prevent the model universe from expanding) and posited an absolute, cosmic rotation of matter, so that isotropy was precluded. {17} On Gödel's model, it was not possible to define a cosmic time because the local times of observers which are associated with the mean motion of matter cannot be fitted together into one world time. The most incredible feature of this model was that it permitted the existence of closed, timelike loops, so that by making a round trip on a rocket ship in a sufficiently wide curve, it would be possible for some observer to travel into any region of the past or future and to return. Although the world-line of every fundamental particle was open, so that no temporal period could recur in the experience of an observer connected with the particle, other closed, timelike lines could exist such that, if P and O are any two points on the world-line of a fundamental particle and P precedes O , then a timelike line exists connecting P and O on which O precedes P . By following these loops an observer could fulfill Wells's dream of time travel.

The question is whether Gödel's model constitutes a mere mathematical curiosity or represents a possible description of the real universe. Unfortunately for time-travel buffs, it seems pretty clear that Gödel's universe fails as an actually descriptive account of the universe, and so time travel is not a possibility for us. That is to say, Gödel's universe, even if nomologically possible, is not physically possible. As G. J. Whitrow observes, the empirical evidence for world isotropy undercuts the postulate of cosmic rotation and furnishes instead evidence for the existence of cosmic time. The microwave background radiation is remarkable precisely for its isotropy, which varies by only about one part in a thousand. "Consequently, we have strong evidence that the universe as a whole is predominantly homogeneous and isotropic and this conclusion . . . is a strong argument for the existence of cosmic time." {18} Since these facts are incompatible with Gödel's model, it follows that time travel, at least along his lines, is physically impossible.

But the issue remains whether time travel is not possible in a broader sense. Here the proponents of time travel have argued persuasively that the stock objections to the possibility of time travel are unsound. For example, Gödel himself was disturbed because he believed that his models make it possible that someone might travel into the past and find a person who

would be himself at some earlier period of his life. "Now he could do something to this person which, by his memory, he knows has not happened to him" (561). This objection, however, is once again infected by the fallacious reasoning of fatalism. For from the fact that someone did not do something, it does not follow that he could not have done it. Hence, Gödel was unnecessarily concerned about my doing something to myself which I could not remember: all that follows from his objection is either that I did not perform the action or that I forgot it.{19}

But at this point a more formidable objection to time travel may be lodged: time travel seems to entail the possibility of the existence of a logically pernicious self-inhibitor. The objection is a reminiscent of the argument against tachyons. Earman asks us to consider a rocket ship that at some space-time point x can fire a probe that will travel along a timelike loop into the past lobe of x 's light cone. Suppose the rocket is programmed to fire the probe unless a safety switch is on and the safety switch is turned on if and only if the "return" of the probe is detected by a sensing device with which the rocket is equipped (230-232). Is the probe fired or not? The answer is that it is fired if and only if it is not fired, which is logically absurd. Again, this contradiction does not suffice to show that time travel *per se* is impossible. Rather the whole situation is impossible, and this includes assumptions about the programming of the rocket, the safety switch, the sensing device, and so forth. But, although the contradiction could be avoided by giving up some of these assumptions, Earman suggests that we have good evidence that rockets can be so programmed. Earman concludes, "Thus, although we cannot exclude closed timelike lines on logical grounds, we do have empirical reasons for believing that they do not exist in our world" (232). His conclusion may be strengthened: it is not just the feasibility in our world of such rockets which generates the paradox; so long as such machines are nomologically possible, the contradiction could arise. Given the nomological possibility of such machines, then, timelike loops must be nomologically impossible if the contradiction is to be avoided. The conclusion would therefore appear to be similar to that in the tachyon case: that, although time travel is logically possible, there are no nomologically possible accessible worlds in which time travel can occur.

Paul Horwich has, however, disputed Earman's reasoning, claiming that he invalidly infers that, since the various assumptions are logically impossible and since the rocket, safety switch, and so forth are physically possible, therefore timelike curves do not exist (440).{20} But there could exist timelike curves in the actual world or in any physically possible world in which the rocket, switch, and so forth do not exist. Letting p = "The rocket, probe, safety switch, and so forth exist and function properly," q = "Timelike loops exist," and r = "The probe is fired," Horwich's argument appears to be that the following reasoning, which is Earman's, is invalid:

5. (i)	$(p \cdot q) \supset (r \equiv \sim r)$	P
(ii)	$\Diamond p$	P
(iii)	q	P
(iv)	$(\Diamond p) \cdot q$	ADJ (ii), (iii)
(v)	$(\Diamond p) \cdot q \supset \Diamond(r \equiv \sim r)$	(i)
(vi)	$\Diamond(r \equiv \sim r)$	MPP (iv), (v)
(vii)	$q \supset \Diamond(r \equiv \sim r)$	CP (iii-vi)
(viii)	$\sim q$	RAA

The problem is that (v) does not follow modally from (i). Although the conjunction of p and q implies an absurdity, the conjunction of q with $\Diamond p$ implies neither a contradiction nor even

the possibility of a contradiction. In other words, timelike loops can exist in any world in which such rockets, switches, and so forth are possible but never in fact exist or function correctly; similarly for tachyons and the tachyonic antitelephone.

The opponent of time travel (and tachyons) has thus apparently committed precisely the same fallacy as the theological fatalist, and the response to them has the same form. The opponent of fatalism asserts that from God's foreknowledge of a future contingent proposition it follows, not that the future event *cannot* occur but only that it *will* not occur; the proponent of time travel maintains that from the fact that timelike loops exist it follows, not that such rockets *cannot* exist or function properly, but only that they *do* not exist or function properly. Further, the opponent of fatalism maintains that, if the contingent event *were* not to occur, then different propositions *would* have been true and God's foreknowledge *would* have been otherwise; the proponent of time travel contends that, if such rockets *were* to be built and function properly, then the timelike loops *would* not exist. Thus, the two situations seem quite parallel.

IV. Tachyons, Time Travel, and Theological Fatalism

Now I must confess that, whereas the argument of the opponent of theological fatalism seems entirely plausible, the same argument in the hands of the proponent of time travel (and, implicitly, of tachyons) runs strongly counter to my intuitions. One might imagine a world, for example, in which all the technology and even the blueprints for the rocket, probe, and so forth exist and in which timelike loops exist. It seems bizarre to claim that, while the rocket could be built, so long as no one in fact builds it, the loops can exist without the possibility of a contradiction's arising. Moreover, it seems very strange to claim that, were the rocket and so forth to be built, then the timelike loops would not exist. Suppose a team of rocket scientists took out the blueprints of the devices and decided, "Let's build them!" What is going to stop them? Horwich's response that to ask such a question is simply to ask why a contradiction does not come true might fail to assuage one's suspicions that something is amiss here. *Something* must prevent the rocket's being built or a contradiction will arise; if the rocket and so forth are constructible, a contradiction would seem to be generable, which is absurd. Or again, we might imagine a world in which the rocket, probe, and so forth do exist and in which time travel occurs regularly. But each attempt to generate the self-inhibiting situation is frustrated by a series of accidents, which prevent the devices from functioning properly. But why do they always go wrong? Or worse, why do things not go wrong whenever the probe travels the same loop when no safety switch is used, but go awry whenever the switch is employed? Horwich confesses that he does not know the answer, but he believes that there is no reason to think an answer is impossible. This confidence might strike one as a somewhat unwarranted optimism. Finally, we might imagine a world in which time travel along timelike loops is a regular affair and in which the rocket, switch, and so forth not only exist, but would function properly if they were used. But in fact nobody uses them. Indeed, the commander of every time vessel may instruct his new recruits, "Do not activate the probe and the safety switch with the sensing device; otherwise the timelike loops along which we travel would not exist." Obeying his command, the new recruits like the rest of the crew are careful not to activate the devices, lest the loops should not exist. But does the very structure of space and time thus depend on the obedience of callow, young recruits to their commanding officer?

Nevertheless, it must be admitted that I have been somewhat unfair to the proponent of time travel in my illustrations. When we consider a world, we take into account not merely the history of that world up to some time t_n but rather its whole history. In any world containing

timelike loops, the envisioned rockets never exist or function properly. It is not as though at t_{n+1} someone might build the devices and so cause the loops that had existed to fail to exist. Nor is it being claimed that the structure of space-time is dependent upon human decisions. Rather the point is that, since p and q are logically impossible, their corresponding states of affairs never both obtain in any world. If one obtains, the other does not. If the other did obtain, then the one would not. To ask why is, as Horwich says, merely to ask why contradictions are not true. To think that in this case a contradiction is possible seems incorrectly to presuppose that time travel involves changing the past, an error analogous to the assumption, frequently made by theological fatalists, that one's freely choosing to do other than one does would involve changing God's foreknowledge. If the probe is seen to be returning though the safety switch is on, the space travelers know that the switch is going to be turned off or malfunction is some way so as to permit the launching of the probe. If the switch is off, they know it or the probe is malfunctioning. Should they decide not to launch the probe after all, for some reason or other (malfunction, change of mind, disobedience to the commander) the probe will be sent anyway (and they no doubt realize this). Otherwise it would not be seen to be returning. For one cannot change the past.

I think that the sense of discomfort which the time travel case (like the tachyon case) evokes but which the case of divine foreknowledge does not elicit is due to the absence in the former case of a lack of a relation of conditionship (in Roger Wertheimer's sense {21}) between the existence of the time loops and the construction and functioning of the rocket. What is at issue here is a piece of counterfactual reasoning on the part of the proponent of time travel:

6. $p \Box \rightarrow \sim q$

7. $p. \sim q \Box \rightarrow r \equiv r$

8. $p \Box \rightarrow r \equiv r$

The reasoning is valid and purports to show that, if the rocket and so forth were to exist and function properly, then the probe would be fired iff it were fired, since no timelike loops would exist in such a world. The truth of (6) appears to depend at any time upon a special resolution of vagueness which permits backtracking counterfactuals, that is, counterfactuals in which the truth of the antecedent implies some adjustment of the past. In such a case the closest possible worlds to the actual world are not those in which the past is preserved inviolate, but in which some feature of the past is other than in the actual world in order that some overriding feature of the actual world might be preserved as much as possible. It is highly a disputed question as to when a special resolution of vagueness between worlds is warranted. It seems to me, however, that a special resolution is permissible when a relation of conditionship obtains between the state of affairs described in the antecedent of the counterfactual and that described in the consequent. Where this is lacking, the burden of proof would seem to lie on him who maintains that a special resolution is to be employed rather than the standard resolution of vagueness. Hence, for example, it seems true that

9. If it were the case that Lincoln was assassinated and I can possibly eat ice cream, then were I to do so, it would be the case that Lincoln was assassinated and I eat ice cream.

Here Lincoln's death and my eating ice cream are totally unrelated, and so whether or not I eat does not affect Lincoln's death. Analogously, the construction and proper functioning of the rocket have no effect upon the structure of space-time. Hence, if the timelike loops exist and

the rocket and so forth are possible, then it seems that it would be true that, if the rocket were to exist, both the loops and the rocket would exist, which results in a self-inhibiting situation. But, since it is impossible that, were the rocket to exist and function properly, then both it and the time loops would exist, it follows that it must be impossible for the time loops to exist and the rocket to be possible. Since the rocket is possible, necessarily the time loops do not exist.

The crucial difference between these two cases, however, is that, although both lack a relation of conditionship between the earlier and later states of affairs, the time-travel case involves contradictory states of affairs, which the other does not. A backtracking counterfactual is therefore required in the time-travel case, not because the time loops are conditioned by later events, but because the envisaged situation does not obtain in any possible world; that is, there simply is no world in which both states obtain. The closest worlds to the actual world in which the rocket exists and functions properly must be worlds in which time loops do not exist. Therefore, a backtracking counterfactual is here in order, even under the standard resolution of vagueness and in the absence of any relation of conditionship between antecedent and consequent, despite the feeling of disquiet with which one is left.

This inquietude can, however, be considerably diminished by an analysis of one of the logical properties of "within one's power." Is the notion "within one's power" closed under entailment? That is to say, is

10. If (i) p entails q , and (ii) S has the power to make p true at t , then S has the power to make q true at t .

true? Joshua Hoffman and Gary Rosenkrantz have argued convincingly that it is not.{22} For example, although it may be within my power to bring it about that

11. Some rocket ship is red.

is true, and (11) entails

12. Some rocket ship exists.

it may not be within my power to make (12) true. Therefore, power is not closed under entailment. Alfred Freddoso hopes to rectify the deficiency revealed by this important insight by requiring that p and q be logically equivalent. That is to say, he defends

10'. If (i) p is logically equivalent to q and (ii) S has the power to make p true at t , then S has the power to make q true at t .

Although he provides no justification for 10', he considers it "impeccable." {23}

But it seems to me that 10' may not be so flawless after all. For consider a situation such as that envisioned in Newcomb's paradox: {24} a being guesses in advance whether I shall choose one of two boxes B_1 or B_2 . My choice has absolutely no influence on his prediction, nor is his forecast the result of precognition: it is pure guesswork. Let us, however, suppose that the predictor is infallible, essentially inerrant. It follows that

13. I choose B_1 $\equiv$ The being predicts that I choose B_1 .

But, although it is within my power to choose B_1 , it is not within my power to bring about the being's prediction; for the problem conditions guarantee that the being's prediction is entirely outside my control. Therefore (10') is false. Now consider another scenario in which the notion of precognition is admitted. In this case the being cannot fail to predict my choices correctly because he has infallible precognition. So in this case, too, (13) is true. Here, however, it appears that it is within my power to bring about the being's prediction as well as my choice, since my choice determines his precognitions. But what about what lies within the being's power? It is within his power to predict that I choose B_1 , but it is not with his power to bring it about that I choose B_1 . So, once again, (10') is false. No doubt these cases are exotic, but then again power over the past is an exotic subject, and the cases have obvious relevance to the question at hand.

The above cases suggest that what is missing from (10') is some mention of the relation of conditionship between p and q . Only if p is a condition of q in Wertheimer's sense can one be guaranteed that, by having it within one's power to bring it about that p , one also has it within one's power to bring it about that q . Accordingly, I should replace 10' with

10*. If (i) p is logically equivalent to q , and (ii) S has the power to make p true at t , and (iii) q is a consequence of p , then S has the power to make q true at t .

Hence, even though it is true that

14. The rocket, probe, safety switch, etc., function properly $\equiv$ Time loops do not exist.

and, even if space cadet Jones has it in his power to bring it about that the first half of this equivalence is true, it does not follow that he has it within his power to determine the structure of space and time. All that follows is that Jones exercises his above power in worlds in which there are no time loops and that in worlds in which time loops exist Jones never exercises his power. There is a sort of logical parallelism here without any relation of conditionship, and so rejection of the self-inhibitor argument does not imply embracing counterintuitive notions of power.

V. Conclusion

In conclusion, I think it is clear that the problems that confront the philosopher of science and the philosopher of religion respectively can turn out to be very similar and that interaction between the two can lead to some helpful insights for both. In the present case, the argument of the opponent of theological fatalism bears striking resemblance to the argument of the proponent of tachyons and time travel. They agree that past states of affairs may obtain which are logically incompatible with some envisioned action and yet insist that such an action is still possible because, if it were to be taken, the past states of affairs would not have obtained. This is initially disquieting, since in the one context the argument seems quite plausible whereas in the other the results seem counterintuitive. This inquietude can, however, be alleviated, I have argued, by positing the presence of a relation of conditionship in the case of divine foreknowledge, which makes it reasonable to ascribe to a free agent the power to determine partially what God foreknows, a relation which is absent in the cases of tachyons and time travel, so that in these cases one has no power over the past.

Footnotes

{1} For the clearest statement of this position, see Alvin Plantinga, *God, Freedom, and Evil* (New York: Harper & Row, 1974), pp. 69-72; for an assessment of this solution, see Philip Quinn, "Plantinga on Foreknowledge and Freedom," in James Tomberlin and Peter Van Inwagen, ed., *Alvin Plantinga, Profiles 5* (Boston: Reidel, 1985), pp. 271-287.

{2} For the best analysis, see Alfred J. Freddoso, "Accidental Necessity and Logical Determinism," this *Journal*, LXXX, 5 (May 1983): 257-278; cf. Joshua Hoffman and Gary Rosenkranz, "Hard and Soft Facts," *Philosophical Review*, XC (1984): 419-434; Alvin Plantinga, "Ockham's Way Out," *Faith and Philosophy*, II (1986): 235-269. On none of these theories of temporal necessity does God's foreknowledge turn out to be temporally necessary. For an assessment of these theories, see my "Temporal Necessity; Hard Facts/Soft Facts," *International Journal for Philosophy of Religion*, XX (1986): 65-91.

{3} "Elektrodynamik bewegter Körper," *Annalen der Physik*, XVII (1905): 891-921.

{4} Bilaniuk, Deshpande, Sudarshan, "Meta Relativity," *American Journal of Physics*, XXX (1962): 718ff; Gerald Feinberg, "Possibility of Faster-than-light Particles," *Physical Review*, CLIX (1967): 1089-1105.

{5} *The Theory of Relativity of Motion* (Berkeley: University of California Press, 1917), pp. 54/5. Actually Tolman's paradox results not only when infinite velocities are involved, but for all velocities greater than c^2/w , where w is the relative velocity of two observers.

{6} See Bilaniuk *et al.*, "More about Tachyons," *Physics Today* (December 1969), p. 49; David Bohm, *The Special Theory of Relativity* (New York: W. A. Benjamin, 1965), p. 158; F. A. E. Pirani, "Noncausal Behavior of Classical Tachyons," *Physical Review*, D 1 (1970): 3224.

{7} Bilaniuk and Sudarshan, "Particles beyond the Light Barrier," *Physics Today* (May 1969): 47; Gerald Feinberg, *op. cit.*, p. 1091.

{8} See Bilaniuk *et al.*, "More about Tachyons," pp. 48-50; G. A. Benford, D. L. Book, and W. A. Newcomb, "The Tachyonic Antitelephone," *Physical Review*, D 2 (1970): 263-265 [this is the same Newcomb of the famous Newcomb's paradox]; Pirani, *op. cit.*, p. 3224; Paul Fitzgerald, "Tachyons, Backwards Causation, and Freedom," in *PSA, 1970*, Roger C. Buck and Robert S. Cohen eds. Boston Studies in the Philosophy of Science, VIII (Boston: Reidel, 1971), pp. 421-423; T. Chapman, *Time: a Philosophical Analysis*, Synthese Library (Boston: Reidel, 1982), pp. 23-25.

{9} Cf. Fitzgerald, "Tachyons," pp. 421-423.

{10} Roger G. Newton, "Causality Effects of Particles that Travel Faster Than Light," *Physical Review*, CLII (1967): 1274. Interestingly, Newton acknowledges his debt to Michael Scriven on the score of causal directionality and time and appeals to tachyons to show the possibility of precognition experiments. See also Paul L. Csonka, "Advanced Effects in Particle Physics, I," *Physical Review*, CLXXX (1969): 1266-1281; Bilaniuk *et al.*, "More about Tachyons," p. 52.

{11} *Op. cit.*, p. 1092. Cf. Chapman, *Time*, p. 23, who asserts that, after receiving a return signal which he will trigger, the observer may decide not to send his signal after all; in this case the standard objection to backward causation applies.

{12} Cf. Fitzgerald, "Tachyons, Backwards Causation, and Freedom," pp. 428-434; and, "On Retrocausality," *Philosophia*, IV (1974): 543. Suppose, he says, I receive a tachyon message from the future that a man I am about to shoot will be at a banquet two days hence. Is it therefore not within my power to kill him? Not at all, responds Fitzgerald; I have both the ability and opportunity to do so, so that I could kill him; but were I to do so, I would not have this reliable message from the future that he is alive. The point is that ignorance is not a necessary condition of an action's being within one's power. Fitzgerald's analysis is flawed, however, when he proceeds to argue that, in the case in which one does not try to perform the action precisely because one believes the tachyon message, then one's freedom is limited by the message from the future. For anything, he claims, which prevents a person's doing what he wants is to a limit on his freedom. Fitzgerald fails to see, however, that in this case what one wants to do is changed by the message; it does not therefore prevent one from doing what one wants to do. It merely changes one's motivation. As Fitzgerald goes on to observe, this can arise without messages from the future at all. Suppose before I pull the trigger someone rushes up and informs me that my intended victim is my beloved, long-lost uncle. Suddenly, my motivation is changed, and I no longer want to kill him, but would we say that my informer has limited my freedom in conveying his report to me?

{13} "Implications of Causal Propagation outside the Null Cone," *Australasian Journal of Philosophy*, I, (1972): 254. Thus, the escape route suggested by DeWitt, that information sent into the past is wiped from the observer's memory, is unavailing (Bikaniuk, *et al.*, "Tachyons," p. 50).

{14} "Tachyons," p. 427; and "Retrocausality," p. 435.

{15} Earman, "Causal Propagation," pp. 234/5. Assuming that the apparatus will work as it is supposed to, a typical experiment will involve the following elements: (1) a tachyon source that can be amplitude modulated, (2) a tachyon detector, (3) a velocity filter giving a monoenergetic beam. Proposed devices for each of these are used in tachyon research. (Benford *et al.*, "Antitelephone," p. 263; cf. Bilaniuk and Sudarshan, "Particles," pp. 50/1; *et al.*, "Tachyons," p.52.)

{16} See Monte Cook, "Tips for Time Travel," in Nicholas D. Smith, ed. *Philosophers Look at Science Fiction* (Chicago: Nelson-Hall, 1982), pp. 47-55. See also Donald C. Williams, "Myth of Passage," this *Journal.*, XLVIII, 15 (July 19, 1951): 457-472, p. 463.

{17} "A remark about the Relationship between Relativity Theory and Idealistic Philosophy," in *Albert Einstein: Philosopher-Scientist*, 2 vols., ed. Paul Arthur Schlipp (rep. ed.: New York; Harper, 1959), pp. 557-562. Gödel also announced discovery of expansion models and models with any value for $\times$ for which there exists no cosmic time because of the presence of cosmic rotation.

{18} *The Natural Philosophy of Time*, 2nd ed. (New York: Oxford, 1980), p. 307.

{19} See Paul Horwich, "On Some Alleged Paradoxes of Time Travel," this *Journal*, LXXII, 14 (Aug. 14, 1975): 432-444, p. 435.

{20} I am indebted to William Hasker for many interesting discussions of this issue.

{21} See his "Conditions," this *Journal*, LXV, 12 (June 12, 1968): 355-364.

{22} Joshua Hoffman and Gary Rosenkrantz, "On Divine Foreknowledge and Human Freedom," *Philosophical Studies*, XXXVII (1980): 289-296.

{23} "Accidental Necessity and Power over the Past," *Pacific Philosophical Quarterly*, LXII (1982): 64.

{24} Robert Nozick, "Newcomb's Problem and Two Principles of Choice," in N. Rescher, ed., *Essays in Honor of Carl G. Hempel* (Boston: Reidel, 1969), p. 132.

"Lest Anyone Should Fall": A Middle Knowledge Perspective on Perseverance and Apostolic Warnings

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Apostolic warnings against apostasy pose a difficulty for the classic doctrine of perseverance of the saints because either the warnings seem superfluous or else it seems possible for the believer to fall away after all. The attempt to construe the warnings as the means by which God effects perseverance fails to distinguish the classical doctrine from a Molinist doctrine, according to which believers can fall away but in fact will not due to God's extrinsically efficacious grace. A Molinist perspective is coherent and, unlike the classical doctrine, does not render superfluous the apostolic admonitions.

"'Lest Anyone Should Fall': A Middle Knowledge Perspective on Perseverance and Apostolic Warnings." *International Journal for Philosophy of Religion* 29 (1991): 65-74.

Adherents of the doctrine of the perseverance of the saints typically maintain that, once a person is truly regenerate, not merely will he not fall away, but that he literally cannot fall away from grace and be lost. Usually this conclusion is thought to follow from the irresistible character and intrinsic efficacy of God's grace: a person who has been regenerated by the Holy Spirit is so overwhelmed by God's love, power, and majesty that he is simply rendered incapable of committing apostasy. Therefore, all who through God's sovereign working have come to a knowledge of God will persevere to the end and be saved.

This doctrine sits uncomfortably, however, with numerous passages in Scripture which warn the faithful of the danger of apostasy and describe the terrible desserts of those who deliberately fall from grace (*e.g.*, Rom. 11.17-24; I Cor. 9.27; Gal. 5.4; Col. 1.23; I Thess. 3.5; I Tim. 1.19-20; II Tim. 2.17-18; Jas. 5.19-20; II Pet. 2.20-22; I Jn. 5.16). The writer of the Epistle to the Hebrews, whose readers were tempted to revert to Judaism under the pressure of persecution, is especially explicit, warning and exhorting his readers against the danger of apostasy (6.1-8; 10.26-31), "lest anyone should fall" through disobedience (4.11).

Although some adherents of the doctrine of perseverance have attempted to explain away such passages by maintaining that they concern persons who were never truly regenerate in the first place,{1} such a contention seems highly dubious in view of the language of these admonitions, which seem clearly to be directed toward regenerate believers.{2} In light of this fact, defenders of perseverance who take these passages as serious warnings directed toward Christians have offered another explanation of the compatibility of the doctrine of perseverance and warnings against apostasy: the warnings themselves are the *means* by which God preserves the elect.{3} Berkhof, for example, remarks,

There are warnings against apostasy which would seem to be quite uncalled for, if the believer could not fall away But these warnings regard the whole matter from the side of man and are seriously meant. They prompt self-examination, and are instrumental in keeping believers in the way of perseverance. They do not prove that any of the addressed will apostasize, but simply that the use of means is necessary to prevent them from committing this sin.{4}

By warning believers against apostasy, God ensures that they do not commit apostasy.

This ingenious response raises all sorts of intriguing questions. For example, if the believer's will is so overwhelmed by God's grace that he is actually incapable of apostasizing, then why give such warnings at all? Would they not be entirely superfluous? If, on the other hand, it is the warnings themselves that bring about perseverance, then is it not true that the believer is *capable* of falling away, even though, because of the warnings, he *will* not? For warnings do not seem to act as efficient causes upon the will, forcing one to act in a certain way; they can be disobeyed. Contrast, for example, my speaking English as a result of being raised by English-speaking parents: I am determined to speak English; I cannot suddenly choose to start speaking Vietnamese. I have no freedom simply to elect what language I speak. Now in the case of warnings, if they are severe enough and I am prudent, then I shall certainly heed them. But in virtue of being warned, I do not think we should want to say that my freedom has thereby been removed; it is still within my power to disregard the warnings, and if I am foolish enough, perhaps I shall do so. If then it is merely the warnings that guarantee

perseverance, it seems that the believer is in fact free to disobey them and fall away, even though he will not. I shall assume, therefore, that warnings do not obviate human freedom.

What seems to be at stake in the question I am raising is a counterfactual proposition like

1. If the warnings had not been given, the believers would have fallen away.

Does the defender of perseverance regard (1) as true or not? If he holds that (1) is true, then it seems clear that the believers are in fact capable of falling away, for in the closest possible worlds in which the antecedent of (1) is true, they do fall away.

Now the defender of perseverance might insist that even if (1) is true, nevertheless, *given the fact that believers have, indeed, been warned*, the believers cannot fall away. But this response commits an error which is prevalent in discussions of divine foreknowledge and human freedom, namely, confusing the necessity of a proposition *in sensu composito* with its necessity *in sensu diviso*. Proponents of theological fatalism often fail to distinguish these two senses in considering a proposition like

2. Whatever is foreknown by God must occur, which they take to entail a denial of human freedom.

But (2) *in sensu composito* means merely

2*. Necessarily, any event which is foreknown by God will occur.

In this case, what is necessary is not the occurrence of any event *per se*, but the composite state of affairs consisting of both God's foreknowledge of the event and the event's occurrence. The whole conjunction is necessary, but not the individual conjuncts. Hence, this necessity *in sensu composito* is in no way inimical to human freedom. On the other hand, (2) *in sensu diviso* means

2**. Necessarily, any event, which is foreknown by God, will occur.

This does entail a denial of human freedom, since what is necessary is any event itself. In this case, we do not have a mere composite necessity, but one of the conjuncts is itself asserted to be necessary. The opponent of theological fatalism will claim that (2) when understood *in sensu diviso*, that is, as (2**), is false, but when understood *in sensu composito*, that is, as (2*), is true and that therefore theological fatalism fails.

Similarly, in the case of perseverance, if (1) is true, then the proposition

3. Any believer who has been warned by God cannot fall away

is at best true *in sensu composito*, that is to say, it is true that

3*. Necessarily, a believer who has been warned by God will not fall away.

But according to (3*) it is not impossible that the believer fall away; what is impossible is the conjunction of God's warning him and his falling away. The necessity asserted by (3*) is ascribed only to the composite state of affairs consisting of God's warning a believer and that believer's remaining faithful. But this composite necessity in no way removes the believer's

freedom or ability to fall away. On the other hand, (3) is false *in sensu diviso*, that is to say, it is false that

3**. Necessarily, a believer, who has been warned by God, will not fall away.

For if (1) is true, then even though it is impossible for the believer both to be warned and fall away, it is possible for him to fall away. Therefore, if (1) is true, then the doctrine of perseverance as classically understood is false: the believer *can* fall away, but, necessarily, if he has been warned by God, he *will* not.

But then suppose that the defender of perseverance says that (1) is false, that is, that the opposite of (1) is true.^{5} In that case, the warnings would seem to be superfluous. For if God's grace is intrinsically efficacious so that the believer cannot fall away, then it is causally impossible for the believer to apostasize. God causes him to persevere in grace. Seen in this light, the doctrine of perseverance is something of a misnomer; for it is not really *perseverance*, but *preservation* that is at issue here. The crucial point is that God preserves the believer in the state of grace by causally acting upon him, and, therefore, it is causally impossible for him to fall away, and so he perseveres. But if his falling away is causally impossible, then no warnings are necessary and the admonitions of Scripture lose all seriousness.

The defender of perseverance may have an escape from this dilemma, however. He could maintain that (1) is false, but contend that the reason it is false is not because it is causally impossible for the believer to fall away, but because

4. If the warnings had not been given, then God would have provided some *other* means of guaranteeing that the believer would persevere in grace.

He could argue that in view of God's faithfulness and love for the elect, it is broadly logically impossible for a believer to fall away because in every possible world in which a believer exists God supplies some means of ensuring his perseverance. Since there simply are no possible worlds in which believers fall from grace, the closest worlds in which the antecedent of (1) is true must be worlds in which the believers persevere. The reasons they persevere may be multitudinous, and there is no reason to think that believers in any world are causally constrained to persevere. Nor may one infer from the falsity of (1) or the truth of (4) that the Scriptural warnings are not the means by which God guarantees in the actual world that believers persevere.

But the problem with such a response is that it does not clearly distinguish the classical doctrine of perseverance from a Molinist version of that doctrine.^{6} The heart of the issue lies in the efficacy of God's grace: is God's grace intrinsically efficacious or extrinsically efficacious? According to the classic doctrine of perseverance, God's grace is intrinsically efficacious in producing its result, that is to say, grace infallibly causes its effect. But according to Molina, divine grace is extrinsically efficacious, that is to say, it becomes efficacious when conjoined with the free co-operation of the creaturely will. On Molina's view, God gives sufficient grace for salvation to all men, but it becomes efficacious only in the lives of those who respond affirmatively to it.

Now within Molinism, there exists a school called Congruism which could agree quite happily to (4) and even to the broadly logical impossibility of a believer's falling from grace

and yet insist that such a contention is in no way incompatible with the claims that the believer freely perseveres and even that it lies within the believer's power to renounce God's grace and apostasize.{7} Congruism, as represented, for example, by Suarez, holds that logically prior to God's decree of creation, God freely chose certain individuals to attain beatitude. Via His middle knowledge, God knew which gifts of grace would be efficacious in eliciting the free, affirmative response of these creaturely wills. Therefore, He decreed to create a world containing these individuals and to accord to them those gifts of grace to which He knew they would freely respond. These gifts are extrinsically, not intrinsically, efficacious in that the creaturely will is free to reject such grace, but since such gifts are selected according to God's middle knowledge, they are congruent to each created will and therefore infallibly are met with an affirmative response. God knows via His middle knowledge that even though the individual *could* reject His particular gifts of grace, in fact he *would* not. Suarez seems to suggest that in any logically possible world in which an elect individual exists, God bestows, based on His middle knowledge, congruent grace on that person which ensures his free response. Applied to the issue of perseverance, Congruism could maintain that God via His middle knowledge knows just what gifts of grace to accord in any possible world to each believer's will so as to elicit a continuing response of faith from that person. Hence, every believer will persevere to the end in whatever world he exists even though he is free and it lies within his power to reject any particular gifts of God's grace.

Such a Congruist doctrine of perseverance appears very paradoxical because even though the believer freely perseveres and is able to reject God's grace, nevertheless there are no logically possible worlds in which he apostasizes. Is such a doctrine coherent?

It does seem coherent, I think, for the Congruist to maintain that the believer freely perseveres even if he is not free to apostasize. That the believer freely perseveres is evident from the fact that for any *particular* congruent grace accorded him, there are worlds in which the believer rejects *that* grace. But via His middle knowledge, God in each of those worlds offers the believer some *other* gift of grace to which God knows the believer will freely respond. So even though there are no possible worlds in which a believer falls away, nonetheless believers persevere freely. The crucial point, once again, is that God's grace is only extrinsically efficacious, and therefore the believer's freedom is not causally constrained by God's action.{8}

But is the believer free to fall away and apostasize? On the one hand, it would seem not, since it is broadly logically impossible that he fall away. Surely if an agent is free to do some action A, then it must be broadly logically possible for him to do A! But on the other hand, nothing causally constrains him in any world to persevere, so that the broadly logical impossibility of his apostasy depends on his free will. So how can he not be free? Part of the problem here is that the introduction of an Anselmian God into the sphere of broadly logical modality scrambles our intuitions of what ought to be regarded as broadly logically possible or necessary. For example, it seems intuitively obvious that a possible world exists in which the highest form of creaturely life is rabbits which exist in unrelenting misery. But as Thomas Morris points out, such a world is in fact broadly logically impossible because it would be inconsistent with an Anselmian God. A maximally perfect being would not create a situation of such unrelenting suffering. Thus, ". . . worlds are (at least partially) conceivable which if, *per impossible*, the Anselmian God did not exist, would be possible." {9} Similarly, in the case at hand we have what seems intuitively to be a logically possible world (one in which believers apostasize), but which turns out to be broadly logically impossible because God in His essential goodness always acts so as to win the free, affirmative response of believers to

His grace. At the root of the paradox here seems to be a deficiency in the currently fashionable Stalnaker-Lewis type of theory of the truth conditions of counterfactual propositions, namely, the theory's inability to deal with counterfactuals having impossible antecedents. For what we really want to know is not whether (1) is true, but whether it is true that

1*. If the warnings had not been given and God had provided no additional gifts of grace, the believers would have fallen away.

The problem is that on the view we are currently considering, the antecedent is broadly logically impossible because God is too good to fail to provide additional gifts of grace. Hence, having an impossible antecedent, (1*) is vacuously true, but so is its contradictory, since there are no antecedent-permitting worlds. But intuitively we should want to say that (1*) is false if God's grace is intrinsically efficacious and non-vacuously true if His grace is extrinsically efficacious. Hence, the Congruist would be justified in holding the believer to be free to fall away even if there are no worlds in which he exercises that freedom. This conclusion seems to bring out the truth of Plantinga's remark that the use of possible worlds is not apt to shed much light on the notion of "within one's power." {10}

But is the Congruist committed in any case to the position that there are no possible worlds in which believers fall away? Careful reflection suggests not. For the notion of congruent grace does not mean grace which *cannot* be rejected by the created will, but grace which is so suited to the created will that were it to be offered, it *would not* be rejected. Hence, possible worlds exist in which grace which would in fact be congruent and efficacious, were it offered, is rejected and, hence, inefficacious. Nor need such worlds be worlds in which some other grace offered by God is congruent. The Congruist can maintain that in some such worlds *every* grace offered by God is rejected by the created will. The integrity of God's goodness and faithfulness to the believer is retained in such worlds because He offers the believer the greatest gracious help that He can, but the apostasizing believer rejects every gift of grace he is offered. Nor does such a possibility compromise the doctrine of perseverance, since the Congruist will maintain that such worlds are not feasible or realizable for God because the believer *would* in fact respond to such gracious helps were they actually to be offered. {11} In every world realizable by God, His various graces are congruent and efficacious; therefore, there is no realizable world in which believers fall away and are lost. This may seem odd at first because the word "feasible," which is normally used to describe the set of worlds realizable by God, tends to carry with it the connotation that worlds not feasible for God are worlds which He would like to actualize (like worlds in which all creatures always freely refrain from sin), but cannot because the creaturely wills fail to cooperate. But in the case of perseverance, God is no doubt pleased that worlds in which believers fall away are infeasible for Him, and that because the creaturely wills always *do* cooperate with His grace. Therefore, a Congruist doctrine of perseverance does not require that there are no logically possible worlds in which believers fall from grace.

In this light (4) may be more perspicuously expressed as
4.' If the warnings had not been given, God would have provided other gifts of grace and the believer would have responded freely to these.

The Congruist regards (4') as true, but holds that there are possible worlds in which the believer rejects all other gifts of divine grace offered to him; he adds merely that all such

worlds are infeasible for God. It is therefore clear that while all truly regenerate believers will persevere to the end, nevertheless they are free to fall away.

Therefore, if the classical defender of perseverance is to distinguish his view from a Molinist perspective, he must do more than insist on the truth of (4). For the Congruist will also insist that believers always persevere in grace and that were the Scriptural warnings not to be given, God would have offered the believers some other gifts of grace which He knew to be congruent; but he will also insist that the believer is entirely free to reject God's grace and fall away. The classical defender of perseverance must, it seems, if he is to distinguish his view from Molinism, hold to the intrinsic efficacy of God's grace and, hence, the causal impossibility of the believer's apostasy. But in that case, the warnings of Scripture against the danger of apostasy seem to become otiose and unreal. Perhaps the best route for the classical defender to take is to adopt a sort of *admonitory occasionalism*: that on the occasion of warning the believer against apostasy God infuses His intrinsically efficacious grace for perseverance.

To maintain that the warnings of Scripture are the means by which God guarantees the perseverance of the elect is in fact to adopt a Molinist perspective. That perspective need not be so radical as Congruism. The Molinist who holds to the perseverance of the saints may regard (4) and (4') as false because, in counterdistinction to the Congruist, he holds that there are realizable worlds in which believers do reject God's grace and apostasize. That is to say, such worlds are not merely logically possible, but are feasible for God. But the Molinist who holds to perseverance will simply add that God would not decree to actualize any of these worlds, or even more modestly, that God did not in fact decree to actualize such a world. In the world He chose to actualize, believers always persevere in the faith. Perhaps the warnings in Scripture are the means by which God weakly actualizes their perseverance. That is to say, in the moment logically prior to creation, God via His middle knowledge knew who would freely receive Christ as Savior and what sorts of warnings against apostasy would be extrinsically efficacious in keeping them from falling away. Therefore, He decreed to create only those persons to be saved who He knew would freely respond to His warnings and thus persevere, and He simultaneously decreed to provide such warnings. On this account the believer will certainly persevere and yet he does so freely, taking seriously the warnings God has given him.

Of course, Molinism does not imply the doctrine of the perseverance of the saints. The defender of middle knowledge could hold that logically prior to creation God knew that there were no worlds feasible for Him in which all believers persevere or that, if there were, such worlds had overriding deficiencies in other respects. Therefore, the warnings of Scripture do not guarantee the perseverance of believers, for believers can and do ignore them. Nevertheless, it does seem to me that those who interpret the warnings of Scripture as the means by which God ensures the perseverance of the saints have abandoned the classic understanding of that doctrine and have adopted instead a middle knowledge perspective on perseverance.

Endnotes

{1} This appears to have been the position of John Calvin *Institutes of the Christian Religion* 3.3.21,24; 4.1.10; 4.24.6-11. See also his comments on Hebrews 6 and 10 in John Calvin, *Calvin's Commentaries*, vol. 12: *The Epistle of Paul the Apostle to the Hebrews and the First*

and *Second Epistles of St. Peter*, trans. Walter B. Johnston (Grand Rapids, Mich.: Wm. B. Eerdmans, 1963).

{2} See I. Howard Marshall, *Kept by the Power of God* (Minneapolis: Bethany Fellowship, 1983).

{3} See, for example, Judy Gundry-Wolf, "Perseverance and Falling Away in Paul's Thought" (D.Theol. dissertation, Eberhardt-Karls-Universität Tübingen, 1987); for a critique, see I.H. Marshall, "Election and Calling to Salvation in 1 and 2 Thessalonians," paper read at the 38th *Colloquium Biblicum Lovaniense*, 1988, to be published in *Bibliotheca Ephemeridum Theologicarum Lovaniensium*.

{4} Louis Berkhof, *Systematic Theology* (Grand Rapids, Mich.: Banner of Truth Trust, 1969), p. 548.

{5} I.e., that if the warnings had not been given, the believers would not have fallen away. The defender of perseverance might say that both (1) and its opposite are false; but I regard this position as implausible. See my critique of this position in *Divine Foreknowledge and Human Freedom* (Leiden: E.J. Brill, 1990), chap. 13.

{6} See Luis Molina, *On Divine Foreknowledge: Part IV of "De Liberi Arbitrii cum Gratia Donis, Praescientia, Providentia, Praedestinatione et Reprobatione Concordia,"* trans. with an Introduction and Notes by Alfred J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988); William Lane Craig, *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, Brill's Studies in Intellectual History 7 (Leiden: E.J. Brill, 1988), chaps. 7, 8; *Dictionnaire de théologie catholique*, ed. A. Vacant, E. Mangenot, and E. Amann (Paris: Librairie Letouzey et ane, 1929), s.v. "Molinisme," by E. Vansteenbergh, vol. 10, pt. 2, cols. 2094-2187.

{7} See Francisco Suarez, *Opera omnia*, vol. 10: *Appendix prior: Tractatus de vera intelligentia auxilii efficacis, ejusque concordia cum libertate voluntarii consensus* 1, 12, 13, 14; idem *De concursu et auxilio Dei* 3.6, 14, 17, 20; Craig, *Divine Foreknowledge and Future Contingents*, chap. 8; *Dictionnaire de théologie catholique*, s.v. "Congruisme," by H. Quillet, vol. 3, pt. 1, cols. 1120-38.

{8} See the very stimulating remarks by Thomas V. Morris, *The Logic of God Incarnate* (Ithaca, N.Y.: Cornell University Press, 1986), pp. 151-52. He imagines a case in which Jones's brain is wired with electrodes such that if he were to attempt to choose differently than he does choose, the electrodes would be activated and prevent that choice. "He could not possibly have done otherwise, but nothing apart from his own decisions as a matter of fact brought it about that he did as he did" (Ibid., p. 152). Substitute for the electrodes God's congruent grace, and we see that Jones freely perseveres even though there are no worlds in which he does not persevere. Indeed, since God's grace is, unlike the electrodes, only extrinsically efficacious, Jones's freely persevering is all the more evident.

{9} Morris, *Logic of God Incarnate*, pp. 112-13.

{10} Alvin Plantinga, "Ockham's Way Out," *Faith and Philosophy* 3 (1986): 265.

{11} On the notion of worlds feasible for God, see Thomas P. Flint, "The Problem of Divine Freedom," *American Philosophical Quarterly* 20 (1983): 257.

Omniscience, Tensed Facts, and Divine Eternity

William Lane Craig

William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

A difficulty for a view of divine eternity as timelessness is that if time is tensed, then God, in virtue of His omniscience, must know tensed facts. But tensed facts, such as It is now t, can only be known by a temporally located being.

Defenders of divine atemporality may attempt to escape the force of this argument by contending either that a timeless being can know tensed facts or else that ignorance of tensed facts is compatible with divine omniscience. Kvanvig, Wierenga, and Leftow adopt both of these strategies in their various defenses of divine timelessness. Their respective solutions are analyzed in detail and shown to be untenable.

Thus, if the theist holds to a tensed view of time, he should construe divine eternity in terms of omnitemporality.

"Omniscience, Tensed Facts, and Divine Eternity." *Faith and Philosophy* 17 (2000): 225–241

Many theists in the Western tradition have held that God is timeless, and recently this doctrine has enjoyed something of a resurgence.{1} The objective reality of tense remains, however, problematic for the doctrine of divine atemporality. For if an A–Theory of time (in McTaggart’s terminology) is correct, there exist tensed facts, of which God, as an omniscient being, cannot be ignorant. But since tensed facts can only be known by a temporal being, God must therefore be temporal.

The objection, then, is that

1. God is timeless.
2. God is omniscient.

and

3. A temporal world exists.

are broadly logically inconsistent, as is evident from the necessary truth of

4. If a temporal world exists, then if God is omniscient, God knows tensed facts.
5. If God is timeless, He does not know tensed facts.

Since (2) is essential to theism and (3) is evidently true, (1) must be false.

The B-theorist escapes this argument by denying that there are any tensed facts, so that (4) is false. The B-theorist holds that God knows all the facts there are about the temporal world in knowing tenseless facts. Thus, if one embraces a tenseless theory of time, he eludes the objector's snare.

Most defenders of divine timelessness, however, are eager to free their doctrine from dependency on the B-theory. The question, then, is how one may affirm the reality of tensed facts and yet maintain either that God knows them or that His ignorance of them does not impugn His omniscience.

Timeless Knowledge of Tensed Facts

Some atemporalists have attempted to argue that God does know tensed facts, thus denying the truth of (5). For example, Jonathan Kvanvig holds both to the objective reality of tensed facts and to God's timeless knowledge of all facts, which together imply that God has timeless knowledge of tensed facts. Kvanvig's defense of this position relies upon his analysis of propositions expressed by sentences containing personal indexicals.^{2} In lieu of positing privately accessible propositions, he analyzes belief in terms of a triadic relation between an intentional attitude, a proposition, and a particular manner of accessing, or grasping, the proposition. Personal indexicals express individual essences, which are part of the propositional content of the sentence containing such indexical words. But this propositional content is differently accessed by different persons. When Kvanvig says, "I'm Kvanvig," he expresses the same proposition as I do when I say to him, "You're Kvanvig," but this propositional content is *directly* grasped by Kvanvig and *indirectly* grasped by me. Kvanvig suggests that the proposition is grasped through the meanings of the sentences involved; since these are different,^{3} the propositional content is differently accessed by Kvanvig and me. Thus, an omniscient God has the same knowledge of the facts as we do with respect to the propositions we express through sentences containing personal indexicals, but we directly access those propositions involving our respective individual essences, while God accesses this same propositional content indirectly.

Kvanvig proposes an analogous solution for dealing with tensed facts expressed by sentences like "It is now 1 June 1984." He asserts that the demonstrative "now" expresses the individual essence of the time to which it refers. He maintains that "temporal demonstratives are just particular ways of referring to the essences of moments."^{4} Such an interpretation of temporal indexicals permits us to hold that God grasps the same propositional content that we

do when we use sentences like "It is now 1 June 1984." On Kvanvig's view the same proposition is expressed by the sentence "Today is 1 June 1984" uttered on that date as is expressed by the sentence "Yesterday was 1 June 1984" uttered on June 2. The difference in behavior resulting from these two beliefs is due to the meanings of the sentences through which the identical propositional content is accessed. A person grasps a proposition containing the essence of a time directly only if that person grasps the proposition at that time, which issues in a present-tense belief; otherwise the proposition is grasped indirectly, which in the case of temporal persons will yield beliefs involving other tenses. Hence, "one can affirm the doctrines of timelessness, immutability and omniscience by affirming that God indirectly grasps every temporal moment, and directly grasps none of them." {5}

At face value, Kvanvig's analysis would not seem to be a defense of God's timeless knowledge of tensed facts, but the claim that tense in some way derives from the manner of accessing propositional content, which itself is tenseless. For the essences of the times picked out by temporal indexicals do not include their tensed properties (for example, presentness), or it becomes inexplicable how indexical expressions like "today" and "yesterday" could refer to the same individual essence and how God could timelessly grasp propositional content involving such essences. But Kvanvig denies that there is any temporal element expressed by tensed sentences which is not part of their propositional content. Referring to what he calls the "proposition"

1. It is now 1 June 1984.

and

1A. The essence of the moment picked out by the use of the demonstrative 'now' in (1) is mutually exemplified with the property of being 1 June 1984.

Kvanvig asserts,

. . . the apparent infection of propositions such as (1) by temporality is eliminated by noting that (1A) lacks this temporality and further contains all the same temporal elements as (1). If (1A) is not identical to (1), it is not because of some temporal dimension; it must be for some other reason. {6}

It is odd that Kvanvig refers to his (1) as a proposition, for on his own view propositions lack indexicality. Rather (1) is a sentence, and the question is whether the proposition expressed by (1) is infected by temporality, that is to say, whether that proposition is such that it cannot be expressed "without implying temporal indexicals." {7} Kvanvig's claim is that the propositional content of (1) can be expressed by sentences not implying temporal indexicals. His reason for this claim is that (1A) is not so infected (either it expresses the same proposition as (1) without the use of temporal indexicals or else it represents the propositional content of (1) and can be expressed other than by (1) through a sentence not implying temporal indexicals) and, moreover, contains *all the same temporal elements as (1)*. But (1A) is true only if the "is" in (1A) is tenseless. Otherwise (1A) is false, having been true only on 1 June 1984. If (1A) is tensed, the time of its truth is just the same as that of (1). Thus Kvanvig errs when he says that if (1A) is not identical to (1) it is not because of some temporal element—on the contrary, it is precisely because of the absence of tense from (1A) that it is not identical to (1). If *all* the temporal elements of (1) are contained in (1A) and God's knowledge is of propositions expressible by sentences like (1A), then God knows no tensed facts nor,

indeed, is tense any objective temporal element at all, either of the propositional content of (1) or of the way of accessing that propositional content. Tense is merely a feature of language and nothing more. Kvanvig's analysis thus miscarries: it implies that the propositional content of tensed sentences is tenseless and that such sentences imply no temporal element not described by their propositional content, which in turn implies the non-objectivity of tense.{8}

A somewhat similar, but crucially adjusted, account of divine omniscience is offered by Edward Wierenga, who considers tense to belong to the propositional content expressed by tensed sentences, so that God must, in virtue of His omniscience, know tensed facts.{9} In order to explain why such knowledge does not involve God in temporality, Wierenga appeals, like Kvanvig, to the analogy of propositions expressed by sentences containing first-person pronouns.{10} Adopting Plantinga's notion of an individual essence—a property which something can possess essentially and no other thing can possess at all—, Wierenga asserts that we should hold one of a person's essences to be special, namely, the one expressed by that person's use of the word "I." In my case this essence is the property of *being me*. Wierenga calls this special essence one's haecceity, and he claims that propositions expressed by sentences involving the first person pronoun entail the haecceity of the person using such expressions; such propositions he calls "first person propositions." Now Wierenga does not think that I am the only person who can grasp a proposition entailing my haecceity. Rather what is crucial is that I cannot believe such a proposition without having a *de se* belief, that is, a belief about me myself. A person *S* believes *de se* that he himself is *F* just in case there is a haecceity *E* such that *S* has *E* and *S* believes a proposition having *E* as a constituent and which attributes *being F* to whomever has *E*. Being omniscient, God also believes those propositions which have my haecceity as a constituent, but since the haecceity is mine, not God's, His believing them does not issue in *de se* beliefs for Him, as my believing them does for me.

On the analogy of personal haecceities, Wierenga asserts that moments of time also have special essences or haecceities. A proposition containing the haecceity of a time he calls a "present-time proposition." We temporal beings can only grasp present-time propositions at the time whose haecceity is contained in the proposition, not before or after. When a person believes a present-time proposition at its time, that person has a *de praesenti* belief. A person *S* believes *de praesenti* at a time *t* that it is then the case that *p* just in case there is a haecceity *T* such that *t* has *T* and at *t* *S* believes a proposition having *T* as a constituent and which attributes being such that *p* to whatever time has *T*. Wierenga analyzes the proposition expressed by A. N. Prior's "The 1960 exams are over" as a proposition entailing the conjunction of the haecceity of the time of Prior's belief and the property of *being such that the 1960 exams have finished before then*.

Now Wierenga contends that there is no reason why God cannot believe all true present-time propositions, just as He believes all true first-person propositions. Just as His belief in a first-person proposition does not give Him a belief *de se* unless it is a belief in His own first-person proposition, so a belief in a present-time proposition does not give Him belief *de praesenti* unless He believes that proposition at its time. Being timeless, God did not have to wait, as did Prior, until August 29, 1960, in order to grasp the proposition Prior expressed by saying, "The 1960 exams are over." He grasps and believes the relevant proposition timelessly and so forms no *de praesenti* belief in so doing. Thus, a timeless God knows all present-time propositions, and so there are no tensed facts unknown to Him.

It seems to me that Wierenga's account of God's knowledge of propositions expressed by tensed discourse is multiply defective. To begin with, his account of what it is to have a *de praesenti* belief is implausible. Suppose I glance out the window and form the judgment, "It's raining." On Wierenga's account, what I actually believe is a proposition about a certain time which attributes to that time a peculiar property, *being such that it is raining then*. But surely I do not believe anything of the sort.^{11} I may be utterly unconscious of the present time and certainly am not forming beliefs about its properties or its haecceity. Whatever plausibility attends Wierenga's analysis of *de se* beliefs derives from the fact that expression of such beliefs in English involves the use of first-person indexicals, so that *S* can be conceived to believe a proposition involving *S*'s haecceity and a property *F*. But the temporal analogue to such beliefs *de se* are beliefs involving present-tense indexicals like "now." When we have beliefs about what is going on now, then we do plausibly form a belief involving in some way the relevant time. Wierenga's analysis would most plausibly account for beliefs having similar form to a belief like "Now is when the meeting starts." In such a case we do seem to be ascribing a property to a tensed time. But not all beliefs *de praesenti* involve temporal indexicals, and the range of those doing so which also ascribe properties to the present is narrow, indeed. Wierenga might attempt to adjust his analysis, such that in having a belief *de praesenti* I grasp (even if I do not believe) a proposition such as he describes.^{12} But if through my tensed beliefs I grasp information which essentially involves a certain time and its properties, why is there no necessary reference to that time in my conscious belief in the form of temporal indexicals like "now"? Just as first-person propositions must be expressed in English via first-person indexicals, so present-time propositions, as Wierenga conceives them, must seemingly be expressed via present-tense indexicals. The absence of temporal indexicals from most of our tensed beliefs renders implausible the idea that by means of them we grasp propositions which involve essentially the ascription of properties to a time.

Moreover, Wierenga's analysis of tensed beliefs is drastically incomplete, since it overlooks all but present-tense beliefs. How are beliefs like "John left at 8:00" or "John will come home at 3:00" to be analyzed? It seems that Wierenga's analysis would require him to say that such beliefs express a proposition involving the haecceity of the time at which the belief is held and which attributes to that time properties specifying certain B-relations to events, for example, the time in question is such that John's leaving at 8:00 is earlier than then and his coming home at 3:00 is later than them. This analysis serves to bring out that the property attributed to the time must be tenseless, not only in past- and future-tense beliefs, but also in beliefs *de praesenti*, lest the propositional content of God's beliefs be constitutive of a past, present, and future for God. If God is to know tensed facts, then, such knowledge comes, not through the property *being such that p* which is attributed to the time, but through the haecceity which the relevant time has.

Does the haecceity of any time *t*, then, include its tense? If not, then the propositional content of God's beliefs is wholly tenseless, and all He grasps are the tenseless B-relations between times and events. Indeed, it might be argued that a time's haecceity *cannot* include its tense, since specific tense determinations are accidental to times. A haecceity is an individual essence; but since times are not essentially present, but acquire and lose presentness, their particular tense determinations cannot be part of their respective haecceities. Thus, the haecceity of a time must be a wholly tenseless property. Since the attribution to a tenseless time of a property involving tenseless B-relations of *earlier than*, *simultaneous with*, or *later than* does not serve to introduce tense, it turns out that what God knows are wholly tenseless propositions, not present-time propositions.

Wierenga could escape this conclusion by advocating an ontology of presentism, according to which past and future times do not exist. Since the only time that exists is the present time, presentness could be conceived to be essential to any time. Just as existence is essential to any thing, since a thing has existence in every possible world in which it exists,{13} so presentness is essential to any time, since a time has presentness at every time at which it exists. Since a time cannot exist without being present, presentness therefore belongs to its haecceity.

The analogy with first-person propositions clearly suggests that for Wierenga a time's haecceity involves its tense, indeed, its presentness. Just as first-person propositions are exactly those which entail one's haecceity, so present-time propositions are just those containing a time's haecceity. But then it becomes extraordinarily difficult to understand how God can grasp the haecceity of a time without that time's being present for Him, which entails God's temporality. Consider the analogy of first-person indexicals. If the individual essence which is my haecceity is not the property of *being William Craig*, but, as Wierenga maintains, the special property of *being me*, then how can God possibly grasp a proposition which includes this haecceity?{14} Such a proposition is a private proposition which God cannot grasp because He is not I. If He can grasp such a proposition, then I fail to see why someone who addresses me as "you" does not also grasp such a proposition—in which case we are not talking about first-person propositions at all. Analogously, if a haecceity involves more than a tenseless B-determination, if it involves *being present*, then a timeless God cannot grasp a proposition containing such a haecceity. To grasp a proposition attributing a B-relation to some time which is objectively present entails one's being present. For example, in order to know the tensed fact expressed by Prior's utterance, "The 1960 exams are over," God must know more than the tenseless fact that the close of the exams is earlier than August 29, 1960; he must know of August 29, 1960 that it is present, or past in relation to the present. God's having such knowledge entails His temporality.

Wierenga's analysis fails to explain how God can grasp propositions involving haecceities which include the property of presentness without His being temporal. It therefore also fails as a defense of a timeless God's knowledge of tensed facts.

Finally, consider Brian Leftow's defense of God's timeless knowledge of tensed facts. The key to Leftow's solution is his distinction, inspired by the Special Theory of Relativity, between events' occurrence relative to various temporal reference frames and their occurrence relative to God's "reference frame" of eternity. Relative to eternity, all events are eternally present, even though relative to various temporal reference frames they may be past, present, or future respectively. Thus, relative to eternity there simply are no temporally tensed facts to be known. Leftow explains,

. . . all events are actual at once, *in eternity*. But it does not follow that time is not tensed. Events also occur in temporal reference frames, and the time of these reference frames may be tensed The reason a timeless God does not know the essentially tensed fact that (T) is that in His framework of reference, eternity, *this is not a fact at all*. (T), again, is the claim that a proper subset S of the set of temporal events, consisting of a, b, c, etc., now has present-actuality. In eternity this claim is false. In eternity *all* temporal events . . . have present-actuality at once.{15}

By (T) Leftow apparently means that the *members* of S, rather than S itself, now have present-actuality. But how is this claim false in eternity? Since *all* events have present-

actuality in eternity, would not also the members of *S*? Perhaps the problem is that all events have present-actuality *at once* in eternity, whereas (T) states that the members of *S* have present-actuality *now*. But in eternity, the indexical "now" in (T) refers either to the eternal present or to the time of *a, b, c*. If it refers to the eternal present, then the members of *S* do have present-actuality along with all other events. If it refers to the time of *a, b, c*, then it remains in Leftow's view a fact in eternity that *a, b, c* have present-actuality then. So the problem does not reside in the contrast between now/at once. Perhaps the problem is that the present-actuality which *a, b, c* now have is temporal present-actuality, whereas in eternity they have eternal present-actuality. While this might seem to make sense, it sits ill with Leftow's insistence that

The same events that A-occur in our temporal present A-occur in God's eternal present. They are there 'in their presentness': the very A-occurrence that is B-simultaneous with certain events within temporal reference frames is A-simultaneous with a timeless being's existence and with all temporal events within an eternal reference frame. Thus God can timelessly perceive, all at once, the very A-occurring that we perceive sequentially, under the form of change. {16}

Since, on Leftow's definitions, to A-occur is to occur now, {17} we face the same indexical difficulty as above. If an event A-occurs in eternity, the "now" refers either to the eternal present or to the temporal present. If it refers to the eternal present, then it is not "the very A-occurring that we perceive," since that occurring refers to the temporal now. But if we say that it refers to the temporal present, then since the very same A-occurring takes place in time and eternity, (T) is a fact in eternity after all. In order to bring consistency into his account, it seems to me that Leftow ought to say that for an event to A-occur is for that event to be present and that while the same events exist in time and eternity, they are not present in the same way with respect to these two "frames": events are temporally present only in time and eternally present only in eternity. Therefore, in eternity there are no temporally tensed facts; there are only eternally tensed facts, and these are all in the eternal present-tense. Accordingly, (T), referring as it does to the temporal present, is false in eternity, but it is also false that the very same A-occurring that transpires in time takes place in eternity.

It might be thought that by (T) Leftow actually means

T'. Only the members of a proper subset *S* of all temporal events have present actuality,

a claim which is true in time, but false in eternity, since in eternity all events have present actuality. But if by "present actuality" we mean, not merely tenseless metaphysical presence (which affords no knowledge of tensed facts), but present-tense actuality, then it is clear that in atemporal eternity events are not actual in that mode, for then eternity would be temporal. {18} Such an interpretation would also be inconsistent with Leftow's claim that in eternity God is presented with B-series of events relative to inertial frames. {19} In any case, such present-tense actuality would leave God completely in the dark as to past- and future-tensed facts; indeed, in having all events present to Him, God would either mistakenly believe that all events are present or else be ignorant of which subclass of events really is present and so have no knowledge of tensed facts.

Leftow's account thus seems to deny, not grant, God knowledge of (temporally) tensed facts. All He knows are the eternal present-tense facts. But Leftow maintains that God also knows the essentially tensed facts relative to temporal frames of reference. He writes,

A factually omniscient being can only be required to grasp directly such facts as are genuinely facts within that being's framework of reference. Thus the fact that a timeless being grasps directly only the essentially tensed facts of eternity does not count against His strict factual omniscience, provided that He has some other access to the essentially tensed facts of other reference frames. But . . . a timeless God can know all the facts of simultaneity that obtain in other reference frames. Thus He can know what the essentially tensed facts of these other frames *are*, though He cannot be directly presented with these facts: it is just not true that the only way God can know facts is by some sort of direct presentation.{20}

Leftow's appeal to the distinction between direct and indirect grasping will not serve to provide God with a knowledge of tensed facts, however. At best God can know what are the simultaneity classes of events relative to any arbitrarily specified reference frame or hypothetical observer, but He cannot know what point on the world line of that observer or which simultaneity class of events is present in that frame.{21} When we realize that the "eternal present" is just a metaphorical description of a tenseless state of existence, then it is evident that on Leftow's account God knows no tensed facts. At the very least He knows no temporally tensed facts, which is what was to be proved.

Indeed, Leftow's account of what he calls "factual omniscience" implies that there really are no tensed facts.{22} According to Leftow a fact is either the existing of a subject or a subject's exemplifying of an attribute. The same fact can render a number of distinct propositions true. In Leftow's view the same fact that renders *It is then (i.e., at 3 P.M.) 3 P.M.* true also renders true what is expressed by the sentence token "It is now 3 P.M." These are distinct truths, different propositions, rendered true by the same fact. That fact is accessible at all times in varying ways and the various modes of access one can have to this fact generate distinctive truths that can only be known at various times. So even if God cannot be propositionally omniscient concerning events in time, He can still be factually omniscient in regard to them.

The above account makes it evident that Leftow is really a B-theorist in spite of himself, holding that there are no tensed facts. On his account a tensed fact would be a subject's exemplifying a tensed property like presentness or the subject's presently existing. But such a fact is not accessible at all times, but only at the time it obtains or exists. The proposition that *It is then 3 P.M.* does not serve to access such a present-tensed fact, for we do not know by it whether 3 P.M. is past, present, or future. The fact that renders such a proposition true must therefore be tenseless, even if that tenseless fact generates a tensed proposition at 3 P.M. Since there are no facts that escape God's omniscience and the only temporal facts God knows are tenseless facts, it follows that tensed facts do not exist.

Moreover, Leftow's account of God's factual omniscience seems untenable. For Leftow does not think that the propositional context expressed by tensed sentences is tenseless and that tense results from the mode of presentation to or access by language users. Rather he holds that there are tensed propositions which can be known only at certain times. But unless Leftow is prepared to reject a view of truth as correspondence, there must be facts corresponding to true tensed propositions, for example, that *3 P.M. is present*. If this proposition is true, then it states a fact about the world. Even if we agree with Leftow that there are facts which are stated by no proposition, he has not given us any reason to doubt that every true proposition states a fact. Indeed, a view of truth as correspondence seems to require it. It follows, therefore, that a timeless God is not only not propositionally omniscient, but not even factually omniscient.

Omniscience Despite Ignorance of Tensed Facts

It seems evident, then, that if God knows tensed facts, He is temporal, so that a denial of (5) is untenable. What prospect is there then for escaping the present objection by a denial of (4)? Here it is not enough simply to assert that a timelessly existing being cannot be expected to know tensed facts, on the basis that this is to demand the logically impossible.^{23} Of course, such a feat is logically impossible; that is the point of the necessary truth of (5). But so long as we retain the customary definition of omniscience

O: S is omniscient = *df.* For all p , if p , then S knows that p and does not believe that $\sim p$

and agree that tense is part of the propositional content expressed by tensed sentences, then it follows that God, in order to be omniscient, must know tensed facts. If such knowledge is precluded by His timelessness, then He is not omniscient.

The above suggests that the most promising strategy for the atemporalist will be either to revise the traditional definition of omniscience or to deny that tense, though objective, belongs to the propositional content of tensed sentences.

Generally speaking, the difficulty encountered in the first approach is that any adequate definition must be in accord with our intuitive understanding of the *definiendum*, so that we are not at liberty to "cook" the definition of omniscience in order to resolve the difficulty without the definition's becoming unacceptably *ad hoc*.^{24} So what plausible alternative to O does the atemporalist suggest?

Wierenga, in a sort of second line of defense, is prepared to accept that some propositions are "perspectival," true at some perspectives and false at others. With respect to tense what this amounts to is the admission that propositions have their truth values relative to times and thus sometimes change their truth values. O would require God to know all such true propositions and, hence, to be temporal and changing. But Wierenga, observing that believing that a proposition is true at a perspective is different from believing at a perspective that a proposition is true, proposes the following re-definition of omniscience:^{25}

O': X is omniscient = *df.* For any proposition p and perspective $\langle s, t \rangle$,
(i) if p is true at $\langle s, t \rangle$, then X knows that p is true at $\langle s, t \rangle$, and
(ii) if X is at $\langle s, t \rangle$ and p is true at $\langle s, t \rangle$, then at $\langle s, t \rangle$, X knows p .

According to O' God must know which tensed propositions are true at which times, but He need not know the tensed propositions themselves. Wierenga concludes, "if some propositions really do change their truth value over time, if propositions are thus 'perspectival,' then . . . an omniscient being is required to know a perspectival proposition only if the being is at a perspective at which the proposition is true"; thus, "it follows from the claim that God is omniscient that he is not eternal only on the assumption that he is at some temporal perspective" ^{26}

Wierenga's definition O' is, however, unacceptably contrived. For the ostensibly perspectival nature of truth is not a sufficient condition for exempting knowledge of a certain class of propositions from the concept of omniscience. In Wierenga's view, God has knowledge of propositions stating exclusively tenseless B-facts, such as that p is true at t , whereas temporal persons know a multitude of objectively true propositions which remain unknown to God.

Persons located at t know not merely that p is true at t ; they know p *simpliciter*, an objectively true proposition of which God is ignorant. Wierenga re-defines omniscience in such a way that a being which does not know tensed propositions can nonetheless be declared to be omniscient. But in the absence of independent grounds for accepting O', such a procedure is unacceptably *ad hoc*. If we wish to include temporal perspectives in our definition of omniscience, then why not adopt Davis's following definition?[{27}](#)

O'': S is omniscient = *df.* For all p , if p at t , then it is true at t that S knows that p and does not believe $\sim p$.

On O'', unlike O', God would know *every* true proposition instead of just some; this intuitively commends O' as a more adequate definition of omniscience.[{28}](#) But O'' would require that God know tensed propositions, as (4) states.

Leftow also entertains the idea that omniscience be re-defined in such a way that God not be required to know all truths, including tensed truths.[{29}](#) He argues, in effect, that there are plausibly many sorts of truths that God cannot know, so what harm is there in admitting one more class of truths of which God is ignorant? But Leftow's strategy is misconceived. This reasoning does not constitute grounds for revising the concept of omniscience as such (which does not even involve reference to God), but rather for denying that God need be omniscient. That is a moot question to which we shall return.

A more plausible and independently motivated re-definition of omniscience would be to deny that God's knowledge is propositional in nature and therefore not adequately described by O, which gives a propositional account of omniscience.[{30}](#) God's knowledge may be construed as a simple intuition of reality which we finite knowers represent to ourselves in terms of discrete propositions. If facts are propositional in nature (a fact being a true proposition,[{31}](#) for example), then God could be said not to know facts as such, tensed or otherwise, though He is omniscient.

But I think that such a re-construal, while plausible and attractive, does not serve to avert the force of the present objection. The critic of divine timelessness will simply re-formulate (4) in such a way that the problem re-appears, for example:

4'. If a temporal world exists, then if God is omniscient, God knows what we cognize as tensed facts.

If God were ignorant of what we represent to ourselves propositionally as tensed facts, He would not deserve to be called omniscient.

No good reason has been given, then, for revising the definition of omniscience in such a way that omniscience does not encompass knowledge of (what we cognize as) tensed propositions.

Suppose, then, that the atemporalist tries the other route to a denial of (4), maintaining that tense does not belong to the propositional content expressed by tensed sentences. Like personal and spatial indexicals, temporal indexicals and tensed expressions could reflect features of the mode of presentation or the context of believing or the way of grasping the propositional content expressed by sentences containing such locutions. Or they could be analyzed in terms of our self-ascription of properties rather than, or in addition to, our believing propositions. Such analyses need not deny the objective reality of tense, but could

simply exclude tense from the propositional content of tensed expressions, having it lodge somewhere else. Given the customary definition O, a timeless God would count as omniscient, even given the necessary truth of (5), because there are no tensed facts, where facts and true propositions are extensionally equivalent.

Again, it seems to me that such analyses are both attractive and plausible, but I doubt that they ultimately serve to avert the problem raised by the present objection. If tense is an objective feature of reality, then one might plausibly contend that there are non-propositional facts (for example, first-person facts) and that tensed facts are also among these. Since, according to Christian theism, God is not merely propositionally omniscient, but maximally excellent cognitively, He must know such tensed facts, just as He must possess non-propositional knowledge *de se*. His cognitive excellence would not require Him to possess everyone's knowledge *de se*, since it would be a cognitive defect for God to believe that He is Napoleon (not to mention His believing Himself also to be Washington and Reagan and . . .). Similarly, it would be a cognitive defect for God to believe that it is now 44 B.C. (not to mention His believing it also to be 1895 and 2020 and . . .). But it is a cognitive perfection to have a knowledge of what time it really is, of what episode in the history of the actual world is present. A being who is ignorant of all tensed facts is less excellent cognitively than one who knows all such facts.{32} The latter being knows infinitely more than the former and suffers no cognitive defect in so doing. On the contrary, it is only by the grace of such knowledge that God can act providentially in the temporal world at all.{33} Hence, (4) can be reformulated as

4*. If a temporal world exists, then if God is maximally excellent cognitively, God knows tensed facts.

With a similarly recast (2) the argument goes through as before. In case one still sticks at non-propositional facts, one may substitute in (4*) for "tensed facts" an expression like "what time it is" and revise (5) accordingly.

In short, the prospects for turning back the force of (4) seem no better than those for denying (5). Given the existence of the temporal world, an omniscient or cognitively perfect being must know tensed facts. Since omniscience is essential to theism and such knowledge is incompatible with divine timelessness, God must not be timeless.

Must God Be Omniscient?

Our discussion has assumed the truth of

2. God is omniscient,

but some defenders of divine timelessness, determined to preserve God's atemporality, are prepared to deny (2). Kvanvig, in response to the objection that "Just as we cannot hold the view that God is never intimately enough acquainted with himself to know himself as himself, so it would be a mark of imperfection were God never to be intimately acquainted with any temporal . . . location," observes that there are two options open.{34} First, one could reject divine timelessness. In order to exhibit maximal perfection, God must directly grasp whatever moment is present and so be constantly changing. According to Kvanvig, the traditional motivations for the doctrine of timelessness are not compelling, so that it can be sacrificed if found incompatible with omniscience or cognitive perfection.{35}

Such a verdict goes down hard with Leftow, who advocates rejecting (2) rather than (1) if these are incompatible.{36} He argues that God is ignorant of several classes of truth and that it is not a serious attenuation of divine omniscience to hold that He is also ignorant of tensed truths. It might be thought that we should construe God's knowledge as robustly as possible, so that even if there turn out to be some truths He cannot know, so that He is not omniscient, nevertheless that constitutes no justification for further eroding the extent of His knowledge by holding Him to be ignorant of tensed truths. But Leftow is so deeply committed to the doctrine of divine timelessness that he is prepared to jettison God's omniscience in order to preserve His timelessness. But does Leftow succeed in showing that God cannot know all true propositions? His example of something God cannot know is how it feels to be, oneself, a walker, a breather, or a sinner.{37} But such knowledge is not propositional knowledge at all and so fails to furnish examples of *truths* which God does not know; hence, on O God is omniscient even though He does not know how it feels to be oneself a sinner. Leftow recognizes the non-propositional character of such knowledge, but insists that God's lacking such knowledge entails His ignorance of certain truths as well. If I arrange for a person to fail a test, I can say to him afterwards, "Being a failure oneself feels like *this*." According to Leftow,

This is a proposition we both grasp You and I can know that being a failure oneself feels like *this*, but if God cannot fail, God cannot (though He can know how failure feels *to you*). For if God cannot fail, God cannot have the kind of experience "this" picks out and so in a sense cannot even understand the proposition that 'being a failure oneself feels like *this*.'{38}

It seems to me that the defender of God's omniscience will very plausibly reply that "Being a failure oneself feels like *this*" is a sentence, not a proposition, as is evident from the presence of the demonstrative "this" (the italicizing of which does nothing to change its semantic content). Demonstratives serve to focus the hearer's attention on the referent and, like indexicals, are typically not construed to be part of the propositional content of the utterance involving them. The propositional content expressed by "this" in the example will be the feelings of humiliation, depression, and so forth that attend being oneself a failure. Leftow seems to think that because God cannot have such feelings, He cannot know the propositional content expressed by the utterance. But this is to confuse God's ability to have the non-propositional knowledge of *how* it feels to be a failure oneself with His ability to know *that* being a failure oneself feels like being humiliated, and so forth. Even in Leftow's own example, the referent of "this" is not the speaker's own feelings, since he did not fail, but rather the other person's feelings who did fail. Yet Leftow asserts that they both know the same proposition. Similarly God can know the same propositional content that we do when we make such utterances, even though He does not share our experiences and so does not know how it feels to be oneself a failure.

It might well be questioned whether preserving God's atemporality is worth the price of rendering Him ignorant of what state of the universe presently exists, as well as of all other tensed truths. But Leftow surmises that a God who is timeless but not omniscient with respect to tensed truths would be more perfect over all than a God who is temporal and possesses such knowledge. Leftow's many arguments for divine timelessness aim to extol the perfection accruing to God due to this attribute. Unfortunately, a discussion of these arguments takes us beyond the bounds of this paper. But I believe that all but one of his arguments can be shown to be unsound or inconclusive, as I have elsewhere tried to show.{39} The greatness of divine temporality, on the other hand, can be seen in the fact that, if time is tensed, God could not be creatively active in the world were He timeless.{40}

Leftow also attempts to cheapen the value of omniscience, arguing that it is not a necessary property of a perfect knower. He rightly points out that cognitive perfection involves many other qualities than the range of one's knowledge. But that does nothing to show that cognitive perfection should not also encompass knowledge of tensed facts. Leftow proceeds to attack the possibility of propositional omniscience, appealing to private propositions expressed by sentences containing first-person indexicals. But we have already seen how such knowledge *de se* can be handled non-propositionally, not to mention the objections to private propositions.{41} In any case, positing one restriction on the range of God's knowledge hardly makes it a matter of indifference whether further restrictions are proposed. The fact that propositional omniscience and maximal cognitive excellence have not been shown to be impossible undercuts Leftow's response to what he calls the semantic argument against divine timelessness.

But what about Kvanvig's other alternative? He proposes that God be conceived to grasp *all* temporal moments directly.{42} Such an understanding, he claims, would be analogous to a plausible construal of omnipresence as the direct grasping of the essence of every spatial location. What this analogy would imply, however, is that all times are literally present for God, not in the metaphorical sense of the eternal present, but in the literal temporal sense of the term. That is simply incompatible with there being a temporal series of events ordered by relations of *earlier than/later than*. In order to rebut this objection, Kvanvig is forced to resort either to the device of ET-simultaneity of Stump and Kretzmann—which is explanatorily vacuous{43}—or to the suggestion that omniscient beings can grasp essences of moments directly without being in time—which is both *ad hoc* and self-contradictory.{44}

In conclusion, therefore, I think that we have good reason to believe that if a temporal world exists and an A-theory of time is correct, then divine timelessness is incompatible with divine omniscience and, moreover, that if, as I claim, the arguments for God's atemporality are at best inconclusive, it is divine timelessness which ought to yield pride of place to divine omniscience.

Notes

{1} The revival of interest can be traced to the seminal article by Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 (1981): 429–458; see also recent defenses by Paul Helm, *Eternal God* (Oxford Clarendon, 1988); John Yates, *The Timelessness of God* (Lanham, Maryland: University Press of America, 1990); Brian Leftow, *Time and Eternity* (Ithaca, N.Y.: Cornell University Press, 1991); Hugh J. McCann, "The God beyond Time," in *Philosophy of Religion*, ed. Louis Pojman (Indianapolis: Hackett, 1993).

{2} Jonathan L. Kvanvig, *The Possibility of an All-Knowing God* (New York: St. Martin's, 1986), pp. 66–70.

{3} The advance of the New Theory of Reference over Frege's view is its distinguishing linguistic meaning from propositional content. "I'm Kvanvig" and "You're Kvanvig" have different linguistic meanings due to the different personal indexicals employed, but in the appropriate context they express the same proposition. See John Perry, "The Problem of the Essential Indexical," *Noûs* 13 (1979): 3–21. The shortcoming of the New Theory of Reference, however, lies in its failure to further distinguish between linguistic meaning and cognitive significance, a defect whose importance for omniscience shall emerge in the sequel.

On this shortcoming see Howard Wettstein, "Has Semantics Rested on a Mistake?" *Journal of Philosophy* 8 (1986): 195.

{4}Kvanvig, *All-Knowing God*, p. 155.

{5}Ibid., p. 159.

{6}Ibid., p. 156.

{7}Ibid., p. 154. Kvanvig erroneously assimilates all tensed expressions to temporal indexical expressions. A proposition which can be expressed without employing temporal indexicals but not without employing tensed verbs should still count as an essentially temporal proposition. It is also not clear what Kvanvig intends by "implying." Verbally tensed expressions need not imply temporal indexical expressions; *e.g.*, the proposition that *No sentient creatures exist* can be expressed by the relevant present-tense sentence without implying the sentence "No sentient creatures now exist." Kvanvig should substitute "employing" for "implying" and "tensed expressions" for "temporal indexicals."

{8}Kvanvig also erred (as he now acknowledges) in claiming that the linguistic meaning of indexical expressions serves to distinguish direct from indirect grasping of the propositional content. A similar weakness attended the Perry–Kaplan analysis of indexicals and demonstratives.

{9}Edward R. Wierenga, *The Nature of God: An Inquiry into Divine Attributes*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1989), pp. 179–185.

{10}Ibid., pp. 47–54.

{11}That is to say that Wierenga's analysis does not provide a plausible account of the cognitive significance of one's beliefs. I take it as obvious that when I judge "It's raining," I have no beliefs concerning a certain time and the ascription of a peculiar property to that time, even if the propositional content expressed by a statement of my belief does include such a time and property. Recall that Wierenga is offering an account of *de praesenti* belief, not the propositional content of belief.

{12}Wierenga's notion of grasping a proposition is very obscure, but space but does not permit me to comment here.

{13}See Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), p. 61.

{14}Plantinga, who holds that one can grasp the individual essence or haecceity of another person, does not take a haecceity to be or include the property of *being me*, but takes it to be just an individual essence (Alvin Plantinga, "De Essentia," in *Essays on the Philosophy of Roderick M. Chisholm*, ed. Ernest Sosa, Grazer philosophische Studien 7/8 [Amsterdam: Rodopi, 1979], pp. 101–106). By siding with Chisholm (Roderick M. Chisholm, "Objects and Persons: Revision and Replies," in *Philosophy of Chisholm*, p. 320) in taking a haecceity to be a special individual essence which involves the property of *being me*, Wierenga has forfeited the right to public graspability of a haecceity.

{15}Leftow, *Time and Eternity*, p. 333.

{16}Ibid.

{17}Ibid., p. 239.

{18}If all events have present–tense actuality in eternity, all the customary problems re–surface, *e.g.*, why are not all events then simultaneous in eternity? How can God know which simultaneity class of events really is present? How can He know which events are earlier/later than other events? Why is eternity not fleeting in its existence?

{19}Brian Leftow, "Eternity and Simultaneity," *Faith and Philosophy* 8 (1991): 170, 179.

{20}Leftow, *Time and Eternity*, p. 334.

{21}Cf. Leftow's explanation: "From any reference frame, one can extrapolate what judgments of simultaneity would be correct in other reference frames So . . . for every temporal now, God knows what is happening now (i.e., simultaneous with that now) . . ." (Ibid., p. 235).

{22}Leftow, *Time and Eternity*, pp. 335–336.

{23}As asserted by Herbert J. Nelson, "Time(s), Eternity, and Duration," *International Journal for Philosophy of Religion* 22 (1987): 18; cf. William Hasker, *God, Time, and Knowledge*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1989), p. 159. Some of *Faith and Philosophy's* referees for this paper make the same mistake. They claim that in eternity there are no tensed facts, so that God cannot be expected to know them. But while it is true that it is impossible for a timeless God to know tensed facts, that does not imply that such a God still warrants being called omniscient. For if the propositional content expressed by tensed sentences is tensed, a timeless God *by definition* is not omniscient because He does not know all true propositions.

{24}Some of the referees for this paper do not appreciate this point. They argue that given the assumption that God is timeless, it is natural to revise the definition of omniscience so as not to require God to know tensed propositions. But a definition of omniscience *per se* involves no reference to God or to timelessness, so that to revise the definition of omniscience on the grounds of God's timelessness is *ad hoc*. If we have good reasons for thinking that God is timeless, those constitute reasons for thinking that God is not omniscient, not for revising the definition of omniscience as such. The question will then become whether a perfect being must be omniscient, a question which we shall address in due course.

{25}Wierenga, *Nature of God*, p. 189.

{26}Ibid., pp. 198, 189.

{27}Stephen T. Davis, *Logic and the Nature of God* (Grand Rapids, Mich.: Wm. B. Eerdmans, 1983), p. 37.

{28}—assuming that there are no timelessly true propositions. If there are, then codicils have to be added to O' and O" alike to ensure that God knows these, too.

{29} Leftow, *Time and Eternity*, pp. 321–323.

{30} See William Alston, "Does God Have Beliefs?" *Religious Studies* 22 (1986): 287–306.

{31} This would be a controversial assumption, as Leftow, *Time and Eternity*, p. 318, notes, since there seem to be facts which are non-propositional in nature, *e.g.*, that I am William Craig. If tensed facts are non-propositional in nature, then God's knowledge's being non-propositional does not undercut the necessary truth of (4). For an omniscient, non-propositional knower must know tensed facts.

{32} So also the judgement of Richard M. Gale, "Omniscience–Immutability Arguments," *American Philosophical Quarterly* 23 (1986): 332; cf. *idem*, *On the Nature and Existence of God* (Cambridge: Cambridge University Press, 1991), pp. 90–91.

{33} See my "The Tensed vs. Tenseless Theory of Time: A Watershed for the Conception of Divine Eternity," in *Questions of Time and Tense*, ed. Robin LePoidevin (Oxford: Oxford University Press, 1998), pp. 221–50.

{34} Kvanvig, *Possibility of an All-Knowing God*, p. 159.

{35} *Ibid.*, p. 151.

{36} Leftow, *Time and Eternity*, pp. 323–326.

{37} *Ibid.*, p. 322.

{38} *Ibid.*, p. 323.

{39} See my "Timelessness and Creation," *Australasian Journal of Philosophy* 74 (1996): 646–656; "Divine Timelessness and Necessary Existence," *International Philosophical Quarterly* 37 (1997): 217–224; "On the Argument for Divine Timelessness from the Incompleteness of Temporal Life," *Heythrop Journal* 38 (1997): 165–171; "On the Alleged Metaphysical Superiority of Timelessness," *Sophia* 37 (1998): 1–9.

{40} See note 33.

{41} On those objections see Kvanvig, *Possibility of an All-Knowing God*, pp. 48–56.

{42} *Ibid.*, p. 160.

{43} For critiques, see Davis, *Logic and the Nature of God*, p. 20; Delmas Lewis, "Eternity Again: a Reply to Stump and Kretzmann," *International Journal for Philosophy of Religion* 15 (1984): 74–76; Helm, *Eternal God*, pp. 32–33; Hasker, *God, Time, and Knowledge*, pp. 164–166; Yates, *Timelessness of God*, pp. 128–130; Leftow, *Time and Eternity*, pp. 170–172.

{44} Kvanvig more or less admits that this solution is *ad hoc*, making a bland appeal to divine omnipotence as its rationale. Ultimately, however, the solution is incoherent, since on his view tense arises precisely from direct grasping, tense not being part of a time's essence. If God directly grasps events as present and yet they are not really present, He does not in fact directly grasp them.

God and the Beginning of Time

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Leibniz's question to Clarke, "Why Did God Not Create the World Sooner?" poses a difficult problem for theists holding to a neo-Newtonian view that God is omnitemporal and that time is beginningless. Kant's escape route—denying that the universe began to exist—is rendered implausible by contemporary cosmology. Unless we are prepared to say that the universe popped into being uncaused, we must face Leibniz's conundrum.

Leibniz's argument, when properly formulated, leads to the conclusion that time began to exist. The individual premises are examined and found to be plausible.

But if time therefore began to exist, how is God's relation to the beginning of time to be construed? It is argued that God is plausibly timeless sans the universe and temporal with the universe. This paradoxical conclusion is defended against objections.

"God and the Beginning of Time." *International Philosophical Quarterly* 41 (2001): 17-31.

Did time have a beginning? Isaac Newton, whose disquisitions on time and space in his *Philosophiae naturalis principia mathematica* became determinative for the classical concepts of space and time which reigned up until the Einsteinian revolution, held that it did not. Although Newton held to the traditional Christian doctrine of *creatio ex nihilo*, he did not think that the beginning of the universe implied the beginning of space and time. Notoriously Newton held that prior to the beginning of the universe, there existed an infinite duration devoid of all physical events, a beginningless time in which at some point a finite time ago the universe came into being. For Newton our familiar clock time is but a "sensible measure" of this absolute time, which, he says, "of itself, and from its own nature, flows equably without relation to anything external, and by another name is called duration." {1}

The prospect of this empty, beginningless duration prior to the inception of the universe has seemed scandalous to many, since in the absence of anything which endures it seems bizarre to maintain that duration itself exists. But Newton would have agreed wholeheartedly! Those who envision Newtonian absolute time as pure duration unrelated to and ungrounded in any

substance or as itself an enduring substance have not yet comprehended Newton's metaphysical views. For Newton conceived of absolute time as grounded in God's necessary existence. In the *General Scholium* to the *Principia*, Newton observes that "It is allowed by all that the Supreme God exists necessarily"{2}—indeed, Newton held that "All that diversity of natural things which we find suited to different times and places could arise from nothing but the ideas and will of a Being necessarily existing"{3}—"and by the same necessity he exists *always* and *everywhere*."{4} As a being which exists necessarily, God must exist eternally, which Newton took to imply immemorial and everlasting duration. He writes,

He is eternal and infinite . . .; that is, his duration reaches from eternity to eternity; his presence from infinity to infinity He is not eternity and infinity, but eternal and infinite; he is not duration or space, but he endures and is present. He endures forever, and is everywhere present; and, by existing always and everywhere, he constitutes duration and space. Since every particle of space is always, and every indivisible moment of duration is *everywhere*, certainly the Maker and Lord of all things cannot be *never* and *nowhere*.{5}

Because God is eternal, there exists an everlasting duration, and because He is omnipresent, there exists an infinite space. Absolute time and space are therefore contingent upon the existence of God. As Newton elsewhere puts it, they are "emanative effects" of God's existence.{6} Thus, for Newton the beginning of the universe does not imply the beginning of time because prior to the moment of creation there existed God, infinitely enduring through beginningless ages up until that moment at which He created the world.

Why Did Not God Create the World Sooner?

Newton's conception of absolute time scandalized his continental contemporary Gottfried Leibniz. On Leibniz's preferred relational view of time, there are no instants of time in the absence of changing things; hence, given God's immutability, time begins at creation and God's eternal existence is to be construed in terms of timelessness.{7} In his celebrated correspondence with the Newtonian *Anhanger* Samuel Clarke, Leibniz confronted Clarke with the following conundrum: Why, if He has endured through an infinite time prior to creation, did not God create the world sooner?{8} Leibniz presented this challenge as an objection to Newton's substantival view of time, but it is, in fact, an objection to time's past infinity. The substantivalist who believes in the finitude of the past will find the question malformed, since there are no empty instants of time preceding creation, as Newton believed. Leibniz's question is thus irrelevant to the substantivalism/relationalism debate; it is rather a challenge to the infinitude of the past.{9} It asks what possible reason God could have had for delaying for infinite time His creation of the world. Whether time is construed substantively or relationally, since God created all reality outside Himself *ex nihilo* at some time in the past, it follows, if past time is infinite, that God endured through an infinite period of creative idleness up until the moment of creation. Why did He wait so long?

One might think to avert the force of this conundrum by denying that the universe in fact began to exist, as Newton and Leibniz assumed. In fact Immanuel Kant thought that this was the position which we are rationally driven to adopt.{10} In the antithesis to his First Antinomy concerning time, Kant asserts that "The world has no beginning" but "is infinite as regards. . . time"{11} He argues,

Since the beginning is an existence which is preceded by a time in which the thing is not, there must have been a preceding time in which the world was not, i.e. an empty time. Now

no coming to be of a thing is possible in an empty time, because no part of such a time possesses, as compared to any other, a distinguishing condition of existence rather than of non-existence; and this applies whether the thing is supposed to arise of itself or through some other cause. In the world many series of things can, indeed, begin; but the world itself cannot have a beginning, and is therefore infinite in respect of past time. {12}

Kant's reasoning is a reprise of Leibniz's objection to Clarke. Assuming the existence of a homogeneous time prior to the beginning of the world, a time whose moments are not distinguished by the occurrence of events, no reason can be given why the world should come to exist at one moment rather than another. Therefore, the world cannot have begun to exist. Kant thinks to put through the argument without reference to God, but it is dubious if such a strategy is sound. For if the beginning of the universe is truly uncaused, then there need not be any reason why it should pop into existence at one moment rather than another. As one contemporary atheologian has put it: the universe "came from nothing, for nothing, and by nothing"; it "interrupts without reason the reign of non-being." {13} But such an escape from Kant's argument hardly commends itself as plausible. As philosopher of science Bernulf Kanitscheider complains, it is "in head-on collision with the most successful ontological commitment that was a guiding line of research since Epicurus and Lucretius," namely, that *out of nothing nothing* comes, which Kanitscheider calls "a metaphysical hypothesis which has proved so fruitful in every corner of science that we are surely well-advised to try as hard as we can to eschew processes of absolute origin." {14} Accepting this quite reasonable advice, we can ignore Kant's non-causal origination alternative, and the antithesis reduces to Leibniz's conundrum.

The difficulty in adopting the conclusion of Kant's antithesis—that the world has no beginning—is that we now have very powerful astrophysical evidence that the universe did in fact have an absolute origin. Indeed, according to Stephen Hawking in his most recent book, "Today almost everyone believes that the universe, and time itself, had a beginning at the big bang." {15} It must be said, however, that the fact that physical time (and space) had a beginning in the Big Bang does not automatically carry with it the conclusion that time itself began, given the distinction drawn by Newton between absolute time, God's time, and our physical measures of time. It is quite easy to conceive of God's existing temporally prior to the Big Bang in a metaphysical time, perhaps busy creating angelic realms. It may be worth noting in this connection that all the results of relativistic Big Bang cosmology can be perfectly reproduced by Newtonian physics alone, the origin of the material universe taking place in an empty pre-existing Newtonian space and at a moment in Newtonian absolute time." {16} Still the astrophysical evidence does point to the origination of the material universe at a point in the finite past before which it did not exist. Thus one evades Leibniz's conundrum by denying the beginning of the universe only at the expense of going against the evidence.

We seem to be encountered with a stark choice, as the physicist P. C. W. Davies points out:

What caused the big bang? . . . One might consider some supernatural force . . . or one might prefer to regard the big bang as an event with out a cause. it seems to me that we don't have too much choice. Either . . . something outside of the physical world. . . or an event without a cause. {17}

If we are unwilling to swallow the idea that the universe came into being uncaused out of nothing, then we are stuck with a supernatural cause. As Sir Arthur Eddington opined, "The

beginning seems to present insuperable difficulties unless we agree to look on it as frankly supernatural." {18} But then we must confront squarely the Leibnizian–Kantian conundrum.

So why did not God create the universe sooner? It might be said that given infinite past time, it is simply logically impossible for God to have a sufficient reason for choosing one moment rather than another to create the world and that God can hardly be blamed for not doing what is logically impossible. {19} God's choices are limited to refraining from creation, creating from eternity past, or choosing arbitrarily some moment of infinite time at which to create.

But far from resolving Leibniz's challenge, such a response serves only to underline the difficulty. The problem may be formulated as follows, where t ranges over time:

- 1.If the past is infinite, then at t God delayed creating until $t + n$. (P)
- 2.If at t God delayed creating until $t + n$, He must have had a good reason for doing so. (P)
3. If the past is infinite, God cannot have had a good reason for delaying at t creating until $t + n$. (P)
- 4.Therefore, if the past is infinite, God must have had a good reason for delaying at t creating until $t + n$. (HS,1,2)
- 5.The past is infinite.(P)
- 6.Therefore, God must have had a good reason for delaying at t creating until $t + n$.(M–P,4,5)
- 7.Therefore, God cannot have had a good reason for delaying at t creating until $t + n$. (MP,3,5)
- 8.Therefore, God must have had a good reason for delaying at t creating until $t + n$, and God cannot have had a good reason for delaying at t creating until $t + n$. (Conj.,6,7)
9. Therefore, if the past is infinite, God must have had a good reason for delaying at t creating until $t + n$, and God cannot have had a good reason for delaying at t creating until $t + n$. (CP,5–8)
10. Therefore, the past is not infinite. (RAA,9)

The claim that it is logically impossible for God to have any reason for preferring one moment over another as the moment at which to create does nothing to undermine the crucial premise (2), but rather undergirds the truth of premise (3). In an infinite, empty time prior to the existence of any reality outside of God, there can be no reason for God to wait longer to create the world. At any time t , after all, He has already waited for infinity! Why delay any longer?

In his interesting analysis of this problem, {20} Brian Leftow observes that if God acquires at some moment a sufficient reason to create the world, this reason must come from some change either within God or outside of God. The only change going on outside of God is the absolute becoming of time itself. If, from eternity past, God has willed to create the world at t , then the arrival of t as present could give God a new reason to create. But, says Leftow, it is at

least initially plausible that a perfectly rational God could not have from all eternity a reason to create at one particular instant rather than another. For there is nothing about the position of any particular instant which makes it an especially appropriate point for the beginning of the universe. So if God is to have a new reason to create, it must come from within Himself. But since God is from time immemorial perfectly good, omniscient, and omnipotent, no change within Himself can occur which should prompt Him to create at some time rather than earlier. Thus, God cannot acquire at some moment a sufficient reason to create the world. But by the same token neither could He have had some reason from eternity past to create at some particular time, as already seen. Leftow's analysis goes to support (3) above, that God could not have had any good reason at any time t in the infinite past for delaying at t His creation of the world until $t + n$. Leftow seeks to avert the force of the argument by claiming that God's reason for delaying creating is the joy of anticipation of creating. He says,

So (I submit) God can delay creating to enjoy anticipating a universe and/or desiring to create one. Parents can find joy in the anticipation of a child. . . . So God a fortiori can savor in advance the coming-to-be of a universe whose precise nature He foreknows.{21}

Such a portrait of God may seem overly anthropomorphic; but Leftow argues that a person of overflowing love delights in the goodness of a gift he will give and in the joy of the receiver in getting it and that God's nature's being *agapé* makes Him such a person.

The real rub with Leftow's proposal, I think, lies in whether his proposed solution provides an answer to the question of why God would delay for infinite time His creation of the world. Leftow sees no problem in God's waiting for infinite time, since God is infinitely patient. But the question remains of why God, having anticipated from eternity past the creation of the world, would at t delay creating until $t + n$. Or, obversely, why did He cease waiting and anticipating at $t + n$ instead of earlier or later? Leftow answers that there is a time t at which one's anticipation over bestowing a gift begins to wane and so reaches a point of diminishing returns.

So a rational person concerned to maximize his or her overall happiness would have some reason to give his or her gift at t But if this is God's concern, then God will not want to wait beyond t if after t He will no longer enjoy His maximal state of anticipatory happiness and will enjoy greater happiness if He gives at t . Now if God foresees His own future states, He knows from all-eternity precisely when His anticipation's point of diminishing return will start to fall. If so, He can resolve to create at just this point.{22}

Leftow envisions a sort of "Gaussian curve" representing God's rising and falling anticipatory pleasure (Fig. 1):

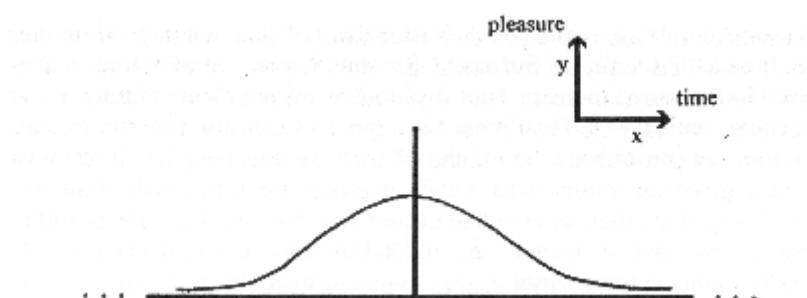


Figure 1: God's anticipatory pleasure rises from a minimal value at $t = -\infty$ to a

peak value before declining to a minimal value at $t = +\infty$ again.

God will create at the moment His anticipatory pleasure peaks, and that is t , the time of creation. Again, one might reasonably object that such a portrayal of God's anticipatory pleasure is grossly anthropomorphic; but let that pass. The more salient difficulty is that Leftow's Gaussian curve must be logically prior to the fact of the curve's peaking specifically at t if it is to provide some rationale for God's choosing to create at t . But then why, if the past is infinite, did God's anticipation peak at t rather than sooner? Leftow's reply is faltering:

. . . let us imagine a curve *infinite* along the x -axis inscribed in a two-dimensional space. There is no empty space along the x -axis into which to shift such a curve. The equations whose values that curve expresses generates a value of y for each point along the x -axis. Thus we cannot even speak of the curve's nature and its location as two independent factors determining its highest point. Such a curve cannot be shifted. Rather, where its highest point falls clearly is a function of the nature of the curve alone. The curve's nature suffices to determine where along the x -axis the curve's greatest y -value occurs.{23}

This reply fails to take account of the paradoxical nature of the actual infinite. Just as the infamous Hilbert's Hotel (each of whose infinitely many rooms are occupied) can accommodate infinitely many new guests simply by shifting each guest into a room with a number twice his own (thereby freeing up all the odd numbered rooms), so God's pleasure curve, though infinitely extended, can be shifted backward in time simply by dividing every value of the x -coordinate by two. Since the past is, *ex hypothesi*, actually infinite, there is no danger of "scrunching up" the front of the curve by such a backward shift. If such a shift seems impossible, what is called into question is the possibility of an infinite past. But given the past's infinity, there is no problem in shifting such a curve: its shape could remain unchanged and yet peak anywhere in the infinite past or future. Therefore, Leftow has not provided a cogent argument for, thinking that God's anticipating creation for infinite time provides a reason as to why God creates at t instead of $t + n$ (or $t - n$).

premise (1) of our argument seems incontestable. If the past is infinite, then at any moment prior to creation, God existed at that moment and could, at that moment, have brought the universe into being. But He did not. He waited. He delayed creating the world until some later moment should arrive.

The most controversial premise will therefore be (2), that God must have had a good reason for delaying until $t + n$. Notice that (2) does not depend on the truth of some broader Principle of Sufficient Reason. It states merely that in this specific case God, existing alone at t , but deciding to refrain from creating at t and to delay creating until $t + n$, must have had a good reason for waiting. Notice, too, that (2) does not presuppose the infinity of time. Hence, it is doubly irrelevant to protest that given an infinite past God's decision when to create must be arbitrary. Not only does that merely underscore (3), but (2) does not postulate the infinitude of the past. It asserts that if God at some moment prior to creation consciously defers creating until a later moment, then He surely has a reason for doing so. A perfectly rational agent does not delay some action he wills to undertake apart from a good reason for doing so. For this reason, Smith's claim in his discussion of Kant's antithesis that ". . . something can come to be at one time rather than another *accidentally*" is irrelevant, since Smith does not consider the case of theistic creation.{24} Thus, (2) strikes me as eminently plausible.

Accordingly, the Leibnizian challenge seems to me to furnish a cogent and persuasive argument for thinking that the past is finite. God's idling away eternity, continually delaying His creation of the world throughout infinite past time seems to be an unintelligible conception. Thus, it seems to me that we have good grounds for affirming the finitude of the past and the beginning of time.

Temporality vs. Atemporality of God sans Creation

Now if time had a beginning at some moment in the finite past, it follows that God *sans* the universe exists atemporally, even if subsequent to the moment of creation He is, as Newton believed, temporal. Now *prima facie* such a position seems bizarre, even incoherent. For on such a view there seem to be two phases of God's life, which stand to each other in a relation of earlier/later than. But a timeless phase can hardly be coherently said to exist earlier than a temporal phase of God's life. Leftow has stated the objection forcefully:

If God is timeless, there is no before and after in His life. No phase of His life is earlier—or later than any other phase, for only temporal durations and their phases stand in these relations. As it lacks earlier and later parts, an eternal life has no phases, even if (as Eleonore Stump and Norman Kretzmann contend) it is somehow extended. If God is timeless and a universe or time exists, then, there is no phase of His life during which He is without a universe or time, even if the universe or time had a beginning. For a life without phases cannot have one phase which is without the universe or time and another phase which is with it. If God is timeless, the whole of His life is identical with the 'phase' of it during which the universe or time exists, whether or not the universe or time began.{25}

If a timeless phase of one's life is, as Leftow puts it, a phase co-extensive with the whole of one's life, it follows that if God has a temporal phase of His life, He cannot also have a timeless phase of His life. Hence, if God is temporal subsequent to creation, He must also be temporal prior to creation; indeed, given His necessary existence, time must be beginningless.

Metrically Amorphous Time sans Creation

How are we to escape this apparent antinomy? One possibility is suggested by a closer examination of the argument I presented for the finitude of the past. Strictly speaking, the argument does not imply that time itself had a beginning. Rather what it implies is that time which is divisible into distinct intervals must have had a beginning. But the argument would not be incompatible with the existence of an undifferentiated "before" followed by the beginning of time as we know it. Such a view of divine eternity *sans* the universe has been defended by Padgett and Swinburne.{26} Both of them endorse metric conventionalism with respect to time and so regard God existing prior to creation as enduring through a metrically amorphous time, a state which Padgett calls "relative timelessness." Now the conventionalist thesis confronts serious difficulties;{27} but these could be avoided were we simply to say that metric time begins at the moment of creation. If God is changeless prior to creation, perhaps the time which characterized such an existence was radically different from metric time. In a metrically amorphous time, there is no difference between a minute, an hour, or an aeon; more exactly, such measured intervals of time do not exist at all. Thus it is a mere chimaera to imagine God existing, say, one hour before He created the world. Swinburne argues that on such an understanding, God's time is beginningless, but cannot be said to be infinite (or finite):

... think of God, the temporal being, existing by-himself, not having created a universe in which there are laws of nature. There would then ... be no 'cosmic clock' which ticked unstoppably away, that is, there would be no temporal intervals of any definite length. There would just be an event or sequence of events in the divine consciousness. Think of him too as the subject of just one mental event, a conscious act without qualitatively distinguishable temporal parts (e.g., conscious act that does not consist of one thought followed by a different thought). Now ... any event has to take time, but there wouldn't be a truth that this event (this act) had lasted any particular length of time rather than any other. There would be no difference between a divine act of self-awareness which lasted a millisecond and one that lasted a million years ... Would there be difference between a divine conscious act which was God's only conscious act and was qualitatively identical throughout which was of finite length, and one which was of infinite length? No—so long as the former really is qualitatively identical throughout and thus contains no experience of a beginning or end; and so long as there is no time at which God is not. {28}

Such a view has considerable attraction: it enables us to speak literally of God's existing before creation without affirming the problematic claim that God has endured through infinite time prior to creation. We can also conceive of God's literal foreknowledge of future events subsequent to creation, including His own acts. And we encounter no problems arising from the principle that a cause must be temporally prior to its effect.

Nonetheless, the Padgett–Swinburne doctrine of divine eternity is demonstrably defective as it stands and so needs revision. Metric conventionalism is the thesis that there is no fact of the matter concerning the comparative lengths of non nested temporal intervals. What metric conventionalism does *not* assert is that no intervals at all exist in metrically amorphous time or that nested intervals cannot be compared to each other with respect to length. So in a metrically amorphous time, it is meaningful to speak of factual differences of length of certain temporal intervals (Fig. 2).

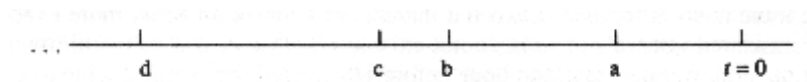


Figure 2: Intervals in metrically amorphous time prior to creation at $t = 0$.

According to the conventionalist, there is no fact of the matter concerning the comparative lengths of dc and cb or db and ca . But there is an objective difference in length between da and ca or cb and ca , namely $da > ca$ and $cb < ca$. For in the case of intervals which are proper parts of other intervals, the proper parts are factually shorter than the encompassing intervals. This entails that prior to $t = 0$ God has endured through a succession of an actually infinite number of progressively longer intervals, and we can still ask, "Why did not God create the world sooner?" Thus, our difficulties with the infinitude of the past return to haunt metrically amorphous divine eternity. In fact, *pace* Swinburne, we can even say that such a time would be infinite. The past is finite iff there is a first interval of time and time is not circular. (An interval is first if there exists no interval earlier than it, or no interval greater than it but having the same end point.) Even a past which lacks an initial instant is finite if it has a first interval. Swinburne's metrically amorphous past is thus clearly not finite. But is it infinite? The past is infinite iff there is no first interval and time is not circular. Thus Swinburne's past eternity is infinite. Our inability to compare factually the lengths of temporal intervals in metrically amorphous time therefore does not preclude our determining that the past as a whole is finite or infinite. The thesis of a metrically amorphous time prior to creation does not obviate the difficulties of the infinity of the past.

The shortcoming of the Padgett–Swinburne *Ansatz* is that it is not radical enough. It proposes to dispense with the metric of time while retaining time's isomorphism to a geometrical line. Since on such a line intervals can be distinguished and compared (when nested), one fails to obtain the undifferentiation necessary for time if it is to exist without the world. What needs to be done is to strip time of its isomorphism to a geometrical line: to maintain that there literally are no intervals of time prior to creation. In such a time, there would be no earlier and later, no enduring through successive intervals and, hence no waiting, no temporal becoming, nothing but the eternal "now." This state would pass away in an instant, as a whole, not piecemeal, at the moment of creation, when metric time begins. It would be an undifferentiated "before" followed by a differentiated "after."

It might be said that such an undifferentiated, changeless state hardly deserves to be called temporal—no wonder Padgett refers to it as relative timelessness. In fact it looks suspiciously like a state of timelessness. Topologically, it sounds very much like a point, the paradigmatic symbol of divine timelessness. The only sense in which it seems to count as temporal is that this state exists literally before God's creation of the world and the inception of metric time. That fact may be advantage enough for some thinkers to embrace such a conception divine eternity *sans* the world; it is not to be downplayed.

Timelessness *sans* Creation

But perhaps the above–enunciated misgivings might prompt us to re–examine the curious alternative that God is timeless *sans* creation and temporal subsequent to creation. A re–reading of Leftow's reasoning discloses that he just assumes that if God's life lacks earlier and later parts, then it has no phases whatsoever. But why could there not be two phases of God's life, one atemporal and one temporal, which are not related to each other as earlier and later? Leftow merely assumes that if any phase of God's life is timeless, the whole is timeless. But it may be the case that God's atemporal phase does not exist temporally prior, technically speaking, to His temporal phase.

We have already seen that a state of relative timelessness looks suspiciously like plain, old timelessness. This impression is reinforced by calling upon the tensed or A–Theory of time. On a tenseless or B–Theory of time it is tempting to picture the two phases of God's life as equally existent, juxtaposed and joined at the moment of creation, the one earlier and the other later. Such a portrayal is admittedly incoherent. But, given an A–Theory of time, this picture is an illusion. In reality God existing *sans* creation is entirely alone, utterly changeless and perfect, and not a single event disturbs His immobility. There is no before, no after, no temporal passage, no future phase of His life. There is just God, changeless and solitary. Now the only possible reason we could have for calling such a static state temporal is that temporal states of affairs obtain after it. But insofar as the state of affairs of God existing *sans* the universe obtains, there are, of course, no temporal states of affairs, not in the future or anywhere else. Nothing exists but God in this utterly changeless state.

To claim that time would exist *sans* the world in virtue of the beginning of the world seems to posit a sort of backward causation, the occurrence of the first event causing time to exist not only with the event, but even before it. But on an A–Theory of time such backward causation is metaphysically impossible, for it amounts to something's being caused by nothing, since at the time of the effect the retro–cause in no sense exists. {29}

The impression that the state of affairs of God existing changelessly *sans* creation is timeless may be reinforced by a thought experiment: think of God in a changeless, solitary state in a possible world W^* in which He freely refrains from creation. In such a world, it is entirely plausible and coherent to conceive of such a state as timeless. But no intrinsic difference exists between such a state and the state of affairs of God existing *sans* creation in the actual world. The allegedly initial segment of the actual world TW is perfectly similar to the world W^* . It seems groundless to say that in one world God is temporal in such a state and in the other world atemporal.

Perhaps the most plausible face to put on the hypothesis of an empty time in which God exists prior to the beginning of the universe is to hold that divine temporality is a sort of "soft fact" which is counterfactually dependent upon, though not caused by, God's action to create the world. The idea is that time exists prior to creation because God at $t = 0$ acts to bring about a first event; but He is perfectly free to refrain from causing the first event when $t = 0$ arrives, only were He to refrain, then time would not have always existed and God would have been timeless. But such a scenario seems to involve what Thomas Flint has called a "collapsing counterfactual,"^{30} that is to say, a counterfactual whose consequent entails the falsity of its antecedent. For we are supposing that

A. If God at $t = 0$ were to refrain from creating, then time would not have existed, since if God were to remain utterly changeless, time would not exist and He would be timeless. But in that case God could not have refrained at $t = 0$ from creating because $t = 0$ would not have existed. It does no good to try to rescue this hypothesis by holding that God in such a timeless state does refrain from creating at $t = 0$ as well as at every other time, for that is to abandon the hypothesis that God exists temporally prior to creation and that His pre-creation temporality is a soft fact. It is to confuse (A) with

(A') If God were to refrain from creating, He would be timeless, a counterfactual which is coherent and, I think, true. Thus, apart from backward causation, there is nothing to make time exist in the changeless state of God's existing *sans* creation. Perhaps an analogy from physical time will be illuminating. In standard Big Bang cosmology, the initial cosmological singularity at which the universe, indeed spacetime itself, begins is not conceived to be an instant or any other part of time, but rather to constitute a boundary to time. Thus, it cannot be said technically to be earlier than the universe, and yet it is causally prior to the universe. It is clearly distinct from a terminal cosmological singularity, which represents the terminal boundary of a universe in gravitational self-collapse. Although the physical grounds for regarding such singularities as constituting boundaries to, rather than points of, spacetime are inapplicable to the notion of metaphysical time, nonetheless they do serve as an illustrative analogy to the state of God's existing *sans* the universe. Perhaps we could say that the envisioned state is a boundary of time which is causally, but not temporally, prior to the origin of the universe.

Or consider quantum gravitational models of the origin of the universe such as the Hartle–Hawking or Vilenkin models. In such models real spacetime originates in a region in which time is imaginary (that is, the time variable takes on imaginary values) and so is indistinguishable from space. The timeless four-space is causally prior to our real spacetime and is, indeed, usually said to have existed prior to the Planck time (10⁻⁴³ sec. after the singularity in the standard model). Such an interpretation of this region drew charges of incoherence from my collaborator Quentin Smith:

If the 4-dimensional space does not possess a real time value, how can it stand in relation to . . . spacetime of being earlier than it? If the four-dimensional space is in real . . . time, then it is not really earlier than, later than, or simultaneous with the . . . spacetime manifold.{31}

Smith's concern here is precisely the one which occupies us: can this timeless region exist chronologically prior to the inception of real time? After lengthy conversations with the late Robert Weingard, Smith retracted his objection. In a paper read before the Philosophy of Time Society in 1993, Smith solves his objection by maintaining that the timeless four-space is topologically, not temporally, prior to classical spacetime.{32} As one regresses in time prior to the Planck time, the metric of spacetime gradually dissolves until only the topological properties of spacetime remain. Topologically prior to this metrically amorphous region lies the four-space in which time is imaginary. Whether such a conception of physical time is tenable is a moot question.{33} But it again suggests that it is possible to conceive of realities which are causally prior to space and time without being literally earlier than them. Perhaps God's atemporal phase of life is topologically, but not temporally, prior to His temporal phase.

All this has been said in defense of the coherence of the position that God exists timelessly *sans* creation and temporally from the moment of creation, a view Thomas Senor has called "accidental temporalism." {34} But now I should like to offer a positive argument in favor of such a position. The argument is predicated upon God's existing changelessly *sans* the universe (a premise justified by *kalam* arguments against the infinitude of the past).{35} We are to envision a state which, whether temporal or atemporal, must be absolutely changeless. But, I maintain, such a state is most plausibly regarded as timeless. On a substantialist view of time, time can exist without change. But even on a substantialist view, there is no good reason to think that time could not have a beginning. So in the utter absence of change, there is just no reason to consider time as existent for God *sans* the world. He seems as timeless in such a state as He would be in a world in which He refrains from creation and time never exists. On a relational view of time, God's timelessness in such a changeless state becomes even more perspicuous. For "before" and "after" do not exist in the complete absence of events. Now ever since the ground-breaking analysis of Sydney Shoemaker{36} it has become commonplace to assert that relationalism can admit time without change. But Shoemaker's *Gedankenexperiment* envisioned temporal intervals without change bounded by earlier and later events, a scenario which is not parallel to God existing changelessly *sans* the universe. Thus, W. H. Newton-Smith, reflecting on Shoemaker's analysis, contends that there is a period of time between events E_1 and E_2 only if relative to these events it is possible for some event to occur between them; when Newton-Smith comes to Kant's First Antinomy, he maintains that the possibility of events before a given event does not imply the actuality of times prior to the given event.{37} The mere possibility of events prior to a first event shows only that there might have been times before t_0 , but hardly suffices for the existence of actual time prior to the first event—there must be actual events in relation to which temporal vacua can be identified. Similarly, Graeme Forbes crafts a relational theory of time using the device of branching worlds which allows for the existence of empty time between events in a world W and even after events have run their course in W , in virtue of reference to the events of branching worlds where events do occur at times which are empty in W .{38} Forbes's account rules out worlds in which time passes even though no events ever occur as well as worlds featuring an empty time before the course of events begins. Le Poidevin formulates relationalism as the doctrine that there exists a time t which is before/after some actual event e iff it is possible that there should exist an event n units before/after e .{39} But this formulation makes relationalism a triviality, for it amounts to saying, since the units referred

to must be temporal units, that time exists before/after e iff time exists before/after e . {40} If we say that time exists before/after e iff it is possible that an event occurs before/after e , then we rule out the possibility of a beginning (and end) of time by definition. Thus, relational views of time, while able to accommodate time without change subsequent to the occurrence of a first event, make no room for the existence of empty time prior to the first event. Indeed, I think we can lay it down as a principle:

P. Necessarily, if a first event occurs, times exist only at or after the occurrence of that event.

Thus, there is no "before" relative to a first event and, hence, no empty time prior to a first event.

Therefore, it seems to me that we have plausible grounds for thinking God to be timeless *sans* creation. The picture of God existing prior to the moment of creation is purely a product of the imagination,—however irresistible such a picture may seem. {41} The most plausible position to take with respect to the relation of God and time seems to me to be that God is atemporal *sans* creation and temporal since creation.

Summary

We have thus seen good reasons to hold to the beginning of time, not only physical time, but God's metaphysical time. The question "Why did God not create the world sooner?" is unanswerable given the infinitude of the past. Since we have good reason to think that the physical universe began to exist and it is implausible to think that it came into existence without a supernatural cause, we therefore have good reason to believe that the past is finite. While the state of affairs of God *sans* creation can be construed as a geometrically amorphous "before" relative to the moment of creation, it is perhaps more plausible, especially on a relational view of time, to take the state of God's existing changelessly *sans* creation as timeless, time springing into being concomitantly with the first event. God's act of creating the world may be taken to be simultaneous with the world's coming into being. The first event is the event of creation, the moment at which the temporal phase of God's life begins.

Endnotes

{1} Isaac Newton, *Sir Isaac Newton's 'Mathematical Principles of Natural Philosophy' and his 'System of the World,'* trans. Andrew Motte, rev. with an Appendix by Florian Cajori, 2 vols. (Los Angeles: University of California Press, 1966), 1: 6.

{2} Ibid., 1: 545.

{3} Ibid., 1: 546.

{4} Ibid., 1: 545.

{5} Ibid., 1: 545.

{6} Isaac Newton, "On the Gravity and Equilibrium of Fluids," [*De gravitatione et aequipondio fluidorum*] in *Unpublished Scientific Papers of Isaac Newton*, ed. A. Rupert Hall and Marie Boas Hall (Cambridge: Cambridge University Press, 1962), p. 132.

{7} On Leibniz's relational view, since God is immutable, ". . . if there were no creatures space and time would be only in the ideas of God" (G. W. Leibniz, "Mr. Leibniz's Fourth Paper," in *The Leibniz–Clarke Correspondence*, ed. with an Introduction and Notes by H. G. Alexander [Manchester: Manchester University Press, 1956], p. 42). Hence, ". . . once it has been shown, that the beginning, whenever it was, is always the same thing; the question, why it was not otherwise ordered, becomes needless and insignificant" (Ibid., pp. 38–39). Cf. his later explanation:

"If there were no creatures, there would be neither time nor place, and consequently no actual space. The immensity of God is independent upon space, as his eternity is independent upon time. These attributes signify only [with regard to those two orders of things] that God would be present and co-existent with all the things that should exist. And therefore I don't admit what's here alleged, that if God existed alone, there would be time and space as there is now: whereas then, in my opinion, they would be only in the ideas of God as mere possibilities" (G. W. Leibniz, "Mr. Leibniz's Fifth Paper," p. 80).

A theistic relationalist who holds to the infinitude of God's past would have to regard God as being in immemorial change, for example, counting down the negative numbers, which Leibniz would reject due to his commitment to divine immutability. The question why God *did not* finish His countdown sooner remains unabated for the relationalist who regards God as being in immemorial change. The substantialist could see God as either changing or changeless prior to the moment of creation.

{8} G. W. Leibniz, "Mr. Leibniz's Third Paper," in *Correspondence*, p. 27.

{9} That this is the case is clear from the historical provenance of the question. In the debate between medieval Islamic philosophers and practitioners of *kalam* over the world's eternity, philosophers championing eternal emanation of the world opposed adherents of temporal creation by defying them to explain why God did not create the world sooner. Defenders of *creatio ex nihilo* like al-Ghazali responded by arguing that time begins at creation, so that the question is meaningless (Al-Ghazali, *Tahafut al-Falasifah*, trans. S.A. Kamali [Lahore: Pakistan Philosophical Congress, 1963], pp. 35–36; cf. p. 23). Leibniz himself hints at the real issue when he remarks, "It is a . . . fiction, (that is) an impossible one, to suppose that God might have created the world some millions of years sooner. Those who run into such kind of fictions, can give no answer to one that should argue for the eternity of the world" (Leibniz, "Fourth Paper," p. 38).

The wider context in which the question at issue arose was the emanationist philosophers' challenge to creationists to explain how a first temporal effect could originate from an eternal, changeless cause (Ghazali, *Tahafut*, p. 14). Ghazali argues that (i) God as a free agent cause can initiate new effects in time without any determining conditions, (ii) God wills eternally that a temporally finite effect appear, so that the appearance of the effect involves no change in God and, hence, does not compromise divine timelessness, and (iii) that since time begins at the moment of creation, it is senseless to ask why God did not create sooner. I have found Ghazali's discussion enormously stimulating and profitable. In my own work I have defended both (i) and (iii), but I have argued against (ii) because even if no intrinsic change in God occurred at creation, He would at least change extrinsically and, hence, become temporal.

{10} Of course, Kant also believed that the argument for the thesis of his First Antinomy was also rationally compelling; that is precisely why it is an antinomy! My interest in this paper

lies solely in assessing the argument which comes to expression in the antithesis; I am not attempting here an exegesis of Kant.

{11}Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Macmillan, 1933), p. 396 (A427/B455).

{12}Ibid., p. 397.

{13}Quentin Smith, "The Uncaused Beginning of the Universe," in Wm. L. Craig and Q. Smith, *Theism, Atheism, and Big Bang Cosmology* (Oxford: Clarendon Press, 1993), p. 135.

{14}Bernulf Kanitscheider, "Does Physical Cosmology Transcend the Limits of Naturalistic Reasoning?" in *Studies on Mario Bung's "Treatise,"* ed. P. Weingartner and G. J. W. Doen (Amsterdam: Rodopi, 1990), p. 344.

{15}Stephen Hawking and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton: Princeton University Press, 1996), p. 20.

{16}E. A. Milne, *Relativity, Gravitation and World Structure* (Oxford: Clarendon Press, 1935); idem, "A Newtonian Expanding Universe," *Quarterly Journal of Mathematics* 5 (1934): 64–72; W. H. McCrea, "On the Significance of Newtonian Cosmology," *Astronomical Journal* 60 (1955): 271–274. See also remarks of H. Bondi, *Cosmology*, 2d ed. (Cambridge: Cambridge University Press, 1960), p. 89; E. L. Schücking, "Newtonian Cosmology," *Texas Quarterly* 10 (1967): 274; Pierre Kerszberg, "On the Alleged Equivalence between Newtonian and Relativistic Cosmology," *British Journal for the Philosophy of Science* 38 (1987): 349.

{17}Paul Davies, "The Birth of the Cosmos," in *God, Cosmos, Nature and Creativity*, ed. Jill Gready (Edinburgh: Scottish Academic Press, 1995), pp. 8–9.

{18}Arthur Eddington, *The Expanding Universe* (New York: Macmillan, 1933), p. 124.

{19}This objection has been suggested to me in conversation by Quentin Smith.

{20}Brian Leftow, "Why Didn't God Create the World Sooner?" (preprint).

{21}Ibid.

{22}Ibid.

{23}Ibid. It is not clear to me that God's having waning anticipation is compatible with Leftow's claim that God is infinitely patient.

{24}Quentin Smith, "Kant and the Beginning of the World," *New Scholasticism* 59 (1985): 345.

{25}Leftow, "Why Didn't God Create the World Sooner?"

{26} Alan G. Padgett, *God, Eternity and the Nature of Time* (New York: St. Martin's, 1992), pp. 122–146; Richard Swinburne, "God and Time," in *Reasoned Faith*, ed. Eleonore Stump (Ithaca, N.Y.: Cornell University Press, 1993), pp. 204–222.

{27} For critiques see Michael Friedman, "Grünbaum on the Conventionality of Geometry," in *Space, Time, and Geometry*, ed. Patrick Suppes, Synthese Library (Dordrecht: D. Reidel, 1973), pp. 217–233; Paul Gordon Horwich, "On the Metric and Topology of Time" (Ph.D. dissertation, Cornell University, 1975), chap. 3; Philip L. Quinn, "Intrinsic Metrics on Continuous Spatial Manifolds," *Philosophy of Science* 43 (1976): 396–414; Graham Nerlich, *The Shape of Space* (Cambridge: Cambridge University Press, 1976), chap. 8. These critics argue that continuity of a manifold does entail the metrical amorphousness of that manifold, that we may not equate a metric's extrinsicity with conventionality, that the metric may be intrinsic even in Grünbaum's sense if it is a counterfactual property, and that Grünbaum's attempt to reformulate his argument using a set theoretic analysis is misconceived and irrelevant because a continuous interval has a size intrinsically iff each subinterval does.

{28} Swinburne, "God and Time," pp. 218–219. The mention of an end is gratuitous; metrically amorphous time could end at the moment of creation, which is a more plausible view than Padgett and Swinburne's metric conventionalism concerning post-creation time.

{29} See discussion in William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 (Leiden: E. J. Brill, 1991), pp. 150–156.

{30} Thomas Flint, "Middle Knowledge and the Doctrine of Infallibility," in *Philosophical Perspectives*, vol. 5: *Philosophy of Religion*, ed. James Tomberlin (Atascadero, Cal.: Ridgeaway Publishing, 1991), pp. 373–93.

{31} Quentin Smith, "The Wave Function of a Godless Universe," in *Theism, Atheism, and Big Bang Cosmology*, p. 318.

{32} Quentin Smith, "Temporal Becoming and Physics," Philosophy of Time Society meeting, Central Division Meeting of the American Philosophical Association, Chicago, December 29, 1993.

{33} See discussion in William Lane Craig, "Theism and the Origin of the Universe," *Erkenntnis* 48 (1998): 47–50.

{34} Thomas Senior, "Divine Temporality and Creation *ex Nihilo*" *Faith and Philosophy* 10 (1993): 88.

{35} See discussion in Craig and Smith, *Theism, Atheism, and Big Bang Cosmology*.

{36} Sydney Shoemaker, "Time without Change," *Journal of Philosophy* 66 (1969): 363–81. Shoemaker envisioned a universe which underwent periodic partial "freezes" which were staggered in such a way that its denizens could calculate that every few years the entire universe would be frozen for a determinate time.

{37} W. H. Newton-Smith, *The Structure of Time*, International Library of Philosophy (London: Routledge & Kegan Paul, 1980), pp. 44–46, 104.

{38} Graeme Forbes, "Time, Events, and Modality," in *The Philosophy of Time*, ed. Robin Le Poidevin and Murray MacBeath (Oxford: Oxford University Press, 1993), pp. 80–95.

{39} Robin Le Poidevin, "Relationism and Temporal Topology: Physics or Metaphysics?" in *Philosophy of Time*, pp. 150–53.

{40} If we interpret Le Poidevin's formulation of the consequent to mean that it is possible that n units of time exist before/after e along with some event at the relevant time (rather than that it is possible that an event should exist at an actual position n units before/after e), then we have declared by fiat that time is infinite, a strange way of doing metaphysics! Le Poidevin qualifies his formulation by adding to the consequent "compatible with no disturbance of the actual temporal relations between actual events." But this addendum rules out *a priori* that time could have any different extent than it actually has. For example, if time begins at t_1 , then it is not possible that an event should occur at t_0 , since then t , would stand in the *later than* relation to t_0 , which relation it actually lacks; similarly, t_1 would then stand in the relation *between* with respect to t_0 and t_2 , in which it does not stand.

{41} A point ably emphasized by Ghazali, *Tahafut*, p. 43.

The Eternal Present and Stump-Kretzmann Eternity

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started

their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

A classic difficulty of the conception of divine eternity as timelessness is that it seems impossible for an atemporal deity to be causally active in the world. Stump and Kretzmann, in their seminal article "Eternity," claimed to be able to resolve this problem by formulating a new species of simultaneity, viz., eternal-temporal simultaneity. Although their proposal has received extensive criticism, little has been said concerning the notion of the "eternal present" which underlies their analysis. It is argued that apart from construing divine eternity as a sort of embedding hyper-time, it does not seem possible to make sense of Stump and Kretzmann's description of the eternal present.

Source: *American Catholic Philosophical Quarterly* 73 (1999): 521-536.

Introduction

A great many contemporary thinkers would probably agree with Nelson Pike's judgement that "A timeless individual could not *produce, create, or bring about* an object, circumstance or state of affairs," since so doing would temporally locate the agent's action.^{1} Pike's claim is to be taken in what medieval thinkers called "the composite sense," namely, that what is impossible is a timeless being's doing what is described; and the objects and circumstances in question must be temporal, since it is easy to conceive of a world in which a timeless being produces (tenselessly) timeless objects. So understood, Pike's claim does seem to raise a significant problem for the contention that God is timeless. For it is essential to Christian theism that any reality *extra Deum* is the product of God's creative activity. So if some temporal object *O* begins to exist at a time *t*, that event is the result of God's action of creating *O* at *t*. *Prima facie* the phrase "at *t*" qualifies the gerund "creating," thus dating God's creative action. But if there is a time at which God acted to create *O*, then God's act has a temporal location. So unless there is some strange way in which one's acts can be divorced from one's being, it therefore follows that God has a temporal location, that is to say, He is temporal.

Opponents of divine timelessness can therefore be understood as claiming that

1. God is timeless

and

2. God is creatively active in the temporal world

are broadly logically incompatible, on the basis of the necessary truth of

3. If God is creatively active in the temporal world, God is really related to the temporal world

and

4. If God is really related to the temporal world, God is temporal.

Since (2) is essential to Christian theism, (1) must be abandoned.

Why think that (3) and (4) are necessarily true? With respect to (3), it seems inconceivable that God's causal relation to the world and the events/things in it could be regarded as anything other than a real relation. Indeed, God's being related to the world as cause to effect seems to be a paradigm example of a real relation. As for (4), its intuitive basis is the inconceivability of divorcing an agent's being from his actions or his actions from their effects in such a way that the effects could be temporal but the agent timeless. In virtue of the real relation between a cause and its effect, the temporality of the effect entails the temporality of the cause as well.

Given the reality of tense and God's causal relation to the world, it is, indeed, very difficult to conceive how God could remain untouched by the world's temporality. At the first moment of time, God stands in a new relation in which He did not stand before (since there was no before!). We need not characterize this as a change in God (perhaps change entails a "before"

and "after" for an enduring subject), but this is a real, causal relation which is at that moment new to God and which He does not have in the state of existing *sans* creation. Even if the beginning of the temporal world is the result of a timeless volition of God, the fact that the world is not sempiternal but began to exist out of nothing demonstrates that God acquires a new relation at the moment of creation. At the moment of creation, God comes into the relation of *sustaining the universe* or at the very least that of *co-existing with the universe*, relations which He did not before have. Since He is free to refrain from creation, God could have never stood in those relations; but in virtue of His decision to create a temporal universe God comes into a relation with the temporal world the moment the temporal world springs into being. As Aquinas explains,

whatever receives something anew must be changed, either essentially or accidentally. Now certain relations are predicated of God anew; for example, that He is Lord or governor of this thing which begins to exist anew. Hence, if a relation were predicated of God as really existing in Him, it would follow that something accrues to God anew, and thus that He is changed either essentially or accidentally. . . .{2}

As God successively sustains each subsequent moment or event in being, He experiences the flow of time and acquires a growing past as each moment elapses. Hence, even if God remains intrinsically changeless in creating the world, He nonetheless undergoes an extrinsic, or relational, change, which, if He is not already temporal prior to the moment of creation, draws Him into time at that very moment in virtue of His real relation to the temporal, changing universe.

It does no good simply to appeal to non-explanatory spatial analogies in order to justify God's timeless sustenance of a temporal world, as William Hasker has done: "Just as the non-spatial God can act outside of space so as to produce effects at every point in space, so the timeless God can act outside of time, that is, in eternity, so as to produce effects at every point in time." {3} The analogy breaks down precisely because space is not tensed. Hence, God can create spatial things without entering into spatial relations with them (He does not have to be *here* to create things *here*); but some explanation is required for how God can create temporal things without entering into temporal relations with them (how He sustains things *now* without existing *now*).

Stump and Kretzmann's E-T Simultaneity

Aquinas attempted to avert extrinsic change and, hence, the temporality of God by denying that God stands in any real relations to creation, a singularly difficult doctrine.{4} If, on the other hand, we think that God is really related to the world in virtue of His creative activity in the temporal world, then we must deny the necessary truth of

4. If God is really related to the temporal world, God is temporal in order to undercut the argument for divine temporality.

In 1981 Eleonore Stump and the late Norman Kretzmann sparked a renewal of interest in the doctrine of divine timelessness by proposing a model of God's relationship to time which allegedly demonstrated the possibility of God's being atemporal and yet really related to the world. The heart of the Stump-Kretzmann proposal lies in their conception of a new species of simultaneity, which they call "eternal-temporal simultaneity" (or "ET-simultaneity").{5} They take the generic concept of simultaneity to be *existence or occurrence at once* (that is,

together). "Temporal simultaneity" refers to a species of this generic concept and means *existence or occurrence at one and the same time*. Temporal simultaneity and simultaneity are not the same, since between two eternal entities or events there obtains another species of the generic concept of simultaneity called "eternal simultaneity," which is *existence or occurrence at one and the same eternal present*. Thus, the two species of simultaneity are distinguished by the specific content given to the general notion *at once*, or *together*. Simultaneity in general involves co-existence or co-occurrence, but does not specify whether this co-existence or co-occurrence is at one and the same time or at one and the same eternal present.

Stump and Kretzmann's definition of ET-simultaneity has received extensive criticism; but their notion of the "eternal present," which is presupposed by their definition, has been overlooked by commentators. It is important that Stump and Kretzmann have a coherent understanding of the nature of the eternal present, not only in order to clarify the new species of simultaneity they introduce, namely, eternal simultaneity, but also because the notion of the present--both the temporal present and the eternal present --features prominently in their definition of ET-simultaneity. So what do Stump and Kretzmann understand by the expression "eternal present?" Although for Stump and Kretzmann eternity is not equivalent to atemporality--they have the peculiar view that whatever is eternal is alive, for example--[{6}](#), nonetheless they hold that eternity entails atemporality. Clearly, then, the eternal present is not the temporal present. Nevertheless they claim that this fact "does not rule out the attribution of presentness . . . to the life . . . of such an entity, nor should it. Insofar as an entity is or *has* life, completely or otherwise, it is appropriate to say it has present existence in some sense of 'present' . . ."[{7}](#) They clarify what sense that is when they comment, "no eternal entity has existed or will exist; it *only* exists. It is in this sense that an eternal entity is said to have present existence."[{8}](#) The only way in which an entity could literally possess presentness and yet it never be true of that entity that it will exist or that it has existed would be if time were composed of a single instant at which that entity existed. Since an eternal entity is, however, atemporal, Stump and Kretzmann's characterization of its having present existence as *only existing* must seemingly imply that its existence is literally tenseless and therefore only metaphorically present.

But here things begin to get complicated. Apparently misled by the metaphor of the "eternal present," Stump and Kretzmann feel compelled to deny that the eternal present--like the present of a time composed of a single instant--is an evanescent instant which elapses as soon as it occurs: "the eternal, pastless, futureless present is not instantaneous but extended, because eternity entails duration The eternal present . . . is by definition an infinitely extended, pastless, futureless duration."[{9}](#) They are thus led to embrace the notorious notion of "atemporal duration." According to Stump and Kretzmann "the life of an eternal entity is characterized by beginningless, endless, infinite duration."[{10}](#)

Their advocacy of atemporal duration has drawn heaps of criticism. As Padgett complains, "atemporal duration" is just an oxymoron, since duration simply is the span of time through which an entity might endure.[{11}](#) Temporality is thus inherent to the meaning of "duration." Stump and Kretzmann recognize that their combining duration with timelessness constitutes "the most flagrant of the difficulties" with their view; but they seek to soften its impact by insisting that "atemporal duration" is "technical terminology" which uses familiar words in unfamiliar ways and noting that technical uses of familiar terms--like "black hole" or "Big Bang"--are common and go unprotested in other theoretical disciplines.[{12}](#) What is surprising about this defense is that expressions like "black hole" and "Big Bang" are

precisely not technical terminology, but ordinary language expressions which every scientist recognizes as metaphorical. On this pattern we should take expressions like "eternal present" or "atemporal duration" as appropriate metaphors for God's mode of existence. But Stump and Kretzmann are committed to construing eternity as literally some sort of extension which is the paradigm of duration.{13} According to them temporal duration is "only apparent duration," while atemporal, infinite duration is "genuine, paradigmatic duration." {14} By contrast, no scientist would take the Big Bang to be the paradigm for explosions or black holes to be the paradigm of holes. To contend that temporal duration is only apparently duration because it lacks the permanence of eternity is as ridiculous as saying that a bomb blast is not an explosion because it involves no expansion of space itself or that a perforation is not a hole because it involves no gravitational self-collapse. The metaphors "black hole" and "Big Bang" are appropriate because the entities or events so referred to are reminiscent of genuine explosions and holes. If, then, temporal duration is, as seems undeniable, genuine duration, it follows that eternity is not a genuine duration.{15} Because it does not elapse, an eternal state is reminiscent of something that endures, but the terminology of duration can only be used of it metaphorically.

Of course, one may move "beyond the terminological novelties" by dropping the terminology of duration altogether and speaking of eternity, as Stump and Kretzmann are wont to do, simply in terms of an atemporal *extension*.{16} The idea of atemporal extension is clear, since the concept of space involves extension which is atemporal. Now if one does wish to conceive of eternity as an atemporal extension, one is obliged to explain the nature of this extension, its topological and geometrical properties.{17} But Stump and Kretzmann admit that eternity has none of the properties normally associated with extension. Minimally any extension must be such that it can be regarded as a manifold, that is to say, one can specify points within it which are non-identical. But according to Stump and Kretzmann eternity does not even fulfill this most minimal of conditions: it has no actual parts or phases and is not divisible even potentially or conceptually.{18} The conclusion seems irresistible that this "extension" is not topologically different from a single mathematical point. Not even the most primitive metric can be non-trivially defined for eternity, since non-identical points cannot be specified within it, much less ordered by a relation of betweenness. Topologically and geometrically, then, eternity seems to be no kind of extension, but a point.{19}

Stump and Kretzmann respond to this criticism, first, by asserting that it has not been shown that divisibility is essential to extension.{20} They note that on discrete theories of time there exist extended but indivisible atoms (or chronons). Moreover, the specious present, though extended, is as such not divisible, even conceptually. The eternal present may be thought of as God's specious present which covers all of time. Moreover, even if space and time are continuous, one may not licitly generalize that all extensions are divisible. Secondly, Stump and Kretzmann attempt to provide some rationale for regarding eternity as an extension despite its indivisibility.{21} Eternity must be thought of as extended because the alternative--that eternity belongs to the evanescent realm of becoming--is metaphysically impossible. Eternal extension or atemporal duration are predicated analogically of God, and although it is impossible to state what features are shared by temporal and atemporal extension, we can say that "eternal duration . . . is a measure of existence, indicating some degree of permanence of some sort on the part of something that persists--although, of course, divine existence, permanence, and persistence will be analogous to, not identical with, temporal existence, permanence, and duration." {22}

This two-fold response seems clearly unavailing. First, it belongs analytically to the concept of extension that a multiplicity of points can be, at least conceptually, specified within it. Indeed, for eternal duration to be "a measure of existence" some metric on this manifold must be specified, which is impossible without a multiplicity of ordered, specifiable points. The proffered counter-examples of chronons and the specious present are based on misunderstandings. For a moment of time even to be a chronon one must be able to specify instants which constitute its boundaries, or, at least, if its boundaries are fuzzy, which do not lie outside its span. If chronons endure for 10^{-23} second, we can conceptually, if not physically, divide it into lengths of 10^{-33} second.^{23} As for the specious present, Stump and Kretzmann conflate the psychological present with the ontological present. The psychological present has for us a minimal duration, but whatever interval of time is actually present is conceptually divisible into smaller intervals. The eternal present, however, is not supposed to be God's psychological present, but the actual mode of His existence. The indivisibility of His psychological present does not imply the indivisibility of His mode of existence. If the mode of His existence is conceptually indivisible, then His eternity is topologically point-like, even if His psychological present necessarily takes in the whole extent of time. Finally, the essential conceptual divisibility of an extension is not due to over-generalization from the cases of space and time. We can conceive, for example, of other sorts of extensions in logical space, such as a gradient recording temperature and pressure, and all these must be susceptible to specification of non-identical points along the extension, or one simply does not have an extension. An extension without conceptually specifiable points is as much a contradiction as atemporal duration.

When we examine Stump and Kretzmann's reasons for thinking of eternity as an extension, I think it is evident that they have been misled by the metaphor of the "eternal present." Since they conceive of eternity on the model of the tensed present rather than of a tenseless state, they are exercised to deny of eternity that "radically evanescent existence" which characterizes the temporal present and which "could not be the existence of an absolutely perfect being," which must be "permanent, utterly immutable actuality."^{24} Thus, they explicitly state their aim as attempting "to frame the notion of a mode of existence consisting wholly in a present that is limitless rather than instantaneous."^{25} This attempt to combine presentness with permanence forces them to the conclusion that the eternal present "is indivisible, like the temporal present, but it is atemporal in virtue of being limitless rather than instantaneous, and it is in that way infinitely enduring."^{26}

The best sense that I can make of the Stump-Kretzmann notions of the eternal present and atemporal duration is that our time dimension is embedded in a hyper-time in which God endures, such that at every moment of hyper-time the entire temporal series is present (Figure 1).

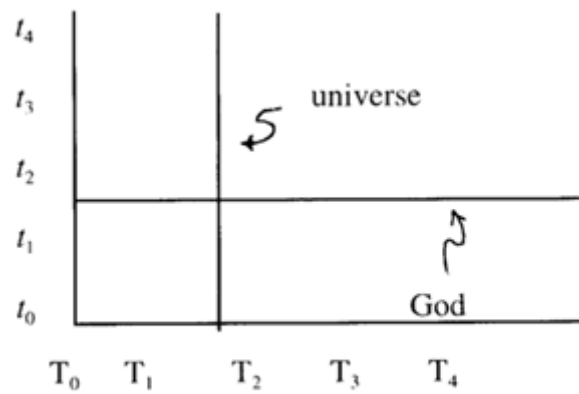


Figure 1

Fig. 1. The horizontal T-axis represents hyper-time, in which God endures infinitely. The vertical t -axis represents time, in which our universe endures. When T_2 is present for God, the entire temporal series of events is present to Him.

On this view even though our temporal present is radically evanescent, for God in hyper-time, or eternity, all our presents are equally real in His hyper-present. By the same token, the hyper-present is permanent from the standpoint of any temporal observer and is in that sense eternal. The present instant of hyper-time encompasses the whole of time and, as an instant, is indivisible. In God's eternal present the whole temporal series of events is laid out before Him. He can survey the whole series of events in that single hyper-instant and act at any point in our temporal series without changing or waiting for events to elapse. God can be said to have atemporal duration in the sense that He does not endure throughout time, but does endure in hyper-time, or eternity. Thus, on this model the notions of the eternal present and atemporal duration turn out to be coherent.^{27}

Remarkably, several statements by Stump and Kretzmann suggest that they are struggling to express just such a view. For example, in response to Brian Leftow's allegation that since, on Stump and Kretzmann's view, eternity cannot contain distinct positions, "eternity is pointlike, not extension like,"^{28} they assert, "this inference holds only if it exhausts the possibilities for any mode of existence to describe it either as linelike or as pointlike, and there is no good reason to think that modes of existence higher up the ladder of being or of more dimensions than our own are limited in that way."^{29} Here they explicitly appeal to higher dimensional reality in order to explain how what appears to us as a point is extended in a higher dimension. Again, they state, "On the doctrine of eternity, the eternal present persists, encompasses time, and is unbounded."^{30} Here eternity is conceived as an infinite, embedding dimension in which time exists. Finally, Stump and Kretzmann attempt to illustrate their model by describing the attempts of a three-dimensional person to communicate his spatial location to one-dimensional creatures via spatial indexical expressions like "here."^{31} This analogy suggests construing eternity as a hyper-time in which God attempts to communicate to creatures in time that all of them regardless of their temporal location exist "now." Thus, construing eternity as an embedding hyper-time not only renders coherent much of what Stump and Kretzmann say, but is even suggested by not a few of their own statements.

Nevertheless, it is obvious that they would not accept such a construal of their view. The chief difficulty lies in the fact that in hyper-time God would not have complete possession all at once of His interminable life. We could eliminate this problem by limiting hyper-time to a

single hyper-instant in which the whole series of temporal events in the universe exists; but such a solution is hardly acceptable, since God would then have evanescent existence in hyper-time. If His life is extended in hyper-time, then the hyper-present is constantly shifting for God, and our whole universe passes Him by in a fleeting hyper-instant. We could solve this difficulty in part by having God sustain our time dimension across hyper-time, so that it does not instantly pass away (Figure 2).

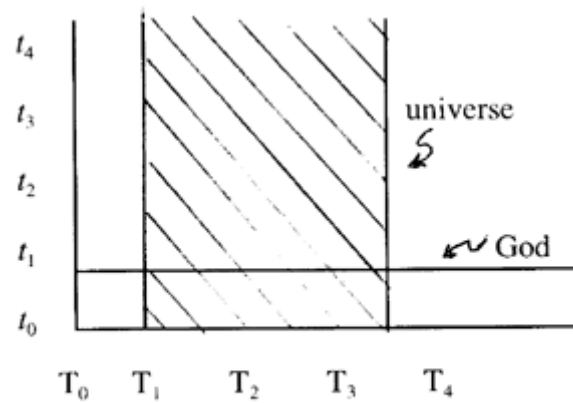


Figure 2

Fig. 2. By sustaining time across moments of hyper-time, time acquires width as well as length.

If God chose to create time from the infinite hyper-past and sustain it into the infinite hyper-future, nothing in time would ever pass away for God. Still, if hyper-time is tensed, it remains the case that God would not possess His life all at once.

Perhaps we could avoid this problem by denying that hyper-time is tensed, so that God's life exists tenselessly as a B-series of events. But then God still has, at least, the *experience* of hyper-temporal becoming and so does not possess His life all at once in that sense. Perhaps we could adopt Stump and Kretzmann's suggestion that God's specious present in tenseless hyper-time embraces the whole of hyper-time, so that nothing is lost or gained by Him experientially or metaphysically. But I have elsewhere pointed out the fatal flaws in such a view with respect to God's timely action in a tenseless time, and the same goes for hyper-time.^{32} God could not act to create or destroy time at a certain moment of hyper-time, since all moments of hyper-time appear to Him as equally "now." But perhaps a final gambit could be played: we could conceive of God's hyper-time as tenseless and composed of a single hyper-instant which is speciously present to God and in which our time dimension is embedded. On this view, eternity consists of a single, tenseless instant of hyper-time at which God creates our whole temporal series of events. This hyper-instant is not a duration, but neither is it evanescent, since it is tenseless. It appears as present to God, but there is no problem with timely action, since hyper-time, or eternity, consists of a single instant. Such a model comes startlingly close to the classical conception of eternity. The central difference consists in the fact that eternity was taken by its classical defenders to be a state of timelessness, not an embedding hyper-temporal dimension. If we construe eternity as hyper-time, it follows that God must exist at minimally one instant of time where His hyper-temporal world-line (even if only a point) and the world-line of the universe intersect.^{33} Thus, curiously, at some arbitrary point in time it would be true to say, "God now exists." Before that time it would be true to assert "God will exist" and thereafter "God did exist."

Ironically, we were forced to such a model by attempting to provide a coherent interpretation of Stump and Kretzmann's notions of atemporal duration, eternal extension, and the eternal present; but all of these have now been sacrificed by the model suggested. Moreover, the model of hyper-temporal eternity depends for its metaphysical possibility on the tenseless theory of time, since God's hyper-time, if not our time, is conceived to be a tenseless time. But Stump and Kretzmann are eager to expound a model of eternity which is compatible with theories of time that are essentially tensed. Thus, the construal of eternity as a tenseless hyper-time would be doubly objectionable to them.

Conclusion

Ultimately, then, I have been unable to find an acceptable, coherent model of Stump-Kretzmann eternity. This negative conclusion requires us to regard such expressions as "eternal present" and "atemporal duration" as metaphors appropriate to God's mode of existence. Stump and Kretzmann practically admit as much in characterizing such expressions as wholly analogical. For analogical predication without some univocal, conceptual content cannot be regarded as anything more than metaphor. {34} Such metaphors are apt for divine eternity because they convey to us that God's timeless state does not pass away like a temporal instant, that it is permanent. The opposite of evanescence is not duration or extension, but permanence. Permanence is really what Stump and Kretzmann are anxious to safeguard, and this property of eternity is guaranteed by God's tenseless existence and action on theories of divine timelessness, not by incoherent notions like atemporal duration or conceptually indivisible extension. {35} Defenders of divine timelessness who conceive of eternity as topologically point-like have not in the least thereby compromised God's permanence. If we take eternity to be a tenselessly existing state topologically like a point, then two eternal entities can both be located tenselessly at the same point which represents eternity. Thus, "eternal simultaneity" makes sense. But if one entity is eternal and the other temporal, then the question becomes the adequacy of Stump and Kretzmann's definition of the ET-simultaneity relation, a question which I have taken up in another place. {36}

Endnotes

{1} Nelson Pike, *God and Timelessness*, Studies in Ethics and the Philosophy of Religion (New York: Schocken Books, 1970), p. 110.

{2} Aquinas *Summa contra gentiles* 2. 12. 5. For discussion see Michael-Thomas Liske, "Kann Gott reale Beziehungen zu den Geschöpfen haben?" *Theologie und Philosophie* 68 (1993): 224.

{3} William Hasker, *God, Time, and Knowledge*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1989), p. 154.

{4} See discussion in my "The Tensed vs. Tenseless Theory of Time: A Watershed for the Conception of Divine Eternity," in *Questions of Time and Tense*, ed. Robin Le Poidevin (Oxford: Oxford University Press, 1998), pp. 223-31.

{5} Stump and Kretzmann formulate the following definition of ET-simultaneity:

For every x and for every y , x and y are ET-simultaneous iff

(i) either x is eternal and y is temporal, or vice versa; and
(ii) for some observer, A , in the unique eternal reference frame, x and y are both present--i.e., either x is eternally present and y is observed as temporally present, or vice versa; and
(iii) for some observer, B , in one of the infinitely many temporal reference frames, x and y are both present--i.e., either x is observed as eternally present and y is temporally present, or vice versa

(Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 [1981]: 441).

{6} This property of an eternal entity they erroneously read into Boethius's account (see William Lane Craig, "Boethius on Theological Fatalism," *Ephemerides theologiae Lovanienses* 64 [1988]: 324-347).

{7} Stump and Kretzmann, "Eternity," p. 434.

{8} Ibid.

{9} Ibid., p. 435.

{10} Ibid., p. 433.

{11} Alan Padgett, *God, Eternity and the Nature of Time* (New York: St. Martin's, 1992), p. 67: "Stump and Kretzmann have chosen the wrong word. The word 'duration' means an interval of time, namely, that interval of time through which something endures. The notion of an atemporal duration is, therefore, a contradiction in terms;" so also Stephen T. Davis, *Logic and the Nature of God* (Grand Rapids, Mich.: Wm. B. Eerdmans, 1983), p. 19; Richard M. Gale, *On the Nature and Existence of God* (Cambridge: Cambridge University Press, 1991), p. 48; Katherin A. Rogers, "Eternity Has No Duration," *Religious Studies* 30 (1994): 7.

{12} Eleonore Stump and Norman Kretzmann, "Eternity, Awareness, and Action," *Faith and Philosophy* 9 (1992): 464-465.

{13} Stump and Kretzmann, "Eternity," pp. 444-445; idem, "Atemporal Duration: a Reply to Fitzgerald," *Journal of Philosophy* 84 (1987): 216, 218.

{14} Stump and Kretzmann, "Atemporal Duration," p. 218.

{15} So Brian Leftow, *Time and Eternity*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991), pp. 125-127.

{16} Stump and Kretzmann, "Eternity, Awareness, and Action," pp. 465-466.

{17} Paul Fitzgerald, "Stump and Kretzmann on Time and Eternity," *Journal of Philosophy* 82 (1985): 260-269.

{18} Stump and Kretzmann, "Eternity, Awareness, and Action," p. 46; cf. idem, "Atemporal Duration," p. 215: "Nothing that is incompatible with divine simplicity can count as E-duration;" cf. pp. 218-219. Helm rightly complains that "atemporal duration" becomes so qualified that nothing remains but the bare words (Paul Helm, *Eternal God* [Oxford: Clarendon Press, 1988], p. 35). Strangely, on p. 216 of "Atemporal Duration" Stump and

Kretzmann do seem to allow conceptual divisibility of atemporal duration: continuous time, they explain, is not composed of actual or even potential parts, rather

"it is *potentially divisible* conceptually. And Fitzgerald provides no reason for thinking that the subphases of E-duration are to be treated otherwise than those of temporal duration . . . since the potential divisibility of any duration is conceptual only, there is no discrepancy between any possible divisibility of E-duration and God's nature as pure actuality."

Here they seem to countenance the idea that a duration as a whole is logically prior to any intervals or points which can be specified in it and endorse the possibility of conceiving eternity in this way. Their mature view seems clearly to contradict such an endorsement. If we do conceive of eternity as a conceptually divisible duration, then metrical questions cannot be avoided. For example, for any two non-identical points a and b in eternity, is the distance $(a, b) > 0$? If not, how is eternity different from a point? If so, how does God have possession of His life "at once"? Similarly, for any three points a , b , and c , if b is between a and c , is the distance $(a, b) > (a, c)$? The same two questions arise with respect to negative and affirmative answers to this question.

{19} The best analogy for Stump-Kretzmann eternity which I can think of would be a series of points having a light-like separation in Minkowski space-time. The metric of such a manifold requires that the interval, or space-time separation, between any two points lying along the path of a light ray *in vacuo* be zero. This is the case even for events which occur millions of years apart and light years away from each other: their space-time separation is zero. Lucas and Hodgson comment,

"Topology is concerned with 'nearness', points and sets of points that are close together, that is those where the distance between them tends toward zero. In an ordinary space the distance between two points can be zero only if the two points are coincident, but in Minkowski space two points on the path of a light ray are not, according to our criterion, separated, even though they are, according to intuitive reckoning, a great distance apart. Hence whereas in an ordinary space two points are near only if the distance between them is tending toward zero, which can happen only when they are themselves actually coincident, in Minkowski space two points can be counted as being topologically near to each other without approximating in the least to be coincident" (J. R. Lucas and P. E. Hodgson, *Spacetime and Electromagnetism* [Oxford: Clarendon Press, 1990], pp. 34-35).

Perhaps Stump and Kretzmann could model divine eternity on the world-line of a light ray, conceding that it is, after all, made up of a multiplicity of points, but having a metric such that the separation of any two points is zero. Perhaps such a feature could be interpreted as God's possessing His life all at once.

{20} Stump and Kretzmann, "Eternity, Awareness, and Action," pp. 466-468; idem, "Atemporal Duration," pp. 215-216.

{21} Stump and Kretzmann, "Eternity, Awareness, and Action," pp. 468-469; idem, "Atemporal Duration," pp. 218-219.

{22} Stump and Kretzmann, "Eternity, Awareness, and Action," p. 469.

{23} See G.J. Whitrow, *The Natural Philosophy of Time*, 2d ed. (Oxford: Clarendon Press, 1980), p. 201:

"Acceptance of the ideas of spatial and temporal atomicity in physics does not, of course, preclude us from applying mathematical concepts of space and time involving numerical continuity in our calculations, but the infinite divisibility associated with these concepts will then be purely mathematical and will not correspond to anything physical."

Also relevant in this connection is Philip L. Quinn, "On the Mereology of Boethian Eternity," *International Journal for Philosophy of Religion* 32 (1992): 57.

{24} Stump and Kretzmann, "Atemporal Duration," p. 218; cf. idem, "Prophecy, Past Truth, and Eternity," in *Philosophy of Religion*, ed. Jas. Tomberlin, Philosophical Perspectives 5 (Atascadero, Calif.: Ridgeway Publishing, 1991), p. 396: "The existence of an absolutely perfect being must be an indivisibly persistent present actuality."

{25} Stump and Kretzmann, "Atemporal Duration," p. 218.

{26} Ibid.

{27} Curiously, however, ET-simultaneity may not survive in this re-interpretation, since in two-dimensional time simultaneity becomes relativized to a dimension, as explained by Murray MacBeath, "Time's Square," in *The Philosophy of Time*, ed. R. Le Poidevin and M. MacBeath, Oxford Readings in Philosophy (Oxford: Oxford University Press, 1993), p. 196.

{28} Leftow, *Time and Eternity*, p. 128.

{29} Stump and Kretzmann, "Eternity, Awareness, and Action," p. 471.

{30} Ibid., p. 466.

{31} Ibid., pp. 470-473. Unfortunately, the analogy is misconstrued due to a misuse of indexical expressions. In the one-dimensional world, the creatures are supposed to recognize an absolute *here*, which is the location of the creature which occupies the mid-point of the line segment which is their world. The aim of this analogy is clearly to construct a spatial tense on the analogy of "now." But the attempt misfires; for creatures elsewhere on the line segment the specified point can not be truly regarded as *here*, but as *there*. It can only be truly regarded as *here* for the creature who occupies it. The customary view of spatial indexicals is that none of the points on the line is objectively *here* or *there*, these being person-dependent expressions of spatially tenseless facts. Objective spatial tenses would require us to say that in the postulated one-dimensional world there really are objective, person-independent facts like *The end-point is here* or *The mid-point is up ahead*. But it does not require the absurdity that only one point in space qualifies as being *here*. That would be like saying that only one point in time ever qualifies as *now*, when in fact objective tense requires merely that any time the expression "now" is correctly used the time of usage be objectively present. In general, Stump and Kretzmann seem to have been misled by the word "absolute" with which they preface "here" and "present." The upshot is that when the 3-D person says to the 1-D creature "We're all here together," the 1-D creature will recognize that the expression "here" has a different referent than when he uses it, just as he recognizes that each of his fellow creatures would refer to his own place on the line segment as "here." It is also significant to note that the 3-D

person does in fact share the same single dimension with the 1-D creatures; he fails to be on the line only in virtue of being off it in the second and third dimensions, and co-ordinates can be assigned to him in that one shared dimension. Similarly, a hyper-temporal being causally connected to our temporal world would have to share our temporal dimension at minimally one point where the dimensions intersect.

{32} See discussion in my "On the Argument for Divine Timelessness from the Incompleteness of Temporal Life," *Heythrop Journal* 38 (1997): 165-171.

{33} This would seem to be the hyper-time at which God acts causally to create time and the universe. Since this point of intersection is shared by time and hyper-time and could be at any time, it follows that God may have created the world in, say, 1898--or maybe He has not yet created the world! From God's perspective such mid-time creation would not involve backward causation, since God in hyper-time acts to create the whole time-line at one hyper-instant, but for us temporal creatures His action would seem to involve backward causation, since it also occurs at a moment of ordinary time. These sorts of difficulty might well cause one to doubt the metaphysical possibility of higher temporal dimensions, in contrast to higher spatial dimensions.

{34} See William P. Alston, "Aquinas on Theological Predication: A Look Backward and a Look Forward," in *Reasoned Faith*, ed. Eleonore Stump (Ithaca, N.Y.: Cornell University Press, 1993), pp. 145-178.

{35} For an analysis of permanence, see Quentin Smith, "A New Typology of Temporal and Atemporal Permanence," *Noûs* 23 (1989): 307-330, and Leftow, *Time and Eternity*, pp. 132-133. I should add merely that Leftow conflates instants (which are durationless) with moments (which have arbitrarily short non-zero duration). Eternity is not like a single moment which is both a first and last moment; rather it is like an instant and so has no first or last finite period of existence.

{36} It is noteworthy that in the proposed definition simultaneity is not defined in terms of a shared location, but in terms of a shared property. Relative to a location either in time or in eternity, both x and y are said to be present. This is not a shared location (contrast: "in the present"), since x and y are not both located in the "eternal present" nor in any temporal present. Such a procedure seems peculiar, since two entities' sharing a property relative to some location hardly suffices for simultaneity. Relative to the eternal reference frame, for example, God and Jones are both intelligent, but they are not therefore in any way simultaneous. But when it comes to the property of presentness, I think, we can make sense of such a procedure. For example, we could define temporal simultaneity by stating that x and y are simultaneous iff relative to time t x and y are both present. The problem with the Stump-Kretzmann definition is that the word "present" in the definition refers to entirely different properties, namely, temporal presentness and eternal presentness, so that there is no shared property involved. The fact that the "eternal present" must be taken as metaphorical only underscores this conclusion. We cannot circumvent this problem by giving tenseless, token-reflexive truth conditions relative to eternity or to moments of time for statements like " y is present," since in eternity as well as at most moments of time there are no such tokens. Rather we must find some common property shared by God and temporal entities relative to either's "reference frame" which intuitively suffices to found a simultaneity relation. I think that the essence of the Stump-Kretzmann definition would be preserved if we state that relative to either frame " x and y are both real," one eternally real and the other observed as temporally

real relative to the eternal "reference frame" or one temporally real and the other observed as eternally real relative to a moment of time. Not only does *real* seem to be the univocal element common to the eternal present and the temporal present, but Stump and Kretzmann later revise their definition of ET-simultaneity in such a way as to make it tenseless. Their use of the word "present" is thus confusing and, I fear, inconsistent. They even speak of spatial locations as being present to a non-spatial God. If Stump and Kretzmann insist on a shared property of literal presentness, then I fear that the incoherence found in their notion of the eternal present will also bring down their definition of ET-simultaneity.

Timelessness and Omnitemporality

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

How shall we construe divine eternity and God's relationship to time? The view that God is simply timeless faces two insuperable difficulties: (1) an atemporal deity cannot be causally related to the temporal world, if temporal becoming is real, and (2) timelessness is incompatible with divine omniscience, if there are tensed facts about the world. On the other hand, we have good reasons to think that time and the universe had a beginning. Therefore, God cannot be infinitely temporal in the past. Perhaps we could say that God *sans* the universe existed in a topologically amorphous time in which temporally ordered intervals could not be distinguished. But such a state is not different from a state of timelessness. Therefore, the best understanding of eternity and time is that God is timeless *sans* creation and temporal since creation.

Source: *Philosophia Christi*, Series 2, Vol. 2, No. 1, 2000, pp. 29-33.

Divine Relations with the World

Given that a temporal universe exists, we need to ask whether God can remain untouched by its temporality. It is very difficult to see how He can. Imagine God existing changelessly alone without creation, but with a changeless determination of His will to create a temporal world with a beginning. Since God is omnipotent, His will is done, and a temporal world comes into existence. Now this presents us with a dilemma: either God existed prior to creation or He did not. Suppose He did. In that case, God is temporal, not timeless, since to exist prior to some event is to be in time. Suppose, then, that God did not exist prior to creation. In that case, without creation, He exists timelessly, since He obviously did not come into being along with the world at the moment of creation.

This second alternative presents us with a new dilemma: once time begins at the moment of creation, either God becomes temporal in virtue of His real relation to the temporal world or else He exists just as timelessly with creation as He does without it. If we choose the first alternative, then, once again, God is temporal. But what about the second alternative? Can God remain untouched by the world's temporality? It seems not. For at the first moment of time, God stands in a new relation in which He did not stand before (since there was no "before"). Even if in creating the world God undergoes no intrinsic change, He at least undergoes an extrinsic change. For at the moment of creation, God comes into the relation of sustaining the universe or, at the very least, of co-existing with the universe, relations in which He did not stand before. Thus, even if it is not the case that God is temporal prior to His creation of the world, He nonetheless undergoes an extrinsic change at the moment of creation which draws Him into time in virtue of His real relation to the world.

This argument can be summarized as follows:

1. God is creatively active in the temporal world.
2. If God is creatively active in the temporal world, God is really related to the temporal world.
3. If God is really related to the temporal world, God is temporal.
4. Therefore, God is temporal.

This argument, if successful, does not prove that God is essentially temporal, but that if He is a Creator of a temporal world--as He in fact is--, then He is temporal.

Classical attempts like Aquinas's to deny that God is really related to the world and contemporary attempts like those of Stump, Kretzmann, and Leftow to deny that God's real relation to the world involves Him in time all appear in the end to be less plausible than the premisses of the argument itself. It seems that in being related to the world God must undergo extrinsic change and so be temporal.

Divine Knowledge of Tensed Facts

God's real relation to the temporal world gives us good grounds for concluding God to be temporal in view of the extrinsic change He undergoes through His changing relations with the world. But the existence of a temporal world also seems to entail intrinsic change in God in view of His knowledge of what is happening in the temporal world. A being which knew only tenseless facts about the world, including which events occur (tenselessly) at any date and time, would still be completely in the dark about tensed facts. He would have no idea at all of what is now going on in the universe, of which events are past and which are future. On the other hand, any being which does know tensed facts cannot be timeless, for his knowledge must be in constant flux, as the tensed facts known by him change.

Thus we can formulate the following argument for divine temporality:

1. A temporal world exists.
2. God is omniscient.
3. If a temporal world exists, then if God is omniscient, God knows tensed facts.
4. If God is timeless, He does not know tensed facts.
5. Therefore, God is not timeless.

So in addition to the argument from God's real relation to the world, we now have a second powerful reason based on God's changing knowledge of tensed facts for thinking that God is in time.

A Way Out for Advocates of Divine Timelessness?

It would seem, then, that we should conclude with Nick Wolterstorff that God is temporal. But there does remain one way of escape open for defenders of divine timelessness. The argument based on God's real relation to the world assumes the objective reality of temporal becoming, and the argument based on God's omniscience assumes the objective reality of tensed facts. If one denies the objective reality of temporal becoming and tensed facts, then the arguments are undercut. In short, the defender of divine timelessness can escape the arguments by embracing the static or tenseless theory of time. But this represents a very unpalatable route of escape, for the static theory of time faces formidable philosophical and theological objections, not to mention the arguments which can be offered on behalf of a dynamic theory of time. I, therefore, prefer to cast my lot with the dynamic theory. And it is noteworthy that almost no defender of divine timelessness has taken this escape route. Virtually the only person who appears to have done so is Paul Helm. On his view there is no ontological difference between the past, present, and future. Helm thus appears to be the one advocate of divine timelessness who has seen and taken the way out. But it is a hard and lonely road.

Timelessness and Omnitemporality

Given a dynamic theory of time, it follows from God's creative activity in the temporal world and His complete knowledge of it that God is temporal. God quite literally exists now. Since God never begins to exist nor ever ceases to exist, it follows that God is omnitemporal. This might seem to imply that God has existed for infinite time in the past and will exist for infinite time in the future. But what if the temporal world has not always existed? According to the Christian doctrine of creation, the world is not infinite in the past but was brought into being out of nothing a finite time ago. Did time itself also have a beginning? Did God exist literally before creation or is He timeless without the world?

There is an old problem which bedevils proponents of an infinite, empty time prior to creation, namely: Why did God not create the world sooner? On a relational view of time, time does not exist in the total absence of events. Hence, time may begin at the moment of creation, and it is imply maladroit to ask why God did not create the world sooner, since there is no "sooner" prior to the moment of creation. Time comes into existence with the universe, and so it makes no sense to ask why it did not come into being at an earlier moment. But if time never had a beginning, God has endured through an infinite period of creative idleness up until the moment of creation. Why did He wait so long?

This problem can be formulated as follows (letting t represent any time prior to creation and n some finite interval of time):

1. If the past is infinite, then at t God delayed creating until $t + n$.
2. If at t God delayed creating until $t + n$, then He must have had a good reason for doing so.
3. If the past is infinite, God cannot have had a good reason for delaying at t creating until $t + n$.

4. Therefore, if the past is infinite, God must have had a good reason for delaying at t and God cannot have had a good reason for delaying at t .
5. Therefore, the past is not infinite.

We thus seem to have a good argument for denying the infinity of the past and holding to the beginning of time. But now we are confronted with an extremely bizarre situation. God exists in time. Time had a beginning. God did not have a beginning. How can these three statements be reconciled? If time began to exist--say, for simplicity's sake, at the Big Bang--then in some difficult to articulate sense God must exist beyond the Big Bang, alone without the universe. He must be changeless in such a state; otherwise time would exist. And yet this state, strictly speaking, cannot exist before the Big Bang in a temporal sense, since time had a beginning. God must be causally, but not temporally, prior to the Big Bang. With the creation of the universe, time began, and God entered into time at the moment of creation in virtue of His real relations with the created order. It follows that God must therefore be timeless without the universe and temporal with the universe.

Now this conclusion is startling and not a little odd. For on such a view, there seem to be two phases of God's life, a timeless phase and a temporal phase, and the timeless phase seems to have existed earlier than the temporal phase. But this is logically incoherent, since to stand in a relation of earlier than is by all accounts to be temporal. How are we to escape this apparent antinomy?.

Strictly speaking, our argument for the finitude of the past did not reach the conclusion, "Therefore, time began to exist." Rather what it proved is that there cannot have been an infinite past, that is to say, a past which is composed of an infinite number of equal temporal intervals. But Padgett argues that in the absence of any measures, there is no objective fact that one interval of time is longer or shorter than another distinct interval. Prior to creation it is impossible to differentiate between a tenth of a second and ten trillion years. There is no moment, say, one hour before creation. Time literally lacks any intrinsic metric. God existing alone without the universe would thus not endure through an infinite number of, say, hours, prior to the moment of creation.

Such an understanding of God's time prior to creation seems quite attractive. Nevertheless, a close inspection of the view reveals difficulties. Even in a metrically amorphous time, there are objective factual differences of length for certain temporal intervals. For in the case of intervals which are proper parts of other intervals, the proper parts are factually shorter than their encompassing parts. But this implies that prior to creation God has endured through a beginningless series of longer and longer intervals. In fact we can even say that such a time must be infinite. The past is infinite if and only if there is no first interval of time and time is not circular. Thus, the amorphous time prior to creation would be infinite, even though we cannot compare the lengths of non-nested intervals within it. Thus, all the difficulties of an infinite past return to haunt us.

What must be done is to dissolve the linear geometrical structure of pre-creation time. One must maintain that "prior" to creation there literally are no intervals of time at all. There would be no earlier and later, no enduring through successive intervals and, hence, no waiting, no temporal becoming. This state would pass away, not successively, but as a whole, at the moment of creation, when time begins.

But such a changeless, undifferentiated state looks suspiciously like a state of timelessness! It seems to me, therefore, that it is not only coherent but also plausible that God existing changelessly alone without creation is timeless and that He enters time at the moment of creation in virtue of His real relation to the temporal universe. The image of God existing idly before creation is just that: a figment of the imagination. Given that time began to exist, the most plausible view of God's relationship to time is that He is timeless without creation and temporal subsequent to creation.

On the Alleged Metaphysical Superiority of Timelessness

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Brian Leftow argues that timeless beings are metaphysically superior to temporal beings in view of their truer presence and unity. Leftow's argument that a timeless being has truer presence is based on a systematic misconstruction of tensed vs. tenseless theories of time, which invalidates his argument. Leftow's argument that temporal beings have less unity is based on a misunderstanding and reductionistic interpretation of the Special Theory of Relativity. Whether one adopts a presentist or non-presentist ontology, Leftow's further claim that temporal beings do not have their existence all at once is erroneous.

"On the Alleged Metaphysical Superiority of Timelessness." *Sophia* 37 (1998): 1-9.

In his recent study *Time and Eternity*, Brian Leftow maintains that timeless existence is metaphysically superior to temporal existence.^{1} He argues at great length that timeless beings have a higher degree of existence, in view of their truer presence and greater unity, than temporal beings and are therefore metaphysically superior to them.^{2} It follows that it would most befit God, as a perfect being, to be timeless. In this paper I wish to assess Leftow's arguments in support of his claim.

I. The More Genuine Presence of Timeless Beings

The claim that timeless beings have more genuine presence than temporal beings is *prima facie* baffling since presence--or, better, presentness, to distinguish it from mere spatial presence, the opposite of absence--is the quintessential tensed temporal property. To ascribe presentness to a timeless being in any literal sense is patently self-contradictory, for if a timeless being had presentness, it would exist now, at the present time. As J. M. E. McTaggart, that patron of modern tensed theories of time, observed,

The eternal is often spoken of . . . as an 'eternal present.' As a metaphor this has . . . some appropriateness, but it cannot, I think, be taken as more than a metaphor. 'Present' is not like 'existence,' a predicate which can be applied in the same sense to the temporal and the timeless. On the contrary, its meaning seems to include a distinct reference to time . . . {3}

Thus, I think that Eleonore Stump and Norman Kretzmann are more accurate than Leftow in thinking of God's eternal present as God's specious present which covers all of time, a subjective rather than objective present. {4} When ancient philosophers spoke of the eternal in present-tense terms--an idiom which passed into medieval theology--, this usage was probably in default of the device of tenseless discourse, the inappropriateness of using past- or future-tense language being evident. As Plato wrote, "we say of it [Eternal Being] that it *was* and *shall be*, but on a true reckoning we should only say *is*, reserving *was* and *shall be* for the process of change in time." {5} Plato goes on to recognize the incongruity of using the present-tense "is" to speak of timeless eternity, but since no tenseless idiom was available, the present-tense was all that was left. This use of the present-tense with respect to the eternal led to metaphors like God's "eternal present" or even the *nunc stans* (static now) of eternity in contrast to the *nunc movens* (moving now) of time. If these metaphors are taken literally, they lead to absurdities. For example, God's eternal present must not elapse like the present instant, so it must somehow last, which leads to the malapropism of "atemporal duration." As Nelson Pike recognized, "if something *is*, but is such that is never correct to say that it *was*, or that it *will be*, it *is* in a sense of 'is' that does not mean 'is now'." {6}

But Leftow defends the assertion that a timeless being is most truly present, whether one adopts a tensed theory of time or a tenseless theory of time. Tensed theories hold that attributions of pastness, presentness, and futurity to things/events express in some way an objective feature of reality, not merely the perspective or subjective impression of sentient beings. According to Leftow "on a tensed theory of time, to exist = to be present." {7} Now while this assertion may characterize the view of some defenders of tensed theories, it is not true of all or perhaps even most. For many defenders of tensed theories would no doubt be quite prepared to admit, at least in principle, timeless existents into their ontology in the form of abstract objects, in addition to temporal existents. For such thinkers "to exist" may be tensed or tenseless, tensed in the case of temporal beings, tenseless in the case of atemporal entities. Only in the case of temporal beings is existence identical with being present. Thus, it is possible to be, but not to be present. Moreover, some defenders of tensed theories of time are quite prepared to say that past events exist and some even that future events exist, but that in neither case are such events present. Thus, "to exist" is tenseless and is not to be equated, in their view, with "to be present." Finally, those tense theorists who do equate existing with being present would not regard God, if He exists, as atemporal. Rather everything that exists, even abstract objects, exists temporally and is at some time present. Such thinkers would regard God, if He exists, as omnitemporal, as existing now, and as having a past, present, and future. None of these thinkers would agree with Leftow's claim that on a tensed theory of time

if a timeless being exists, it *ipso facto* is in some sense present Hence a timeless being exists in a present to which nothing is past or future, and within its duration nothing is past or future. If this is so, then arguably, timeless beings are more genuinely present than temporal beings: for they are present without taint of past or future.{8}

A present without past or future would be possible only if time were composed of a single instant, and then it would not have any duration at all. A being existing at such a present would not be timeless, but temporal and fleeting. To use such tensed words in any other way is non-literal or misconceived.

Leftow goes on to develop further non-literal senses of presentness such as character-presence and existential-presence, both of which have to do with immutability, not presentness. These notions do nothing to show that a timeless being is more genuinely present than any temporal being. Moreover, a metaphysically necessary, temporal God is as existentially immutable as a timeless being, and character immutability as defined by Leftow (having all at once all the attributes one ever has) does not strike me as a perfection at all.

Leftow then turns to a justification of God's being more genuinely present on tenseless theories of time. Tenseless theories are characterized by the denial that there are tensed facts about the objective world, that things/events really are past, present, or future. All events in the temporal series of events, whether past, present, or future from our perspective, are on an ontological par, and the presentness of things/events simultaneous with us is just a subjective feature of consciousness.

Leftow, however, fundamentally misconstrues the tenseless view of time. He thinks that

On a tenseless theory of time, existence = presentness or pastness or futurity. . . The tenseless theorist will not grant that whatever exists at t is present at t . Tenseless theorists hold instead that whatever exists at t is present or past or future at t . . . On a tenseless theory, to exist at t = to be present or past or future at t .{9}

This characterization is mistaken. The defender of tenseless theories of time does not believe that there are any monadic properties of pastness, presentness, or futurity. Hence, he does not equate existence with the disjunction of such pseudo-properties, lest there be no such thing as existence either. Such theorists hold that things/events exist without ever being past, present, or future. The disjunctive analysis of "to exist" is actually a technique of some philosophers of tense to parse the tenseless use of the verb in tensed terms: to say " x exists (tenselessly)" = " x has existed or x exists or x will exist." Leftow seems to have confused this device with tenseless claims. Leftow is correct that tenseless theorists will not typically grant that whatever exists at t is present at t ; but he errs in his positive characterization of tenseless claims, that such theorists hold that whatever exists at t is past, present, or future at t . At the most, some defenders of tenselessness hold that an event at t may be past for some sentient subject at $t' > t$, present for such a subject at t , and future for such a subject at $t^* < t$. Pastness, presentness, and futurity, insofar as these are not reducible to the relations *earlier than*, *simultaneous with*, and *later than*, are subjective features of consciousness. Finally, to exist at t is not to be present or past or future at t , but just to be tenselessly located at t ; tensed determinations have nothing to do with it.

These misunderstandings of the tenseless theory of time invalidate Leftow's further argument. He contends that because presentness has degrees, so does the disjunctive property of the

three tense determinations. But philosophers of tenseless theories regard all of these properties as spurious. Similarly, Leftow proceeds to argue that the following claim is acceptable to such thinkers: "at t , existence located at t = presentness located at t ." But such an identity statement is clearly false on tenseless theories, and the rest of the argument collapses. Hence, it seems to me that Leftow's attempt to justify the higher existence of a timeless being by means of its more genuine presence is maladroit.

II. The Greater Unity of Timeless Beings

What, then, of the purported greater unity of an atemporal being? Leftow claims that to exist is to exemplify a kind of unity and that since an atemporal being has greater unity than a temporal being, it has a greater degree of existence. Leaving aside the moot equation of existence and unity, we may ask why temporal beings have inherently less unity than timeless beings. Leftow's answer is that spatial objects are composed of parts and that "If the special theory of relativity is true, then whatever is located in time is located in space."[10](#)

But such an assertion is problematic for two reasons. In the first place, one could dispute the assertion on purely physical grounds alone in that it fails to make sufficient cognizance of the difference between coordinate time and parameter time. It is true that insofar as time plays the role of a coordinate, it is connected with a system of spatial coordinates, so that anything to which a temporal coordinate can be assigned is such that spatial coordinates are assignable to it as well. But insofar as time functions as a parameter, it is independent of space, and something which possesses temporal location and extension need not be held to exist in space as well as time. In Newtonian mechanics time plays the role of a parameter, not a coordinate, and, interestingly, the same is true of Einstein's formulation of the Special Theory of Relativity--the now familiar space-time formulation derives later from Minkowski. The Special Theory can be validly formulated in either way. Moreover, since the Special Theory is a local theory only, we must, in order to achieve a global perspective, consider time as it functions in cosmological models based on the General Theory of Relativity, on which matter Leftow is silent. While time is defined in the standard Friedman models by means of spatial hypersurfaces, the time parameter in the Robertson-Walker line element which describes the space-time metric is distinguished precisely by its independence of space. Moreover, spatio-temporal coordinates in the General Theory are purely conventional and have no physical significance. Thus, it is not obvious that a being could not exist at a certain moment of cosmic time without being spatially located as well.

But Leftow's argument suffers from a far more serious shortcoming than this. The argument appears to rest upon a crucial presupposition which will affect fundamentally one's theories of time and eternity and which I believe to be profoundly mistaken, namely, the reductionistic equation of time with *physical* time, that is to say, with time as it plays a role in physics. That this equation is mistaken is obvious from the simple fact that whereas physical time came into existence after the Big Bang singularity, time itself may well have existed prior to the initial cosmological singularity. A succession of mental events in God's mind--His counting, for example--would alone suffice to generate a temporal series in the absence of any physical objects whatsoever.[11](#) Thus, it is plainly not the case that something is in time if and only if it is in space--and that metaphysical truth is not negated by the fact that in physical theory an event which is assigned a temporal coordinate in space-time also has spatial coordinates as well.[12](#)

Leftow also asserts that a timeless being has greater unity than a temporal being because it "has its duration all at once," whereas a temporal being's duration "is dribbled out to it one instant at a time."^{13} One could complain about these characterizations on the grounds that a timeless being has no literal duration at all and that temporal becoming need not proceed by instants. But these inaccuracies can be remedied without affecting the gist of the argument. Just substitute "existence" for "duration" and "serially" for "one instant at a time." Nonetheless, on an ontology of presentism, according to which the only temporal things/events that exist are those that are present, a temporal being which is present has all its existence which there is, and a timeless being can boast of no more unity than that. As for unity over time, this consists in its identity over time, its enduring as the same object through intrinsic change; this feat (which is impossible for a timeless being) is plausibly taken as testimony to its unity, rather than as detracting from it. On the other hand, if we adopt a tenseless theory of time, then it is false that the existence of temporal objects is dribbled out to them over time. Rather they just exist tenselessly at their (spatio-)temporal locations and their unity is just as great as that of a timeless being. Indeed, to borrow Leftow's terminology, relative to a timeless being the world-line of a temporal object (which many partisans of the tenseless theory take to be just the object itself) is extrinsically timeless, even though it is intrinsically temporal in that it has internally a structure ordered by temporal relations. Nothing comes to be or passes away; everything just exists (tenselessly). So it is difficult to see how a timeless being *qua* timeless would have any greater unity than a temporal being.

In conclusion, I do not see that Leftow has shown that timeless beings inherently possess a truer presentness nor a greater degree of unity than temporal beings. Hence, he has not demonstrated that a timeless God is metaphysically superior to a temporal God.^{14}

Endnotes

^{1}Brian Leftow, *Time and Eternity* (Ithaca, N.Y.: Cornell University Press, 1991), p. 278.

^{2}*Ibid.*, chap. 5.

^{3}John Ellis McTaggart, "The Relation of Time and Eternity," *Mind* 18 (1909): 347.

^{4}Eleonore Stump and Norman Kretzmann, "Eternity, Awareness, and Action," *Faith and Philosophy* 9 (1992): 468.

^{5}Plato *Timaeus* 7. 38.

^{6}Nelson Pike, *God and Timelessness*, Studies in Ethics and the Philosophy of Religion (New York: Schocken Books, 1970), p. 15.

^{7}Leftow, *Time and Eternity*, p. 84.

^{8}*Ibid.*

^{9}Leftow, *Time and Eternity*, p. 91.

^{10}*Ibid.*, p. 100; cf. p. 98.

{11} For good statements of the point see Grace M. Jantzen, *God's World, God's Body*, with a Foreword by John MacQuarrie [London: Darton, Longman, and Todd, 1984], p. 44); W. Norris Clarke, *The Philosophical Approach to God* (Winston-Salem, N.C.: Wake Forest University, 1979), p. 94.

{12} The two contemporary thinkers who have signaled the distinction between time and physical time most clearly are Quentin Smith, *Language and Time* (New York: Oxford University Press, 1993), chap. 7 and Alan Padgett, *God, Eternity and the Nature of Time* (N.Y.: St. Martin's Press, 1992), chap. 1.

{13} Leftow, *Time and Eternity*, p. 98.

{14} Leftow also claims that by examining the ways by which we distinguish dreams from reality, we discover several criteria of high reality which also serve to show that timeless beings have greater reality than temporal beings (Ibid., pp. 100-110). The procedure, however, seems to me to be misdirected, since the criteria are only criteria for our *distinguishing* reality from dreams; they are not properties which *make* the world more real than dreams. Leftow confuses the *ordo cognoscendi* with the *ordo essendi*.

Divine Timelessness and Personhood

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started

their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Detractors of the doctrine of divine timelessness argue that

1. God is timeless

and

2. God is personal

are broadly logically incompatible on the basis of the following necessarily true premises

3. If God is timeless, He does not exemplify properties x, y, z

4. If God does not exemplify properties x, y, z , He is not personal

where x, y, z are replaced by certain specified properties.

For clarity's sake, consider God existing alone *sans* a temporal creation. Could He in such a state be timeless and exemplify the properties essential to personhood? I show that God could, in fact, do so, whether one adopts

criteria for personhood based on states of consciousness, intentionality, or capacity for inter-personal relations. Thus, on a plausible construal of (4), it turns out that (3) is not necessarily true, and thus the argument fails.

"Divine Timelessness and Personhood." *International Journal for Philosophy of Religion* 43 (1998): 109-124.

It is frequently alleged by detractors of divine timelessness that the concept of a timeless person is incoherent, that the properties essential to personhood cannot be exemplified timelessly. Since it is essential to theism that God be personal, it follows that God cannot be timeless. Thus, if God exists, He is temporal.

In effect these opponents of divine timelessness are arguing that the following two propositions are broadly logically incompatible:

1. God is timeless.
2. God is personal.

In order to demonstrate this, these philosophers try to show that it is necessarily true that

3. If God is timeless, He does not exemplify properties x, y, z .
4. If God does not exemplify properties x, y, z , He is not personal

where x, y, z are replaced by certain specified properties.

Debates on this issue are frequently muddled by the conflation of the question of the coherence of the notion of a timeless person with the question of whether such a timeless person could sustain relations with or interact with temporal persons. For example, when Grace Jantzen complains, "A timeless and immutable God could not be personal, because he could not create or respond, perceive or act, think, remember, or do any of the other things persons do which require time. Thus, within the framework of a theology of a personal God, the doctrines of divine timelessness and immutability cannot be retained,"^{1} the problems she raises with divine timelessness, apart from thinking and remembering, arise only in connection with a timeless God's relation to temporal entities and so do not demonstrate any incoherence in the notion of a timeless person as such. Since I have elsewhere discussed the objection to divine timelessness based on God's relation to the temporal world,^{2} I shall for clarity's sake in the discussion of this objection consider God as existing timelessly alone without creation, whether this be conceived to be a state of affairs included in the actual world, as on an Ockhamist model of divine eternity, or whether it be taken to be a state of affairs constituting a non-actual possible world, as on the Thomistic model. The question, then, is whether God so conceived could be personal.

The answer to that question will, of course, depend on one's concept of personhood and the conditions laid down for something's being a person. Typically detractors of divine timelessness propose certain criteria which serve as necessary conditions of personhood and then seek to show that a timeless being fails to meet these standards. In his helpful survey of this issue, Yates observes that these criteria tend to fall into three broad groups: (1) criteria based on states of consciousness, (2) criteria based on intentionality, and (3) criteria based on inter-personal relations.^{3} Defenders of divine timelessness might choose to challenge the

adequacy of the proposed criteria by arguing that they are not necessary conditions of personhood, thus in effect undercutting (4)--a not unpromising strategy in light of the difficulty of defining personhood, which stirs debates in applied ethics over beginning and end of life issues and in the field of artificial intelligence. More often, however, proponents of timelessness have sought to show that God as they conceive Him can in fact meet the conditions stipulated, however incorrect they may be, thus undercutting (3). Let us consider these questions with respect to each of the three types of criteria proposed.

Criteria Based on States of Consciousness

In his article, "Conditions of Personhood," {4} Daniel Dennett discerns six different conceptions of personhood in the philosophical tradition, each laying down a necessary condition of an individual A's being a person:

A is a person only if:

- i. A is a rational being.
- ii. A is a being to which states of consciousness can be attributed.
- iii. Others regard or can regard A as a being to which states of consciousness can be attributed.
- iv. A is capable of regarding others as beings to which states of consciousness can be attributed.
- v. A is capable of verbal communication.
- vi. A is self-conscious; that is, A is capable of regarding him/her/itself as a subject of states of consciousness.

All of these criteria depend directly or indirectly on A's having or being ascribed consciousness. As an initial foray into this first objection to divine timelessness, then, we may ask, is the concept of a timeless, conscious being incoherent?

J. R. Lucas is adamant that it is. He maintains that it cannot be up to God whether to create time or not, for God, as a personal being, is conscious and time is a concomitant of consciousness. Hence,

Time is not a thing that God might or might not create, but a category, a necessary concomitant of the existence of a personal being, though not of a mathematical entity. This is not to say that time is an independent category, existing independently of God. It exists because of God: not because of some act of will on His part, but because of His nature: if ultimate reality is personal, then it follows that time must exist. God did not make time, but time stems from God.{5}

In Lucas's view, then, whether or not the physical world exists, time exists if a personal God alone exists. Now Lucas is clearly correct, I think, in maintaining that a succession of contents of consciousness in God's mind would itself be sufficient to generate a temporal series, and his insistence on this score is a healthy antidote for the physical reductionism that too often poisons the contemporary philosophy of space and time. But what if God's mental life in the absence of any created world is not discursive, but changeless? Why could the contents of God's consciousness not be comprised of tenselessly true beliefs such as "No humans exist," "7+5=12," "In W^* Socrates drinks hemlock," "Anything that has a shape has a size," "If Jones were in C, he would write to his wife," "The atomic number of gold is 78," "God is omnipotent, omniscient, and morally perfect," and so on, and be such that He never acquires

and never loses any of His beliefs? Would not such a changeless consciousness of truth be plausibly regarded as timeless? Short of a proof of the incoherence of all relational theories of time, we must grant that time would not be a concomitant of such a consciousness. What reason is there, then, to regard such a consciousness as impossible? Here Lucas has nothing to say; he confesses, "My claim . . . that time is a concomitant of consciousness, is of course only a claim, and I have been unable to argue for it, except by citing poetry . . . arguments would be better." {6}

Indeed, so what arguments are there against atemporal consciousness? Richard Gale would make short work of the question: "the quickest and most direct way of showing the absurdity of a timeless mind is as follows: A mind is conscious, and consciousness is a temporally elongated process." {7} This way is certainly direct, and it is all too quick: Gale fails to show that being temporally extended is an essential property of consciousness. Given some relational theory of time, God's solitary and unchanging consciousness of tenseless truths would not be temporally extended. As various defenders of divine timelessness have pointed out, knowing is not necessarily an activity which takes time. {8} Gale's retort that it makes sense to ask questions like "How long have you known logic?" {9} does nothing to show that believing a tenseless proposition *p* or knowing *p* necessarily takes time, but only shows that there are senses of the word "know" in which it is appropriate to speak of knowing something over time. Gale fails to blunt William Mann's point that "it need not take any time at all to *know* something. Of course, one can know something for a period of years, but the point is that knowing is not a process whose fulfillment takes time, or an activity which entails the existence of earlier and later stages in the mental life of the knowing agent." {10} Gale counters that one cannot know that *p* without having dispositions to engage in temporal episodes, occurrences, or processes, in which case God cannot be pure actuality as Thomists claim. {11} But this objection, even if cogent, strikes only against God's being pure actuality, not His being timeless--unless Gale thinks that being pure actuality is a necessary condition of a person's being timeless. It is true that Aquinas held that any being with even the potentiality for change could not be eternal, but inhabits at best the mysterious *aevum*, which he thought of as a sort of quasi-temporality. {12} But it is difficult to see any reason to adopt this peculiar, modal view of time. So long as God is intrinsically changeless and extrinsically unrelated to changing things, then in the utter absence of change it is hard to see how the mere disposition to engage in temporal activities suffices to render God temporal, even if it were conceded that were He to actualize those dispositions to so engage, then He would be temporal. In any case, Gale's stipulation is clearly false. There is no reason to think that God cannot know that $2+2=4$ without having a disposition to engage in temporal activities. Moreover, on the Christian view God is free to refrain from creating at all, and were He to have so abstained and remained changeless, then He would have had no disposition whatsoever to engage in temporal episodes, occurrences, or processes, and He would have known a true proposition precisely to that effect.

Thus, we have not seen any grounds for thinking that God could not fulfill condition (ii) above. The mention of modal properties also helps us to see how God might meet conditions (iii), (iv), and (v). Even in a state of existing changelessly alone, God is still capable of regarding others as conscious beings, since He is capable of creating such beings, thereby fulfilling condition (iv). Condition (iii) can be taken to imply that even if no one in fact regards *A* as a conscious being, still there is a possible world *W* in which they do regard *A* as a being which can be conscious. Since God could create such persons, (iii) is met even in a world in which God exists changelessly alone. Even if in *W* God is temporal, that does not alter the fact that in the world or state we are envisioning He is such that possibly others

regard Him as a being to which states of consciousness can be attributed. Similarly, even in the state we are imagining, God is capable of verbal communication, since He could create language users like us and communicate with them verbally by, say, causing sound waves in the air. Even if in such a case He would be temporal, that fact does nothing to detract from His timeless existence in the state of affairs we have pictured. Thus, no reason has been provided for thinking that a timeless being could not be a conscious being and, hence, on the above criteria a person. Thus, (3) is undercut. More than that, however; our thought experiment suggests more positively, I think, that a timeless being can be conscious and therefore can be a person. Could a timeless God be self-conscious? In order to be self-conscious a being must believe not merely propositions about himself *de re*, such as, in this case, "God exists necessarily" or "God knows that *p*," but he must have beliefs *de se*, which he would express from the first person perspective; for example, God must believe "I exist necessarily" and "I know that *p*." {13} If a timeless being can be conscious, there seems to be no reason remaining for denying to Him tenseless knowledge *de se* as well. It takes no more time to believe truly that "I have no human company" or "I believe that if Jones were in *C*, he would write to his wife" than it does to believe that "No human beings exist" or "If Jones were in *C*, *etc.*" Hence, if a timeless being can be conscious, it seems that he could be self-conscious as well and therefore by criterion (vi) personal.

As for being rational, that depends on whether *A* is within his epistemic rights or exhibits no defect in his noetic structure with respect to the bulk of his beliefs. {14} There seems to be nothing about timelessness which would entail *A*'s violating his epistemic duties or having a flawed noetic structure. In God's case He is surely within His rights in holding the beliefs He does, since it is broadly logically impossible for God to hold a false belief and He knows that fact. Moreover, it is plausible or at least possible that for God all His beliefs are properly basic, so that none of His beliefs is improperly founded or entertained. Being timeless has no inherent impact upon God's noetic structure or fulfillment of His epistemic duties (assuming that He even has such duties), so that by criterion (i) we ought to affirm that a timeless God can be personal.

Now some have denied that a timeless God can be a self-conscious, rational being because He could not then exhibit certain forms of consciousness which we normally associate with such beings (namely, ourselves). In an oft-quoted passage, Robert Coburn asserts,

Surely it is a necessary condition of anything's being a person that it should be capable (logically) of, among other things, doing at least some of the following: remembering, anticipating, reflecting, deliberating, deciding, intending, and acting intentionally. To see that this is so one need but ask oneself whether anything which necessarily lacked all of the capacities noted would, under any conceivable circumstances, count as a person. But now an eternal being would necessarily lack all of these capacities inasmuch as their exercise by a being clearly requires that the being exist in time. After all, reflection and deliberation take time, deciding typically occurs at some time--and in any case it always makes sense to ask, 'When did you (he, they, etc.) decide?'; remembering is impossible unless the being doing the remembering has a past; and so on. Hence, no eternal being, it would seem, could be a person. {15}

Even if Coburn were correct that the capacity to exhibit the above-mentioned forms of consciousness were essential to a personal being, it still does not follow that a timeless being cannot be a person. For Coburn just assumes that timelessness is an essential property of any timeless being; but that assumption is dubious. Suppose that God is in fact temporal. Is it

implausible to think that God is contingently temporal, but possibly timeless? Since according to the Christian doctrine of creation, God's decision to create is freely willed, there are possible worlds in which God exists alone, with no reality *extra se* (apart from any timeless abstract objects which Platonists among us might want to posit). If in such a world God is unchanging, then on any sort of relational theory of time God would be timeless in such a world. Indeed, there would be no time at all in such a world, since literally nothing happens; there are no events to generate relations of *before* and *after*. God as He exists in such an atemporal world would differ in respect to some of His properties which He has in the postulated actual world--such as *knowing what time it is, experiencing tense and temporal becoming, changing in His awareness*, and so forth--, but none of these differences seems so major as to preclude transworld identity. In short, apart from highly controversial claims concerning divine simplicity and pure actuality, I see no reason to think that God may not be conceived as contingently temporal or atemporal.

In fact we can conceive of a model of divine eternity along Ockhamist lines which would combine states of divine timelessness and temporality into a *single* world. On such a model God exists timelessly *sans* creation and in time subsequent to the commencement of the temporal series of events. On this view God in the eventless, changeless state of existing alone without creation is timeless, since time does not exist in the total absence of events. Time originates with the first event, the creation of the world, and God endures throughout time from the moment of creation on. On such a model, as Leftow points out, God's having a first moment of existence does not entail that God's existence has a limit or that He came into existence:

If God existed in time once time existed and time had a first moment, then God would have a first moment of existence: there would be a moment before which He did not exist, because there was no 'before' that moment. . . . Yet even if He . . . had a first moment of existence, one could still call God's existence unlimited were it understood that He would have existed even if time did not. For as long as this is true, we cannot infer from God's having had a first moment of existence that God *came into* existence or would not have existed save if time did.{16}

On such a model, the past is finite, God exists atemporally without the world, and yet God exists temporally from the inception of the world and His creation of time. If such a model is coherent, then any objection that God is either essentially temporal or essentially timeless is nugatory.

If, then, timelessness is a contingent property of some timeless being, then that being might be quite capable of remembering, anticipating, reflecting, and so forth; only were he to do so, then he would not then be timeless. If he desists from such activities, he is timeless though capable of being temporal through engaging in them and so, by Coburn's own lights, personal.

If we modify Coburn's criterion such that in order to be a person a being must be not merely capable, but actually engaged in such activities, then it follows that we cease to be persons every time we fall asleep (at least a dreamless sleep) or are unconscious, which is absurd. We could perhaps say that a truly personal being must engage in some of these activities during its lifetime; to avoid begging the question, we could require that if *A* is personal, it must not be true of *A* that *A* never engages in such activities. But this criterion is still inadequate. Since memories and anticipations and intentions are not always veridical or fulfilled, a timeless being could still engage in such activities, so long as his memories, anticipations, and

intentions never change. Remembering the past without having a past is not impossible, so long as one's memories are false; similarly with regard to anticipations and intentions and the future. What Coburn is really arguing is that a perfect being or God cannot be timeless and personal. If God is to be personal, it must not be true of Him that He never engages in the specified activities. But even this stricture would fail to preclude God's being personal and timeless on an Ockhamist view, according to which God is timeless *sans* creation and temporal subsequent to creation, for God exhibits the prescribed forms of consciousness subsequent to the moment of creation, even if He lacks them *sans* creation.

In any case, I think it is pretty widely recognized that the forms of consciousness specified by Coburn (with the exception of volitional activities, which I shall take up below) are not essential to perfect personhood. Indeed, it is not essential to perfect personhood even to be capable of them, so that even defenders of the non-contingent nature of timelessness need not be troubled by Coburn's objection. Take remembering, for example. Mental health requires that any temporal person remember his past. Persons suffering from *aphasia*, a mental disorder characterized by the disappearance of all memories within two or three seconds, are pitifully deranged; they are still persons, yet far from healthy persons. But if an individual is atemporal, why would being a healthy or perfect person require memories on his part? After all, he has no past. And he never forgets anything. Given God's status as an infallible knower, there is just no reason at all to think that His perfect personhood requires memory. Similarly with respect to anticipations: since He has no future, since his life is *tota simul*, there just is nothing to anticipate. Only a perfect person who is temporal would need to have beliefs about the future or the past.

As for reflecting and deliberating, these are essential only for persons who are not omniscient. For a perfect knower reflection and deliberation in any temporal sense{17} are precluded, since he would already know the conclusions to be arrived at. This is the case for a temporal deity as well as for an atemporal God. Are we to think then that omniscience is incompatible with personhood? That would be a bizarre conclusion; I see no reason to think that an omniscient being could not be personal.{18} But if a temporal God can be personal and yet never reflect or deliberate, it is gratuitous to deny the status of *person* to an atemporal deity because He does not engage in these activities either.

With a little imagination, as R. C. S. Walker has shown, it is not difficult to conceive of a personal being existing timelessly.{19} Yet, it might be maintained that the life of such a person, lacking collectively the sorts of forms of consciousness specified by Coburn, could not be perfect, and this even if it were shown that no one such form of consciousness alone was essential to a perfect being. Walker himself seems rather ambivalent on the value of timeless life as he imagines it, commenting,

life would be very strange, and very limited, in a timeless world. There would be none of the pleasures of putting right someone who has made a mistake one recognizes as such; nor would there be the more dubious, or Platonic, pleasure of being put right oneself. Life would not be exciting; but at least it would not be boring either. For us pleasure resides very largely in getting things done, not in having done them, and none of this would be available in our imaginary world. Aristotle thought that such an existence would be fun all the same; this may be doubted, but at least one could entertain a great variety of thoughts and a great complexity of mathematical argumentation, so long as one did it all at once. And tastes, after all, do vary.{20}

Walker's misgivings about the value of a timeless life are based on an overgeneralization from the anthropomorphic timeless world he envisions. If the finite, timeless persons he imagines had their attention fixed upon the infinite God, riveted by His supreme goodness and love for them, then their experience could be a timeless moment of sheer ecstasy, to which the puny goods mentioned by Walker could not even be compared. They would have no need of the pleasure of correcting someone else or of being corrected by them. How much more so for God Himself, who, on the Christian perspective, enjoys a complete apprehension of His infinite goodness and the infinite, inter-personal love of the Blessed Trinity! For finite persons, true fulfillment and, hence, their greatest pleasure lie, not in getting things done, but in knowing God. Similarly, what John Piper calls "the pleasures of God" [{21}](#) reside primarily not in what He gets done, but in Himself, as the supremely worthy one. Life so conceived is not only not boring, it is enthralling. The reason that Aristotle --and his medieval progeny-- thought that such a timeless life would be "fun" is because they conceived this life to be God's life, perfect and complete and, hence, changeless in its apprehension of God's inexhaustible goodness. Once we conceive of timeless life as God's life, we can see that temporal forms of consciousness such as those mentioned by Coburn are not at all necessary in order for such a life to be supremely valuable and pleasurable.

In summary, then, it has not been shown that a timeless being, even a perfect timeless being, cannot meet the conditions necessary for personhood based on the possession of states of consciousness. Thus, no good reason has been given to think that

3'. If God is timeless, He does not exemplify the properties of self-consciousness and rationality

is necessarily true. On the contrary, our discussion suggests that God could be timeless and still fulfill all the proposed requisites of being personal. Thus, for any properties which are such that propositions of the form of (4) are plausibly taken to be necessarily true also seem to be such that propositions of the form of (3) turn out to be not necessarily true, so that no incompatibility has been demonstrated between (1) and (2).

Criteria Based on Intentionality

Some critics of divine timelessness have proposed volitional criteria such as intentionality and volition as essential to personhood and on that basis argued for the incompatibility of personhood with timelessness. Again Gale makes the point:

The necessity for a person to endure in time can also be seen from an analysis of what it is to be a rational agent. An agent performs intentional actions so as to bring about some goal or end. But to have a goal or end, the agent must have desires and values. But only a temporally incomplete being can have a desire or intention, since one cannot desire or intend what one already has. [{22}](#)

Unfortunately, here again old problems resurface. If we say that performing intentional activities is essential to personhood, then we are only sporadically persons. And this is not merely the case for a sleeping or comatose individual, but even for the couch potato passively watching television or the daydreamer whose mind is wandering. If we modify the criterion to state that persons must have the capacity for performing intentional activities, then a timeless God could possess such a capacity, even if it were true that, were He to realize that capacity by actually intending something, He would then be temporal. Again, we could modify the

criterion to state that if *A* is personal, then it not be true of *A* that *A* never engages in intentional activity. But since intentions are not always fulfilled and the will is not inevitably efficacious, it is easy to imagine someone who has future-directed intentions and volitions without there being any future for that person; for example, a person who unbeknownst to him is about to be instantaneously killed. In a similar way a timeless being could possess unchanging future-directed intentions and volitions which are never fulfilled. We might be inclined to modify the present criterion such that if *A* is a personal being, *A* must have efficacious volitions and fulfilled intentions. But then it is much less obvious that this criterion states a necessary condition of personhood. So long as a person *believes* that his intentions and volitions are efficacious, it does not seem to matter if that person should really be a brain in a vat or the dupe of a Cartesian evil genius whose willings turn out to be wholly inefficacious. He intends to lift his arm or drive to town or enjoy a day at the beach, and the Mastermind produces an appropriate illusory experience. Doubtless some acts of will (say, to concentrate on a certain idea) cannot be merely seemingly efficacious; but then there is no necessity that our hypothetical individuals should have such volitions or intentions. Once the condition of efficacy is added to intentionality and volition, the criterion no longer states a plausible necessary condition of personhood.

All this makes it evident that the issue once again is not whether a person can be timeless, but whether God can be timeless. It is plausible that necessarily God has desire and volition, since, as Aquinas held, God desires and wills His own goodness. So the question is: Can God possess intentionality and volition and yet exist timelessly? The answer to that question will depend on whether intentionality and volition are essentially oriented toward the future. Even on a purely human level, it is easy to find counter-examples to Gale's assertion that the objects of one's intentions or desires must be future rather than present goods. A man dangling from a cliff wills to hold on as tightly as he can; a person admiring the beauty of a statue intends his experience of aesthetic pleasure; a sunbather desires the feeling of relaxation which he presently enjoys. Of course, we could imagine further ends to which these ends are typically subordinated; but the point remains that intentionality and will need not be oriented toward the future. There is nothing about intentionality and will as such which renders them essentially future-directed.

But if that is the case, then why could God not will and intend what He does timelessly? God's desiring and willing His own goodness obviously is not an activity which consumes time. Similarly, existing changelessly alone *sans* creation, God may will and intend to refrain from creating a universe. God's willing to refrain from creation should not be confused with the mere absence of the intention to create. A stone is characterized by the absence of any will to create, but cannot be said, as God, to will to refrain from creating. In a world in which God freely refrains from creation, that abstinence is the result of a real act of the will, choosing between two available alternatives. But in such a world, as we have seen, God can be conceived to exist atemporally with a timeless intention to refrain from creation. The efficacy of God's will is evident from the fact that in no possible world in which God wills to refrain from creation does a world of creatures exist, whereas in every world in which He wills to create, creatures are produced.

Although God's timeless volitions are not the result of decisions taken at any point in time, nonetheless they are freely willed, as is evident from the fact that there are worlds in which God does create a universe and in such worlds nothing external to God determines His volition to create. Thus, God can be truly said to have efficacious and free volitions timelessly.[\[23\]](#)

Therefore, although defenders of divine timelessness adhere to the necessary truth of

4". If God does not exemplify intentionality and volition, He is not personal,

we have seen no reason why they should accede to the necessary truth of

3". If God is timeless, He does not exemplify intentionality and volition.

Quite the contrary, our thought experiment suggests that (3") is not necessarily true, that it is possible for God to exist with timeless intentions and volitions.

Criteria Based on Inter-personal Relations

Certain philosophers have taken it as essential to personhood that one have the capacity to engage in inter-personal relations. But any number of thinkers have alleged that a timeless God is incapable of sustaining such relations with other persons and so cannot be personal. Pike's reservations are illustrative:

a timeless being could not be affected or prompted by another. It could not respond to needs, overtures, delights or antagonisms of human beings. There are two distinct issues connected with this last point: (1) A timeless being is immutable in the strong sense of 'immutable' Such an individual could not be affected or prompted by another. To be affected or prompted by another is to be changed by the other. (2) The actions of a timeless being could not be interpreted as a *response* to something else. Responses are located in time after that to which they are responses . . . An individual that is (in principle) incapable of all of these things could not be counted as a person.{24}

Now if we are to disentangle this objection from the objection based on God's relations to the temporal world, we need to continue to consider God as He exists changelessly alone *sans* creation. In such a timeless state, would God have the capacity for inter-personal relations?

The answer to that question depends on what it is that constitutes the capacity to engage in such relations. It seems to me that it consists in precisely those sorts of attributes which we have been discussing; sufficient intelligence, self-consciousness, volition. But we have seen that all of these can be possessed by a timeless being and by God in particular. It therefore follows that a timeless God existing *sans* creation has the capacity, if not the opportunity, to engage human persons in inter-personal relations, even if, should He create and so engage such persons, He would not then be timeless. Pike's appeal to immutability to bar this conclusion is nugatory. Even if a timeless God could not change, it does not follow that He could not have willed differently and chosen to be related to a temporal world and so been temporal. Pike gratuitously assumes that if God is timeless, He is so essentially rather than contingently. Moreover, Pike assumes that immutability is essential to a timeless being, rather than mere changelessness. But on some relational theory of time, the changelessness of a solitary God is sufficient for timelessness. That opens the door for an Ockhamist view according to which God exists timelessly *sans* creation and enters into time at the moment of creation in virtue of His relation to temporal things or events, including human persons. Thus, timelessness does not entail that God could not be affected or prompted by another or that He could not respond to any other persons He might choose to create.

It hardly needs to be said that it would be hopeless to modify the present criterion to require as a necessary condition of personhood that one actually be related to other persons in order to be personal, for then every marooned sailor, every prisoner locked in solitary, every reclusive hermit would no longer be a person. It would be more plausible to hold that if *A* is personal, then it must not be true of *A* that *A* never experiences inter-personal relations. Someone who lacks all contact with other human beings would fail to develop into a person. This criterion assumes a functional view of personhood, which is controversial; but let that pass. For a moment's reflection reveals the inadequacy of the proposal. What seems to be required for *A*'s personhood is merely that *A* *think* that he is engaged in inter-personal relations, even if it should turn out that *A* is a brain in a vat or an unwitting denizen of a world of wonderfully constructed simulacra. Of course, God could not be so deceived; but then why think that the infinite and eternal God is subject to the same sort of developmental restrictions as human beings?

In any case this whole discussion presupposes that if God is to enjoy inter-personal relations, it must be human persons to which He must be related. But on the Christian view, that is false. Within the fullness of the Godhead itself, the persons of the Father, the Son, and the Holy Spirit enjoy the inter-personal relations afforded by the Trinity which God is. As a Trinity, God is eternally complete, with no need of fellowship with finite persons. It is a marvel of God's grace and love that He would freely create finite persons and invite them to share in the love and joy of the inner Trinitarian life of God. But would the existence of these Trinitarian inter-relationships necessitate that God be temporal, as Pike implies? I see no reason to think that the persons of the Trinity could not be affected, prompted, or responsive to one another in an unchanging and, hence, timeless way. Pike is mistaken when he asserts that to be affected or prompted by another is to be changed by the other. To use a mundane example, think of iron filings clinging to a magnet. The magnet and the filings need not change their positions in any way in order for it to be the case that the filings are stuck to the magnet because the magnet is affecting them and they are responding to the magnet's force. Of course, on a deeper level change is going on constantly in this case because the magnet's causal influence is mediated by finite velocity electro-magnetic radiation. Nonetheless, the example is instructive because it illustrates how on a macroscopic level action and response can be simultaneous and, hence, involve neither change nor temporal separation. How much more is this so when we consider the love relationship between the members of the Trinity! Since intra-Trinitarian relations are not based on physical influence chains or rooted in any material substrata, but are, as it were, purely telepathic, the response of the Son to the Father's love entails neither change nor temporal separation. Just as we speak metaphorically of two lovers who sit, not speaking a word, gazing into each other's eyes as "lost in that timeless moment," so we may speak literally of the timeless mutual love of the Father, Son, and Spirit for one another.

In his imaginative construction of a timeless world, Walker agrees that there could be a timeless society of inter-related persons, though with limitations which we might think incompatible with divine life:

The social life of these timeless beings would, it is true, be a trifle limited; limited in particular by the fact that they could not converse or argue with one another, for these things take time. They could, however, at least be aware of each other's existence. It is even perhaps conceivable that they might have a sort of language (of rather limited usefulness)--though of course they could never have learned it. {25}

But again Walker's world is a society of finite timeless persons, not the divine society of the Trinity, which has no use of conversation or argument. The ancient doctrine of *perichoreisis*, championed by the Greek Church Fathers, expresses the timeless interaction of the persons of the Godhead.^{26} According to that doctrine, there is a complete interpenetration of the persons of the Trinity, such that each is intimately bound up in the activities of the other. Thus, what the Father wills, the Son and Spirit also will; what the Son loves, the Father and Spirit also love, and so forth. Each person is completely transparent to the others. There is nothing new that the Son, for example, might communicate to the Spirit, since that has already been communicated. There exists a full and perfect exchange of the divine love and knowledge, so that nothing is left undone which needs to be completed. In this perfect interpenetration of divine love and life, no change need occur, so that God existing alone in the self-sufficiency of His being would, on some relational view of time, be timeless.

Thus, I think it is evident that God can enjoy inter-personal relations and yet be timeless. So even if we conceded that God is essentially timeless, that timelessness entails immutability, and that *de facto* inter-personal relations are essential to personhood--all of which are moot--, it is still not necessarily true that

3". If God is timeless, He does not stand in inter-personal relations.

Summary and Conclusion

In conclusion, then, the objection to divine timelessness that a personal being or God cannot be timeless must be deemed unsuccessful. Detractors of divine timelessness have failed to show that a timeless God cannot exemplify properties which are a necessary condition of personhood. On the contrary, we have good reason to think that a timeless God can fulfill the stipulated necessary conditions of personhood. An atemporal, divine person can be a self-conscious, rational individual endowed with volition and engaged in relations with other like persons. But this leads on to a stronger conclusion. For surely these conditions are jointly sufficient for personhood. If any individual exemplifying these properties does not deserve to be called a person, then that word is simply not being used in its ordinary sense. But then the proposition

5. God is a self-conscious, rational being endowed with volition and engaged in inter-personal relations

is compatible with

1. God is timeless,

as we have seen, and entails

2. God is personal,

so that the broadly logical compatibility of (1) with (2) has been demonstrated, thus fully vindicating the position of the defender of divine timelessness.

Endnotes

{1} *A New Dictionary of Christian Theology*, ed. Alan Richardson and John Bowden (London: SCM Press, 1983), s.v. "Time and Timelessness," by Grace Jantzen.

{2} "The Tensed vs. Tenseless Theory of Time: a Watershed Issue for the Conception of Divine Eternity," in *Theories of Time and Tense*, ed. Robin LePoidevin (Oxford: Oxford University Press, forthcoming).

{3} John Yates, *The Timelessness of God* (Lanham, Maryland: University Press of America, 1990), pp. 169-171.

{4} Daniel Dennett, "Conditions of Personhood," in *The Identities of Persons*, ed. Amelie Oksenberg Rorty (Berkeley: University of California Press, 1976), pp. 175-196. Dennett's criteria were first used in defense of divine timeless personhood by William E. Mann, "Simplicity and Immutability in God," *International Philosophical Quarterly* 23 (1983): 267-276.

{5} J. R. Lucas, *The Future: An Essay on God, Temporality, and Truth* (Oxford: Basil Blackwell, 1989), p. 213; cf. p. 212.

{6} Ibid., p. 175. Nor does Lucas have anything more to add in his essay "The Temporality of God," in *Quantum Cosmology and the Laws of Nature*, ed. Robert J. Russell, Nancey Murphy, and C. J. Isham (Vatican City: Vatican Observatory, 1993), pp. 235-236. He argues that time can exist without change and that it is possible to have a subjective awareness of time's passage even if nothing is happening, so that even a changeless and solitary deity, if He is conscious, must be temporal. At best, Lucas only shows that a temporal consciousness must experience time's flow; he never shows that consciousness entails temporality, that there could not be an atemporal consciousness (whether in an atemporal world or in a temporal world) which fails to experience the passage of time.

{7} Richard M. Gale, *On the Nature and Existence of God* (Cambridge: Cambridge University Press, 1991), p. 52.

{8} Nelson Pike, *God and Timelessness*, Studies in Ethics and the Philosophy of Religion (New York: Schocken Books, 1970), p. 124; Mann, "Simplicity and Immutability," p. 270; Paul Helm, *Eternal God* (Oxford: Clarendon Press, 1988), pp. 64-65; Yates, *Timelessness of God*, pp. 173-174; Brian Leftow, *Time and Eternity*, Cornell Studies in Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991), pp. 285-290

{9} Gale, *Nature and Existence of God*, p. 52.

{10} Mann, "Simplicity and Immutability," p. 270.

{11} Gale, *Nature and Existence of God*, pp. 52-53.

{12} Thomas Aquinas *Summa theologiae* 1a.10.5. Cf. Leftow's espousal of a modal conception of time (Leftow, *Time and Eternity*, p. 236).

{13} Mann takes (vi) to require only second-order beliefs about oneself *de re*, e.g., A believes that A knows that *p* (Mann, "Simplicity and Immutability," p. 270). But this is not a full-blooded interpretation of self-consciousness, which is normally understood to involve beliefs

about oneself *de se*. Whether God's beliefs *de se* are to be accounted for in terms of private propositions (Richard Swinburne, "Tensed Facts," *American Philosophical Quarterly* 27 [1990]: 127), or the mode of presentation of a proposition *de re* (Jonathan L. Kvanvig, *The Possibility of an All-Knowing God* [New York: St. Martin's, 1986], pp. 66-70), or His self-ascription of properties (David Lewis, "Attitudes *De Dicto* and *De Se*," *Philosophical Review* 88 [1979]: 513-543) is a fascinating question which need not occupy us at this juncture.

{14} On such a characterization of rationality, see Alvin Plantinga, "Reason and Belief in God," in *Faith and Rationality*, ed. Alvin Plantinga and Nicholas Wolterstorff (Notre Dame, Ind.: University of Notre Dame Press, 1983), pp. 29-34, 48-53.

{15} Robert C. Coburn, "Professor Malcolm on God," *Australasian Journal of Philosophy* 41 (1963): 155.

{16} Leftow, *Time and Eternity*, p. 269; cf. p. 201. Such a model serves to undercut McCann's argument that a temporal deity cannot be the Creator of time (Hugh J. McCann, "The God beyond Time," in *Philosophy of Religion*, ed. Louis Pojman [Indianapolis: Hackett, 1993], p. 233). Senor has dubbed such a model "accidental temporalism" (Thomas D. Senor, "Divine Temporality and Creation *ex Nihilo*," *Faith and Philosophy* 10 [1993]: 88). The accidental temporalist agrees that God exists at all times, but denies that God's existence is always at a time ("always" understood to mean here "without exception"). Senor, who acknowledges Leftow's influence, worries about the arbitrariness of maintaining that the act of creation temporalizes, but does not spatialize, God. But I have elsewhere criticized the claim that God's temporality entails His spatiality (William Lane Craig, "Divine Timelessness and Necessary Existence," *International Philosophical Quarterly* 37 [1997]: 218-22); moreover, the reason that creation would not spatialize God, even if it temporalized Him, is that creating is not itself a spatial act, though it be, on tensed theories of time, a temporal act.

{17} I add this qualifier because Molina conceived of God's decrees to be based on His deliberation over the content of His middle knowledge logically prior to His decision to create a world.

{18} See the discussion in William Lane Craig, *Divine Foreknowledge and Human Freedom*, Brill's Studies in Intellectual History 19 (Leiden: E. J. Brill, 1991), pp. 222-225. Unless we are prepared to say that machines can have beliefs, omniscience actually seems to entail personhood.

{19} Ralph C. S. Walker, *Kant, The Arguments of the Philosophers* (London: Routledge and Kegan Paul, 1978), pp. 34-41.

{20} *Ibid.*, p. 41.

{21} John Piper, *The Pleasures of God* (Portland, Oregon: Multnomah Press, 1991).

{22} Richard M. Gale, "Omniscience-Immutability Arguments," *American Philosophical Quarterly* 23 (1986): 333; cf. William Kneale, "Time and Eternity in Theology," *Proceedings of the Aristotelian Society* 61 (1960-61): 99; Richard Sorabji, *Time, Creation, and the Continuum* (London: Duckworth, 1984), p. 257; cf. p. 7.

{23} See also discussions by Walker, *Kant*, p. 40; Helm, *Eternal God*, pp. 61-63; Yates, *Timelessness of God*, pp. 174-177; Leftow, *Time and Eternity*, pp. 295-297.

{24} Pike, *God and Timelessness*, p. 128.

{25} Walker, *Kant*, p. 41.

{26} See St. John Damascene *An Exact Exposition of the Orthodox Faith* 2. 1 (*St. John of Damascus: Writings* [New York: Fathers of the Church, 1958], p. 204).

The Special Theory of Relativity and Theories of Divine Eternity

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Contemporary analyses of divine eternity often make explicit appeal to the Special Theory of Relativity in support of the doctrine of divine timelessness. For example, two fundamental tenets of Leftow's theory, namely, (i) that temporal things exist both in time and in timeless eternity and (ii) that the timeless presence of all things to God in eternity is compatible with objective temporal becoming, depend essentially upon the legitimacy of the application of Einsteinian relativity to temporal events in relation to God. I argue that the first of these rests upon category mistakes, presupposes a reductionist view of time, and seems incompatible with a tensed theory of time. The second involves the same conceptual mistakes, but also hinges upon a particular interpretation of STR which, though widespread, is by no means the most plausible.

Source: "The Special Theory of Relativity and Theories of Divine Eternity." *Faith and Philosophy* 11 (1994): 19-37.

Introduction

Although studies of divine eternity written during the previous generation--such as Nelson Pike's standard work, *God and Timelessness* {1}--paid scant attention to the nature of time insofar as it plays a role in physical theory, contemporary analyses of divine eternity often make explicit appeal to physical theory, and particularly to the Special Theory of Relativity (STR), in support of the doctrine of divine timelessness. This appeal may be primarily

illustrative, as in the case of the Stump-Kretzmann model of divine eternity.^{2} On the other hand, STR may play an essential role in the construction and defense of the coherence of a model of divine eternity, as in Brian Leftow's theory.^{3} If the appeal to Relativity Theory turns out to be nugatory, then in the former case one has lost a physical analogy to one's theory and thereby any credibility which that analogy may have lent to one's metaphysical model; but in the latter case the results are more serious because with the removal of its relativistic underpinnings one's model collapses into incoherence.

It is important, therefore, especially for proponents of the latter sort of model, that the legitimacy of the appeal to STR be thoroughly explored. It is my fear, however, that this exercise has not been carried out by proponents of divine timeless eternity and that as a result STR may have been both misused and naively interpreted by them. In order to explore this question, let us consider Leftow's recent exposition and defense of his theory.^{4}

Examination of Leftow's Theory

Two fundamental tenets of Leftow's theory, namely, (i) that temporal things exist both in time and in timeless eternity and (ii) that the timeless presence of all things to God in eternity is compatible with objective temporal becoming, depend essentially upon the legitimacy of the application of Einsteinian relativity to temporal events in relation to God. Let us look more closely, therefore, at Leftow's exposition and defense of these two tenets.

(i) The Existence of Temporal Things in Timeless Eternity

(a.) The Zero Thesis

Leftow bases his defense of (i) on what he calls the Zero Thesis: that the distance between God and every spatial being is zero. The argument for this thesis is simple: if God is not located in space, there can be no spatial distance between God and spatial beings; therefore, there is none.

This argument seems to involve a category mistake, however. Leftow himself states the objection clearly:

... God is not the kind of thing of which we can affirm *or* deny distance: ... 'there can be no spatial distance between God and spatial creatures' is a category-negation rather than an ordinary negation, and so its semantics are such that it does not entail the Zero Thesis ... the Zero Thesis is actually ill-formed. For it arguably is equivalent to 'there is a distance between God and spatial creatures, and this distance is zero,' a conjunctive proposition whose first conjunct the doctrine of categories declares nonsensical.^{5}

One may not therefore validly infer from God's spacelessness that the distance between God and any spatial being is zero.

The foregoing objection seems to be well-founded. The dispute between Lorentzian and Einsteinian Relativity provides a salient example from the history of science of the crucial difference between a category-negation and the negation of a property. Nineteenth century aether theories originally posited as the medium of transmission of electromagnetic radiation an invisible, rigid liquid, like glass, which was nonetheless completely intangible and utterly at rest with respect to absolute space. With the publication of his STR paper in 1905, Einstein

rejected the existence of the classical aether and along with it the privileged rest frame. But in 1916, at the prompting of Lorentz that the General Theory of Relativity (GTR) admits the possibility of a stationary aether, Einstein introduced a new relativistic conception of the ether: the space-time manifold itself as described by the metrical tensor $g_{\mu\nu}$. {6} When Einstein lectured at Lorentz's University of Leiden in 1920, he drew a fundamental distinction between the classical aether and his new relativistic ether on the basis of the applicability of the category of motion to the aether frame:

As regards the mechanical nature of Lorentz's aether, one might say of it, with a touch of humor, that immobility was the only mechanical property which H. A. Lorentz left it. It may be added that the whole difference which the special theory of relativity made in our conception of the aether lay in this, that it divested the aether of its last mechanical quality, namely immobility. . . .

The most obvious viewpoint which could be taken of this matter appeared to be the following. The aether does not exist at all. . . .

However, closer reflection shows that this denial of the aether is not demanded by the special principle of relativity. We can assume the existence of an aether; but we must abstain from ascribing a definitive state of motion to it, *i.e.*, we must by abstraction divest it of the last mechanical characteristic which Lorentz had left it. . . .

Generalizing, we must say that we can conceive of extended physical objects to which the concept of motion cannot be applied. . . . The special principle of relativity forbids us to regard the aether as composed of particles, the movements of which can be followed out through time, but the aether hypothesis as such is not incompatible with the special theory of relativity. Only we must take care not to ascribe a state of motion to the aether. {7}

Privately Einstein confessed to Lorentz, "It would have been more right if I had limited myself, in my previously published papers, to lay emphasis only on the non-existence of any velocity of the ether instead of the defense of the total non-existence of the ether." {8}

When Einstein denied a velocity or state of motion of the ether, he was emphatically *not* ascribing to it the property of immobility. For that would be to admit that the ether constitutes a reference frame, as Lorentz claimed, and therefore serves in virtue of its immobility as a privileged frame relative to which absolute motion, simultaneity, and length exist. Rather the relativistic ether is, as Kostro puts it, {9} an ultra-referential reality to which the category of motion does not even apply.

When Leftow infers from God's spacelessness that the distance between God and spatial things is zero, he seems to commit the same error as would someone who inferred from the ultra-referential status of the relativistic ether that its motion is zero. Leftow defends his inference by asking how, if the Zero Thesis and its equivalent "There is a distance between God and spatial creatures, and this distance is zero" are ill-formed nonsense, we can understand them well enough to tell that they are equivalent. The answer is that we understand analogous well-formed statements about spatially distant objects (and rest frames) to see what has gone wrong in these ill-formed statements about a spaceless being or an ultra-referential reality. Leftow further defends his inference by asserting that the equivalent mentioned is problematic only if a zero distance is a positive distance. By "positive" he does not mean positive in the numerical sense, for that would be not merely problematic but contradictory. Rather he means positive in the sense of ontological status. But if Leftow means to assert more than a category-negation, he must be ascribing positive, existential status to the zero distance between creatures and God. That is just as problematic as ascribing

zero motion to the relativistic ether. Finally, Leftow defends his Thesis by claiming that it is an entailment of the true and intelligible statement that "Necessarily, there is no distance between God and any spatial thing." But this statement is true and intelligible only insofar as it is a category-negation, and as such it does not entail the Zero Thesis.

What is disquieting about this apparent failure of the Zero Thesis is that Leftow's entire theory of divine eternity appears to balance like an inverted pyramid on this Thesis, so that with the untenability of that thesis the whole theory threatens to topple. Without the Zero Thesis, I do not know how to save Leftow's theory, for without it there is no "frame of reference" in which all things exist changelessly relative to God--which fact should become clearer as we proceed.

According to Leftow, the Zero Thesis has a startling consequence: since the distance between God and any creature is always the same (zero), there is no motion relative to God. Now, of course, in the sense of a category-negation there is no motion relative to God, since God is not a reference frame any more than is the relativistic ether. But Leftow takes this consequence to mean that God is or has a reference frame and that the motion of things in space relative to that frame is zero. He writes, "That there is no motion relative to God does not entail that there is no motion relative to *other* things. There is nothing problematic in the thought that an object at rest in one frame of reference (e.g. God's) is in motion in other reference-frames."[10](#) What is problematic, however, is the slide from speaking colloquially of God's "frame of reference" to treating this as a sort of reference frame related relativistically to other physical reference frames. A reference frame is a conventional standard of rest relative to which measurements can be made and experiments described. In STR our concern is specifically with inertial frames, which are reference frames comprising certain regions of space and time within which, to some specified degree of accuracy, every test particle which is initially at rest remains at rest and every test particle that is initially in motion continues that motion without change in speed or direction.[11](#) Such a conception obviously cannot be applied to God in any literal sense; He has no reference frame as such. But then it is simply inept to speak of objects at rest (zero motion) relative to God.

(b.) Thesis (M)

Leftow proceeds to broach the following thesis, which he characterizes as "eminently defensible":[12](#)

M. There is no change of any sort involving spatial, material entities unless there is also a change of place, i.e. a motion involving some material entity.

This is a sweeping claim which would require for its defense some account of what constitutes a change (cf. Cambridge changes). But let that pass. I simply want to observe at this point that (M) is incompatible with a tensed, or (to borrow McTaggart's convenient terminology) A-theory of time. For according to that theory, the physical world undergoes objective changes in tense; indeed, this is the essence of temporal becoming. There are tensed facts, such as that *It is now t*, that are constantly changing whether anything changes spatially or not.[13](#) Temporal change does not entail spatial change.[14](#) Insofar as he endorses (M), therefore, Leftow is implicitly endorsing a tenseless, or B-theory of time. This conclusion is important because Leftow avers that his theory is compatible with an A-theory of time and becoming.

(c.) Reduction of Time to Physical Time

Since there can be no spatial motion relative to God, (M) is said to imply that no spatial thing can change in any way in relation to God. Leftow then goes on to make the surprising assertion that "if there is any truth in contemporary physics," then even non-spatial entities such as changeable angels or disembodied souls do not exist.^{15} He justifies this assertion by pointing out that time is one of the dimensions in the four-dimensional space-time manifold and that whatever is located in one dimension is *ipso facto* located in the others as well. Therefore, if it is correct to represent time as a dimension of the manifold, nothing can be in time unless it is also in space; only spatial things are temporal. Since only temporal things can change, it follows only spatial things can change.

One could quarrel with this argument on the grounds that it takes insufficient cognizance of the difference between coordinate time and parameter time. Insofar as time plays the role of a coordinate, it is connected with a system of spatial coordinates, so that anything to which a temporal coordinate can be assigned is such that spatial coordinates are assignable as well. But insofar as time functions as a parameter, it is independent of space, and something which possesses temporal location and extension need not, arguably, be held to exist in space as well. In Newtonian mechanics, time plays the role of a parameter, not a coordinate, and, interestingly, the same is true of Einstein's formulation of STR--the familiar space-time formulation derives later from Minkowski. STR can be validly formulated in either way. Moreover, since STR is a local theory only, we must, in order to achieve a global perspective, consider time as it functions in GTR-based cosmological models, which Leftow neglects to do.

But let all that pass. My reservations about Leftow's argument at this point are much more deeply laid; namely, I have deep misgivings about the very conception of time which seems to underlie his reasoning. Leftow's argument appears to rest upon a crucial presupposition that will affect fundamentally one's theory of eternity and time and therefore deserves to be discussed at some length, namely, a reductionistic equation of time and space with *physical* time and space.

In making this assumption, it must be admitted, Leftow does stand within the mainstream of philosophy of space and time since Mach.^{16} Under the influence of Mach's positivism, twentieth century philosophy of space and time has been dominated by a reductionistic, verificationist conception of time which equates time with time as it plays a role in physics. Physicists and philosophers of space and time during the first half of this century shared alike Mach's abhorrence for what was called "metaphysics." An instructive piece is a 1941 article by Henry Margenau ostensibly defending metaphysical elements in physics. Observing that "our time appears to be distinguished by its *taboos*, among which there is to be found the broad convention that the word *metaphysics* must never be used in polite scientific society," Margenau counters that there not only are, but ought to be, metaphysical elements in physical science.^{17} But then he emasculates this bold contention by explaining that he means thereby that we must have "epistemology"; but as physicists "we reject ontology."^{18} He reduces metaphysics to what he calls the methodology of science, and insists that we must not relax our standards here, lest the "obnoxious ontological elements" find their way back into science.^{19} What these elements are he leaves in no doubt: the luminiferous aether and simultaneity in different Lorentz frames are classed along with the external world and the *Ding-an-sich* and dismissed as "ultra-perceptory and hence meaningless."^{20} This judgement is based on the "positivistic criticism" that propositions not verifiable in principle are meaningless, a criterion which elicits Margenau's ringing endorsement: "this recognition should be one of the premisses of philosophy of science; it enjoys, indeed, almost universal

consent."{21} As a result of positivism's influence, contemporary philosophy of space and time has implicitly and almost unquestioningly been the philosophy of *physical* time and space.

But the question arises, why should we follow in the Machian train? This is a *philosophical*, not a *scientific*, question. Rejection of the equation between time and physical time would not contradict "any truth in contemporary physics." What the reductionist fails to appreciate is that time as it plays a role in physics may be but a pale abstraction of a much richer metaphysical reality. Newton realized this when he drew a distinction between time itself and our "sensible measures" of time. People "defile the purity of mathematical and philosophical truths who confound real quantities with their relations and sensible measures." {22} I am not here plumping for a substantivalist, as opposed to relational, view of time, but merely saying that however time is constituted, there is no reason to think it identical with the measurement procedures which are used to define time operationally in physics.

Take, for example, the question of the status of temporal becoming. According to Newton, time itself "flows equably without relation to anything external, and by another name is called duration . . . this duration ought to be distinguished from what are only sensible measures thereof . . . " {23} In time itself physical events become successively present; but Newton seems to leave it open whether this aspect of time is preserved in our physical measures of time. A persuasive case can be made, I think, that physical time is a tenseless, B-theoretical time which has been abstracted from the richer A-theoretical metaphysical time in order to rid scientific theories of indexical elements and thus render them universalizable. Max Black explains:

It is easy to understand why theoretical physics should express its formal results in a language that is independent of context, using formulas or sentences from which the occasion words are absent. This procedure has the great advantage of no reconstruction of the original context being required on the part of any reader If a scientist were to say, 'I *then* saw a green flash at the edge of the sun's disk,' anyone who was absent at the time of the original observation would need to know *who* spoke, and where and when, in order to obtain the intended information. No such supplementary information is needed in order to understand Boyle's law or any other freely repeatable scientific statement. {24}

Because of its universalizing tendency, its abstraction from the here and now, physical time does not seem to possess an A-theoretical structure. As a result, Black went so far as to advise physicists to stop talking about "time" in their theories and to refer to their own concept simply as "*t*"! {25} This is no doubt asking too much. But it does show that the simplistic equation between time and physical time is illicit. Hence, (*pace* reductionists like Grünbaum, for example) it does not follow from the B-theoretical structure of physical time that temporal becoming is therefore mind-dependent or non-objective. As Peter Kroes points out in his discriminating book *Time: Its Structure and Role in Physical Theories*, the universality of the laws of physics seems to preclude the introduction of the notion of the flow of time on the basis of these laws, but that does not imply that temporal becoming is therefore unreal: "Whether or not it is in principle impossible for physics to incorporate the flow of time in its descriptions of physical reality, is still an open question. Up to the present, all attempts to capture this mysterious *but essential aspect of time* in the language of physics have failed." {26} In Kroes's view, the notions of past, present, and future are essential for what he calls "real time," even though, in his judgement, these notions have yet to be successfully integrated into physical time. The contention here is not that temporal becoming is

incompatible with physical time; there are a number of ways of showing how, for example, objective temporal becoming can be made compatible with STR, as Leftow himself recognizes. But the point is that such an integration involves the introduction of something into physical time from outside physics; physical theory itself knows nothing of A-determinations and temporal becoming. But these notions can be legitimately integrated with physical time only if there exists a metaphysical time from which physical time has been abstracted.

Even some positivist philosophers of science are willing to admit that notions which find no proper place in the time of physics are quite legitimate once one broadens his scope of inquiry. Thus, Philipp Frank, who denounces metaphysical sentences as meaningless, qualifies this by stating, ". . . they are meaningless *as far as science is concerned*." {27} When we begin to ask questions of a broader scope, the meaningfulness of such sentences may emerge:

Our judgment about the usefulness of such expressions may change considerably if we consider the realm not only of physical facts in the narrower sense (*e.g.*, the motion of planets) but ask also for a general picture of the world and include the phenomena of human behavior as facts to be represented. {28}

Frank even goes so far as to state that here religious beliefs may enter the picture--a commendable display of openness for a positivist philosopher!

Now obviously, Leftow does not regard metaphysical sentences as meaningless; but his view of time as constricted to the time of physics does seem to be positivistic and reductionist, leading him in turn to deny the existence of non-spatial, temporal beings and thus evincing a scientistic attitude which even a positivist like Frank would consider too narrow. I am reminded in this connection of Alvin Plantinga's advice to Christian philosophers that they have their own agenda to pursue and should display more boldness and autonomy over against the concerns which secular philosophy deems legitimate. {29} It would be ironic if a Christian philosopher like Leftow were, out of some misplaced deference to the "truth of contemporary physics," led to adopt a positivistic view of time and to deny, as a consequence, important Christian doctrines pertinent to angelology/demonology and to the intermediate state of the soul after death. {30}

Of course, Leftow's motivation for denying the existence of changeable angels/demons and disembodied souls is clear: if there are non-spatial, changing beings, then there will exist a metaphysical time and, hence, a "frame of reference" in which things are changing relative to God. But then it will be false that all things are timelessly present to God in eternity. Therefore Leftow is obliged to deny the existence of temporal, non-spatial beings. This he accomplishes by the positivistic constriction of time to physical time. There is not only a theological price to be paid for this reduction, however; since physical time is a B-theoretic time only, Leftow's theory of the relationship of eternity to time will be incompatible with the A-theory, which fact he is anxious to deny.

(d.) Timeless Presence of Temporal Events to God

On the basis of the Zero Thesis, (M), and the constriction of time to physical time, Leftow concludes that there is no change relative to God. Unfortunately, none of the supporting theses for this inference is plausibly true. All of the errors described thus far seem to come

home to roost in the following conclusion: "So if a frame of reference is a system of objects at rest relative to one another, then it appears that God and all spatial objects share a frame of reference, one in which nothing changes." {31} This conclusion is analogous to the statement that spatial objects and space-time (the relativistic ether) are at rest relative to one another and therefore exist in a common reference frame--as though God or space-time could be said to constitute a reference frame and so be at rest with respect to spatial objects or to exist in the same reference frame as spatial objects!

Since an event occurring in one reference frame occurs in all (albeit simultaneous with different groups of events), explains Leftow, all events which occur in other reference frames also occur in the frame at rest relative to God. All temporal events are therefore timelessly present to God. By invoking Relativity Theory at this point in his argument, Leftow is able to stave off the Eleatic conclusion that because God is changeless and there is no change relative to God, therefore motion and change are mere illusions masking a static reality. By holding that change is real in physical reference frames and making all change relative change, Leftow is able to hold that while change is real relative to some frames it is non-existent relative to God's "frame."

But the difficulty I have with this account of how all temporal events can be timelessly existent relative to God's "frame of reference" is that there just does not seem to be any such "frame of reference" in which all events are simultaneous. Certainly there is no such physical reference frame, and the addition to these of God's "frame of reference" does not seem to change the picture, since the timelessness of events in the eternal frame depends upon the defective Zero Thesis, (M), and the reduction of time to physical time. Unless some more secure foundation can be found for the existence of such a frame, it will remain problematic how all temporal events can exist timelessly relative to God.

(ii) The Compatibility of the Timeless Presence of All Things to God in Eternity and Objective Temporal Becoming

(a.) Local Simultaneity in God's "Frame"

On the basis of his argument for tenet (i) Leftow claims that ". . . relative to God, the whole span of temporal events is always actually there, all at once. Thus in God's frame of reference, the correct judgment of local simultaneity is that all events are simultaneous." {32} This is a dark saying. If we are to make sense of it, we must construe "always" to mean something like "tenselessly," since God's frame of reference is timeless, not sempiternal. For the same reason, Leftow cannot mean by "simultaneous" "occurring at the same time," but something like "co-existent" or "coincident." The statement that God judges all events to be locally simultaneous is very obscure. He cannot mean that all events exist in God's timeless frame of reference, but are tenselessly ordered by a "later than" relation such that no event occurs (tenselessly) later than any other, for that would be to affirm that there is only one time and all events occur at that moment of time. If we take literally Leftow's appeal to STR's doctrine of the relativity of simultaneity to reference frames, then we must say that just as a given set of causally unconnectable events will be calculated to sustain among themselves different relations of "earlier than," "simultaneous with," and "later than," in various reference frames, so in God's "frame of reference" no events are judged to be earlier or later than any other or even as occurring simultaneously. Rather in God's "frame" all events are judged to be timelessly coincident. In other words, in God's "frame of reference" the very topology of time is voided. It would be as though one took the series of real numbers and removed from it any ordering

relation such as "greater than." The one-dimensional temporal continuum has been divested in God's "frame of reference" of those topological properties which make it isomorphous to a geometrical line, so that all that is left is an amorphous collection of points. Notice that in God's "frame" even causally connected events, such as one's birth, development, decline, and death, are judged to sustain no temporal relations among themselves; they are all just timelessly coincident. It might be objected that if God judges one's birth to be coincident with one's death rather than earlier than it, then He is surely deceived. But if we take relativity seriously, as Leftow wishes to do, that is not the case. There is no privileged frame. Hence, no observer can impugn the temporal ordering of events determined by any other observer in another reference frame. Of course, in all *physical* frames the temporal order of causally connectable events is invariant. But in the special case of God, if Leftow's argument for (i) is correct, this invariance does not hold with respect to His "frame of reference." In fact, if anyone's frame is privileged, it will surely be God's, for the relativity of simultaneity arises only for events spatially distant from the observer; judgements of local simultaneity are neither conventional nor relative. But given Leftow's Zero Thesis, all events are in a sense local for God. Therefore, His judgement that all events are timelessly coincident should be absolute, and it is we who are deceived when we judge that they are temporally ordered (shades of McTaggart!). In fact, it is not clear to me that Leftow can avert also voiding space as well as time of any topological properties in God's "frame of reference." For in Relativity Theory, a difference in the value of the temporal coordinate of some event relative to two distinct reference frames requires a mathematically determinate difference in the spatial coordinates of the event as well. Doubtless, Leftow would not say that the Lorentz transformation equations hold relative to God's "frame of reference" as for physical frames. Nonetheless, since an event's spatial coordinates are partially dependent upon its temporal coordinates, events in God's "frame of reference," lacking any temporal coordinates, cannot be located in space either. To paraphrase Leftow: something is located in one dimension of a geometry if and only if it is located in all; so if it is correct to represent time as another dimension, it follows that whatever is not in time is not in space either: *only temporal things are spatial*. It therefore seems to follow that in God's "frame of reference" events not only occur timelessly but spacelessly as well. The topological structure of the four-dimensional space-time manifold has come completely unglued in the divine "frame of reference" so that all God is confronted with is a chaotic collection of points which are ordered neither spatially nor temporally.

Leftow, however, clearly does not interpret the "local simultaneity" of all events in God's "frame of reference" in the above way. He states, "In eternity events are in effect frozen in an array of positions corresponding to their ordering in various B-series."[\[33\]](#) In a footnote he explains that God does not see all events spread out in one B-series, since each reference frame generates its own unique B-series. There are thus a plurality of B-series and God must be aware of all of them.[\[34\]](#) Now this seems an eminently more reasonable account of the existence of temporal events in God's "frame of reference," but I do not see how this account concords with the theory of timeless eternity developed under (i). It needs to be understood that that account does not merely eliminate the A-determinations of events (monadic predicates like *past*, *present*, and *future*) relative to the divine "frame of reference," for STR itself takes no cognizance of such predicates in handling temporal relations among events in physical reference frames. Rather Leftow's account must also eliminate the B-determinations of events as well (dyadic predicates like *earlier than*, *simultaneous with*, and *later than*) relative to God's "frame of reference." For the relativity of simultaneity, which Leftow employs in order to stave off the Parmenidean conclusion that change is illusory and reality is a static whole, entails that events are classed relative to a reference frame as being either

earlier than, simultaneous with, or later than any arbitrarily chosen point on the inertial trajectory of a hypothetical observer, and that observers in different frames will draw at any arbitrary point on their world-lines different lines of simultaneity connecting events determined to be simultaneous with that point and dividing later from earlier events. Hence, relative to God's timeless "frame of reference," God must judge of any two events that one is neither earlier than the other, nor later, nor even strictly simultaneous; they are just timelessly coexistent relative to His frame. Therefore, Leftow's theory must void even B-relations relative to the divine "frame of reference." Of course, an omniscient God must also know the lines of simultaneity which would be drawn by hypothetical observers relative to any physical reference frame; but in His "frame" events are chaotically co-existent.

If the proponent of divine timelessness wants to preserve the B-relations among events, then it seems to me that his most plausible move will be to identify God's "frame of reference" with the four-dimensional space-time manifold itself, which God transcends, and hold that that manifold exists tenselessly. In short: the B-theory of time is correct. Given the B-theory of time, the metaphorical and problematic notion of God's "frame of reference" becomes perspicuous and it becomes easy to see what is meant by divine timelessness and the presence of all things to God in eternity.

(b.) The Relativity of Simultaneity

Leftow, however, denies that his theory of divine eternity entails the B-theory. He claims that ". . . a defender of God's eternity can assert that (in a strictly limited sense) one and the same event is present and actual in eternity though it is not yet or no longer present or actual in time." {35} He explicates this by saying

That is, it can be true at a time t that an event dated at $t+1$ has not yet occurred in time, and yet also correct at t to say that that very event exists in eternity. That all events occur at once in eternity . . . does not entail that they all occur at once in time. {36}

Unfortunately, it is not apparent to me that this explication is anything but a statement of the B-theory. A B-theorist like Grünbaum would be adamant that at t an event at $t+1$ has not yet occurred in time (otherwise it would be earlier than t) and nonetheless this event exists tenselessly with as much actuality as the event at t ; moreover, the B-theory does not assert the absurdity that all events occur at once in time, for then there would be only one moment of time! What Leftow needs to show is that his theory of the timeless existence of all things relative to God is compatible with the reality of tense, the objectivity of temporal becoming, the denial that all events exist tenselessly, and so forth.

It is at this point that the Einsteinian interpretation of STR takes center stage in Leftow's defense. He argues,

If simultaneity and presentness are relative to reference-frames, then if present events are actual in some way in which future events are not, this sort of actuality is itself relative to reference frames. Thus there is a (strictly limited) sense in which the relativity of simultaneity entails a relativity of actuality, if one restricts full actuality to present events. {37}

This represents one way of integrating objective temporal becoming with STR, though it strikes me as enormously implausible. Sklar notes that a peculiarity of such a relativized view of becoming is that at my given space-time point there will be events which are now such that

they will be in my real past at some future time, but which will never have a present reality to me at all. {38} In fact, that is true of *all* events except for those lying on the single thread of my inertial trajectory which passes vertically on a Minkowski diagram through the vertex of my past light cone. This follows from the fact that all events having a space-like separation from me or lying inside or on my future-directed lightcone do not exist; at a later space-time point vast numbers of such events will be past for me and therefore real, though they were never present. Oddly enough, then, the present is not the moment of becoming for most events. Since, on the A-theory of time, things in the past, having become, are no longer existent, Sklar charges that the view under discussion collapses into a relativistic solipsism, in which reality is reduced to a single point! {39} On a theistic metaphysic, the charge of solipsism would not quite be justified, since as well as what exists here-now, God also timelessly exists. That still seems to be a pretty attenuated reality. But, of course, on Leftow's view, all events also exist timelessly in eternity with God. So reality is restored in its fullness; even though in my reference frame no events other than that which is here-now exist, nonetheless there is a reference frame in which all events exist. This escape from solipsism depends on the truth of tenet (i), which I have argued to be incoherent; but at least Leftow can claim that his view is not further burdened by solipsism.

Leftow explains the result of relativizing actuality to reference frames:

If we take eternity as one more frame of reference, then, we can thus say that a temporal event's being present and actual in eternity does not entail that it is present and actual at any particular time in any temporal reference frame (though it does follow that this event is, was or will be actual in all temporal reference frames). {40}

Again, I feel constrained to say that God's "frame of reference" is not literally a reference frame; there is no reference frame in which all events are present and actual, since there are in every frame space-time regions designated absolute future or absolute past as determined by the light-cone structure at any event. The only thing corresponding to God's "frame of reference" as described by Leftow, so far as I can see, is Einstein's relativistic ether, the space-time manifold itself. But since it is not a reference frame, the relativity of simultaneity relation does not obtain between it and local frames. Temporal becoming cannot be objective, for all events simply exist in the four-dimensional manifold. {41}

In another place, Leftow shows himself prepared to fall back, if necessary, to a sort of Stump-Kretzmann model which does not appeal to the Zero Thesis, but relies exclusively on the relativity of simultaneity in order to justify the claim that actuality is reference frame dependent and, therefore, events which are not actual with respect to various temporal reference frames may all be actual with respect to God's "frame." {42} Suppose then that it is legitimate to speak of eternity's constituting a reference frame. My misgivings about Leftow's theory strike much deeper than anything heretofore expressed, indeed, at the very philosophical foundations of the interpretation of Relativity Theory itself; namely, I, quite frankly, see no reason to think that the relativity of simultaneity obtains at all. Leftow's appeal to STR to ground this relation, it seems to me, evinces a certain naiveté concerning the philosophical foundations of the received physical interpretation of Relativity Theory and an uncritical acceptance of that interpretation, which is then (mis)applied to metaphysics.

There are, after all, other physical interpretations of the Lorentz transformation equations that constitute the mathematical core of STR which are empirically equivalent to the received interpretation and which, if correct, would lead to completely different conclusions when

applied metaphysically. As the Australian physicist Geoffery Builder points out, the only formulation of STR which is verifiable is "the theory that the spatial and temporal coordinates of events, measured in any one inertial reference system, are related to the spatial and temporal coordinates of the same events, as measured in any other inertial reference system, by the Lorentz transformations." {43} But this verifiable statement is neutral, for example, with respect to the received Einsteinian interpretation and the neo-Lorentzian interpretation championed by Ives, Builder, Prokhovnik, and others. {44} These two interpretations, while empirically indistinguishable, are radically different due to the different ontologies presupposed. {45} On the Einsteinian view, there exists no preferred spatio-temporal order; rather space and time are relative to inertial frames, and no frame is privileged. According to the neo-Lorentzian view, absolute space and time exist, not necessarily in the substantial, as opposed to relational, sense of "absolute," but rather in the sense that there exists a spatio-temporal order which is privileged. There exists a universal, fundamental (or privileged) reference frame which is the analogue of the aether frame of nineteenth century classical physics but without the classical aether and which is usually identified with the frame of hypothetical fundamental observers stationary relative to the expansion of space itself as posited in current cosmological models. Light is propagated isotropically at velocity c relative to this fundamental frame alone and therefore will be propagated relative to observers in motion with respect to this frame at velocities exceeding or less than c . The consequence of motion relative to the fundamental frame will be certain anisotropy effects produced by dynamical causes operating on the moving systems, primarily length contraction in the direction of motion in order that the internal equilibrium of the system might be maintained. Time dilation effects follow immediately as a consequence of these anisotropy and contraction effects, as may be seen from the behavior of a light clock in motion relative to a frame at rest. It needs to be emphasized that on the Einsteinian interpretation length contraction and time dilation are no less real and objective physical effects, but there is under this interpretation no causal explanation for these effects, which follow simply as deductions from the two postulates of Einstein's formulation of the theory. {46} Under the neo-Lorentzian interpretation, the constancy of the observed velocity of light relative to all frames, observed length contraction of objects in motion relative to frames taken to be at rest, and time dilation of clocks, including all physical and biological systems, in motion relative to an observer taken to be at rest become physically intelligible, rather than mere postulates or deductions lacking physical explanation.

Although it is often asserted that Einstein's version of the theory is simpler and therefore to be preferred, the claim that the Einsteinian interpretation is simpler is incorrect. Although Lorentz's own theory was more complicated than Einstein's, H. E. Ives was able to derive the Lorentz transformation equations from (i) the laws of conservation of energy and momentum and (ii) the laws of transmission of radiant energy. He showed that there is an apparent discrepancy in the equations for a particle governed by these laws which demands that the particle's mass vary with velocity. He then derived from these variations of dimensions the Lorentz transformations. "The space and time concepts of Newton and Maxwell are retained without alteration," he wrote, "It is the dimensions of the material instruments for measuring space and time that change, not space and time that are distorted." {47} On Ives's achievement, Martin Ruderfer comments that he succeeded in elevating Lorentz's *ad hoc* theory to an equal status with STR and did so with the same number of basic assumptions as Einstein, so that his theory has the same "beauty." "The Ives and Einstein interpretations represent two different, but equally valid, views of the same set of observations." {48}

We thus have two different interpretations of Relativity Theory which are radically different in their metaphysical foundations and yet which are, to date, experimentally indistinguishable and therefore insusceptible to scientific adjudication. An examination of the philosophical foundations of Relativity Theory is therefore indispensable if we are to decide between these competing interpretations. Unfortunately, space does not permit me to delve into this fascinating issue here.^{49} But if a neo-Lorentzian interpretation is philosophically preferable (as I suspect that it is), then the rug is pulled from beneath the feet of theories of divine eternity appealing to STR in order to justify notions like ET-simultaneity or the presence of all things to God in timeless eternity. It therefore seems to me that it is of the utmost moment that proponents of divine timeless eternity address themselves more closely to the scrutiny and justification of the interpretation of Relativity Theory which they prefer and on which their theories are predicated.

CONCLUSION

In conclusion, then, I think we can agree that there are reasons to doubt the legitimacy of the appeal to Relativity Theory to support the crucial theses (i) that temporal things exist in time and in timeless eternity and (ii) that the timeless presence of all things to God is compatible with objective temporal becoming. The first of these rests upon category mistakes, presupposes a reductionist view of time, and seems incompatible with a tensed theory of time. The second involves the same conceptual mistakes, but also hinges upon a particular interpretation of STR which, though widespread, may by no means be the most plausible. It seems to me that a more promising route for defenders of divine timelessness to pursue would involve the explicit adoption of a B-theory of time and the explication of a transcendent being's relations to the space-time manifold--but then, of course, they must face up to the case for the superiority of the A-theory over the B-theory.

Endnotes

^{1}Nelson Pike, *God and Timelessness* (New York: Schocken Books, 1970).

^{2}Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 (1981): 429-58.

^{3}Brian Leftow, *Time and Eternity*, Cornell Studies in the Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 1991).

^{4}Brian Leftow, "Eternity and Simultaneity," *Faith and Philosophy* 8 (1991): 148-79.

^{5}*Ibid.*, p. 162.

^{6}A. Einstein to H.A. Lorentz, June 17, 1916, item 16-453 in the Mudd Library, Princeton University, cited in Ludwik Kostro, "Einstein's New Conception of the Ether," proceedings of "Physical Interpretations of Relativity Theory," conference of the British Society for the Philosophy of Science, Sept. 16-19, 1988, Imperial College of Science and Technology, London.

^{7}A. Einstein, *Äther und Relativitätstheorie* (Berlin: Julius Springer Verlag, 1920), pp. 7-9.

{8}A. Einstein to H.A. Lorentz, Nov. 15, 1919; item 16-494 in Mudd Library, Princeton University, cited in Kostro "Einstein's New Conception."

{9}Kostro, "Einstein's New Conception."

{10}Leftow, "Eternity and Simultaneity," p. 163.

{11}See Edwin F. Taylor and John Archibald Wheeler, *Spacetime Physics* (San Francisco: W.H. Freeman, 1966), pp. 9-10; J.G. Taylor, *Special Relativity*, Oxford Physics Series (Oxford: Clarendon Press, 1975), p. 13.

{12}Leftow, "Eternity and Simultaneity," p. 163.

{13}See A.N. Prior, "Changes in Events and Changes in Things," in *Papers on Time and Tense* (Oxford: Clarendon Press, 1968), pp. 1-14.

{14}See Sydney Shoemaker, "Time without Change," *Journal of Philosophy* 66 (1969): 363-81; cf. W.H. Newton-Smith, *The Structure of Time*, International Library of Philosophy (London: Routledge & Kegan Paul, 1980), chaps. 4, 10.

{15}Leftow, "Eternity and Simultaneity," p. 163.

{16}A giant of nineteenth century German physics, Mach's influence has been profound. Einstein once remarked, "Even those who think of themselves as Mach's opponents hardly know how much of Mach's views they have, as it were, imbibed with their mother's milk" (Albert Einstein, "Ernst Mach," *Physikalische Zeitschrift* 17 [1916]:101, reprinted in Ernst Mach, *Die Mechanik in ihrer Entwicklung historisch-kritisch dargestellt*, ed. Renate Wahsner and Horst-Heino Borzeszkowski [Berlin, DDR: Akademie-Verlag, 1988], pp. 683-89). Einstein also refers to Mach as "the greatest influence on the epistemological orientation of the natural scientists of our time." For Mach's strictures against metaphysical space and time see especially Mach, *Die Mechanik*, pp. 249, 252 (Ernst Mach, *The Science of Mechanics: A Critical and Historical Account of Its Development*, trans. Thomas J. McCormack [LaSalle, Ill.: Open Court, 1960], pp. 276, 280) and Ernst Mach, *Prinzipien der Wärmelehre* (Leipzig: J.A. Barth, 1896), p. 154 (Ernst Mach, *Principles of the Theory of Heat*, trans. T.J. McCormack, rev. and compl. P.E.B. Jourdain and A.E. Heath, with an Introduction by M.J. Klein, ed. Brian McGuiness, Vienna Circle Collection 17 [Dordrecht: D. Reidel, 1986], pp. 53-54).

{17}H. Margenau, "Metaphysical Elements in Physics," *Reviews of Modern Physics* 13 (1941):176.

{18}Ibid., p. 177.

{19}Ibid.

{20}Ibid., p. 178.

{21}Ibid.

{22} Isaac Newton, *Sir Isaac Newton's "Mathematical Principles of Natural Philosophy" and his "System of the World,"* trans. Andrew Motte, rev. with an Appendix by Florian Cajori, 2 vols. (Los Angeles: University of California Press, 1966), I: 11.

{23} Ibid., I: 6, 8.

{24} Max Black, review of *The Natural Philosophy of Time*, *Scientific American* 206 (April 1962), p. 181. Cf. idem, "The Direction of Time," *Analysis* 19 (1958-59): 54-63.

{25} Black, review of *Natural Philosophy of Time*, p. 182. See also Mary F. Cleugh, *Time and its Importance in Modern Thought*, with a Foreword by L. Susan Stebbing (London: Methuen, 1937), pp. 46-47; Herbert Dingle, *Science at the Crossroads* (London: Martin Brian & O'Keefe, 1972), pp. 31-32; Peter Kroes, "Physics and the Flow of Time," in *Nature, Time, and History*, ed. P.A. Kroes, Nijmegen Studies in the Philosophy of Nature and its Sciences 4/2 (Nijmegen, The Netherlands: Catholic University of Nijmegen, 1985), p. 49.

{26} Peter Kroes, *Time: Its Structure and Role in Physical Theories*, Synthese Library 179 (Dordrecht: D. Reidel, 1985), p. xxiv; cf. p. 209 (my italics).

{27} Philipp Frank, *Interpretations and Misinterpretations of Modern Physics*, Actualités Scientifiques et Industrielles 587: Exposé de Philosophie Scientifique 2 (Paris: Hermann & Cie., 1938), p. 38.

{28} Philipp Frank, *Philosophy of Science* (Englewood Cliffs, N.J.: Prentice-Hall, 1957), p. 144.

{29} Alvin Plantinga, "Advice to Christian Philosophers," *Faith and Philosophy* 1 (1984): 253-71. Plantinga specifically blasts verificationism as a philosophical fashion which Christian thinkers ought to have rejected *tout court*.

{30} The doctrine of the intermediate state of the soul after death may prove to be essential to the coherence of the Christian doctrine of eschatological resurrection and the final state, due to the need to preserve personal identity between earthly and resurrected human beings. Doctrines pertinent to angelology/demonology may have important practical ramifications in the Christian's spiritual struggle (Eph. 6.12).

{31} Leftow, "Eternity and Simultaneity," p. 164.

{32} Ibid.

{33} Ibid., p. 170. Cf. his definition: ". . . R is an eternal reference-frame iff within R, the relations 'earlier' and 'later' can hold only between locations in the atemporal analogues of a B-series . . ." (Ibid., pp. 171-72).

{34} Ibid., p. 179.

{35} Ibid., p. 165.

{36} Ibid.

{37}Ibid.

{38}Lawrence Sklar, "Time, reality and relativity," in *Reduction, time and reality*, ed. R. Healey (Cambridge: Cambridge University Press, 1981), p. 138.

{39}Ibid., p. 140.

{40}Leftow, "Eternity and Simultaneity," p. 167.

{41}Suspensions that Leftow's theory really presupposes a B-theory of time are accentuated by his remarks on God's knowledge of what is happening now:

"That in God's frame of reference all events occur simultaneously does not entail that God does not know all the facts about simultaneity which obtain in temporal reference frames. God's being located in just the eternal frame of reference does not put a limit on what he knows. From any reference frame one can extrapolate what judgements of simultaneity would be correct in other reference frames. Presumably, then, an eternal God can have this knowledge in his own way. So . . . for every temporal now, God knows what is happening now (i.e., simultaneous with that now) . . ." (Leftow, "Eternity and Simultaneity." p. 168).

Notice the conflation of the indexical A-determination "now" and the non-indexical B-relation "simultaneous with." God could know the appropriate simultaneity classes relative to every reference frame and still not have any idea which class of events is occurring now with respect to any frame. This can be clearly seen by reflecting on the fact that appropriate lines of simultaneity can be drawn on a Minkowski diagram through *any* point on the inertial trajectory of a hypothetical observer connected to that frame. Leftow's theory of divine eternity will not result in an attenuation of divine omniscience only if he holds, with the B-theorist, that there are no objective tensed facts and therefore divine knowledge of simultaneity relations is sufficient to grasp all that there is to be known with respect to the facts about what is happening now.

{42}Brian Leftow, "Time, Actuality and Omniscience," *Religious Studies* 26 (1990): 303-321. "The claim that actuality is a function of a relation may seem bizarre, but if time is tensed and the special theory of relativity is true, this claim follows One can hold . . . that events really occur sequentially in time and also all at once *for God*, without it thereby being the case that they really do all occur at once" (Ibid., pp. 318, 320).

{43}Geoffery Builder, "The Constancy of the Velocity of Light," *Australian Journal of Physics* 11 (1958): 457-80, rep. in *Speculations in Science and Technology* 2 (1971): 422.

{44}H. E. Ives's papers have been conveniently assembled in the (unfortunately polemical) volume *The Einstein Myth and the Ives Papers*, ed. Richard Hazelett and Dean Turner (Old Greenwich, Conn.: Devin-Adair, 1979). Geoffery Builder, in the several years prior to his death, published a remarkable series of eleven articles on Relativity Theory from a neo-Lorentzian perspective. Two of his papers, "Ether and Relativity" and "The Constancy of the Velocity of Light," along with references to the others, have been reprinted in abridged form in *Speculations in Science and Technology* 2 (1979). Among the many works of Simon J. Prokhovnik, the most prominent contemporary neo-Lorentzian relativity theorist, are *The Logic of Special Relativity* (Cambridge: Cambridge University Press, 1967) and *Light in Einstein's Universe* (Dordrecht: D. Reidel, 1985).

{45} A point emphasized by Dennis Dieks, "The 'Reality' of the Lorentz Contraction," *Zeitschrift für allgemeine Wissenschaftstheorie* 115/2 (1984): 341.

{46} See, for example, A. Einstein, "Zum Ehrenfest'schen Paradoxon," *Physikalische Zeitschrift* 12 (1911): 509-10; John A. Winnie, "The Twin-Rod Thought Experiment," *American Journal of Physics* 40 (1972): 1091-1094; M.F. Podlaha, "Length contraction and time dilation in the special theory of relativity--real or apparent phenomena?" *Indian Journal of Theoretical Physics* 25 (1975): 74-75; Dieter Lorenz, "Über die Realität der FitzGerald-Lorentz Kontraktion," *Zeitschrift für allgemeine Wissenschaftstheorie* 13/2 (1982): 308-12

{47} Herbert E. Ives, "Derivation of the Lorentz Transformations," *Philosophical Magazine* 36 (1945): 392-401, rep. in *Speculations in Science and Technology* 2 (1979): 247, 255.

{48} Martin Ruderfer, "Introduction to Ives' 'Derivation of the Lorentz Transformations'," *Speculations in Science and Technology* 2 (1979): 243.

{49} I take up this debate in a projected book on divine eternity and God's relationship to time.

A Critique of Grudem's Formulation and Defense of the Doctrine of Divine Eternity

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

It is shown how the attempt of one theologian to explicate the doctrine of divine eternity is logically inconsistent and his attempts to defend an atemporal understanding of eternity mistaken.

"A Critique of Grudem's Formulation and Defense of the Doctrine of Eternity." *Philosophia Christi* 19 (1996): 33-38.

In his recent *Systematic Theology*, {1} Wayne Grudem treats all of the traditional attributes of God, a welcome change from typical contemporary theologies with their anti-metaphysical bias. Unfortunately, his treatment of divine eternity seems to me flawed both in its formulation and defense. An examination of these shortcomings will help to show how a more consistent doctrine of divine eternity might be formulated and defended.

I

Grudem defines divine eternity as follows: "God has no beginning, end, or succession of moments in his own being, and he sees all time equally vividly, yet God sees events in time and acts in time" (p. 168). This definition makes it evident that Grudem construes divine eternity to be a state of timelessness, not infinite temporal duration.

Now it is immediately evident that this affirmation outstrips the biblical passages quoted by Grudem as attestation. From passages like Ps. 90.2, Grudem has no difficulty showing that God has no beginning or end: "Before the mountains were brought forth or ever you had formed the earth and the world, from everlasting to everlasting you are God" (cf. Ps. 90.4; 2 Pet. 3.8). But do such passages support Grudem's affirmation that "God is timeless in his own being" rather than God's beginningless and endless duration? Surely not. Grudem cites Gen. 1.1; Jn. 1.3 which indicate that God created all things "in the beginning," a phrase which Grudem takes to mean "in the beginning of all events, or in the beginning of time" ("Comments"). This line is more promising; but Grudem fails to give any argument why such passages should be taken to refer to the beginning of time rather than to the beginning of the world. Grudem is on less sure ground when he appeals to Ex. 3.14; Jn. 8.58 to prove God or Jesus's eternal presentness, if we take this in the sense of timeless existence. Of the former passage, Grudem claims that it "is probably correctly understood by the Septuagint translation in which the second 'I AM' is rendered as *ho on*, 'the being-one', or 'the one whose existence is characterized by eternal presentness'" ("Comments"). But wholly apart from the moot question of whether metaphysical implications are to be read into the divine name—a question not discussed by Grudem—the equation of "the being-one" with one whose existence is characterized by eternal presentness in the sense of atemporal existence rather than with one whose existence is characterized by ever-present being in the sense of everlasting duration surely begs some justification. With respect to Jn. 8.58 Grudem takes Jesus's use of the present tense to express "the idea that in a time that appears to us to be past (before Abraham existed), Jesus *is*. It is reasonable to think that first century readers would have concluded this very thing from Jesus' bold statement: he has a kind of existence that experiences an eternal 'presentness' in all stages of past history" ("Comments"). But is it not more plausible to suppose that John's readers would infer from Jesus's "I am" his identity with the God of Ex. 3.14 and, hence, his deity, without going further to impute to both passages the idea of timeless existence? After all, Jesus is in time when he makes this assertion. Surely John's intention is to point to the divine nature of Christ, not to Jesus's atemporal mode of being.

In sum, Grudem's proof-texts are underdeterminative with respect to his doctrine of divine eternity. I do not claim that certain texts cannot be construed in the sense of God's timeless existence, and still less that other texts might not be more plausibly adduced in support of this doctrine; but I do claim that Grudem has not argued adequately that the texts he cites should be construed in terms of divine timelessness.

If I am correct in this, then it is to extra-biblical arguments that Grudem must turn in order to justify his doctrine of divine eternity.

That means that Grudem's affirmation of divine timelessness must be based on extra-biblical arguments. What reason does he give for considering God to be timeless? He presents the following reasoning:

The study of physics tells us that matter and time and space must all occur together: if there is no matter, there can be no space or time either. Thus, before God created the universe, there was no 'time,' at least not in the sense of a succession of moments one after another.

Therefore, when God created the universe, he also created time. When God began to create the universe, time began, and there began to be a succession of moments and events one after another. But before there was a universe, and before there was time, God always existed, without beginning, and without being influenced by time

The foregoing Scripture passages and the fact that God always existed before there was any time combine to indicate to us that God's own being does not have a succession of moments or any progress from one state of existence to another (p. 169).

Unfortunately, Grudem is oblivious to the fact that his claim "God always existed before there was any time" is patently self-contradictory, indeed, doubly so. First, to speak of God's existing "before" time is contradictory because "before" is a temporal relation. So if God existed before time, He existed at some time prior to time, which is obviously a contradiction. Secondly, to say God always existed timelessly is self-contradictory, since "always" is a temporal adverb meaning "at all times." But to say God prior to creation existed both timelessly and at all times is clearly contradictory. Grudem protests that such objections are "just quibbling" and perhaps this complaint would be justified were such contradictions due merely to a popular style of writing used to explain a doctrine which can be more rigorously formulated with consistency. But Grudem asserts that "I simply do not think it is possible to express any more clearly in English the ideas (1) that time began at Genesis 1:1 and (2) that 'prior to' Genesis 1:1 time did not exist (and therefore there was no succession of moments or events in this 'prior to' or 'before'), but (3) that in that timeless reality God still existed, and he existed not just for a brief second or any kind of finite amount of (non!)-time but that he 'always' existed timelessly" ("Comments"). Now this strikes me as an extremely serious and troublesome assertion on Grudem's part. If it is really impossible to express such ideas in a logically coherent way, without speaking of such as (non-) time or God's always existing prior to time, then how is that any different than saying that the Christian doctrine of God is simply logically incoherent? Since logical consistency is a necessary condition for truth, the sentences formulating the Christian doctrine of divine eternity are necessarily false. To believe that the Christian doctrine of God, despite its logical incoherence, is nonetheless true thus involves a *sacrificum intellectum* on the part of every believer. Perhaps Grudem could escape this conclusion by distinguishing, with many philosophers, between sentences and the propositions (or information content) expressed by those sentences. The propositions formulating the Christian doctrine of divine eternity are logically consistent, but they cannot be coherently expressed in (English) sentences. But then the Christian doctrine of God becomes literally ineffable and, since it is not clear how we could access the relevant propositions apart from linguistic expressions, rationally incomprehensible as well. Such a move would throw open wide the door to arational mysticism. It seems to me, therefore, that if we find ourselves incapable of formulating Christian doctrine in logically consistent sentences, then that ought to occasion in us the very deepest of suspicions that our understanding of that doctrine is probably defective and needs to be revised.

Fortunately, in this case I think Grudem's doctrine can be formulated consistently. We may capture the ideas behind (1)-(3) above by asserting that God *sans* the universe exists timelessly and that time begins at the moment of creation. Grudem, however, complains that if we want to quibble over language, one could justifiably assert that this formulation is no more logically coherent than his, since the present tense verb "brings in a temporal affirmation" by implying that God "is now at the present time existing" ("Comments"). But

we may avoid this temporal affirmation by stipulating that the verbs in the suggested formulation are tenseless, not present tense. Philosophers employ tenseless sentences for a number of purposes, such as expressing truths of logic and mathematics in possible worlds semantics. So long as we keep the verbs tenseless, the above formulation of Grudem's doctrine is logically coherent.

But has Grudem given adequate reason to take it as true? I think not. Notice, first of all, that his reasoning is based on a reductionistic view of time which equates time with physical time. He says, "The study of physics tells us that matter and time and space must all occur together." Certainly this is a widespread view among scientists and philosophers of science today, but it sounds strange on the lips of a Christian theologian. For Christian theists believe in realities of which physics does not know. Suppose, for example, God were to lead up to creation by counting, "1, 2, 3, . . . *fiat lux!*" In that case, there would be a series of mental events in God's mind which would constitute "a succession of moments in his own being," a "progress from one state of existence to another"--in other words, time would exist and God would be temporal wholly in the absence of any matter or space. If Grudem rejects this thought-experiment as logically impossible due to God's immutability, he must at least allow that God could have created angels who were counting down to the creation of the physical universe, so that time would exist despite the absence of matter or space.

What the Christian should hold on this issue is that Isaac Newton was correct in drawing a distinction between time and our measures of time.^{2} Time as it plays a role in physics is measured time, a pale abstraction of a much richer metaphysical reality. For example, physical time is ordered by the relations *earlier/later than*, but appears to have no room for the notions of *past, present*, and *future* or the passage of time. Yet Grudem would agree, as we shall see, that these latter notions are features of time. It would be reductionistic to conclude that because physics knows nothing of these notions that temporal becoming is unreal and the distinction between past, present, and future a mere illusion of human consciousness. There is a lot more to time than what physics has to tell us.

So Grudem's argument does not show that God *sans* the universe exists timelessly. Even if physical time began at the moment of creation, that does not imply that time itself so began. In two footnotes, however, Grudem observes that a succession of moments extending infinitely far back into the past seems "absurd" and "is probably impossible" (pp. 169, 172). He does not develop this point, but let us concede that an infinite temporal regress is impossible. Would that suffice to demonstrate God's timelessness?

I think not. For at least two alternatives remain open: (1) One could hold that God is timeless *sans* creation and temporal subsequent to creation. A thing need not change to be temporal; it need only be really related to other changing things. In virtue of His real relation to changing creatures, God could be conceived to break out of timelessness into time at the moment of creation. (2) One could hold that God *sans* creation exists in an undifferentiated, metrically amorphous time, in which intervals cannot be distinguished. Thus, the typical problems with an infinite regress of temporal intervals could not arise. Unfortunately, Grudem does not consider such models of divine eternity. Thus, his defense of divine timelessness is unsuccessful.

II

We have seen that Grudem advocates a doctrine of divine eternity for which he has provided neither adequate biblical nor philosophical warrant. What about Grudem's further claim that "God sees all time equally vividly?" Grudem's exposition of this truth is unfortunately even more logically inconsistent than his treatment of God's timelessness. He appeals to Ps. 90.4 ("a thousand years in your sight are but as yesterday when it is past") and II Peter 3.8 ("with the Lord one day is as a thousand years") to argue that God recalls the past vividly and experiences the present perpetually. He writes,

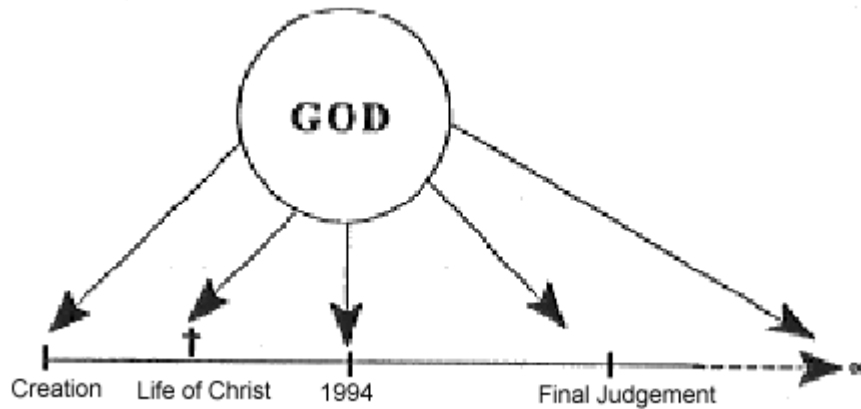
[God] can remember all the detailed events of a thousand years 'as yesterday'. . . . Such a short period of time would pass quickly and all the events would be easily recalled. Yet this is how a thousand years seems [*sic*] to God.

. . . 'One day is as a thousand years'; that is, any one day from God's perspective seems to last for 'a thousand years': it is as if that day never ends, but is always being experienced . . . any one day seems to God to be present to his consciousness forever.

Taking these two considerations together, we can say the following: in God's perspective, any extremely long period of time is as if it just happened. And any very short period of time (such as one day) seems to God to last forever: it never ceases to be 'present' in his consciousness. Thus, God sees and knows all events past, present, and future with equal vividness (p. 170).

Now as an aside, let me say that this seems to me a wholly fanciful exegesis of Ps. 90.4 and II Peter 3.8, which are probably just making the point that to an everlasting being, finite intervals of time are a matter of indifference. More to the point, however, Grudem does not seem to notice that his account is actually incompatible with divine timelessness. Perfect recall of the past and retention of the present describe the experience of an everlasting deity, not a timeless one. A timeless God does not literally remember, retain, or anticipate anything, but has all His knowledge timelessly. A reading of Boethius, Anselm, and Aquinas, all defenders of divine timelessness, would have made this clear. Moreover, Grudem's claim that for God a day lasts forever or is always present in His consciousness is problematic. If this were literally true, then God would not only be grossly mistaken, since today only lasts 24 hours, but worse He would not even know what day in the history of the world really is present, since they would all run together in His experience. Perhaps most importantly, Grudem's argument fails to secure God's knowledge of the future: it only shows at best that as each day unfolds God retains His experience of it forever. This is a completely inadequate conception of divine foreknowledge.

Grudem furnishes what amounts to an alternative and more adequate account by means of a diagram (Fig. II.1, p. 171).



Grudem interprets the diagram to show that "God somehow stands above time and is able to see it all as present in his consciousness" (p. 171). Here I think Grudem is on to something. Philosophers have distinguished between two theories of time, sometimes called the A- and the B-theories, or tensed and tenseless theories of time. According to the B-theory, all events in time--whether past, present, or future relative to us--are equally real and existent. To the people in 1994, 1994 is present, and we are in the future. The passage of time is just a subjective illusion. By contrast, on the A-theory only the present is real. The past has ceased to exist and the future has yet to come to be. Temporal becoming is real. Now it is evident that Grudem's diagram illustrates the B-theory of time: time is spread out like a spatial dimension. And I do think that given a B-theory of time, the timelessness of God is a coherent doctrine. On this view, the entire 4-dimensional, spatio-temporal manifold of events exists tenselessly, and God exists "outside" it and sustains it in being. The problem is that whether the A- or B-theory of time is correct is a hotly debated philosophical issue. If the A-theory is correct, then all events cannot be equally real for God. Theologians who wish to defend a doctrine of divine timelessness or temporality simply cannot therefore avoid this question. Unfortunately, Grudem evinces no knowledge of this debate.

Grudem is also unaware of the philosophical and theological consequences of the B-theory illustrated by his diagram. If we adopt a B-theory, then we must say that there are no tensed facts corresponding to linguistic tenses--no such facts, for example, as that *Lincoln was assassinated* or that *it is now 3:00*. We must hold that we are all victims of the most gigantic and pervasive illusion imaginable, that of temporal becoming, that moments and events really elapse. We must believe that we are all irrational in entertaining feelings of relief or anticipation, nostalgia or dread, since events in the past or future are just as real as the present and, indeed, are present to us at the relevant times. Theologically, we must affirm that the universe is co-eternal with God. To say that the universe began to exist just means that the tenselessly existing four-dimensional manifold has a front edge. But there never obtains a state of affairs of God's existing alone, without the universe. These are conclusions which ought to give serious pause to any would-be advocate of divine timelessness.

In a personal communication, Grudem emphatically repudiates the B-theory of time, stating, "I certainly do not agree" that "past, present, and future events are equally real and equally existent" ("Comments"). But then it is difficult to see how Fig. II.1 does not represent a serious distortion of time, leaving the alleged presence of all events to God obscure.

III

The final element in Grudem's definition of divine eternity is that "God sees events in time and acts in time." Unfortunately, here again Grudem's exposition seems to be logically incoherent. Classical defenders of divine timelessness like Thomas Aquinas would say that God acts timelessly to produce effects in time. Given a B-theory of time, this seems to be a coherent doctrine. But Grudem seems to affirm that God's acts *themselves* are in time: he speaks of "a previous way in which God acted, God's present way of acting, and a future activity that he will carry out, all in time" (p. 172). Or again he affirms that "God predicts his actions at one point in time and then carries out his actions at a later point in time;" He "acts differently at different points in time" (p. 172). Now such a view is logically incompatible with timelessness. If God has different acts at different times, then He is changing. At t_1 He has the property of causing an event E_1 , and at t_2 He no longer has that property; instead He has a property He did not have before, that of causing E_2 . These are real properties, real exercises of causal power. Or look at it this way: at t_1 He knows "I am now causing E_1 ," and at t_2 He knows "I am no longer causing E_1 . I am now causing E_2 ." Thus, His knowledge is changing. Hence, God must be in time.

Grudem tries to elude this objection by drawing a dichotomy between "what God is in his own being (he exists without . . . succession of moments)" and "what God does outside of himself (he creates in time and acts in time . . .)" (p. 172). But changes in a thing's relational properties are just as temporalizing as changes in a thing's intrinsic properties. For example, if Theatetus becomes shorter than Socrates because of an increase in Socrates's height, then Theatetus has undergone a relational change, even if he has himself remained intrinsically unchanged. Such a relational change clearly requires time in order to occur, since Theatetus cannot stand in the relations of *being taller than* and *being shorter than* with respect to Socrates at the same time. In the same way, God existing alone *sans* creation stands in no such relations as *sustaining the universe in being* or *co-existing with the universe*. But once the universe has come to exist, God does, it seems, stand in such relations. Even if creating the universe involves no intrinsic change in God, it does involve an extrinsic, or relational, change and is therefore temporalizing. It is precisely for this reason that Thomas Aquinas insisted that God sustains no real relations with the universe, which solution seems wholly implausible in view of the universe's being caused by God.^{3} Grudem does not embrace Thomas's solution, but neither does he offer any other solution to the problem of God's undergoing relational change. Moreover, as we saw above, changes in God's acts would involve intrinsic changes in God. The actions of an agent involve exercises of causal power on the part of that agent. Thus, if he acts at different times, he is changing in his exercises of causal power, which is an intrinsic change in a being, as the classical defenders of divine timelessness realized. Hence, Grudem's position that "although God in his own being is outside of time, his actions are actions that occur within the creation and within time which is part of creation" is untenable ("Comments").

So it seems that in order to maintain a coherent doctrine of divine timelessness, Grudem should have affirmed that while God's acts are timeless, His effects are in time, a claim which is comprehensible given the B-theory of time.

IV

In conclusion, then, Grudem's treatment of divine eternity is multiply flawed both in its formulation and defense. This does not imply that the doctrine of divine timelessness is either incoherent or indefensible. The same sort of weaknesses in formulation and defense could have been shown to characterize, for example, Clark Pinnock's defense of divine temporality.

I hope only to have shown that Grudem's own attempt to formulate and defend his view of God's eternity is in need of major revision.

Endnotes

{1} Wayne Grudem, *Systematic Theology* (Grand Rapids, Mich.: Zondervan, 1994). Page references in the text will be to this volume. I am indebted to Dr. Grudem for his critical comments on a first draft of this paper (Wayne Grudem to William Craig, October 1, 1996). Citations of these comments will appear as "Comments."

{2} Isaac Newton, *Sir Isaac Newton's 'Mathematical Principles of Natural Philosophy' and his 'System of the World,'* trans. Andrew Motte, rev. with an Appendix by Florian Cajori, 2 vols. (Los Angeles: University of California Press, 1966), 1:6.

{3} For discussion see my "The Tensed vs. Tenseless Theory of Time: a Watershed for Conceptions of Divine Eternity," in ed. Robin Le Poidevin (Oxford: Oxford University Press, forthcoming).

Eternal God: A Study of God without Time.

By Paul Helm



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Paul Helm's *Eternal God* is an important defense of the construal of divine eternity as timeless. I show that Helm's construal presupposes a tenseless (or B-Theory) of time without sufficient justification.

Review: *Eternal God*, by Paul Helm. *Journal of the Evangelical Theological Society* 36 (1993): 254-255.

Writing in the spirit of Jonathan Edwards, Helm provides a philosophical defense of the coherence and plausibility of the view that God is a timeless, omniscient being whose existence is logically inconsistent with libertarian freedom in any of His creatures. As the title of the book suggests, the fulcrum of Helm's case is his defense of divine timelessness.

Biblical scholars may shake their heads at the prospect of anyone's construing the biblical notion of divine eternity in terms of timelessness, rather than omnitemporality. But in chapter 1, "The Issue of Divine Eternity," Helm argues very persuasively that the biblical writers neither accepted nor rejected the idea of divine timelessness, since they lacked a "reflective context" in which this question needed to be addressed at all. The biblical writers consistently *speak* of God as in time, but, Helm quite correctly points out, they with equal consistency speak of God as in space, too, and yet the vast majority of theologians and philosophers do not construe divine omnipresence as God's being spatially extended, but consider Him as transcending space. Helm contends that we ought analogously to construe divine eternity as timelessness because this doctrine, by guaranteeing divine immutability, offers the necessary metaphysical underpinning for God's functioning as the biblical God. To carry his case, then, Helm must show not merely that divine timelessness is logically coherent, but that there are good reasons to embrace the doctrine.

Unfortunately, much of Helm's discussion of the coherence of divine timelessness is undermined by his failure to do the necessary, preliminary spadework concerning certain key issues in the philosophy of space and time; for example, an adjudication of the objectivity of temporal becoming and the ontological status of the future. His discussion of "Omniscience and the Future" in chapter 7 suggests that Helm wants to hold to a so-called A-theory of time, according to which the future is unreal and objective becoming exists. But his arguments for the coherence of divine timelessness seem to presuppose a B-theory of time, according to which all events--past, present, and future--are equally real and what exists "now" is purely a relative matter of subjective consciousness.

For example, his handling of tensed sentences and temporal indexicals in chapter 3 "Indexicals and Spacelessness" and chapter 5 "Eternity, Immutability and Omniscience" is B-theoretic in nature. He endorses D. H. Mellor's proposal for specifying tenseless truth conditions of tensed sentences and treats indexicals like "now" not as tensed expressions, but as the analogues of spatial indexicals like "here." He also regards the temporal distinction between past and future as analogous to the spatial distinction between before and behind.

In chapter 4 "Eternity and Personality," after effectively refuting objections that a timeless being cannot be personal based on considerations of memory, purpose, and knowledge, Helm proposes to solve the objection that a timeless being could not causally create a universe which unfolds serially in time by asserting that the universe as a whole does not exist in time and that God produces the whole universe, the entire temporal matrix, by a single, timeless act of causality, rather than producing each event by a separate exercise of causality (cf. p. 27). This solution is coherent, I think, but only if one assumes a B-theory of time, which Helm never discusses nor justifies.

In any case, why regard God as timeless? Helm argues cogently, it seems to me, that only if God is timeless can He be immutable in a very strong sense. But I do not see that Helm provides any warrant for adopting so strong a doctrine of immutability in preference to less stringent formulations of that doctrine. Helm also asserts that only a timeless God can know the world's future (p. 94), but the reader will search in vain for any argument why a temporal God cannot know the future, especially if He has, as Helm believes, decreed everything that shall happen. In short, Helm's case for embracing divine timelessness is disappointingly weak.

Chapters 6-8 elaborate the theme of God's knowledge of future contingents. Unfortunately, his discussion seems quite confused and interacts with the current, lively debate over this

problem only superficially. Helm argues effectively, I think, that divine timelessness does not solve the problem of theological fatalism because for any time t it can be truly asserted before t that God knows timelessly what happens at t , which is all the fatalist needs. Oddly enough, however, he does not think this argument can be reduced to logical fatalism because if propositions are timelessly true, they are not temporally necessary. But the same gambit may be played here as with God's timeless knowledge: prior to t it may be truly asserted that it is timelessly true that some event happens at t . Nor, *pace* Helm, does logical fatalism hold that all propositions are logically necessary (*i.e.*, there is only one possible world), but that they are temporally necessary. Helm makes a half-hearted pass at discussing temporal necessity and hard/soft facts, but does not advance the discussion. Most amazingly, however, Helm appears to concede in the end that divine foreknowledge "perhaps . . . can be reconciled with human indeterministic freedom and logical . . . fatalism likewise disproved" (p. 142), which seems to give away his whole case!

What Helm winds up arguing is that foreknowledge *which is based on God's foreordination of the future* is incompatible with indeterministic human freedom. But only Thomists (and perhaps some Augustinians) should care to dispute that claim! The point is that Helm has offered no justification at all for adopting such a model of foreknowledge (unless he is confusing the future's being determinate with its being determined). Thus, it is not the existence of a timeless, omniscient God which is inconsistent with libertarian freedom, but the model of foreordination adopted by Helm. Chapter 9 "Timelessness and Human Responsibility" is a thought-provoking attempt to show that if atheistic compatibilism is consistent with human responsibility, then so is theistic compatibilism, and thus God ought not to be blamed for decreeing a world involving human sin. (Helm recognizes that that is a big "if"!)

Helm's discussion of "Divine Freedom" in chapter 10 is hampered by his inadequate grasp of the counterfactuals involved in God's freedom to actualize other worlds; but chapter 11 "Referring to the Eternal God" is a helpful discussion of the fashionable atheistic objection that God cannot be identified.

The value of Helm's book is limited by his failure to discuss several key issues (*e.g.*, middle knowledge or proposals for handling personal and temporal indexicals like D. Lewis's distinction between knowledge *de se* and *de dicto*). On a more minor key, the book is marred by a surprising number of printer's errors and Helm's habit of writing in sentence fragments.

God and Real Time

William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started

their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Whether God is timeless or temporal depends on whether an A-Theory or B-Theory of time is correct, where the former posits tensed facts and the latter only tenseless facts. Given the superiority of the A-Theory, it follows that God is temporal. But since the Special Theory of Relativity relativizes simultaneity to reference frames, the question arises as to which "now" is God's "now"? In order to answer that question, we must distinguish between time and our measures of time. Relativity concerns only measured time and so does not affect God's real time. How does God's time relate to measured time? Contra Alan Padgett, God's time must coincide with a measured time, most plausibly the cosmic time of the General Theory of Relativity.

"God and Real Time." *Religious Studies* 26 (1990): 335-347.

Introduction

While certain of the traditional attributes of God such as omnipotence or omniscience (particularly divine foreknowledge) have been thoroughly--and, one is tempted to say, nearly exhaustively--analyzed and defended in recent philosophical literature, others of the divine attributes such as God's eternity have received scant and generally superficial analysis.^{1} Current discussions of God's eternity have been for the most part carried out in almost complete ignorance of the philosophy of space and time and without any profound knowledge of Relativity Theory and its analysis of time^{2}--a remarkable shortcoming, when one thinks about it, for how can one pretend to formulate an adequate doctrine of God's eternity and His relationship to time without taking cognizance of what modern philosophy and science have to say about time?

Now Alan Padgett, a doctoral candidate under Richard Swinburne, has attempted to remedy that lack by presenting, in full conversation with philosophical and scientific discussions of time, a view of divine eternity which he characterizes as "relative timelessness."^{3} As one who has recently been working in this same area, I wish to endorse the direction in which Padgett is moving and to offer some refinements of this view.

God's Timeless Eternity: A- vs. B-Theory of Time

Padgett rejects the classical Plotinian-Augustinian analysis of divine eternity in terms of timeless existence, a view he calls "absolute timelessness." He deems the classical analysis inadequate because God, in order to sustain created things, which are ever changing in their ontological status, must Himself change in His activity and cannot therefore be timeless.

What Padgett's article does not make clear, however, is that this line of argument goes through only if one has made a prior commitment to an A-theory of time.^{4} According to the A-theorist, temporal becoming is a real and objective feature of the universe; transience is essential to the nature of time, a truth expressed metaphorically by saying that time "flows." Temporal properties of events cannot be adequately analyzed in terms of *earlier than*, *simultaneous with*, and *later than* alone, but must include reference to *past*, *present*, and *future*, which are not merely indexical expressions but are irreducibly tensed. The present represents the edge of becoming, and future events do not merely not *yet* exist, rather they do not exist *at all*. By contrast, according to the B-theorist, temporal becoming is mind-dependent and purely subjective. Time neither flows nor do things come to be except in the

sense that we at one moment are conscious of them after not having been conscious of them at an earlier moment. Things simultaneous with different moments on the time-line are equally existent and are tenselessly related to each other by the relations of *earlier than*, *simultaneous with*, and *later than*, to which *past*, *present*, and *future* can be reduced. Anything that from our perspective has, does, or will exist in the universe in fact simply *exists* (tenselessly).

I am convinced that the decision between an A- or a B-theory of time constitutes a fundamental watershed for our conception of divine eternity. For if we adopt a B-theory of time, most of the typical arguments against divine timelessness, including Padgett's, are doomed to failure. For if every event in the space-time manifold is equally real and existent and God transcends space and time, then He can easily be conceived to cause and sustain (tenselessly) every space-time event, regardless of its location. Such a conception implies neither that things always exist nor that things are changeless, for to exist always would be to exist at every temporal moment (which most things do not), and things do change in the sense that they have different properties at different temporal moments, in the same way that the landscape can be said to change from east to west. On the B-theory of time, the different ontological status which things possess at different times is interpreted to mean that some entity x exists (tenselessly) at some time t_n , but does not exist (tenselessly) at, say, t_{n-1} or t_{n+1} . Anything in the space-time manifold (and, indeed, space-time itself) exists only because of God's creatorial power, as He timelessly sustains it in being.

By contrast, on the A-theory of time, the concept of a timeless God who is really related to the world does seem incoherent. For given that future states of the universe actually do not exist, God cannot be causing them (even tenselessly) to exist; otherwise, they would in fact exist at their respective times. The same holds for past states of the universe. Hence, Aquinas's argument that God causes timelessly things to come to be at their respective times only succeeds in proving that things caused timelessly need not exist everlastingly and in fact betrays a B-theoretic point of view.^{5} Even if God wills changelessly from eternity that a temporal event exist, there must be conjoined to that will an exercise of divine causality at the moment of the thing's creation if it is to genuinely come to be at that moment rather than exist tenselessly at that moment. About the only way to stave off this conclusion would be to deny with Aquinas that God is really related to the world, a wholly implausible move system-dependent upon an elaborate Aristotelian metaphysic.^{6}

It can be plausibly argued, I think, that the A-theory of time is both philosophically and theologically superior to the B-theory. Philosophically, one should agree with D. H. Mellor that "Tense is so striking an aspect of reality that only the most compelling argument justifies denying it: namely that the tensed view of time is self-contradictory and so cannot be true"^{7} and then proceed to show that in fact all such attempts to elicit a contradiction, such as McTaggart's, fail,^{8} leaving us secure in our naturally intuitive A-theoretic understanding. No B-theorist, on the other hand, has successfully answered, in my estimation, the charge that his theory is incoherent because the mind-dependence of physical becoming requires a real becoming in the subjective contents of consciousness.^{9} In favor of the A-theory, one might argue that it gives the most adequate analysis of personal identity^{10} and that the tensedness of our language and experience is uneliminable.^{11}

Theologically, there seems to be a decisive reason for Christian theists' rejecting the B-theory, namely, that it cannot give an adequate analysis of the biblical doctrine of *creatio ex nihilo*. On the B-theory *creatio ex nihilo* is reduced to the ontological dependence of the creation upon God and the space-time continuum's having a front edge. But the creation as a whole is

co-eternal with God in the sense that it exists as tenselessly as He. There is no state of affairs in the actual world which consists of God existing alone without creation. But such an analysis is a wholly inadequate understanding of the biblical doctrine that the created order began to exist and was brought into being by God. Though Aquinas (unlike Bonaventure) thought that one could not *prove* philosophically this aspect of the doctrine of *creatio ex nihilo*, he was nevertheless firmly committed to it on the basis of revelation, a fact which contemporary theologians, who sometimes appeal to Aquinas to justify their undue diffidence on temporal *creatio ex nihilo*, tend to forget.{12}

Padgett's argument against divine timelessness, then, is sound only if the case for an A-theory is successful. What the reader of Padgett's article will not realize is that Padgett himself is fully aware of this point and argues for the superiority of the A-theory in his unpublished thesis. On this point, therefore, we are in fundamental agreement.

God's Time and Ours

If the A-theory of time is correct, then, and God is in time, the question naturally arises in the context of Relativity Theory, "Whose time is He in?" For according to that theory, events which are present for an observer in one inertial frame may be future for an observer in another inertial frame. Certain events will even occur in reverse temporal order relative to some frames as compared to others. An observer at rest relative to an observer who goes on a high speed round trip journey will experience moments of time or "now's" to which there literally exist no correlated, simultaneous moments in the experience of the traveller.

According to Einstein, none of these perspectives is privileged, and there is, therefore, no absolute "now" in the universe. Absolute simultaneity has been banished from the universe in favor of simultaneity relative to a reference frame. There is, for example, no event happening "now" in an absolute sense on the planet Neptune or even on the other side of the earth. For observers in relatively moving reference frames will at this same space-time point draw different planes of simultaneity in space-time and thus measure different events, say, on Neptune, to be occurring in their respective "now's." But which, then, is God's "now"?

Ontological Time and Measured Time

It is the merit of Padgett's work that he has cut this Gordian knot by distinguishing between "time" and "measured time." {13} Time itself, according to Padgett, has to do with God's everlasting duration; measured time is clock-time, time according to some metric. Padgett argues that while God is in time, He is not in any measured time, and, therefore, His "now" is not to be identified with any of the relative "now's" of measured time.

This distinction between ontological time and measured (or empirical) time seems to me an extremely important insight, which is a salutary counterbalance to the universally repeated and extravagant assertions that STR has forced us to abandon the classical views of time and space. {14} This erroneous inference is rooted precisely in the failure to draw the sort of distinction which Padgett has emphasized. That failure can be laid at Einstein's own doorstep. I find it surprising that anyone reading Einstein's 1905 paper can think that Einstein *demonstrated* that absolute simultaneity does not exist and that time is therefore relative to reference frames. {15} For the entire theory depends upon acceptance of Einstein's arbitrary (and, indeed, highly counter-intuitive) definition of simultaneity, {16} coupled with a philosophical positivism of Machian provenance {17} according to which a notion like absolute simultaneity is meaningless if it is empirically undetectable. Since the æther frame of

nineteenth century physics could not be empirically detected, Einstein discarded it as meaningless and along with it absolute simultaneity, which had reference to events occurring simultaneously in the æther frame. By redefining simultaneity in terms of the light signal method of synchronization, Einstein was able to give empirical meaning to the notion of simultaneity, but the simultaneity which emerges from the theory is relative due to the invariant velocity of light. Since light signals are measured as possessing the velocity c regardless of the motion of the emitter or receiver of the signals, two relatively moving observers will measure the same event to be occurring at different times, which runs counter to the traditional notion of simultaneity.{18}

One who is not a positivist and who therefore rejects Einstein's definitions would regard these relatively moving observers as deceived due to the nature of their measurements, which fail to detect the true time.{19} In a real sense, he would not regard Einstein's theory as a theory about time and space at all, but, as Frank put it, as "a system of hypotheses about the behavior of light rays, rigid bodies, and mechanisms, from which new results about this behavior can be derived." {20} Trapped in our locally moving frames, we may be forced to measure time by devices which are inadequate to detect the true time, but that in no way implies that no such time exists. The fact that uniformly moving clocks run slow says more about our clocks than about the nature of time. Einstein's theory may thus be regarded as pragmatically useful and scientifically fruitful without considering that absolute simultaneity and absolute time have thereby been abolished.

It might be thought that Einstein's positivism was merely a historically accidental feature of the theory, but no part of the philosophical foundations of that theory. Such an attitude would, however, be mistaken. For as J. S. Bell points out, it is primarily this philosophical positivism which serves to distinguish the Einsteinian interpretation of STR from the Lorentzian interpretation, which differentiates between ontological time and measured time:

The difference of philosophy is this. Since it is experimentally impossible to say which of two uniformly moving systems is *really* at rest, Einstein declares the notions 'really resting' and 'really moving' as meaningless. For him, only the relative motion of two or more uniformly moving objects is real. Lorentz, on the other hand, preferred to view that there is indeed a state of *real* rest, defined by the 'aether,' even though the laws of physics conspire to prevent us indentifying it experimentally. The facts of physics do not oblige us to accept one philosophy rather than the other.{21}

Since the Lorentzian interpretation of STR is empirically equivalent to the Einsteinian interpretation, the only way the latter can discount the former is by means of a positivist critique of the notions of absolute simultaneity, and so forth. According to Lawrence Sklar, "Certainly the original arguments in favor of the relativistic viewpoint are rife with verificationist presuppositions about meaning, etc. And despite Einstein's later disavowal of the verificationist point of view, no one to my knowledge has provided an adequate account of the foundations of relativity which isn't verificationist in essence." {22} "I see no way of rejecting the old aether-compensatory theories . . . without invoking a verificationist critique of some kind or other." {23}

Now this constitutes a truly serious drawback of the Einsteinian interpretation. For as Healey observes, although positivists tried to restrict the content of scientific theories to ensure that they were meaningful, "More recently positivism has come under such sustained attack that opposition to it has become almost orthodoxy in the philosophy of science." {24} Philosophers

of religion hardly need to be reminded of positivism's untenability in view of its radical critique of religious language, which would regard Padgett's distinction between God's time and our time as cognitively meaningless.

Given that God is in time, therefore, it is evident that His is not the time which is determined by Einstein's operational definitions and subject to dilation, the relativity of simultaneity, and inversion of events. Rather, God's time is the true A-series time, determined by the succession of events in the divine consciousness and activity and characterized by the absolute "now" of the present and the edge of becoming. His is, to borrow D. H. Mellor's phrase, "real time."

Therefore, I think it quite unfortunate that Padgett has chosen to call his view "relative timelessness," for it is precisely the opposite. It is God who exists in the true, ontological time, while we finite observers, restricted to our locally moving reference frames and dependent upon light signal synchronization of clocks, have to make do with our manufactured measured time. Contrary to Padgett, ordinary usage of time concepts cannot justify calling God relatively timeless, for our naturally intuitive view of time is an A-theoretic point of view, and this is precisely the time in which God lives. Hence, the view Padgett presents is better labeled as "True Temporality."

God's Time and Cosmic Time

But how, then, does God's time relate to ours? Padgett answers that while we are in God's time, God is not in any measured time. But this response seems to me in fact false. From God's perspective in real, A-series time, there is an absolute present in which He is now conscious of what is happening in the universe, and He is now causally sustaining the events in the universe. But if, as we saw in our critique of divine timelessness, God's causally sustaining the universe in being is simultaneous with the events' being so sustained, then there must be an absolute, cosmic "now" which describes the state of the universe as it is present to God. Events future to this moment do not at all exist, since God has not yet caused them to be. But is there a frame of reference in the universe which yields a measured time which can naturally be associated with the succession of such moments? Yes, there is. It is not, indeed, the inertial frame of any spatially local observer, rather it is the reference frame of the cosmic expansion of space itself. The relativity of simultaneity depends upon the assumption that there is no preferred reference frame; but if there exists a preferred frame, as the Lorentzian interpretation would have it, then the relations of simultaneity in it would be absolute, and relativity would apply to all other frames. But the frame associated with the cosmic expansion seems naturally suited to such a privileged position. Michael Shallis explains,

It is also possible, however, to take a single clock as standard, taking it to define a universal time coordinate, and to relativize everything to it Of course, the choice of a coordinate time is, to a certain considerable extent, arbitrary -- in principle, one could take any clock as one's standard. But in a cosmological context, it is natural to take as standard a clock whose motion is *typical* or *representative* of the motion of matter in general--one which simply 'rides along,' so to speak, with the overall expansion of the universe. {25}

We must not forget that Einstein proposed his Special Theory long before the cosmic expansion was discovered, so that in the absence of the characterless and moribund æther there seemed to be no empirical basis for positing any universal frame beyond the multitude of locally moving frames. But with the discovery that the universe is expanding, it became possible to envisage a universal reference frame by imagining observers to be associated with

fundamental particles (that is, galaxies or galactic clusters) having mutual recessional velocities. Indeed, the "gas" constituted by these fundamental particles is at rest relative to the expansion of cosmic space and therefore *is* an æther. Already in 1920 Eddington recognized that the General Theory of Relativity posited a sort of cosmic time, but he objected that such a cosmic time was unknowable and, hence, irrelevant for observers in locally moving frames.{26} Within a few years, however, the expansion of the universe predicted by Einstein's field equations (minus the cosmological constant) had been confirmed by observational astronomy, thus providing a sort of cosmic clock which the abandonment of the æther theory seemed to have rendered otiose. Of course, it might still be objected that this universal time is unknowable and, hence, irrelevant. But not only does this objection seem to be infected with a defunct verificationist attitude, but it does not even appear to be true. Recent observations have disclosed an apparent anisotropy in the cosmic microwave background radiation which is due to the earth's motion relative to the cosmic reference frame, resulting in what has aptly been characterized as a "new æther wind" of approximately 360 kilometers per second.{27} P. C. W. Davies comments,

At any given place in the universe, there is only *one* reference frame in which the universe expands isotropically. This privileged reference frame defines a privileged time scale (the time as told by a clock at rest in that frame). Two separated places have their privileged reference frames in mutual motion, because of the expansion of the universe. Nevertheless, the time measured by the entire collection of imaginary standard clocks are obviously correlated such that the global condition (e.g. average separation of two galaxies) of the universe appears the *same* at equal times as registered by every privileged clock (assuming they are all properly synchronized). Happily, the earth is moving very slowly relative to the local privileged frame in our vicinity of the universe, so that Earth time is a fairly accurate measure of cosmic time.{28}

Not only, then, does a cosmic time exist, but we even have a pretty fair idea of what time it is.

Given the existence of this cosmic time, it is my contention that the moments of God's real, A-series time, while not perhaps *identical* with the moments of measured, cosmic time, are nonetheless *coincident* with them. God's ontological time clearly exceeds cosmic time in that the former may have preceded the latter (imagine God leading up to creation by counting "1, 2, 3, . . ., *fiat lux!*"), but once cosmic time comes to exist, its moments would coincide with the moments of real time. How could they fail to do so? If the duration of the universe is measured in cosmic time to be 15 billion years since the singularity, then is not the duration of God's creatorial activity in real time the same duration? In God's "now" the universe has (present tense) certain specific and unique properties, for example, a certain radius, a certain density, a certain temperature background, and so forth; but in the cosmic "now" it has all the identical properties, and so it is with every successive "now". Is it not obvious that these "now's" coincide and designate the one and the same present?

Perhaps we can state this consideration more formally by means of the following principle:

P: For any constantly and non-recurrently changing universe *U* and temporal intervals *x*, *y* large enough to permit change, if the physical description of *U* at *x* is the same as the physical description of *U* at *y*, then *x* and *y* coincide.

Given that in real time there is a temporal interval or duration during which a certain physical description of the universe is true and that in cosmic time a similar interval exists, it follows

from P that those intervals of real and cosmic time coincide. Notice that the argument makes no reference to and therefore does not depend upon any particular metrication of time. It seems to me, then, that real time and cosmic time ought naturally to be regarded as coincident since the inception of cosmic time.

Padgett's objections to this understanding of the relation of God's time to measured time seem to be quite weak. He objects, first, that God is not subject to the laws of nature, as anything in measured time must be. He argues that since God acts freely rather than uniformly and has the power to alter the laws of nature, He cannot be in any measured time. But why could not God's time contain its own intrinsic metric, as Newton believed, of which physical clocks provide a more or less 'sensible measure'? {29} In this case, an ideal physical clock would measure God's time. Moreover, the premiss that anything in measured time must be subject to the laws of nature is a *non sequitur*. It is the *instrument* of measurement, that is, one's *clock*, that must be subject to the laws of nature, not the *object* of one's measurement, which could be a wholly random process. To say that 15 billion years ago, God created the universe is not to say that God is subject to the laws of planetary motion, but is merely to apply to God's time a conventional metric which marks off a duration equal to the duration of an earthly orbit about the sun. It is to say that the duration during which God thought or did something is equal, say, to the duration it would take the earth to complete a certain number of orbits. Even on a purely mundane level, global proper time near the singularity is not a direct counting of simple and actual phenomena, for the earth will not have actually completed, say, 10^{10} orbits in the past 10^{10} years and even a Cesium atomic clock would not have functioned at very early intervals. Rather global proper time is an elaborate mathematical extrapolation from physical phenomena. {30} In a similar way, any arbitrarily chosen metric may be applied to the duration of God or the universe.

Padgett anticipates such an objection, surmising that the universe could be considered to act as a kind of clock to measure the duration of God's time. But let us be quite clear about this, for the universe does not merely *act* as a clock for God. The universe *is* a clock; it is God's clock. For example, some conventional unit of God's time could be the time it takes the radius of the universe to increase by a certain factor. Padgett retorts that it does not follow that because two events e_1 and e_2 are separated by one hour in one reference frame, they are separated by one hour in God's time. He appeals to time dilation between relatively moving frames to show that the duration between two identical events can be variously measured. But the analogy fails here, since we are not comparing two relatively moving frames using light signals to synchronize their respective clocks. Since God is really related to the universe and is not moving with respect to it, there exists no basis for any relativity of simultaneity between His present and the cosmic present. God is an unembodied Mind utilizing a physical clock.

Padgett objects that cosmic time is contingent and applies to our universe alone. We cannot, therefore, assume that it applies to anything beyond it. But we have no reason, biblically or philosophically, to think that other universes exist. Parsimony justifies the assumption that ours is the only universe. In that case it follows only that real time and cosmic time *contingently* coincide; there are possible worlds in which they do not. {31} But why is that an objection? Since God's decision to create at all was free, cosmic time is essentially contingent; indeed, I should say that even real time is contingent. {32} But given that cosmic time exists, there is no objection to holding that God's time contingently coincides with it for the duration of the cosmos.

Padgett's second objection to this view is that measured time is relative to a particular reference frame, which need not apply to God. He argues that because God transcends space, His life need not occur in our four-dimensional space-time continuum. Therefore, His life is not limited to the temporal dimension of our space-time.

This objection raises some interesting questions about divine omnipresence,^{33} which we may forego. One might also question whether the objection takes sufficient cognizance of the difference between parameter time and coordinate time.^{34} In Newtonian mechanics time functions as a parameter, which is wholly independent of space. In relativity theory, however, time functions not merely as a parameter, but also as a coordinate which is united with the spatial coordinates. That theory is, however, susceptible to reformulation wholly in terms of parameter time. One could thus argue that God is in measured time, but that one means thereby parameter, not coordinate, time, so that God's independence from space is preserved. The essential point that needs to be made, however, is that God's time may be measured by coordinate time without His thereby being measured by spatial coordinates as well. For on the understanding I have proposed, the moments of ontological time may be thought to coincide with the moments of measured time without being identical with them. Thus, even if it is true that a being whose duration is measured exclusively by coordinate time must have spatial coordinates as well, it does not follow that a being whose duration in ontological time coincides with his duration in measured time must also be in space. Again, the fact that this coincidence is contingent constitutes no objection, but is in fact entailed by traditional theism.

Thus, it seems to me that Padgett's view needs to be refined with regard to the relationship between ontological time and measured time, and, hence, between God's time and ours. Real time is the A-series time in which God thinks and acts and in which things come into being; the moments of this time coincide since the beginning of the universe with the moments of cosmic time determined by ideal clocks stationary with respect to the expansion of space itself.

Conclusion

I think, therefore, that Padgett has gone a long way toward formulating a philosophically sound and scientifically informed doctrine of divine eternity which is also faithful to the biblical revelation. The philosophical and theological grounds for preferring an A-theory of time also provide justification for rejection of the Plotinian-Augustinian doctrine of divine timelessness because that theory seems incompatible with a timeless God's real relation to the world. God thinks and acts in real time, that is, the A-series of temporal moments, in which becoming, absolute simultaneity, and the absolute "now" exist, and His relationship to time should be characterized as "true temporality." In contrast, by conventionally defining simultaneity in terms of the light signal method of clock synchronization and by adopting arbitrary metrics for quantizing time, men have developed a measured time, which is extremely malleable for relatively moving time-keepers. Since God is not in any inertial frame, His time, ontological time, is not subject to these effects. Nevertheless, in our universe, due to its isotropic expansion from an initial singularity, there contingently exists a cosmic time which records the successive moments in the history of the universe. Although ontological time may precede (or succeed) measured cosmic time--whether ontological time has a beginning is an issue we have not tried to adjudicate in this piece--, nonetheless the moments of ontological time and cosmic time will coincide for the duration of cosmic time, since they concern the identical succession of states in the universe. To object that this makes God subject to the laws of nature is a *non sequitur*, since it is only one's clock that need be so

subject. To object that this view traps God in space-time is equally erroneous, since ontological time only contingently coincides with cosmic time, so that God in ontological time can exist at a moment which coincides with a moment of measured time without thereby having to possess spatial co-ordinates as well. One of the interesting implications of this understanding is that a Lorentzian rather than an Einsteinian interpretation of the Special Theory of Relativity is correct: there is a preferred reference frame in which light is propagated with the velocity c , and relativistic effects are due to local motion relative to this frame. With these refinements, Padgett's view of divine eternity seems to be coherent and plausible.

Endnotes

{1} Notice that literature on divine eternity is so scant that it does not even merit a mention in William J. Wainwright's *Philosophy of Religion: an Annotated Bibliography of Twentieth Century Writings in English* (New York: Garland Publishing, 1978).

{2} See, for example, Nelson Pike, *God and Timelessness* (New York: Schocken Books, 1970); Stephen T. Davis, *Logic and the Nature of God* (Grand Rapids, Mich.: Wm. B. Eerdmans, 1983); Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 (1981):429-58.

{3} Alan Padgett, "God and Time: Toward a New Doctrine of Divine Timeless Eternity," *Religious Studies* 25 (1989): 209-15; see further idem, "Divine Eternity and the Nature of Time" (Ph.D. thesis, Oxford University, 1988) [now published as *God, Eternity, and the Nature of Time* (New York: St. Martin's, 1992)].

{4} The distinction between the A- and B-series of temporal events was originally made by J.M.E. McTaggart, *The Nature of Existence*, 2 vols., ed. C.D. Broad (Cambridge: Cambridge University Press, 1927; rep. ed.: 1968), Book V, chap. 33; for discussion, see C.D. Broad, *Examination of McTaggart's Philosophy*, 2 vols. (Cambridge: Cambridge University Press, 1938; rep. ed.: New York: Octagon Books, 1976), 2:265-344. See also Richard Gale, "Introduction" to Section II: "The Static versus the Dynamic Temporal," in *The Philosophy of Time*, ed. R. Gale (London: Macmillan, 1968), pp. 65-85.

{5} On the connection between classical conceptions of divine eternity and a B-theory of time, see Wm. L. Craig, *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*, Brill's Studies in Intellectual History 7 (Leiden: E.J. Brill, 1988), pp. 116-21; idem, "St. Anselm on Divine Foreknowledge and Future Contingency," *Laval théologique et philosophique* 42 (1986):93-104. See also Delmas Lewis, "Eternity, Time and Tenselessness," *Faith and Philosophy* 5 (1988):72-86.

{6} For a brief critique, see Wm. L. Craig, "God, Time, and Eternity," *Religious Studies* 14 (1979):497-503.

{7} D.H. Mellor, *Real Time* (Cambridge: Cambridge University Press, 1981), p. 5.

{8} See refutation in Paul Horwich, *Asymmetries in Time* (Cambridge, Mass.: MIT Press, 1987), pp. 26-27. Horwich's own rejection of the A-theory is based on the mistaken view that an A-theory implies the denial of semantic bivalence for future contingent propositions.

{9} Such an objection needs to be formulated more carefully, but is adumbrated in Milic Capek, *The Philosophical Impact of Contemporary Physics* (Princeton: D. Van Nostrand, 1961), p. 165; idem, "Introduction," in *The Concepts of Space and Time*, ed. M. Capek, Boston Studies in the Philosophy of Science 22 (Dordrecht: D. Reidel, 1976), p. XLVII; Frederick Ferré, "Grünbaum on Temporal Becoming: A Critique," *International Philosophical Quarterly* 12 (1972):432-33; James A. McGilvray, "A Defense of Physical Becoming," *Erkenntnis* 14 (1979):275-99.

{10} See Ronald C. Hoy, "Becoming and Persons," *Philosophical Studies* 34 (1978):269-80.

{11} See Quentin Smith, "Problems with the New Tenseless Theory of Time," *Philosophical Studies* 52 (1987):371-92 and the therein cited literature.

{12} See, for example, John Polkinghorne, "Cosmology and Creation," paper presented at the conference "The Origin of the Universe," Colorado State University, Ft. Collins, Colorado, 22-25 September, 1988. The proceedings will probably be published by SUNY Press.

{13} This much misunderstood distinction was carefully drawn by Newton himself in the *Scholium* to the Definitions at the beginning of his *Principia* (Isaac Newton, *Sir Isaac Newton's 'Mathematical Principles of Natural Philosophy' and his 'System of the World'*, trans. Andrew Motte, rev. with an Appendix by Florian Cajori, 2 vols. [Los Angeles: University of California Press, 1966], pp. 6-12). Cf. M.F. Cleugh, *Time and its Importance in Modern Thought* (London: Methuen, 1937), pp. 29-67; Philipp Frank, *Philosophy of Science* (Englewood Cliffs, N.J.: Prentice-Hall, 1957), pp. 140-43; Herbert Dingle, "Time in Philosophy and Physics," *Philosophy* 54 (1979):99-104.

{14} Typical are the recent assertions by Hawking: ". . . the theory of relativity put an end to the idea of absolute time The theory of relativity does . . . force us to change fundamentally our ideas of space and time" (Stephen Hawking, *A Brief History of Time* [New York: Bantam Books, 1988], pp. 21, 23).

{15} A. Einstein, "On the Electrodynamics of Moving Bodies," in *The Principle of Relativity*, trans. W. Perrett and G. B. Jeffery with Notes by A. Sommerfield (New York: Dover Publications, 1952), pp. 37-65.

{16} Two spatially separated events are simultaneous iff they both occur at the same clock times recorded by two synchronized clocks A and B situated respectively at the places of the events, where A and B are stationary relative to each other and B reads the same as A at the temporal mid-point of the time required for A to send a light signal to B and receive it back again. The assumption is that A and B are not *both* moving with reference to the æther-frame, so that the travel-time of the signal is not greater (or less) on the return leg of its journey. Now clearly, unless one is an operationalist, this is not what simultaneity *means*, and unless one is a positivist, the underlying assumption of the definition is wholly gratuitous.

{17} The influence of Mach's positivism upon Einstein and his Special Theory of Relativity is widely recognized by historians of science, but is surprisingly rarely discussed by philosophers exploring the philosophical foundations of that theory. For discussion, see G. Holton, "Mach, Einstein, and the Search for Reality," in *Ernst Mach: Physicist and Philosopher*, Boston Studies in the Philosophy of Science 6 (Dordrecht: D. Reidel, 1970), pp. 167-77; P. Frank, "Einstein, Mach, and Logical Positivism," in *Albert Einstein: Philosopher-*

Scientist, ed. P.A. Schilpp, Library of Living Philosophers 7 (LaSalle, Ill.: Open Court, 1949), pp. 271-86; H. Reichenbach, "The Philosophical Significance of the Theory of Relativity," in *Albert Einstein*, pp. 289-311.

{18} For alternative operational definitions of "simultaneity" and "synchronization" which preserve absolute simultaneity see T. Sjödin, "On the One-Way Velocity of Light and its Possible Measurability," paper presented at the conference *Physical Interpretations of Relativity Theory*, British Society for the Philosophy of Science, Imperial College, London, 16-19 September, 1988.

{19} This is, in fact, the modern Lorentzian interpretation of STR, which holds that velocity affects one's measuring devices so that moving rods contract and moving clocks run slow. Such an interpretation does not commit one to a substantial æther, but merely to an æther *frame*, i.e., a privileged frame of reference. That the Lorentzian interprets length contraction and time dilation as not merely apparent, but real, cannot be cited as a disadvantage of the theory, since the Einsteinian also must posit real contraction and dilation (see Peter Kroes's paper "The Physical Status of Time Dilation within the Special Theory of Relativity" at the conference mentioned in note 18; see also Dennis Dieks, "The 'Reality' of the Lorentz Contraction," *Zeitschrift für allgemeine Wissenschafts-theorie* 15/2 (1984):330-42). The difference between the two on this score is that the Lorentzian offers some explanation for these effects, while the Einsteinian does not. The decision between a Lorentzian and an Einsteinian interpretation of STR will probably depend on whether God's time can be plausibly construed to coincide with some coordinate time, which would thereby be the privileged time of the æther-frame.

{20} Frank, *Philosophy of Science*, p. 140.

{21} J.S. Bell, "How to Teach Special Relativity," in *Speakable and Unspeakable in Quantum Mechanics*, ed. J.S. Bell (Cambridge: Cambridge University Press, 1987), p. 77.

{22} Lawrence Sklar, "Time, reality and relativity," in *Reduction, Time and Reality*, ed. R. Healey (Cambridge: Cambridge University Press, 1981), p. 141.

{23} *Ibid.*, p. 132.

{24} R. Healey, "Introduction," in *Reduction, Time and Reality*, p. vii.

{25} Michael Shallis, "Time and Cosmology," in *The Nature of Time*, ed. Raymond Flood and Michael Lockwood (Oxford: Basil Blackwell, 1986), pp. 68-69.

{26} Arthur Eddington, *Space, Time and Gravitation*, Cambridge Science Classics (Cambridge: Cambridge University Press, 1987), p. 168:

"In the first place, absolute space and time are restored for phenomena on a cosmical scale The world taken as a whole has one direction in which it is not curved; that direction gives a kind of absolute time distinct from space. Relativity is reduced to a local phenomenon; and although this quite sufficient for the theory hitherto described, we are inclined to look on the limitation rather grudgingly. But we have already urged that the relativity theory is not concerned to deny the possibility of an absolute time, but to deny that it is concerned in any experimental knowledge yet found; and it need not perturb us if the conception of absolute

time turns up in a new form in a theory of phenomena on a cosmical scale, as to which no experimental knowledge is yet available."

{27} G.F. Smoot, M.V. Gorenstein, and R.A. Muller, "Detection of Anisotropy in the Cosmic Blackbody Radiation," *Physical Review Letters* 39 (1977): 899.

{28} P.C.W. Davies, "Space-Time Singularities in Cosmology and Black Hole Evaporations," in *The Study of Time III*, ed. J.T. Fraser, N. Lawrence, and D. Park (Berlin: Springer Verlag, 1978), p. 76. I have corrected spelling errors in the quotation.

{29} See Charles W. Misner, Kip S. Thorne, John A. Wheeler, *Gravitation* (San Francisco: W.H. Freeman, 1973), pp. 813-14. The authors' attempt to criticize global proper time as inadequately physical fails to appreciate the counterfactual nature of the metric's application; the time elapsed is measured *as if* an atomic clock were present and functioning.

{30} See helpful discussion in Peter Kroes, *Time: Its Structure and Its Role in Physical Theories*, Synthese Library 179 (Dordrecht: D. Reidel, 1985), p. 49.

{31} By postulating a cosmic rotation of matter, Gödel was able to draft model universes satisfying Einstein's field equations in which no cosmic time exists (Kurt Gödel, "A Remark about the Relationship between Relativity Theory and Idealistic Philosophy," in *Albert Einstein*, pp. 557-62). In such worlds, Padgett's view would be correct. But in fact, there is a cosmic time, and it would naturally seem to coincide with real time.

{32} See my "God, Time, and Eternity," pp. 497-503, where I argue that God existing without creation is timeless and that He enters time at its inception with His creation of the universe. Since creation is a freely willed act of God, the existence of real time is therefore contingent.

{33} See for example, Eddington's remark, "Just as each limited observer has his own particular separation of space and time, so a being co-extensive with the world might well have a special separation of space and time natural to him. It is the time for this being that is here dignified by the title 'absolute'" (Eddington, *Space, Time and Gravitation*, p. 168).

{34} See Kroes, *Time*, pp. 60-96.

Rediscovering the Historical Jesus: Presuppositions and Pretensions of the Jesus Seminar

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies

at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

In this first part of a two-part article, the presuppositions and pretensions of the Jesus Seminar are expositied and assessed. It is found that the principal presuppositions of (i) scientific naturalism, (ii) the primacy of the apocryphal gospels, and (iii) the necessity of a politically correct Jesus are unjustified and issue in a distorted portrait of the historical Jesus. Although the Jesus Seminar makes a pretention of speaking for scholarship on the quest of the historical Jesus, it is shown that in fact it is a small body of critics in pursuit of a cultural agenda.

"Rediscovering the Historical Jesus: The Presuppositions and Pressumptions of the Jesus Seminar." *Faith and Mission* 15 (1998): 3-15.

In 1985 a prominent New Testament scholar named Robert Funk founded a think tank in Southern California which he called the Jesus Seminar. The ostensible purpose of the Seminar was to uncover the historical person Jesus of Nazareth using the best methods of scientific, biblical criticism. In Funk's view the historical Jesus has been overlaid by Christian legend, myth, and metaphysics and thus scarcely resembled the Christ figure presented in the gospels and worshipped by the Church today. The goal of the Seminar is to strip away these layers and to recover the authentic Jesus who really lived and taught.

In so doing, Funk hopes to ignite a revolution which will bring to an end what he regards as an age of ignorance. He blasts the religious establishment for "not allowing the intelligence of high scholarship to pass through pastors and priests to a hungry laity."^{1} He sees the Jesus Seminar as a means of disabusing laymen of the mythological figure they have been taught to worship and bringing them face to face with the real Jesus of history.

The degree to which the gospels have allegedly distorted the historical Jesus is evident in the edition of the gospels published by the Jesus Seminar. Called *The Five Gospels* because it includes the so-called Gospel of Thomas along with Matthew, Mark, Luke, and John, their version prints in red only those words of Jesus which the fellows of the Seminar determine to be authentic, actually spoken by Jesus. As it turns out, less than 20% of the sayings attributed to Jesus are printed in red.

The real, historical Jesus turns out to have been a sort of itinerant, social critic, the Jewish equivalent of a Greek cynic philosopher. He never claimed to be the Son of God or to forgive sins or to inaugurate a new covenant between God and man. His crucifixion was an accident of history; his corpse was probably thrown into a shallow dirt grave where it rotted away or was eaten by wild dogs.

Now if these conclusions are correct, we who are Christians today are the victims of a massive delusion. To continue to worship Jesus today in light of these conclusions would be either idolatry or mythology—idolatry if you worship the merely human figure who actually lived, mythology if you worship the figment of the Church's imagination. Now I don't know about you, but I don't want to be either an idolater or a mythologizer. Therefore, it is of utmost importance to assess whether the claims of the Jesus Seminar are *true*.

Today, therefore, I want to talk about the presuppositions and pretensions of the Jesus Seminar.

Presuppositions of the Jesus Seminar

Let's talk first about presuppositions. What is a presupposition? A presupposition is an assumption you make prior to looking at the evidence. Presuppositions are crucial because they determine how you interpret the evidence. Let me give you an example. Did you hear about the man who thought he was dead? This guy firmly believed he was dead, even though he was a living, normally-functioning human being. Well, his wife persuaded him to visit a psychiatrist, who tried in vain to convince him that he was in fact alive. Finally, the psychiatrist hit upon a plan. He showed the man medical reports and scientific evidence that dead men do not bleed. After thoroughly convincing the man that dead men do not bleed, the psychiatrist took out a pin and pricked the man's finger. When the man saw the drop of blood trickle down his finger, his eyes bugged out. "Ha!" he cried, "Dead men do bleed after all!"

The man's belief that he was dead was a presupposition that determined how he interpreted the evidence. He held so strongly to that presupposition that it skewed how he looked at the facts. Now in the same way, the Jesus Seminar has certain presuppositions which determine how they look at the evidence. Fortunately, the Jesus Seminar has made some of its presuppositions abundantly clear.

Naturalism

The number one presupposition of the Seminar is *anti-supernaturalism* or more simply, *naturalism*. Naturalism is the view that every event in the world has a natural cause. There are no events with supernatural causes. In other words, miracles cannot happen.

Now this presupposition constitutes an absolute watershed for the study of the gospels. If you presuppose naturalism, then things like the incarnation, the Virgin Birth, Jesus' miracles, and his resurrection go out the window before you even sit down at the table to look at the evidence. As supernatural events, they *cannot* be historical. But if you are at least open to supernaturalism, then these events can't be ruled out in advance. You have to be open to looking honestly at the evidence that they occurred. In fact, if you don't presuppose naturalism, then the gospels come out looking pretty good as historical sources for the life of Jesus.

R. T. France, a British New Testament scholar, has written,

At the level of their literary and historical character we have good reason to treat the Gospels seriously as a source of information on the life and teaching of Jesus.... Indeed many ancient historians would count themselves fortunate to have four such responsible accounts [as the Gospels], written within a generation or two of the events, and preserved in such a wealth of

early manuscript evidence. Beyond that point, the decision to accept the record they offer is likely to be influenced more by openness to a supernaturalist world view than by strictly historical considerations.{2}

In other words, skepticism about the gospels is not based on history, but on the presupposition of naturalism.

And, in fact, the Jesus Seminar is remarkably candid about its presupposition of naturalism. The Introduction to *The Five Gospels* states:

The contemporary religious controversy turns on whether the world view reflected in the Bible can be carried forward into this scientific age and retained as an article of faith . . . the Christ of creed and dogma . . . can no longer command the assent of those who have seen the heavens through Galileo's telescope.{3}

But why, we might ask, is it impossible in a scientific age to believe in a supernatural Christ? After all, a good many scientists are Christian believers, and contemporary physics shows itself quite open to the possibility of realities which lie outside the domain of physics. What justification is there for anti-supernaturalism?

Here things really get interesting. According to the Jesus Seminar, the historical Jesus *by definition* must be a non-supernatural figure. Here they appeal to D. F. Strauss, the 19th century German Biblical critic. Strauss's book *The Life of Jesus, Critically Examined* was based squarely in a philosophy of naturalism. According to Strauss, God does not act directly in the world; He acts only indirectly through natural causes. With regard to the resurrection, Strauss states that God's raising Jesus from the dead "is irreconcilable with enlightened ideas of the relation of God to the world." {4}

Now look carefully at what the Jesus Seminar says about Strauss:

Strauss distinguished what he called the 'mythical' (defined by him as anything legendary or supernatural) in the Gospels from the historical . . . The choice Strauss posed in his assessment of the Gospels was between the supernatural Jesus—the Christ of faith—and the historical Jesus.{5}

Anything that is supernatural is *by definition* not historical. There's no argument given; it's just defined that way. Thus we have a radical divorce between the Christ of faith, or the supernatural Jesus, and the real, historical Jesus. Now the Jesus Seminar gives a ringing endorsement of Strauss's distinction: they say that the distinction between the historical Jesus and the Christ of faith is "the first pillar of scholarly wisdom." {6}

But now the whole quest of the historical Jesus becomes a charade. If you *begin* by presupposing naturalism, then of course what you wind up with is a purely natural Jesus! This reconstructed, naturalistic Jesus is not based on evidence, but on definition. What is amazing is that the Jesus Seminar makes no attempt to defend this naturalism; it is just presupposed. But this presupposition is wholly unjustified. As long as the existence of God is even possible, then we have to be open to the possibility that He has acted miraculously in the universe. Only if you have a proof for atheism can you be justified in thinking miracles are impossible.

This raises the very real question of whether the fellows of the Jesus Seminar even believe that God really exists. In a debate with John Dominic Crossan, the co-chairman of the Jesus Seminar, I raised this very question. Listen carefully how he responds:

Craig: This distinction between statements of faith and statements of fact that you make troubles me. I would like to know, for you, what about the statement that ‘God exists’? Is that a statement of faith or fact?

Crossan: It’s a statement of faith for all those who make it.

Craig: So on your view, then, factually speaking, it is not true that God exists.

Crossan: That would not be a nice way to put it. Let me put it this way to you. What I’m saying here is to try to take faith seriously. Understand that Dr. Craig wants to equate faith and fact. There are people in the world who do not believe God exists. I understand that. I happen to think they’re wrong, but that does not make it any less an act of faith. They are making an act of faith in something else. . . .

Craig: But if the existence of God is a statement of faith, not a statement of fact, that means that God’s existence is simply an interpretive construct that a particular human mind—a believer—puts onto the universe. But in and of itself the universe is without such a being as God. That is, that’s simply an interpretation that a believer puts on it. It seems to me that on a level of reality, independent of human consciousness, your worldview is actually atheistic and that religion is simply an interpretive framework that individual people put on the world, but none of these is factually, objectively true. . . .

Crossan: No, I would say what you’re trying to do is imagine the world without us. Now unfortunately, I can’t do that. If you were to ask me (which is just what you did) to abstract from faith how God would be if no human beings existed, that’s like asking, me, ‘Would I be annoyed if I hadn’t been conceived?’ I really don’t know how to answer that question.

Craig: Sure you do!

Crossan: Wait a minute! We only know God as God has revealed God to us; that’s all we could ever know in any religion.

Craig: During the Jurassic age, when there were no human beings, did God exist?

Crossan: Meaningless question.

Craig: But surely that’s not a meaningless question. It’s a factual question. Was there a Being who was the Creator and Sustainer of the universe during that period of time when no human beings existed? It seems to me on your view that you’d have to say, ‘No.’

Crossan: Well, I would probably prefer to say ‘No’ because what you’re doing is trying to put yourself in the position of God and ask, ‘How is God apart from revelation? How is God apart from faith?’ I don’t know if you can do that. You can do it, I suppose, but I don’t know if it really has any point.{7}

It seems pretty obvious that Dr. Crossan wouldn't even affirm that there really is a God who exists outside of the human imagination. Well, if God is just a projection of human consciousness, if there really isn't anybody out there, then of course it's impossible that God has acted supernaturally in the world, as the gospels claim. So the first presupposition of the Jesus Seminar, a presupposition which they make no attempt to justify, is naturalism and maybe even atheism. Reject this presupposition and the whole construction collapses.

Primacy of the Apocryphal Gospels

Now if the historical Jesus is not the Jesus of the gospels, the supernatural Jesus, then how do sceptical scholars figure out who the historical Jesus really was? Well, that leads to the second presupposition which I wanted to discuss, namely, sceptical critics presuppose that our most primary sources for the life of Jesus are not the Gospels, but rather writings outside the New Testament, specifically the so-called apocryphal gospels. These are gospels forged under the apostles' names, like the Gospel of Thomas, the Gospel of Peter, the Gospel of Philip, and so forth. These extra-biblical writings are said to be the key to correctly reconstructing the historical Jesus.

Professor Luke Johnson, a distinguished New Testament scholar at Emory University, points out that all of the recent spate of books claiming to uncover the real Jesus follow the same, predictable pattern:

1. The book begins by trumpeting the scholarly credentials of the author and his prodigious research.
2. The author claims to offer some new, and maybe even suppressed, interpretation of who Jesus really was.
3. The truth about Jesus is said to be discovered by means of sources outside the Bible which enable us to read the Gospels in a new way which is at odds with their face value meaning.
4. This new interpretation is provocative and even titillating, for example, that Jesus married Mary Magdalene or was the leader of a hallucinogenic cult or a peasant cynic philosopher.
5. It is implied that traditional Christian beliefs are therefore undermined and need to be revised. {8}

If you hear of books following this familiar pattern, your critical antennae ought to automatically go up. You are about to be duped. For the fact is that there is no source outside the Bible which calls into question the portrait of Jesus painted in the gospels.

Let me take just a couple of examples which are favorite sources of the Jesus Seminar. First, the so-called Gospel of Thomas. The Jesus Seminar considers this such an important source that they include it along with Matthew, Mark, Luke, and John in their edition of *The Five Gospels*.

Now what is the Gospel of Thomas? It is a writing which was discovered in Egypt just after World War II. It was part of a collection of Gnostic documents. Gnosticism was an ancient near-eastern philosophy which held that the physical world is evil and the spiritual realm is good. Salvation comes through secret knowledge of the spiritual realm, which liberates the soul from its imprisonment in the physical world. The so-called Gospel of Thomas is shot through with Gnostic philosophy. It was no doubt part of the literature of a Gnostic Christian cult, much like New Age cults in our own day. Greek fragments of the Gospel of Thomas as old as AD 200 have been found, and most scholars would date the original to have been

written in the latter half of the second century after Christ. One evidence of this fact is that the Gospel of Thomas uses vocabulary that comes from second century translations and harmonies of the four gospels.

Thus, the vast majority of scholars today regard the Gospel of Thomas as a derivative source from the second century after Christ which reflects the view of Christian gnosticism.

Incredibly, however, fellows of the Jesus Seminar regard the Gospel of Thomas as an early, primary source concerning Jesus and use it to revise the portrait of Jesus found in the Gospels. Now what reasons do they have for dating the Gospel of Thomas so early? Amazingly, their whole approach to this question is reasoning in a circle. It goes like this:

1. The Gospel of Thomas is an early, primary source.

“How do you know?”

2. Because no apocalyptic sayings are found in the Gospel of Thomas.

“Why is that evidence of an early date?”

3. This is evidence of an early date because Jesus wasn’t into Apocalyptic.

“How do you know he wasn’t?”

4. Because the Gospel of Thomas proves he wasn’t.

“Why believe what the Gospel of Thomas says?”

1. The Gospel of Thomas is an early, primary source.

Thus, Howard Clark Kee of Boston University hails this procedure as "a triumph of circular reasoning!" {9} British New Testament scholar Thomas Wright says it’s like Winnie the Pooh following his own tracks in the snow around a clump of trees and each time he sees more tracks he takes this as evidence that his quarry is even more numerous and more real than he thought before! {10} No wonder that the fellows of the Jesus Seminar haven’t been able to convince very many of their colleagues by means of arguments like this!

A second example is the so-called Gospel of Peter. Although this writing was condemned as spurious by early Church Fathers, the actual text was unknown to us until a copy was discovered in an Egyptian tomb in 1886. Like the Gospel of Thomas it bears the marks of Gnostic influence and uses uniquely second-second vocabulary, so that scholars unanimously regard it as a second century writing.

Nevertheless, John Dominic Crossan, the Jesus Seminar’s co-chairman, bases his entire reconstruction of Jesus’ death and burial on his claim that the Gospel of Peter actually contains the oldest primary source about Jesus and that the four gospels are all based on it. Therefore, he says, the gospels have no historical value because they have no source of information about Jesus’ death other than the account in the Gospel of Peter. Even though the Gospel of Peter itself does describe Jesus’ resurrection, Crossan’s naturalism prevents him from believing in that event. But with the biblical gospels out of the way, Crossan can claim

that the Gospel of Peter is just legendary and that there is no confirming testimony to Jesus' resurrection.

One of the strangest aspects of Crossan's reasoning is that he seems to have completely forgotten about the Apostle Paul. Even if Crossan were right about the Gospel of Peter's being primary, its testimony would still be independently confirmed by the writings of Paul, who refers to Jesus' burial and even lists the witnesses of Jesus' resurrection appearances. Thus, even if the account of the resurrection in the Gospel of Peter were foundational to the four gospels, there's no historical reason to deny the resurrection.

But in fact Crossan's theory about the primacy of the Gospel of Peter's account is virtually universally rejected by New Testament scholars. The prominent Canadian scholar Ben Meyer has called Crossan's arguments "eccentric and implausible."[{11}](#) Even Harvard University's Helmut Koester rejects Crossan's reasoning as "seriously flawed."[{12}](#) There are no signs of literary dependence of the four gospels on the account in the Gospel of Peter. The obvious conclusion is that the Gospel of Peter is based on the four gospels, not the other way around. Thomas Wright sums up by stating that Crossan's hypothesis "has not been accepted yet by any other serious scholar" and the date and origin suggested by Crossan "are purely imaginary."[{13}](#)

What I've said about the Gospel of Thomas and the Gospel of Peter could be said about all the other apocryphal gospels as well. According to John Meier, a prominent American New Testament critic, the idea that the apocryphal gospels offer us new information about Jesus is "largely fantasy."[{14}](#) The fact is that these writings are later, derivative writings shaped by the theology of the second century and later. What this means, in the words of Professor Johnson, is that despite all the hoopla, "The writings of the New Testament remain our best historical witnesses" to the life of Jesus.[{15}](#)

Politically Correct Religion

The third presupposition of the Jesus Seminar is that religion in general and Jesus in particular must be politically correct. In our day of religious relativism and pluralism it is politically incorrect to claim that one religion is absolutely true. All religions have to be equally valid ways to God. But if you insist on being politically correct, then somehow you've got to get Jesus out of the way. For his radical, personal claims to be the unique Son of God, the absolute revelation of God the Father, the sole mediator between God and man, are frankly embarrassing and offensive to the politically correct mindset. The Jesus of the gospels is not politically correct!

The desire to have a politically correct religion and in particular a politically correct Jesus skews the historical judgement of the Jesus Seminar. They dismiss as unhistorical any aspect of Jesus which they find to be politically incorrect. Historical judgments are thus being made, not on the basis of the evidence, but on the basis of political correctness.

Nowhere is this procedure more evident than in the work of Marcus Borg, one of the Seminar's more celebrated members. As a teenager Borg lost his faith in God, Christ, and the Bible. But a few years after graduating from seminary, he had a number of mystical experiences which gave him a new concept of God. He says, "I realized that *God* does not refer to a supernatural being 'out there' . . . Rather *God* refers to the sacred at the center of existence, the holy mystery that is all around and within us."[{16}](#) Now if you intone these

words the right way, they might sound very meaningful and profound. But really this is pretty thin soup as an understanding of God. What does Borg mean when he says, "God is more than everything and yet everything is in God"?{17}

At any rate, Borg then reinterprets Jesus in light of his own mystical experiences. Jesus becomes a cross-cultural religious mystic. If we imagine Jesus in this way, says Borg, it "undermines a widespread Christian belief that Jesus is unique, which is commonly linked to the notion that Christianity is exclusively true and that 'Jesus is the only way.'" {18} Here it seems very obvious that Borg's desire to have a politically correct religion determines his reconstruction of the historical Jesus. As Douglas Geivett points out, Borg's rejection of the traditional picture of Jesus has "less to do with historical research about Jesus and more to do with Borg's own beliefs about God." {19}

The result of allowing political correctness to dictate what is and is not historical is that you wind up creating an anachronism: a politically correct, late twentieth century Jesus who is just a reflection of yourself. Thus, Borg's Jesus turns out to be a social liberal, driven by a "politics of compassion" to champion the rights of women and the poor against an oppressive social establishment. Jesus' ethos of compassion, says Borg, also implies the advocacy of gay rights and the provision of universal health care now! It's hard to disagree with Howard Kee's verdict: the fellows of the Jesus Seminar have succumbed to the temptation to create Jesus in their own image.{20} They have looked down the long well of history and seen their own faces reflected at the bottom.{21}

In summary, the conclusions of the Jesus Seminar are based, not so much on evidence, as on the presuppositions of naturalism, the primacy of the apocryphal gospels, and politically correct religion. There is no justification for any of these presuppositions. Reject them and their whole reconstructed Jesus collapses in ruin.

Pretensions of the Jesus Seminar

Now at this point, you might be asking yourself how in the world New Testament scholarship could be based on such flimsy underpinnings as these. Well, in fact it's not. That leads me to my second main point: the pretensions of the Jesus Seminar.

The Jesus Seminar portrays itself to the media as *the* representative voice of New Testament scholarship today, going over the heads of the clergy to tell unsuspecting laymen, who have been duped by the Church, what Jesus was *really* like. They claim some 200 participants in the Seminar, who are supposed to be the embodiment of a scholarly approach to the New Testament. Just one evidence of this pretension is that they have named their translation of the gospels "The Scholar's Version"—as though the teams of linguists and experts who produced such translations as the RSV, NEB, or NIV were not scholars! They are very anxious to portray themselves as disinterested historians, not theologians. This is the media image of the Jesus Seminar—a large body of objective historians, representative scholars, speaking the unbiased truth. These are the pretensions. What is the reality?

Well, the reality turns out to be much different. Their claim to have 200 scholars in the Seminar is grossly inflated: that figure includes anybody who in any way was involved in the Seminar's activities, such as being on a mailing list. The real number of regular participants is only about 40. And what about the scholarly credentials of the members? Of the 74 listed in their publication *The Five Gospels*, only 14 would be leading figures in the field of New

Testament studies. More than half are basically unknowns, who have published only two or three articles. Eighteen of the fellows have published nothing at all in New Testament studies! Most have relatively undistinguished academic positions, for example, teaching at a community college. According to Johnson, "The numbers alone suggest that any claim to represent 'scholarship' or the 'academy' is ludicrous." {22}

Indeed, it is the Seminar's claim to represent the consensus of scholarship that has really burned New Testament scholars. And I want to emphasize I'm not talking about the reactions of conservatives or evangelicals: I'm talking about the broad spectrum of New Testament scholars. For example, Howard Kee denounces the Jesus Seminar as "an academic disgrace," and says that its conclusions are "prejudicial" and "peripheral," not "a substantive development in responsible scholarly study of the historical Jesus." {23}

According to Johnson, the real agenda of the Jesus Seminar is not academic, but social. He states,

The agenda of the Seminar is not disinterested scholarship, but a social mission against the way the church is dominated by evangelical theology—that is, a theology focused on the literal truth of the Gospels. It is important to note from the start that Robert Funk does not conceive of the Seminar's work as making a contribution to scholarship but as carrying out a cultural mission. The Seminar's declared enemies are not simply fundamentalists or the Southern Baptist Convention, but all those who subscribe to any traditional understanding of Jesus as Risen Lord and Son of God. {24}

It is this socio-cultural agenda that determines in advance the conclusions of the Jesus Seminar. Far from representing the consensus of New Testament scholarship, the Seminar actually represents the views of a radical minority of the left-wing fringe of Biblical scholarship. No wonder Jacob Neusner, one of the most prominent Jewish theologians of our day, has said that the Jesus Seminar is either the greatest scholarly hoax since the Piltdown Man or else represents the bankruptcy of New Testament studies! {25}

Conclusion

Fortunately, the main stream of New Testament scholarship has been moving in a much different direction than the left-wing fringe represented by the Jesus Seminar. Gone are the days when Jesus was treated like a figure in Greek and Roman mythology. Gone are the days when his miracles were dismissed as fairy tales based on stories of mythological heroes. Gone are the days when his empty tomb and resurrection appearances were written off as legends or hallucinations. Today it is widely agreed that the gospels are valuable historical sources for the life of Jesus and that the proper context for understanding the gospels is not mythology, but Palestinian Judaism. It is widely agreed that the historical Jesus stood and spoke in the place of God Himself, proclaimed the advent of the Kingdom of God, and carried out a ministry of miracle-working and exorcisms as signs of that Kingdom. I find it tremendously gratifying to see that the movement of New Testament scholarship as a whole is in the direction of confirming the traditional understanding of Jesus as portrayed in the gospels. In particular, my own research concerning Jesus' resurrection has convinced me more than ever that this was a historical event, verifiable by the evidence. The Christian can be confident that the historical foundations of his faith stand secure. You can bet your life on it.

Endnotes

- {1} Robert Funk, "The Issue of Jesus," *Forum* 1 (1985): 8.
- {2} R. T. France, "The Gospels as Historical Sources for Jesus, the Founder of Christianity," *Truth* 1 (1985): 86.
- {3} R. W. Funk, R. W. Hoover, and the Jesus Seminar, "Introduction" to *The Five Gospels* (New York: Macmillan, 1993), p. 2.
- {4} David Friedrich Strauß, *The Life of Jesus, Critically Examined*, trans. George Eliot, ed. with an Introduction by Peter C. Hodgson, Lives of Jesus Series (London: SCM Press, 1973), p. 736.
- {5} Funk, *et. al.*, "Introduction," p. 3.
- {6} *Ibid.*, pp. 2–3.
- {7} William Lane Craig and John Dominic Crossan, *Will the Real Jesus Please Stand Up?*, ed. Paul Copan, with Responses by Ben Witherington III, Craig Blomberg, Marcus Borg, and Robert Miller (Grand Rapids, Mich: Baker Bookhouse, forthcoming).
- {8} Luke Timothy Johnson, *The Real Jesus* (San Francisco: Harper San Francisco, 1996), p. 31.
- {9} Howard Clark Kee, "A Century of Quests of the Culturally Compatible Jesus," *Theology Today* 52 (1995): 22.
- {10} N. T. Wright, "Taking the Text with Her Pleasure," *Theology* 96 (1993): 307.
- {11} Ben Meyer, critical notice of *The Historical Jesus*, by John Dominic Crossan, *Catholic Biblical Quarterly* 55 (1993): 575.
- {12} Helmut Koester, *Ancient Christian Gospels* (London: SCM, 1990), p. 220.
- {13} N. T. Wright, *Jesus and the Victory of God* (Minneapolis: Fortress Press, 1996), p. 49.
- {14} John P. Meier, *A Marginal Jew*, vol. 2: *Mentor, Message and Miracles*, Anchor Bible Reference Library (New York: Doubleday, 1994), p. 5.
- {15} Johnson, *Real Jesus*, p. 89.
- {16} Marcus Borg, *Meeting Jesus Again for the First Time* (San Francisco: Harper San Francisco, 1994), p. 14.
- {17} *Ibid.*
- {18} *Ibid.*, p. 37.
- {19} R. Douglas Geivett, "Is Jesus the Only Way?" in *Jesus under Fire*, ed. J. P. Moreland and M. J. Wilkins (Grand Rapids, Mich.: Zondervan, 1995), p. 187.

{20}Kee, "Century of Quests," p. 26.

{21}A memorable characterization of the Old Questers by George Tyrell, *Christianity at the Crossroads* (London: Longman, Green, & Co., 1909), p. 44.

{22}Johnson, *Real Jesus*, pp. 4–5.

{23}Howard Clark Kee, Editorial: "Controversial Jesus Seminar," *Los Angeles Times*, 12 March 1991, p. B6; idem, "Century of Quests," p. 28.

{24}Johnson, *Real Jesus*, p. 6.

{25}Jacob Neusner, cited by Richard N. Ostling, "Jesus Christ, Plain and Simple," *Time* (January 10, 1994), p. 39.

The Evidence For Jesus

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Five reasons are presented for thinking that critics who accept the historical credibility of the gospel accounts of Jesus do not bear a special burden of proof relative to more skeptical critics. Then the historicity of a few specific aspects of Jesus' life are addressed, including his radical self-concept as the divine Son of God, his role as a miracle-worker, his trial and crucifixion, and his resurrection from the dead.

"Rediscovering the Historical Jesus: The Evidence for Jesus." *Faith and Mission* 15 (1998): 16-26.

Last time we saw that the New Testament documents are the most important historical sources for Jesus of Nazareth. The so-called apocryphal gospels are forgeries which came much later and are for the most part elaborations of the four New Testament gospels.

This doesn't mean that there aren't sources outside the Bible which refer to Jesus. There are. He's referred to in pagan, Jewish, and Christian writings outside the New Testament. The Jewish historian Josephus is especially interesting. In the pages of his works you can read about New Testament people like the high priests Annas and Caiaphas, the Roman governor Pontius Pilate, King Herod, John the Baptist, even Jesus himself and his brother James. There have also been interesting archaeological discoveries as well bearing on the gospels. For example, in 1961 the first archaeological evidence concerning Pilate was unearthed in the town of Caesarea; it was an inscription of a dedication bearing Pilate's name and title. Even more recently, in 1990 the actual tomb of Caiaphas, the high priest who presided over Jesus's trial, was discovered south of Jerusalem. Indeed, the tomb beneath the Church of the Holy Sepulcher in Jerusalem is in all probability the tomb in which Jesus himself was laid by Joseph of Arimathea following the crucifixion. According to Luke Johnson, a New Testament scholar at Emory University,

Even the most critical historian can confidently assert that a Jew named Jesus worked as a teacher and wonder-worker in Palestine during the reign of Tiberius, was executed by crucifixion under the prefect Pontius Pilate and continued to have followers after his death.^{1}

Still, if we want any details about Jesus's life and teachings, we must turn to the New Testament. Extra-biblical sources *confirm* what we read in the gospels, but they don't really tell us anything *new*. The question then must be: how historically reliable are the New Testament documents?

Burden of Proof

Here we confront the very crucial question of the burden of proof. Should we assume that the gospels are reliable unless they are proven to be unreliable? Or should we assume the gospels are unreliable unless they are proven to be reliable? Are they innocent until proven guilty or guilty until proven innocent? Sceptical scholars almost always assume that the gospels are guilty until proven innocent, that is, they assume that the gospels are unreliable unless and until they are proven to be correct concerning some particular fact. I'm not exaggerating here: this really is the procedure of sceptical critics.

But I want to list five reasons why I think we ought to assume that the gospels are reliable until proven wrong:

1. *There was insufficient time for legendary influences to expunge the historical facts.* The interval of time between the events themselves and recording of them in the gospels is too short to have allowed the memory of what had or had not actually happened to be erased.

2. *The gospels are not analogous to folk tales or contemporary "urban legends."* Tales like those of Paul Bunyan and Pecos Bill or contemporary urban legends like the "vanishing hitchhiker" rarely concern actual historical individuals and are thus not analogous to the gospel narratives.

3. *The Jewish transmission of sacred traditions was highly developed and reliable.* In an oral culture like that of first century Palestine the ability to memorize and retain large tracts of oral tradition was a highly prized and highly developed skill. From the earliest age children in the home, elementary school, and the synagogue were taught to memorize faithfully sacred tradition. The disciples would have exercised similar care with the teachings of Jesus.

4. *There were significant restraints on the embellishment of traditions about Jesus, such as the presence of eyewitnesses and the apostles' supervision.* Since those who had seen and heard Jesus continued to live and the tradition about Jesus remained under the supervision of the apostles, these factors would act as a natural check on tendencies to elaborate the facts in a direction contrary to that preserved by those who had known Jesus.

5. *The Gospel writers have a proven track record of historical reliability.*

I don't have enough time to talk about all of these. So let me say something about the first and the last points.

1. *There was insufficient time for legendary influences to expunge the historical facts.* No modern scholar thinks of the gospels as bald-faced lies, the result of a massive conspiracy. The only place you find such conspiracy theories of history is in sensationalist, popular literature or former propaganda from behind the Iron Curtain. When you read the pages of the New Testament, there's no doubt that these people sincerely believed in the truth of what they proclaimed. Rather ever since the time of D. F. Strauss, sceptical scholars have explained away the gospels as legends. Like the child's game of telephone, as the stories about Jesus were passed on over the decades, they got muddled and exaggerated and mythologized until the original facts were all but lost. The Jewish peasant sage was transformed into the divine Son of God.

One of the major problems with the legend hypothesis, however, which is almost never addressed by sceptical critics, is that the time between Jesus's death and the writing of the gospels is just too short for this to happen. This point has been well-explained by A. N. Sherwin-White in his book *Roman Society and Roman Law in the New Testament*.^{2} Professor Sherwin-White is not a theologian; he is a professional historian of times prior to and contemporaneous with Jesus. According to Sherwin-White, the sources for Roman and Greek history are usually biased and removed one or two generations or even centuries from the events they record. Yet, he says, historians reconstruct with confidence the course of Roman and Greek history. For example, the two earliest biographies of Alexander the Great were written by Arrian and Plutarch more than 400 years after Alexander's death, and yet classical historians still consider them to be trustworthy. The fabulous legends about Alexander the Great did not develop until during the centuries *after* these two writers. According to Sherwin-White, the writings of Herodotus enable us to determine the rate at which legend accumulates, and the tests show that even two generations is too short a time span to allow legendary tendencies to wipe out the hard core of historical facts. When Professor Sherwin-White turns to the gospels, he states that for the gospels to be legends, the rate of legendary accumulation would have to be "unbelievable." More generations would be needed.

In fact, adding a time gap of two generations to Jesus's death lands you in the second century, just when the apocryphal gospels begin to appear. These do contain all sorts of fabulous stories about Jesus, trying to fill in the years between his boyhood and his starting his

ministry, for example. These are the obvious legends sought by the critics, not the biblical gospels.

This point becomes even more devastating for skepticism when we recall that the gospels themselves use sources that go back even closer to the events of Jesus's life. For example, the story of Jesus's suffering and death, commonly called the Passion Story, was probably not originally written by Mark. Rather Mark used a source for this narrative. Since Mark is the earliest gospel, his source must be even earlier. In fact, Rudolf Pesch, a German expert on Mark, says the Passion source must go back to at least AD 37, just seven years after Jesus's death.^{3}

Or again, Paul in his letters hands on information concerning Jesus about his teaching, his Last Supper, his betrayal, crucifixion, burial, and resurrection appearances. Paul's letters were written even before the gospels, and some of his information, for example, what he passes on in his first letter to the Corinthian church about the resurrection appearances, has been dated to within five years after Jesus's death. It just becomes irresponsible to speak of legends in such cases.

5. *The Gospel writers have a proven track record of historical reliability.* Again I only have time to look at one example: Luke. Luke was the author of a two-part work: the Gospel of Luke and the Acts of the Apostles. These are really one work and are separated in our Bibles only because the church grouped the gospels together in the New Testament. Luke is the gospel writer who writes most self-consciously as an historian. In the preface to this work he writes:

Inasmuch as many have undertaken to compile a narrative of the things which have been accomplished among us, just as they were delivered to us by those who from the beginning were eyewitnesses and ministers of the word, it seemed good to me also, having followed all things closely for some time past, to write an orderly account for you, most excellent Theophilus, that you may know the truth concerning the things of which you have been informed.

This preface is written in classical Greek terminology such as was used by Greek historians; after this Luke switches to a more common Greek. But he has put his reader on alert that he can write, should he wish to, like the learned historian. He speaks of his lengthy investigation of the story he's about to tell and assures us that it is based on eyewitness information and is accordingly the truth.

Now who was this author we call Luke? He was clearly not an eyewitness to Jesus's life. But we discover an important fact about him from the book of Acts. Beginning in the sixteenth chapter of Acts, when Paul reaches Troas in modern-day Turkey, the author suddenly starts using the first-person plural: "we set sail from Troas to Samothrace," "we remained in Philippi some days," "as we were going to the place of prayer," *etc.* The most obvious explanation is that the author had joined Paul on his evangelistic tour of the Mediterranean cities. In chapter 21 he accompanies Paul back to Palestine and finally to Jerusalem. What this means is that the author of Luke-Acts was in fact in first hand contact with the eyewitnesses of Jesus's life and ministry in Jerusalem. Sceptical critics have done back-flips to try to avoid this conclusion. They say that the use of the first-person plural in Acts should not be taken literally; it's just a literary device which is common in ancient sea voyage stories. Never mind that many of the passages in Acts are not about Paul's sea voyage, but take place on land! The more important

point is that this theory, when you check it out, turns out to be sheer fantasy.^{4} There just was no literary device of sea voyages in the first person plural--the whole thing has been shown to be a scholarly fiction! There is no avoiding the conclusion that Luke-Acts was written by a traveling companion of Paul who had the opportunity to interview eyewitnesses to Jesus's life while in Jerusalem. Who were some of these eyewitnesses? Perhaps we can get some clue by subtracting from the Gospel of Luke everything found in the other gospels and seeing what is peculiar to Luke. What you discover is that many of Luke's peculiar narratives are connected to women who followed Jesus: people like Joanna and Susanna, and significantly, Mary, Jesus's mother.

Was the author reliable in getting the facts straight? The book of Acts enables us to answer that question decisively. The book of Acts overlaps significantly with secular history of the ancient world, and the historical accuracy of Acts is indisputable. This has recently been demonstrated anew by Colin Hemer, a classical scholar who turned to New Testament studies, in his book *The Book of Acts in the Setting of Hellenistic History*.^{5} Hemer goes through the book of Acts with a fine-toothed comb, pulling out a wealth of historical knowledge, ranging from what would have been common knowledge down to details which only a local person would know. Again and again Luke's accuracy is demonstrated: from the sailings of the Alexandrian corn fleet to the coastal terrain of the Mediterranean islands to the peculiar titles of local officials, Luke gets it right. According to Professor Sherwin-White, "For Acts the confirmation of historicity is overwhelming. Any attempt to reject its basic historicity even in matters of detail must now appear absurd."^{6} The judgement of Sir William Ramsay, the world-famous archaeologist, still stands: "Luke is a historian of the first rank This author should be placed along with the very greatest of historians."^{7} Given Luke's care and demonstrated reliability as well as his contact with eyewitnesses within the first generation after the events, this author is trustworthy.

On the basis of the five reasons I listed, we are justified in accepting the historical reliability of what the gospels say about Jesus unless they are proven to be wrong. At the very least, we cannot assume they are wrong until proven right. The person who denies the gospels' reliability must bear the burden of proof.

Specific Aspects of Jesus's Life

Now by the very nature of the case, it will be impossible to say a whole lot more beyond this to prove that certain stories in the gospels are historically true. How could you prove, for example, the story of Jesus's visiting Mary and Martha? You just have here a story told by a reliable author in a position to know and no reason to doubt the historicity of the story. There's not much more to say.

Nevertheless, for many of the key events in the gospels, a great deal more can be said. What I'd like to do now is take a few of the important aspects of Jesus in the gospels and say a word about their historical credibility.

1. *Jesus's Radical Self-Concept as the Divine Son of God.* Radical critics deny that the historical Jesus thought of himself as the divine Son of God. They say that after Jesus's death, the early church claimed that he had said these things, even though he hadn't.

The big problem with this hypothesis is that it is inexplicable how monotheistic Jews could have attributed divinity to a man they had known, if he never claimed any such things

himself. Monotheism is the heart of the Jewish religion, and it would have been blasphemous to say that a human being was God. Yet this is precisely what the earliest Christians did proclaim and believe about Jesus. Such a claim must have been rooted in Jesus's own teaching.

And in fact, the majority of scholars do believe that among the historically authentic words of Jesus--these are the words in the gospels which the Jesus Seminar would print in red--among the historically authentic words of Jesus are claims that reveal his divine self-understanding. One could give a whole lecture on this point alone; but let me focus on Jesus's self-concept of being the unique, divine Son of God.

Jesus's radical self-understanding is revealed, for example, in his parable of the wicked tenants of the vineyard. Even sceptical scholars admit the authenticity of this parable, since it is also found in the Gospel of Thomas, one of their favorite sources. In this parable, the owner of the vineyard sent servants to the tenants of the vineyard to collect its fruit. The vineyard symbolizes Israel, the owner is God, the tenants are the Jewish religious leaders, and the servants are prophets sent by God. The tenants beat and reject the owner's servants. Finally, the owner says, "I will send my only, beloved son. They will listen to my son." But instead, the tenants kill the son because he is the heir to the vineyard. Now what does this parable tell us about Jesus's self-understanding? He thought of himself as God's special son, distinct from all the prophets, God's final messenger, and even the heir to Israel. This is no mere Jewish peasant!

Jesus's self-concept as God's son comes to explicit expression in Matthew 11:27: "All things have been delivered to me by my Father; and no one knows the Son except the Father; and no one knows the Father except the Son and anyone to whom the Son chooses to reveal Him." Again there is good reason to regard this as an authentic saying of the historical Jesus. It is drawn from an old source which was shared by Matthew and Luke, which scholars call the Q document. Moreover, it is unlikely the Church invented this saying because it says that the Son is unknowable-- "no one knows the Son except the Father"--, but for the post-Easter church we *can* know the Son. So this saying is not the product of later Church theology. What does this saying tell us about Jesus's self-concept? He thought of himself as the exclusive and absolute Son of God and the only revelation of God to mankind! Make no mistake: if Jesus wasn't who he said he was, he was crazier than David Koresh and Jim Jones put together!

Finally, I want to consider one more saying: Jesus's saying on the date of his second coming in Mark 13:32: "But of that day or that hour no man knows, not even the angels in heaven, nor the Son, but only the Father." This is an authentic saying of the historical Jesus because the later Church, which regarded Jesus as divine, would never have invented a saying ascribing limited knowledge or ignorance to Jesus. But here Jesus says he doesn't know the time of his return. So what do we learn from this saying? It not only reveals Jesus's consciousness of being *the* one Son of God, but it presents us with an ascending scale from men to the angels to the Son to the Father, a scale on which Jesus transcends any human being or angelic being. This is really incredible stuff! Yet it is what the historical Jesus believed. And this is only one facet of Jesus's self-understanding. C. S. Lewis was right when he said,

A man who was merely a man and said the sort of things Jesus said would not be a great moral teacher. He would either be a lunatic--on the level with the man who says he is a poached egg--or else he would be the Devil of Hell. You must make your choice. Either this man was and is the Son of God: or else a madman or something worse. You can shut him up

for a fool, you can spit at him and kill him as a demon; or you can fall at his feet and call him Lord and God. But let us not come with any patronizing nonsense about his being a great human teacher. He has not left that open to us.{8}

2. *Jesus's Miracles.* Even the most sceptical critics cannot deny that the historical Jesus carried out a ministry of miracle-working and exorcism. Rudolf Bultmann, one of the most sceptical scholars this century has seen, wrote back in 1926:

Most of the miracle stories contained in the gospels are legendary or at least are dressed up with legends. But there can be no doubt that Jesus did such deeds, which were, in his and his contemporaries' understanding, miracles, that is, deeds that were the result of supernatural, divine causality. Doubtless he healed the sick and cast out demons.{9}

Back in Bultmann's day the miracle stories were thought to be influenced by stories of mythological heroes and, hence, at least in part legendary. But today it is recognized that the hypothesis of mythological influence was historically incorrect. Craig Evans, a well-known Jesus scholar, says that "the older notion" that the miracle stories were the product of mythological divine man ideas "has been largely abandoned." {10} He says, "It is no longer seriously contested" "that miracles played a role in Jesus's ministry." The only reason left for denying that Jesus performed literal miracles is the presupposition of anti-supernaturalism, which is simply unjustified.

3. *Jesus's Trial and Crucifixion.* According to the gospels Jesus was condemned by the Jewish high court on the charge of blasphemy and then delivered to the Romans for execution for the treasonous act of setting himself up as King of the Jews. Not only are these facts confirmed by independent biblical sources like Paul and the Acts of the Apostles, but they are also confirmed by extra-biblical sources. From Josephus and Tacitus, we learn that Jesus was crucified by Roman authority under the sentence of Pontius Pilate. From Josephus and Mara bar Serapion we learn that the Jewish leaders made a formal accusation against Jesus and participated in events leading up to his crucifixion. And from the Babylonian Talmud, Sanhedrin 43a, we learn that Jewish involvement in the trial was explained as a proper undertaking against a heretic. According to Johnson, "The support for the mode of his death, its agents, and perhaps its coagents, is overwhelming: Jesus faced a trial before his death, was condemned and executed by crucifixion." {11} The crucifixion of Jesus is recognized even by the Jesus Seminar as "one indisputable fact." {12}

But that raises the very puzzling question: Why was Jesus crucified? As we have seen, the evidence indicates that his crucifixion was instigated by his blasphemous claims, which to the Romans would come across as treasonous. That's why he was crucified, in the words of the plaque that was nailed to the cross above his head, as "The King of the Jews." But if Jesus was just a peasant, cynic philosopher, just a liberal social gadfly, as the Jesus Seminar claims, then his crucifixion becomes inexplicable. As Professor Leander Keck of Yale University has said, "The idea that this Jewish cynic (and his dozen hippies) with his demeanor and aphorisms was a serious threat to society sounds more like a conceit of alienated academics than sound historical judgement." {13} New Testament scholar John Meier is equally direct. He says that a bland Jesus who just went about spinning out parables and telling people to look at the lilies of the field-- "such a Jesus," he says, "would threaten no one, just as the university professors who create him threaten no one." {14} The Jesus Seminar has created Jesus who is incompatible with the one indisputable fact of his crucifixion.

4. *The resurrection of Jesus.* It seems to me that there are four established facts which constitute inductive evidence for the resurrection of Jesus:

Fact #1: *After his crucifixion, Jesus was buried by Joseph of Arimathea in the tomb.* This fact is highly significant because it means that the location of Jesus's tomb was known to Jew and Christian alike. In that case it becomes inexplicable how belief in his resurrection could arise and flourish in the face of a tomb containing his corpse. According to the late John A. T. Robinson of Cambridge University, the honorable burial of Jesus is one of "the earliest and best-attested facts about Jesus."[{15}](#)

Fact #2: *On the Sunday morning following the crucifixion, the tomb of Jesus was found empty by a group of his women followers.* According to Jakob Kremer, an Austrian specialist on the resurrection, "By far most exegetes hold firmly to the reliability of the biblical statements concerning the empty tomb."[{16}](#) As D. H. van Daalen points out, "It is extremely difficult to object to the empty tomb on historical grounds; those who deny it do so on the basis of theological or philosophical assumptions."[{17}](#)

Fact #3: *On multiple occasions and under various circumstances, different individuals and groups of people experienced appearances of Jesus alive from the dead.* This is a fact that is almost universally acknowledged among New Testament scholars today. Even Gert Lüdemann, perhaps the most prominent current critic of the resurrection, admits, "It may be taken as historically certain that Peter and the disciples had experiences after Jesus's death in which Jesus appeared to them as the risen Christ."[{18}](#)

Finally, fact #4: *The original disciples believed that Jesus was risen from the dead despite their having every reason not to.* Despite having every predisposition to the contrary, it is an undeniable fact of history that the original disciples believed in, proclaimed, and were willing to go to their deaths for the fact of Jesus's resurrection. C. F. D. Moule of Cambridge University concludes that we have here a belief which nothing in terms of prior historical influences can account for--apart from the resurrection itself.[{19}](#)

Any responsible historian, then, who seeks to give an account of the matter, must deal with these four independently established facts: the honorable burial of Jesus, the discovery of his empty tomb, his appearances alive after his death, and the very origin of the disciples' belief in his resurrection and, hence, of Christianity itself. I want to emphasize that these four facts represent, not the conclusions of conservative scholars, nor have I quoted conservative scholars, but represent rather the majority view of New Testament scholarship today. The question is: how do you best explain these facts?

Now this puts the sceptical critic in a somewhat desperate situation. For example, some time ago I had a debate with a professor at the University of California, Irvine, on the historicity of the resurrection of Jesus. He had written his doctoral dissertation on the subject and was thoroughly familiar with the evidence. He could not deny the facts of Jesus's honorable burial, his empty tomb, his post-mortem appearances, and the origin of the disciples' belief in his resurrection. Therefore, his only recourse was to come up with some alternative explanation of these facts. And so he argued that *Jesus had an unknown identical twin brother* who was separated from him at birth, came back to Jerusalem just at the time of the crucifixion, stole Jesus's body out of the grave, and presented himself to the disciples, who mistakenly inferred that Jesus was risen from the dead! Now I won't go into how I went about refuting his theory, but I think that this theory is instructive because it shows to what

desperate lengths skepticism must go in order to deny the historicity of the resurrection of Jesus. In fact, the evidence is so powerful that one of today's leading *Jewish* theologians Pinchas Lapide has declared himself convinced on the basis of the evidence that the God of Israel raised Jesus from the dead! {20}

Conclusion

In summary, the gospels are not only trustworthy documents in general, but as we look at some of the most important aspects of Jesus in the gospels, like his radical personal claims, his miracles, his trial and crucifixion, and his resurrection, their historical veracity shines through. God has acted in history, and we can know it.

Endnotes

{1} Luke Timothy Johnson, *The Real Jesus* (San Francisco: Harper San Francisco, 1996), p. 123.

{2} A. N. Sherwin-White, *Roman Society and Roman Law in the New Testament* (Oxford: Clarendon Press, 1963), pp. 188-91.

{3} Rudolf Pesch, *Das Markusevangelium*, 2 vols., Herders Theologischer Kommentar zum Neuen Testament 2 (Freiburg: Herder, 1976-77), 2: 519-20.

{4} See discussion in Colin J. Hemer, *The Book of Acts in the Setting of Hellenistic History*, ed. Conrad H. Gempf, *Wissenschaftliche Untersuchungen zum Neuen Testament* 49 (Tübingen: J. C. B. Mohr, 1989), chap. 8.

{5} *Ibid.*, chaps. 4-5.

{6} Sherwin-White, *Roman Society*, p. 189.

{7} William M. Ramsay, *The Bearing of Recent Discovery on the Trustworthiness of the New Testament* (London: Hodder & Stoughton, 1915), p. 222.

{8} C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1952), p. 56.

{9} Rudolf Bultmann, *Jesus* (Berlin: Deutsche Bibliothek, 1926), p. 159.

{10} Craig Evans, "Life-of-Jesus Research and the Eclipse of Mythology," *Theological Studies* 54 (1993): 18, 34.

{11} Johnson, *Real Jesus*, p. 125.

{12} Robert Funk, Jesus Seminar videotape.

{13} Leander Keck, "The Second Coming of the Liberal Jesus?" *Christian Century* (August, 1994), p. 786.

{14} John P. Meier, *A Marginal Jew*, vol. 1: *The Roots of the Problem and the Person*, Anchor Bible Reference Library (New York: Doubleday, 1991), p. 177.

{15} John A. T. Robinson, *The Human Face of God* (Philadelphia: Westminster, 1973), p. 131.

{16} Jakob Kremer, *Die Osterevangelien--Geschichten um Geschichte* (Stuttgart: Katholisches Bibelwerk, 1977), pp. 49-50.

{17} D. H. Van Daalen, *The Real Resurrection* (London: Collins, 1972), p. 41.

{18} Gerd Lüdemann, *What Really Happened to Jesus?*, trans. John Bowden (Louisville, Kent.: Westminster John Knox Press, 1995), p. 80.

{19} C. F. D. Moule and Don Cupitt, "The Resurrection: a Disagreement," *Theology* 75 (1972): 507-19.

{20} Pinchas Lapide, *The Resurrection of Jesus*, trans. Wilhelm C. Linss (London: SPCK, 1983).

Visions of Jesus: A Critical Assessment of Gerd Lüdemann's Hallucination Hypothesis

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Gerd Lüdemann's provocative hypothesis that early Christian belief in Jesus' resurrection was the product of hallucinatory experiences originally induced by guilt-complexes in Peter and Paul is assessed and contrasted with the traditional resurrection hypothesis in terms of the usual standards of hypothesis testing: explanatory power, explanatory scope, plausibility, ad hoc-ness, accord with accepted beliefs, and superiority to rival hypotheses.

Gerd Lüdemann has become one of the most prominent and sharpest critics of the historicity of the resurrection of Jesus. After igniting a firestorm of controversy in his native Germany, Lüdemann's writings have leapt the Atlantic to spark debate in this country as well. His conclusions are important not just for New Testament scholarship, but for dogmatic theology as well. As one who has previously defended the historical credibility of the event of Jesus's resurrection,{1} I propose in this paper to assess critically Lüdemann's historical reconstruction of the events of Easter.

Before we begin, it is perhaps worth mentioning that there are a number of dogmatic issues on which we *do* agree, which deserve to be highlighted. First, I agree, in Lüdemann's words, that "The resurrection of Jesus is the central point of the Christian religion." {2} Second, I agree that if someone asks "What *really* happened?", it is not enough to be told to "just believe." {3} Third, I agree that the historian's task is very much like that of the trial lawyer: to examine the witnesses in order to reconstruct the most probable course of events. {4} Fourth, I agree that if someone does not believe in the literal resurrection of Jesus, he should have the honesty to say that Jesus just rotted away—and that he should not be persecuted for having had the courage to say it. {5} Fifth, I agree that if someone does not believe in the literal resurrection of Jesus, then he should have the honesty to say that he is not a Christian—just as Lüdemann has done. {6} Finally, sixth, I agree that if someone does believe in Jesus's literal resurrection, he should admit that he believes in a miraculous intervention of God in the natural world. {7}

Despite these areas of agreement, however, we obviously have wide-ranging differences, too. I maintain that any adequate historical hypothesis about the resurrection must explain four facts: Jesus's honorable burial, the discovery of his empty tomb, his post-mortem appearances, and the origin of the disciples' belief in his resurrection. I shall first summarize some of the evidence for each of these facts and then examine Lüdemann's treatment of them.

The Inductive Evidence

The Burial

Fact #1: *After his crucifixion Jesus was buried by Joseph of Arimathea in the tomb.* My statement of this fact represents the core of the burial narrative. I do not include secondary details, such as Joseph's Christian commitments. Such circumstantial details are inessential to the historicity of Jesus's honorable burial. The fact of Jesus's honorable burial is highly significant because it implies that the location of Jesus's tomb was known in Jerusalem. In that case, it is extremely difficult to see how the disciples could have proclaimed Jesus's resurrection in Jerusalem if the tomb had not been empty.

We may summarize some of the evidence for Fact #1 as follows:

1. Jesus's burial is attested in the very old tradition quoted by Paul in I Cor. 15.3–5.
2. The burial is part of very old source material used by Mark in writing his gospel.
3. As a member of the Sanhedrin, which condemned Jesus, Joseph of Arimathea is unlikely to be a Christian invention.

4. The burial story itself lacks any traces of legendary development.
5. No other competing burial story exists.

With respect to the first supporting line of evidence, we know that in the second line of the pre-Pauline formula in 1 Cor. 15.3–5 Jesus's burial is mentioned. Lüdemann recognizes this early evidence for the burial but questions whether the burial referred to is the same event as the burial by Joseph of Arimathea.^{8} A comparison of the four-line formula transmitted by Paul with the Gospel narratives on the one hand and the sermons in the Acts of the Apostles on the other makes the answer clear:

I Cor 15.3–5	Acts 13.28–31	Mk. 15.37–16.7
Christ died ...	Though they could charge him with nothing deserving death, yet they asked Pilate to have him killed.	And Jesus uttered a loud cry and breathed his last.
he was buried . . .	they took him down from the tree and laid him in a tomb	And he [Joseph] bought a linen shroud, and taking him down, wrapped him in the linen shroud and laid him in a tomb.
he was raised . . .	But God raised him from the dead . . .	"He has risen, he is not here; see the place where they laid him."
he appeared . ..	. . . and for many days he appeared to those who came up with him from Galilee to Jerusalem, who are now his witnesses to the people.	"But go, tell his disciples and Peter that he is going before you to Galilee; there you will see him."

This remarkable correspondence of independent traditions reveals that the four-line formula is a summary in outline form of the basic events of Jesus's passion and resurrection, including his burial in the tomb. Lüdemann holds that this early formula dates from just two years after the crucifixion.^{9} It thus represents fantastically early evidence for Jesus's honorable burial.

With respect to the second supporting line of evidence, I take it for granted that Mark is working with a pre-Markan passion narrative, and I claim that the burial account was part of that passion narrative. This latter claim is relatively uncontroversial, I think, since the burial is an essential part of the story line, common to all the Gospels, bringing the passion narrative toward its conclusion. Even if we do not postulate a full-blown pre-Markan passion narrative, we must, in light of the independence of John's Gospel from the Synoptics, recognize a pre-Markan burial tradition of Jesus's entombment by Joseph of Arimathea.^{10} And even among the Synoptics, the sporadic and uneven nature of Luke and Matthew's verbal agreements with Mark, their omissions from Mark, and their numerous agreements with each other against Mark suggest that Mark's narrative was not their only source, but that they had additional sources for the burial and empty tomb accounts.^{11} This multiplicity of independent sources is important because, as Marcus Borg explains, "if a tradition appears in an early source *and* in another independent source, then not only is it early, but it is also unlikely to have been

made up." {12} It is remarkable that in the case of the burial we have some of the earliest sources behind the New Testament (e.g., the pre-Pauline formula and the pre-Markan passion story) as well as a number of others.

The third point concerns the enigmatic figure Joseph of Arimathea, who suddenly appears to provide an honorable burial for Jesus, in contrast to the two criminals crucified with him. The late Raymond Brown stated this point forcefully in his magisterial *The Death of the Messiah*:

That the burial was done by Joseph of Arimathea is very probable, since a Christian fictional creation from nothing of a Jewish Sanhedrist who does what is right is almost inexplicable, granted the hostility in early Christian writings toward the Jewish authorities responsible for the death of Jesus While high probability is not certitude, there is nothing in the basic pre-Gospel account of Jesus's burial by Joseph that could not plausibly be deemed historical. {13}

Given his status as a Sanhedrist—all of whom, Mark reports, voted to condemn Jesus—, Joseph is the last person one would expect to care properly for Jesus. Moreover, his association with Arimathea, an obscure town with no theological or historical significance, further lends historical credibility to the figure of Joseph. In a sense, this third line of evidence for the burial is an example of the application of the criterion of dissimilarity. For given the hostility in the early Church toward the Jewish leaders, who had, in Christian eyes, engineered a judicial murder of Jesus, the figure of Joseph is startlingly dissimilar to the prevailing attitude in the Church toward the Sanhedrin. Therefore, Joseph is unlikely to have been a fictional creation of the early Church.

The fourth line of evidence concerns the lack of any traces of legendary development in the burial story as transmitted by Mark. The burial narrative is this-worldly, perfunctory, and lacking in theological reflection. The stark simplicity of the Markan account is in contrast with what one might expect to find in late, legendary accounts (such as in the Gospel of Peter). Given the early age of the pre-Markan passion story, it is implausible to see Mark's account as an unhistorical legend, nor does it evince any signs of being such.

Finally, the fifth supporting line of evidence for the burial account is that no other competing burial story exists. If the Markan account is at its core a legendary fiction, then it is odd that we find no trace of alternative, competing legendary accounts, not to speak of traces of what really happened to the corpse. One might profitably contrast here the competing myths/legends about what happened to the bodies of such pagan figures as Osiris and Empedocles. In the absence of any check by historical facts, alternative legendary accounts can arise simultaneously and independently. If the burial narrative is purely legendary, why is there no competing account of Jesus's burial, say, by some faithful disciple(s) of Jesus or by his family or by Romans at the direction of a sympathetic Pilate? Whence the unanimity of the tradition in the absence of a historical core? Feeling the force of this question, Lüdemann thinks to discern a separate tradition of burial by the Jews in Jn. 19.31–37; Acts 13.29. {14} But as Broer points out, these cannot be the same because in the one Romans are asked to dispatch the bodies and in the others the Jews are said to have done so. {15} More fundamentally, the ascription in Acts of the burial to the Jews is part of a wider tendency by Luke to polemicize against the Jewish authorities and which leads him to ascribe even Jesus's *crucifixion* to the Jews (Acts 2.23; 2.36; 4.10)! {16}

Together these mutually reinforcing lines of evidence provide a strong *prima facie* case for accepting the historicity of Jesus's burial by Joseph of Arimathea in the tomb. For these and other reasons, the majority of New Testament critics concur with the late John A. T. Robinson that the honorable burial of Jesus is "one of the earliest and best –attested facts about Jesus."[{17}](#)

Notice that anti–miraculous historiographical principles do not even come into play in assessing the historicity of the burial account, for it is as down to earth as the crucifixion account. Any historian *qua* historian can ask the question, "What was done with Jesus's corpse?" just as straightforwardly as he can ask, "How did Jesus of Nazareth die?" If, then, Lüdemann will deny the force of the cumulative evidence for Jesus's honorable burial, he needs to have at least equally compelling evidence to the contrary.

In response to this evidence, Lüdemann admits that it would be "going too far" to deny that Joseph of Arimathea is historical,[{18}](#) but, he says, "We can no longer know where Joseph (or Jews unknown to us) put the body."[{19}](#) His main reason for denying Joseph's laying Jesus in the tomb is that the later gospels tend to exalt Joseph, calling him "a good and just man" (Lk. 23.50) or even "a disciple" (Jn. 19.38). But even if the later gospel writers exhibit this tendency, that does not seem to be a good reason for denying the historical fact reported in the pre–Markan source of Joseph's interment of Jesus in the tomb. Indeed, if anything, it serves principally to underscore point (4) above, the primitiveness of the pre–Markan account. In fact, if Lüdemann is willing to grant Joseph's historicity, then how can we deny his role in the burial, since the principal proof of his historicity is precisely that a fictional burial account would not link Jesus's honorable burial with a Sanhedrist? It is precisely his link with Jesus's burial that makes Joseph's historicity plausible. Thus, the tendency of later gospel writers to exaggerate Joseph's devotion to Jesus has not led most scholars to deny the fundamental reliability of the burial story.

The Empty Tomb

Fact #2: On the Sunday following the crucifixion Jesus's tomb was found empty by a group of his women followers. Among the reasons which have led most scholars to this conclusion are the following:

1. The empty tomb story is part of the very old source material used by Mark.
2. The old tradition cited by Paul in I Corinthians implies the fact of the empty tomb.
3. The story is simple and lacks signs of legendary embellishment.
4. The fact that women's testimony was worthless in first century Palestine counts in favor of the women's role in discovering the empty tomb.
5. The earliest Jewish allegation that the disciples had stolen Jesus's body shows that the body was in fact missing from the tomb.

The first supporting line of evidence refers once more to the pre–Markan passion narrative and claims that the empty tomb account was included in that narrative.[{20}](#) This precludes the story's being a late–developing legend. Lüdemann, however, lists four reasons why Mark 16.1–8 is in his opinion "worthless" as an argument for the historicity of the empty tomb:[{21}](#) (1) Such an argument assumes that the burial site was known, which is seriously in doubt. (2) The argument assumes contrary to v. 8 that the women did say something. (3) The passage, does not, strictly speaking, tell of the discovery of the empty tomb but rather proclaims the resurrection at the empty tomb. And (4) How will one avoid Kirsopp Lake's inference that the

women went to the wrong tomb? These objections are not so weighty as Lüdemann seems to think. First, we have seen good reason to accept the historicity of Jesus's honorable burial by Joseph of Arimathea, so that unless Lüdemann can provide some reason for assessing negatively the women's presence at the crucifixion and burial—which he has not, to my knowledge, done—there is no reason to think that the women could not have come to the burial site on Sunday morning. The women's silence and terror reflect a Markan motif of stunned human reaction to the presence of the divine^{22} and is not intended in any case to be taken as an enduring silence; otherwise Mark would have no story to tell! Lüdemann's third objection makes a fatuous distinction, since proclamation of Jesus's resurrection at his empty tomb entails an empty tomb. The angel's proclamation actually draws attention to the emptiness of the tomb: "He is risen; he is not here! Behold—the place where they laid him!" (Mk. 16. 6) As for Lake's theory, one of the reasons it generated almost no following is that it succumbs to the obvious objection that the Jewish authorities would have been only too glad to point out the women's mistake once the disciples began to preach the resurrection. So it is difficult to see how on the basis of such misgivings Lüdemann's verdict can be justified that the empty tomb narrative in Mark is historically worthless.

With respect to the second supporting line of evidence, Lüdemann hopes to avert the implication of the empty tomb by denying that the burial is an autonomous event.^{23} But the Greek text belies this claim. For each line is prefixed by a grammatically unnecessary ο τ ι which serves to distinguish and order serially the separate events. It is fanciful to think that either the ex-Pharisee Paul or the early Jerusalem fellowship from which the formula sprang could have asserted that Christ "was buried and he was raised" and yet think that his corpse still lay in the tomb.^{24} Moreover, a comparison once more of the four-line formula with the Gospel narratives on the one hand and the sermons in Acts on the other reveals that the third line is a summary of the empty tomb narrative, the "he has been raised" mirroring the "he is risen!"

The third supporting line of evidence has reference once more to the Markan empty tomb narrative. Like the burial account, it is remarkably straightforward and unembellished by theological or apologetic motifs likely to characterize a later legendary account. The resurrection itself is not witnessed or described, and there is no reflection on Jesus's triumph over sin and death, no use of Christological titles, no quotation of fulfilled prophecy, no description of the Risen Lord. Even if we excise the angelic figure as, say, a purely literary figure which provides the interpretation of the vacant tomb, then we have a narrative that is all the more stark and unadorned (cf. John 20.1–2). This suggests that the story is not at its core a legend. To appreciate how restrained Mark's narrative is, one has only to read the account in the Gospel of Peter, which describes Jesus's triumphant egress from the tomb, accompanied by angelic visitants, followed by a talking cross, heralded by a voice from heaven, and all witnessed by a Roman guard, the Jewish leaders, and a multitude of spectators!

The fourth supporting line of evidence is essentially an appeal to the criterion of embarrassment, again one of the important criteria of authenticity. Given the second-class status of women in first century Palestine and their inability to serve as witnesses in a Jewish court, it is amazing that they should appear here as the discoverers and chief witnesses to the fact of Jesus's empty tomb, for so unreliable a witness was an embarrassment to the Christian proclamation. Any later, legendary account would surely have made male disciples discover the empty tomb. Indeed, critics often see the story of Peter's inspection of the empty tomb (along with another disciple) as just such a legendary progression. The fact that it is women, whose testimony was worthless, rather than men who are said in the earliest narrative to be

the discoverers of the empty tomb is best explained by the fact that the tradition here is reliable.{25}

Finally, we have the evidence of the earliest Jewish polemic against the resurrection, referred to in Matthew's guard story, as evidence for the empty tomb. Lüdemann grants that the Jewish polemic does show Jewish belief in the empty tomb; but he dismisses this evidence because, he asserts, the Jews came to think that the tomb was empty only through Christian tradition. We can rule out the suggestion that they knew of the empty tomb as a historical fact, he asserts, because Jesus did not have a regular burial and so no one knew what had happened to the corpse.{26} But wholly apart from the fact that we have good reasons to accept the honorable burial of Jesus, the point remains that even if the burial account were a legend and no one knew what had happened to Jesus's corpse, when the disciples began to proclaim in Jerusalem "He is risen from the dead!" (Mt. 27. 64), their Jewish antagonists would not have invented for the Christians the empty tomb by saying that the body had been stolen. Lüdemann has to explain why, if no one knew where the body had been laid, the Jewish opponents of the Christians would have alleged that the body had been stolen. As for the assertion that Jews knew only of the Christian tradition of the empty tomb, this claim fails to reckon with the tradition history lying behind Matthew's story. That the story is not a Matthean creation out of whole cloth is evident by the many non-Matthean linguistic traits in the narrative.{27} Behind the story evidently lies a developing pattern of assertion and counter-assertion:

Christian: "He is risen from the dead!"

Jew: "No, his disciples stole away his body."

Christian: "The guard at the tomb would have prevented any such theft."

Jew: "No, the guard fell asleep."

Christian: "The chief priests bribed the guard to say this."

This pattern probably goes right back to controversies in Jerusalem following the disciples' proclamation of the resurrection, for as John Meier observes, "The earliest fights about the person of Jesus that raged between ordinary Jews and Christian Jews after Easter centered on the Christian claims that a crucified criminal was the Messiah, that God had raised him from the dead"{28} The non-Matthean vocabulary and evident tradition history behind the dispute makes this assumption plausible. But if Jerusalem is the fount of this on-going dispute, then the question presses why the Jewish opponents of the Christian Way, confronted with spurious claims about an empty tomb, would, instead of denouncing such a fiction, have claimed instead that the disciples had stolen the body out of a tomb which did not exist and no one could point to.

So we have a pretty strong *prima facie* case for accepting the fundamental reliability of the account of the empty tomb. Hence, in the words of Jacob Kremer, "By far most exegetes hold firmly to the reliability of the biblical statements concerning the empty tomb."{29}

Lüdemann, however, regards the story as "an apologetic legend." {30} But so far as I can see, he offers no positive evidence for this assertion. Indeed, it is difficult to see how this hypothesis can be sustained, given the multiple, independent attestation enjoyed by the empty tomb narrative. Rather Lüdemann's scepticism is based upon four assumptions, each of which strikes me as very dubious. (1) He assumes that the only primary source we have for the empty tomb is Mark's gospel. {31} But this is almost certainly wrong. At least Matthew and John have independent sources about the empty tomb, it's also mentioned in the sermons in the Acts of the Apostles (2.29; 13.36), and it's implied by Paul (I Cor. 15.4). According to

Klaus Berger, "The reports about the empty tomb are related by all four gospels (and other writings of early Christianity) in a form independent of one another. . . . we have a great abundance of reports, which have been separately handled down." {32} (2) Lüdemann assumes that when Jesus was arrested, the disciples fled back to Galilee; {33} that is why women appear as the discoverers of the empty tomb. But the flight of the disciples is rightly dismissed by the historian Hans von Campenhausen as a scholarly fiction. {34} Not only is there no evidence for this assumption, itself inherently implausible, but Lüdemann's own *theory* contradicts this assumption, since it is crucial for his theory that at least Peter remained in Jerusalem, where he denied Jesus. In any case, if the story of the women's discovery of the empty tomb is a pure legend, then why could we not have a purely legendary account of the discovery of the empty tomb by male disciples? (3) Lüdemann assumes that the Jewish authorities, who he takes to have disposed of Jesus's corpse, suffered a sort of collective amnesia about what they did with the body of Jesus. Even if Joseph (or the Jewish authorities) only gave Jesus a dishonorable burial, why did they not point to his burial place as the easiest answer to the disciples' proclamation of the resurrection? Lüdemann admits, "Jews showed an interest in where Jesus's corpse had been put, and of course a proclamation of Jesus as the Risen One . . . provoked questions about his body from opponents or unbelievers." {35} So why, when the disciples began to preach the resurrection of Jesus, did the Jewish authorities not say where they had put Jesus's body? Lüdemann's answer: they forgot! {36} Again, this is less than convincing. (4) Finally, Lüdemann assumes that belief in the empty tomb arose as an inference from the belief that Jesus was risen from the dead. {37} While Lüdemann is quite right, I think, to recognize, in contrast to scholars who hold that belief in the resurrection of Jesus did not for first century Jews or Christians imply anything's happening to the corpse, still his suggestion cannot be the whole story because it leaves unexplained the inference that Jesus's corpse, contrary to custom, had been laid *in a tomb*. Belief in the resurrection would, indeed, imply that the corpse would no longer be around, but it would not, without further ado, lead one to infer that there was an empty tomb to show for it. Thus, Lüdemann still has not explained belief in the empty tomb.

In sum, we have good grounds for believing that Jesus's tomb was found to be empty by a group of his women followers.

The Post–Mortem Appearances

Fact #3: *On multiple occasions and under various circumstances, different individuals and groups of people experienced appearances of Jesus alive from the dead.* This is a fact which is almost universally acknowledged among New Testament scholars, for the following reasons:

1. The list of eyewitnesses to Jesus's resurrection appearances which is quoted by Paul in I Cor. 15. 5–7 guarantees that such appearances occurred.
2. The appearance traditions in the gospels provide multiple, independent attestation of such appearances.

With respect to the first supporting line of evidence, it is universally accepted on the basis of the early date of Paul's tradition as well as the apostle's personal acquaintance with many of the people listed that the disciples did experience post–mortem appearances of Christ. Among the witnesses of the resurrection appearances were Peter, the immediate circle of the disciples known as "the Twelve," a gathering of 500 Christian believers (many of whom Paul evidently knew, since he was aware that some had died by the time of his writing), Jesus's younger

brother James, and a wider group of apostles. "Finally," says Paul, "as to one untimely born, he appeared also to me" (I Cor. 15.8).

The second supporting line of evidence appeals again to the criterion of multiple attestation. The Gospels independently attest to post-mortem appearances of Jesus, even to some of the same appearances found in Paul's list. Wolfgang Trilling explains,

From the list in I Cor. 15 the particular reports of the Gospels are now to be interpreted. Here may be of help what we said about Jesus's miracles. It is impossible to 'prove' historically a particular miracle. But the totality of the miracle reports permits no reasonable doubt that Jesus in fact performed 'miracles.' That holds analogously for the appearance reports. It is not possible to secure historically the particular event. But the totality of the appearance reports permits no reasonable doubt that Jesus in fact bore witness to himself in such a way. {38}

The appearance to Peter is independently attested by Paul and Luke (I Cor. 15.5; Lk. 24.34), the appearance to the Twelve by Paul, Luke, and John (I Cor. 15.5; Lk. 24:36–43; Jn. 20.19–20), the appearance to the women disciples by Matthew and John (Mt. 28.9–10; Jn. 20.11–17), and appearances to the disciples in Galilee by Mark, Matthew, and John (Mk. 16.7; Mt. 28. 16–17; Jn. 21). Taken sequentially, the appearances follow the pattern of Jerusalem–Galilee–Jerusalem, matching the festival pilgrimages of the disciples as they returned to Galilee following the Passover/Feast of Unleavened Bread and traveled again to Jerusalem two months later for Pentecost.

Lüdemann himself concludes, "It may be taken as historically certain that Peter and the disciples had experiences after Jesus's death in which Jesus appeared to them as the risen Christ." {39} Thus, we are in basic agreement that following Jesus's crucifixion various individuals and groups of people experienced appearances of Christ alive from the dead. The real bone of contention will be how these experiences are best to be explained.

Origin of the Christian Way

Fact #4: The original disciples believed that Jesus was risen from the dead despite almost every predisposition to the contrary. Three aspects of the disciples' disposition following Jesus's crucifixion put a question mark behind the faith and hope they had placed in Jesus:

1. Jesus was dead, and Jews had no anticipation of a dying, much less rising, Messiah.
2. According to Jewish law, Jesus's execution as a criminal showed him out to be a heretic, a man literally under the curse of God.
3. Jewish beliefs about the afterlife precluded anyone's rising from the dead before the general, eschatological resurrection of the dead.

It is important to appreciate, with respect to the first aspect of their situation, that in Jewish expectation Messiah would conquer Israel's enemies and restore the throne of David, not be shamefully executed by them. Jesus's ignominious execution at the hands of Rome was as decisive a disproof as anything could be to a first century Jew that Jesus was not Israel's awaited Messiah, but another failed pretender. Failed Messianic movements were nothing new in Judaism, and they left their followers with basically two alternatives: either go home or else find a new Messiah. These were no doubt hard choices, but nevertheless they were the choices one had. After surveying such failed Messianic movements before and after Jesus, N. T. Wright remarks,

So far as we know, all the followers of these first-century Messianic movements were fanatically committed to the cause. They, if anybody, might be expected to suffer from this blessed twentieth century disease called 'cognitive dissonance' when their expectations failed to materialize. But in no case, right across the century before Jesus and the century after him, do we hear of any Jewish group saying that their executed leader had been raised from the dead and he really was the Messiah after all.{40}

Wright raises the interesting question, if the disciples did not want simply to go home, then why did they not pick someone else, like James, to be the Messiah? As Jesus's younger brother, he would have been the natural choice. But although James eventually did emerge as the most powerful leader in the Jerusalem church, he was never called the Messiah. When Josephus refers to him, he calls him merely "the brother of the so-called Messiah" (*Antiquities of the Jews* 20.200). Based on the typical experience of failed Messianic movements, it is to be expected that the disciples should have either gone home or fastened upon someone else—but we know that they did not, which needs explaining.

As for the second point, Old Testament law dictated that anyone executed by hanging on a tree was under God's curse (Deut. 21.23), and Jews applied this verdict to those executed by crucifixion as well. Thus, seen through the eyes of a first century Jewish follower of Jesus, the crucifixion meant much more than the death of one's beloved Master, akin to the death of Socrates. Rather it was a catastrophe; for it meant that far from being God's Anointed, Jesus of Nazareth had actually been accursed by God. The disciples had been following a man whom God had rejected in the most unequivocal terms.

Finally, Jewish hope in the resurrection of the dead was invariably a corporate and eschatological hope. The resurrection of all the righteous dead would take place after God had brought the world as we know it to an end. Surveying the Jewish literature, Joachim Jeremias concluded,

Ancient Judaism did not know of an anticipated resurrection as an event of history. Nowhere does one find in the literature anything comparable to the resurrection of Jesus. Certainly resurrections of the dead were known, but these always concerned resuscitations, the return to the earthly life. In no place in the later Judaic literature does it concern a resurrection to $\delta\omicron\xi\alpha$ as an event of history.{41}

Even if the disciples' faith in Jesus had somehow managed to survive the crucifixion, they would at most have looked forward to their reunion with him at the final resurrection and would perhaps have preserved his tomb as a shrine, where Jesus's bones might rest until the eschatological resurrection. That was the Jewish hope.

But we know that that did not happen. Despite their having most every predisposition to the contrary, it is an indisputable fact that the earliest disciples suddenly and sincerely came to believe that God had raised Jesus of Nazareth from the dead. . Lüdemann himself declares that historical analysis leads to the "abrupt origination of the Easter faith of the disciples." {42} Any responsible historian wanting to give an account of the origins of Christianity must explain the origin of this belief on the part of those who had known and followed Jesus. Most everyone will agree with Luke Johnson when he writes, "Some sort of powerful transformative experience is required to generate the sort of movement earliest Christianity was and the sort of literature the New Testament is." {43} The question is: how

do we best explain that experience—by the resurrection of Jesus or by hallucinations on the part of the disciples?

In summary, then, there are four facts which any adequate historical hypothesis concerning Jesus's fate must account for: his honorable burial, the discovery of his empty tomb, his post-mortem appearances, and the origin of the disciples' belief in his resurrection.

The Best Explanation

What hypothesis best explains the historical data concerning the fate of Jesus? In his book *Justifying Historical Descriptions*, historian C. B. McCullagh lists six criteria which historians use in testing historical descriptions: *explanatory scope*, *explanatory power*, *plausibility*, *ad hoc-ness*, *accord with accepted beliefs*, and *superiority to rival hypotheses*.^{44} Now we have before us two competing hypotheses, which I shall call the Resurrection Hypothesis and the Hallucination Hypothesis respectively.^{45}

The Hallucination Hypothesis

According to Lüdemann, Peter, having denied Christ, was so consumed with guilt that he found psychological release in projecting a vision of Jesus, which led him to believe that Jesus was risen from the dead. "Under the impression of Jesus's proclamation and death, there finally awoke in Peter the 'And yet. . . ' of faith. Thereby the crucified Jesus showed himself to be the living Jesus, so that Peter could once again apply to himself—and this time with profound clarity—God's word of forgiveness present in Jesus's work."^{46} Peter's experience was infectious in the early Christian community, and soon others, too, who did not share Peter's trauma, also saw hallucinations of the Risen Lord. When Jewish opponents objected and asked where the body was, "it could immediately be reported that the women had found the tomb empty and later that Jesus had even appeared to the women at the tomb."^{47} Much later, the legend of the discovery of Jesus's empty tomb arose. Meanwhile, Saul of Tarsus struggled inwardly with guilt as he labored under the yoke of the Law, and his zeal in persecuting Christians was a manifestation of a secret inner attraction to the Christian message. According to Lüdemann, ". . . if one had been able to analyze Paul prior to his Damascus vision, the analysis would probably have shown a strong inclination to Christ in his subconscious; indeed, the assumption that he was unconsciously Christian is then no longer so far-fetched."^{48} On the Damascus road the pent-up struggle erupted in a hallucination of Jesus, resulting in Paul's wholesale conversion to the faith he once persecuted. "The guilt complex which had arisen with the persecution was resolved through the certainty of being in Christ."^{49}

Let us examine how this hypothesis fares as an explanation of the facts when assessed by McCullagh's six criteria

Criterion 1: *Explanatory Scope*. This is the central failing of the Hallucination Hypothesis. Offered only as a way of explaining the post-mortem appearances of Jesus, its explanatory scope is too narrow because it offers nothing by way of explanation of the empty tomb. In order to explain the empty tomb, one must conjoin some independent hypothesis to the Hallucination Hypothesis. Now, of course, Lüdemann denies the fact of the empty tomb. But that is a matter of establishing one's inductive data base, and we saw in our discussion there that Lüdemann's handling of the evidence for the burial and empty tomb were less than convincing. In a sense, his denial of the burial and empty tomb of Jesus is born out of

necessity; for once you admit these facts, then the inadequate explanatory scope of the Hallucination Hypothesis becomes patent, and the theory is in deep trouble. For that reason Lüdemann finds himself in the awkward position of denying so banal a fact as Jesus's honorable burial, recognized by most scholars as historical. Criterion 2: *Explanatory Power*. Here we grant for the sake of argument that Peter did experience a hallucination of Jesus after his death due to the psychological factors postulated by Lüdemann. The question then becomes whether this explanation has sufficient power to account for the post-mortem appearances and the origin of the disciples' belief in Jesus's resurrection. There are two reasons to think that these facts are not well-explained by the Hallucination Hypothesis.

First, with respect to the appearances, the *diversity of the appearances* is not well-explained by means of such visions. The appearances were experienced many different times, by different individuals, by groups, at various locales and under various circumstances, and by not only believers, but also by unbelievers like James the brother of Jesus and the Pharisee Saul of Tarsus.

This diversity is very difficult to explain by recourse to hallucinations. For hallucinations require a special psychological state on the part of the percipient. But since a guilt complex *ex hypothesi* obtained only for Peter and Paul, the diversity of the post-mortem appearances must be explained as a sort of contagion, a chain reaction. But Lüdemann is unable to provide any example of this. {50} It is important to keep in mind that it is the diversity that is at issue here, not merely individual incidents. Even if one could compile from the casebooks an amalgam consisting of stories of hallucinations over a period of time (like the visions in Medjugorje), mass hallucinations (as at Lourdes), hallucinations to various individuals, and so forth, the fact remains that there is no single instance in the casebooks exhibiting the diversity involved in the post-mortem appearances of Jesus. It is only by compiling unrelated cases that anything analogous might be constructed.

One might mention three specific cases which are not well-explained by the Hallucination Hypothesis:

- *James*: Jesus's brother did not believe that his elder sibling was the Messiah or even anybody special during his lifetime (Mk. 3.21, 31–35; 6.3; Jn. 7.1–10). But unexpectedly we find Jesus's brothers among those gathered in the upper room in Christian worship following the resurrection appearances (Acts 1.14), and in time James emerges as a leader in the Jerusalem church (Acts 12.17; Gal. 1.19). We learn from Josephus that James was eventually martyred for his faith in Jesus Christ during a lapse in the civil government in the mid-60s. This remarkable transformation is in all probability due to the fact, recorded by Paul, that "then he appeared to James" (I Cor. 15.7). Lüdemann himself goes so far as to say that it is "certain" that James experienced a resurrection appearance of Jesus, {51} but he is strangely mute when it comes to explaining how his theory accounts for that experience. The Hallucination Hypothesis has weak explanatory power with respect to this appearance, since James, as an unbeliever and no part of the Christian community, was unlikely to experience a "secondary vision" of the Risen Jesus.
- *The 500 brethren*: Most of these people were still alive in AD 55 when Paul wrote I Corinthians and could be questioned about the experience. Lüdemann explains this appearance as a legendary reference to the event of Pentecost, which he represents as an experience of "mass ecstasy." {52} But such an explanation is weak, not only because the eyewitnesses were still around, but because the event of Pentecost was

fundamentally different from a resurrection appearance. As Hans Kessler in his critique of Lüdemann's suggestion writes,

Equating this appearance with the event of Pentecost is more than questionable, especially since in Acts 2.1–13 all the characteristics of an Easter narrative are missing (above all the appearing of Christ), and, conversely, in the early Easter texts the Spirit plays no role.{53}

It would be highly implausible that an event like Pentecost (which is presumably supposed to have been more or less accurately preserved in Christian tradition as found in Acts 2) to have evolved into a resurrection appearance, given that the event had none of the basic elements of an appearance, especially Christ's appearing! And again, the point deserves underlining that while collective hallucinations do rarely occur, it is the diversity of all these different sorts of appearances that taxes the explanatory strength of the Hallucination Hypothesis.

- *The women:* That women were the first recipients of a post-mortem appearance of Jesus is both multiply attested and established by the criterion of embarrassment. For this reason, as Kremer reports, there is an increasing tendency in recent research to regard this appearance as "anchored in history." {54} Lüdemann himself calls it "historically certain"—though his theory forces him gratuitously to deny its primacy. {55} Nowhere in the New Testament, however, not even in I Cor. 15.5, is it said that Peter was the first to see a resurrection appearance of Christ, despite the widespread assumption of his chronological priority. Rather the women have priority. They are doubtless omitted from the list in 1 Cor. 15.5–7 because naming them as witnesses would have been worse than worthless in a patriarchal culture. But this is fatal to Lüdemann's hypothesis, since then the women's experience cannot be regarded as a "secondary vision" prompted by Peter's experience. Since they did not share Peter's guilt, having remained singularly faithful to Jesus to the end, they lacked the special psychological conditions leading to hallucinations of Jesus. Thus, Lüdemann's hypothesis has no explanatory power with respect to this appearance.

In sum, the Hallucination Hypothesis does not have strong explanatory power with respect to the diversity of the resurrection appearances.

Secondly, the Hallucination Hypothesis has weak explanatory power with respect to *the origin of the disciples' belief* in Jesus's resurrection. Subjective visions, or hallucinations, have no extra-mental correlate but are projections of the percipient's own brain. So if, as an eruption of a guilty conscience, Paul or Peter were to have projected visions of Jesus alive, they would have envisioned him in Paradise, where the righteous dead awaited the eschatological resurrection. But such exalted visions of Christ leave unexplained their belief in his resurrection. The inference "He is risen from the dead," so natural to our ears, would have been wholly unnatural to a first century Jew. In Jewish thinking there was already a category perfectly suited to describe Peter's postulated experience: Jesus had been assumed into heaven. An assumption is a wholly different category from a resurrection. To infer from heavenly visions of Jesus that he had been resurrected ran counter to Jewish thinking in two fundamental respects, as we have seen, whereas Jesus's assumption into heaven would have been the natural conclusion. So far as I know, Lüdemann nowhere addresses the question of why hallucinations, had they occurred, would have led to the conclusion that Jesus had been raised from the dead.

Thus, the hallucination theory has weak explanatory power both in that it cannot account for the diversity of the appearances and in that it cannot account for the origin of the disciples' belief in Jesus's resurrection.

Criterion 3: *Plausibility*. There are at least two respects in which Lüdemann's Hallucination Hypothesis is implausible.

First, there is little plausibility in Lüdemann's psycho-analysis of Peter and Paul. Here two points may be made:

(a) There are *insufficient data* to do a psycho-analysis of Peter and Paul. All we have from Paul is a few autobiographical passages in his letters, and the information about Peter's psyche is, by Lüdemann's own admission, "incomparably worse." {56} We do not have in the New Testament any narrative at all of Peter's experience of seeing Jesus, but merely a pair of epigrammatic references: "then he appeared to Cephas" (I Cor. 15.5); "The Lord is risen, indeed, and has appeared to Simon" (Lk. 24. 34). Lüdemann's whole theory is based on imaginative conjectures about Peter's psychological state, of which we know almost nothing. Psychoanalysis is notoriously difficult even with a patient seated in front of oneself on the couch, but it is virtually impossible with historical figures. That is why the genre of psychobiography is rejected by historians. Martin Hengel rightly concludes, "Lüdemann . . . does not recognize these limits on the historian. Here he gets into the realm of psychological explanations, for which no verification is really possible . . . the sources are far too limited for such psychologizing analyses." {57}

(b) The evidence we do have suggests that *Lüdemann's psycho-analysis of Peter and Paul is mistaken*. In the first place, Lüdemann's imaginative reconstruction of Peter's emotional state following his denials and Jesus's crucifixion fails to diagnose correctly the true problem Peter faced. It was not so much that he had failed his Lord as that his Lord had failed him! Lüdemann thus fails to enter into the mindset of a first century Jew who had been following a failed Messianic pretender. As Grass has emphasized in his trenchant critique of the subjective vision hypothesis, one of the greatest weaknesses of that theory is that it cannot really take seriously what a catastrophe the crucifixion was for the disciples' faith in Jesus. {58} Ignoring the disaster of the cross, Lüdemann imagines without a shred of evidence a self-preoccupied Peter wrestling with his own guilt and shame rather than struggling with dashed Messianic expectations. And lest it be said that such shattered expectations led to Peter's hallucinating Jesus alive from the dead, let me simply remind us that no such hope existed in Israel, either with respect to the Messiah or to the final resurrection. Linking these concepts is the result, not the cause, of the disciples' experience.

As for Paul, the evidence that we have indicates that Paul did not struggle with a guilt complex under the Jewish law. Nearly forty years ago, Krister Stendahl pointed out that Western readers have the tendency to interpret Paul in light of Martin Luther's struggles with guilt and sin. But Paul the Pharisee experienced no such struggles. Stendahl writes,

Contrast Paul, a very happy and successful Jew, one who can . . . say . . . , 'As to the righteousness under the law, (I was) blameless' (Philip. 3:6). That is what he says. He experiences no troubles, no problems, no qualms of conscience. He is a star pupil, the student to get the thousand dollar graduate scholarship in Gamaliel's Seminary . . . Nowhere in Paul's writings is there any indication . . . that psychologically Paul had some problem of conscience . . . {59}

Lüdemann claims that in Rom. 7.7–25 Paul's guilt-ridden, pre-Christian experience under the Law is disclosed to us.^{60} But here it has to be said that the autobiographical interpretation of Rom. 7.7–25 in terms of Paul's pre-Christian versus Christian experience is overwhelmingly rejected by contemporary Pauline interpreters and commentators.^{61} Paul's use of the first person singular pronoun and past tense verbs are not indicators of autobiographical reflection; rather the "I" is the representative self assumed by Paul (cf. Rom. 3.7; I Cor. 6.15; 10.29–30; 13.1–3; Gal. 2.18–19), and the past tense verbs link his disquisition with the afore-described history of sin in the world (Rom. 5.12–14). To postulate a pre- and post-conversion divide is to create a false dichotomy in this chapter, for the switch to the present tense in v. 14 is not accompanied by a change in the attitude of the speaker (cf. v. 25). Therefore, in Kessler's words, "almost all expositors" of Rom. 7 since the late 1920s have abandoned the autobiographical interpretation adopted by Lüdemann.^{62} When we turn to genuinely autobiographical passages in Paul's letters on his pre-Christian experience (Phil. 3.4–14), then, as I say, we find a quite different picture.

Lüdemann's procedure at this point is classic. In response to the objection that Paul's own testimony indicates that he was satisfied as a Jew and felt no conflict with guilt, Lüdemann rejoins that Paul's conflict was *unconscious*.^{63} This typical Freudian move renders Lüdemann's psycho-analysis non-falsifiable, since any evidence against it is just re-interpreted in terms of the theory itself. The hypothesis thereby reveals itself to be sterile.

Thus, both for its want of data as well as for its misconstrual of Peter and Paul's experience, Lüdemann's attempt at psycho-biography has little plausibility.

Second, there is also little plausibility in Lüdemann's claim that the resurrection appearances were merely visionary experiences. Again, two points may be made:

(a) Lüdemann's claim rests on the implausible presupposition that *Paul's experience* on the Damascus Road is *paradigmatic for all the other post-mortem appearances*. Lüdemann admits that his construal of the post-mortem appearances as hallucinatory visions depends on the presupposition that what Paul experienced on the Damascus Road was the *same* as what all the other disciples experienced.^{64} Lüdemann's hypothesis is thus like a pyramid balancing on its point, for if this presupposition is false, there is no reason to think that the disciples' experiences were visionary, and the whole theory topples. But there is no warrant for that presupposition. John Dominic Crossan correctly observes, "Paul needs in 1 Cor. 15 to equate his own experience with that of the preceding apostles. To equate, that is, its *validity* and *legitimacy*, but not necessarily its mode or manner. Jesus was revealed to all of them, but Paul's own entranced revelation should not be presumed to be the model for all others."^{65} Surprisingly, Lüdemann himself concedes that Paul in I Cor. 15 is "not concerned to give a precise account of . . . *what* his resurrection appearances were like The only important thing for Paul . . . was *that* they had taken place."^{66} But once we recognize that Paul's concern in I Cor 15.3–8 is with the fact of Christ's appearance, not with its mode, and realize Paul's strong motivation in his historical context for adding his name to the list of witnesses, then no reason at all remains to think that Paul's testimony implies that all the post-mortem appearances were like Paul's post-ascension encounter. But once that presupposition is gone, there is simply no reason to reduce all these experiences to visionary ones.

(b) The New Testament consistently differentiates between a vision of Christ and a resurrection appearance of Christ. Paul was familiar with "visions and revelations of the Lord" (I Cor. 12.1). Yet Paul, like the rest of the New Testament, did not equate such visions

of Christ with resurrection appearances. The appearances were to a limited circle of witnesses at the birth of the Christian movement and soon ceased, Paul's untimely experience being "last of all" (I Cor. 15.8). Yet visions of the exalted Lord continued to be experienced throughout the Church. The question then presses: what essential difference exists between a vision of Christ and a resurrection appearance of Christ? The answer of the New Testament seems clear: a resurrection appearance was an extra-mental event, whereas a vision was merely in the mind of the percipient. To say that some phenomenon was visionary is not to say that it was illusory. Biblical scholars have found it necessary to distinguish between what are sometimes called "objective visions" and "subjective visions." An objective, or, less misleadingly, veridical vision is a vision caused by God. A subjective or non-veridical vision is a product of the percipient's imagination. A veridical vision involves the seeing of an objective reality without the normal processes of sense perception. A non-veridical vision has no extra-mental correlate and is therefore hallucinatory. Now visions of the exalted Christ such as Stephen's (Acts 7.55–56), Paul's (Acts 22. 17–21), or John's (Rev. 1.10–18) were not regarded as hallucinatory; but neither did they count as resurrection appearances of Christ. Why not? –because appearances of Jesus, in contrast to veridical visions of Jesus, involved an extra-mental reality which anyone present could experience. Even Paul's experience on the Damascus Road, which was semi-visionary in nature, could count as a real appearance because the light and the voice were experienced by Paul's traveling companions (though they were not experienced by them as a revelation of Christ). As I say, this seems to be the consistent answer throughout the New Testament to the question of what the difference was between a vision and an appearance of Jesus. And this answer is thoroughly Jewish in character: the rabbis similarly distinguished between an angelic vision and an angelic appearance based on whether, for example, food seen to be consumed by the angel was actually gone after the appearance had ceased.

Now if this is correct, it is devastating for the claim that the post-mortem appearances of Christ were visionary experiences. For then the distinction running throughout the New Testament between a vision of Christ and a resurrection appearance of Christ becomes inexplicable. Lüdemann admits that most exegetes recognize this distinction, but since he finds himself at a loss to explain it, he simply has to deny it.

Thus, Lüdemann's claim that the resurrection appearances of Jesus were visionary events is doubly implausible, both in its presupposition that all the appearances conformed to the model of Paul's experience and in its failure to render intelligible the New Testament distinction between an appearance and a vision of Jesus. Not only that, but we have also seen that his psychoanalysis of Peter and Paul has in various respects little plausibility. Thus, the Hallucination Hypothesis does not fare well when assessed by the third criterion. Criterion 4: *Accord with Accepted Beliefs*. According to this criterion, that hypothesis is best which forces us to abandon the fewest of generally accepted beliefs. But Lüdemann's hypothesis, if accepted, would compel us to abandon a number of beliefs which are generally accepted by New Testament scholars; for example, the beliefs that:

- (i) Jesus received an honorable burial (by Joseph of Arimathea).
- (ii) Jesus's tomb was discovered empty by some of his women followers.
- (iii) Psychoanalysis of historical figures is infeasible.
- (iv) Paul was basically content with his life under the Jewish Law.
- (v) The appearance to the 500 brethren was distinct from the event at Pentecost.
- (vi) The New Testament makes a distinction between a vision of Christ and a resurrection appearance of Christ.

All of the above statements are generally accepted conclusions of New Testament scholars; yet in order to adopt Lüdemann's hypothesis we should have to reject all of them. This weighs against at least Lüdemann's version of the Hallucination Hypothesis.

Criterion 5: *Ad hoc-ness*. A theory becomes increasingly *ad hoc*, or contrived, in proportion to the number of additional assumptions it requires us to adopt. Lüdemann's Hallucination Hypothesis involves several such additional assumptions:

(i) The disciples fled back to Galilee on the night of Jesus's arrest. Lüdemann needs this assumption in order to separate the disciples from the gravesite of Jesus. Otherwise it becomes difficult to explain why they did not investigate the tomb. But this assumption has not a shred of evidence in its favor and is on the face of it implausible in the extreme.

(ii) Peter was so obsessed with guilt that he projected a hallucination of Jesus. The records tell us nothing about the state of Peter's mind following his denial of Jesus. We have no reason to think that Peter's primary concern in the face of Jesus's execution was with his failure to stand by Jesus rather than with the shattering of Jesus's Messianic claims.

(iii) The remaining disciples became so carried away that they also hallucinated visions of Jesus. We have no evidence that the other disciples, who presumably lacked Peter's guilt complex, were emotionally prepared to hallucinate visions of Jesus alive. We are simply asked to assume this.

(iv) Paul had an unconscious struggle with the Jewish Law and a secret attraction to Christianity. Since the conflict is said to have been unconscious and the struggle secret, this assumption defies support by evidence. It is completely *ad hoc*.

These are just some of the additional assumptions that one must adopt if one is to embrace Lüdemann's Hallucination Hypothesis. Thus, his theory has a certain air of contrivance about it.

Criterion 6: *Superiority to Rival Hypotheses*. The Hallucination Hypothesis is old hat in German theology, having been expounded notably by Emmanuel Hirsch back in the 1920s; but most critics remain unpersuaded. Berger complains that Lüdemann's book is comprised almost exclusively of warmed-over positions which have dominated the Bultmann school for over 50 years.^{67} I think that we can say confidently that the Hallucination Hypothesis has not demonstrated its clear superiority to rival theories, including the Resurrection Hypothesis.

Often the assessment of historical hypotheses is difficult because a hypothesis may be strong relative to certain criteria but weak relative to others. The historian's craft involves assessing the relative weight of these strengths and weakness. But the Hallucination Hypothesis does not fare well when assessed by any of our criteria. Its explanatory scope is too narrow, its explanatory power is too weak to account for the phenomena it does seek to explain, it is implausible in certain important respects, it contradicts a number of accepted beliefs, it is *ad hoc*, and it does not outstrip its rivals in meeting the above criteria. The only hope remaining for proponents of the Hallucination Hypothesis is that the Resurrection Hypothesis will fail even more miserably in meeting the same criteria, so that the Hallucination Hypothesis emerges victorious.

The Resurrection Hypothesis

The Resurrection Hypothesis asserts that "God raised Jesus from the dead." While most New Testament scholars agree with the inductive data base sketched above, many, if not most, will have grave reservations about the Resurrection Hypothesis as I have stated it because as historians they believe that they cannot offer supernatural explanations of the facts. This disturbs me not in the least. For in the first place, the question of methodological naturalism, in history as in the sciences, is a *philosophical* question, which lies outside the realm of expertise of New Testament scholars. And there are quite a few very fine philosophers who argue that methodological naturalism is unwarranted, especially for one who is a theist. {68} Second, I am quite happy to concede, for the sake of argument if need be, that my hypothesis is not a "strictly historical" conclusion. We may call it a theological hypothesis, if we want. Even if the historian *qua* historian is debarred by some methodological constraint from drawing this conclusion, that does not mean that we (or the historian in his off-hours) cannot, as men and women seeking to discover the truth about life and the world, draw it. I offer the theological hypothesis as the best explanation of the facts and am willing to submit it to the same criteria used to assess any historical hypothesis. And the resurrection Hypothesis does seem to meet McCullagh's criteria successfully.

1. It has great *explanatory scope*: it explains why the tomb was found empty, why the disciples saw post-mortem appearances of Jesus, and why the Christian faith came into being.
2. It has great *explanatory power*: it explains why the body of Jesus was gone, why people repeatedly saw Jesus alive despite his earlier public execution, and so forth.
3. It is *plausible*: given the historical context of Jesus's own unparalleled life and claims, the resurrection serves as divine confirmation of those radical claims.
4. It is *not excessively ad hoc* or *contrived*: it requires only one additional hypothesis: that God exists. And even that need not be an additional hypothesis if you already believe in God's existence, as Lüdemann and I do.
5. It is *in accord with accepted beliefs*. The hypothesis: "God raised Jesus from the dead" does not in any way conflict with the accepted belief that people don't rise *naturally* from the dead. The Christian accepts *that* belief as wholeheartedly as he accepts the hypothesis that God raised Jesus from the dead.
6. It far outstrips any of its rival theories in meeting conditions (1)–(5). Down through history various alternative explanations of the facts have been offered, for example, the conspiracy theory, the apparent death theory, the hallucination theory, and so forth. Such hypotheses have been almost universally rejected by contemporary scholarship. No naturalistic hypothesis has attracted a great number of scholars.

Thus, the Resurrection Hypothesis fares very well when assessed by the standard criteria used for testing historical descriptions. Its greatest weakness is that it is *ad hoc* in requiring us to assume that God exists. But for those of us who are theists that is not an insuperable problem.

So why, we may ask, does Lüdemann reject the Resurrection Hypothesis? The answer is very simple: the resurrection is a miracle, and Lüdemann denies the admissibility of miracles. He states, "Historical criticism . . . does not reckon with an intervention of God in history." {69} Thus, the resurrection *cannot* be historical; it goes out the window before you even sit down at the table to look at the evidence.

The problem here can best be understood, I think, as a disagreement over what sort of explanations constitute live options for a best explanation of the facts. According to the pattern of inductive reasoning known as inference to the best explanation, in explaining a body of data, we first assemble a pool of live options and then pick from the pool, on the basis

of certain criteria, that explanation which, if true, would best explain the data.{70} The problem at hand is that scientific naturalists will not permit supernatural explanations even to be in the pool of live options. By contrast, I am open to scientific naturalistic explanations in the sense that I include naturalistic explanations in the pool of live options, for I assess such explanations using the standard criteria for being a best explanation rather than dismiss such hypotheses out of hand. But Lüdemann is so sure that supernatural explanations are wrong that he thinks himself justified in no longer being open to them: they cannot even be permitted into the pool of live options. But, of course, if only naturalistic explanations are permitted into the pool of live options, then the claim or proof that the Hallucination Hypothesis is the best explanation is hollow. For I could happily admit that of all the naturalistic explanations on tap, the best naturalistic explanation is the Hallucination Hypothesis. But, of course, the question is not whether the Hallucination Hypothesis is the best naturalistic explanation, but whether it is true. After all, we are interested in veracity, not orthodoxy (whether naturalistic or supernaturalistic). So in order to be sure that he is not excluding the true theory from even being considered, Lüdemann had better have pretty good reasons for limiting the pool of live options to naturalistic explanations.

So what justification does Dr. Lüdemann give for this crucial presupposition of the inadmissibility of miracles? All he offers is a couple of one-sentence allusions to Hume and Kant.{71} He says, "Hume . . . demonstrated that a miracle is defined in such a way that 'no testimony is sufficient to establish it'".{72} The miraculous conception of the resurrection, he says, presupposes "a philosophical realism that has been untenable since Kant." {73} Now Lüdemann's procedure here of merely dropping names of famous philosophers is sadly all too typical of theologians. Thomas Morris, a philosopher, comments in his book *Philosophy and the Christian Faith*,

What is particularly interesting about the references theologians make to Kant or Hume is that most often we find the philosopher merely mentioned . . . , but we rarely, if ever, see an account of precisely which arguments of his are supposed to have accomplished the alleged demolition In fact, I must confess to never having seen in the writings of any contemporary theologian the exposition of a single argument from either Hume or Kant, or any other historical figure for that matter, which comes anywhere near to demolishing . . . historical Christian doctrine, or . . . theological realism{74}

Hume's argument against miracles was already refuted in the 18th century by Paley, Less, and Campbell, and most contemporary philosophers also reject it as fallacious, including such prominent philosophers of science as Richard Swinburne and John Earman and analytic philosophers such as George Mavrodes and William Alston.{75} Even the atheist philosopher Antony Flew, himself a Hume scholar, admits that Hume's argument is defective as it stands.{76} As for philosophical realism, this is in fact the *dominant* view among philosophers today, at least in the analytic tradition. So if Lüdemann wants to reject the historicity of miracles on the basis of Hume and Kant, then he's got a lot of explaining to do. Otherwise, his rejection of the resurrection hypothesis is based on a groundless presupposition. Reject that presupposition, and it's pretty hard to deny that the resurrection of Jesus is the best explanation of the facts.

Conclusion

In conclusion, then, we've seen, first, that any adequate historical hypothesis concerning Jesus's fate must explain four established facts: Jesus's honorable burial, the discovery of his

empty tomb, his post-mortem appearances, and the origin of the disciples' belief in his resurrection. Second, when assessed by standard criteria used for testing historical descriptions, Lüdemann's Hallucination Hypothesis is seen to have narrow explanatory scope, to have weak explanatory power, to be implausible, to be unacceptably *ad hoc*, to contradict quite a large number of accepted beliefs, and not to outstrip its rivals in meeting these tests. By contrast, the Resurrection Hypothesis, when assessed by the same criteria, fares very well. Therefore, we ought to regard the latter as the better explanation of the facts.

Notes

{1} William Lane Craig, *The Historical Argument for the Resurrection of Jesus during the Deist Controversy*, 2d. ed., Texts and Studies in Religion 23 (Lewiston, N.Y.: Edwin Mellen, 2001); idem, *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus*, 2d ed., Studies in the Bible and Early Christianity 16 (Lewiston, N.Y.: Edwin Mellen, 2001).

{2} Gerd Lüdemann, *What Really Happened to Jesus?*, trans. John Bowden (Louisville, Kent.: Westminster John Knox Press, 1995), p. 1.

{3} Ibid., p. 3.

{4} Gerd Lüdemann, "Zwischen Karfreitag und Ostern," in *Osterglaube ohne Auferstehung?*, ed. Hansjürgen Verweyen, Quaestiones Disputatae 155 (Freiburg: Herder, 1995), p. 21; cf. idem, *What Really Happened?*, p. 6.

{5} Lüdemann, "Zwischen Karfreitag und Ostern," p. 27; cf. idem, "Für die Jünger war sie wichtig," *Evangelische Zeitung*, February 2, 1994; idem *What Really Happened?*, p. v.

{6} Gerd Lüdemann, *The Great Deception* (Amherst: Prometheus Books, 1999); idem, *Jesus after 2000 Years* (London: SCM Press, 2000).

{7} Lüdemann does not exactly put it this way; he says that anyone who holds to a supernatural or miraculous element behind the events of Easter should openly admit that he is a fundamentalist (Lüdemann, "Zwischen Karfreitag und Ostern," p. 7). See also Gert Lüdemann, *The Resurrection of Jesus*, trans. John Bowden (Minneapolis: Fortress Press, 1994), p. 180.

{8} Lüdemann, *Resurrection of Jesus*, p. 45.

{9} Ibid., p. 38.

{10} See further William Lane Craig, "The Disciples' Inspection of the Empty Tomb (Luke 24, 12.24; John 20, 1–10)," in *John and the Synoptics*, ed. A. Denaux, Bibliotheca Ephemeridum Theologicarum Lovaniensium 101 (Louvain: University Press, 1992), pp. 614–619.

{11} Their differences from Mark are therefore not plausibly attributed to mere editorial changes. For examples of the uneven verbal agreements with Mark, see Mk. 15:46 "a tomb which had been hewn out of rock" and Mt. 17.60 "tomb which he had hewn in the rock;" of omissions see Pilate's interrogation of the centurion in Mk. 15.44–45; and of agreements

against Mark see Mt. 27.58=Lk. 23.52 "This man went in to Pilate and asked for the body of Jesus." See further Ernst Lohmeyer, *Das Evangelium des Matthäus*, 4th ed., ed. W. Schmauch, *Kritisch-exegetischer Kommentar über das Neue Testament* (Göttingen: Vandenhoeck & Ruprecht, 1967), pp. 398–399, 404, 408; Walter Grundman, *Das Evangelium nach Lukas*, 8th ed., *Theologischer Handkommentar zum Neuen Testament* 3 (Berlin: Evangelische Verlagsanstalt, 1978), p. 436.

{12} Marcus J. Borg and N. T. Wright, *The Meaning of Jesus* (San Francisco: Harper Collins, 1999), p. 12. Borg observes that most cases of multiple attestation in the New Testament are double; the cases of triple or more attestation are relatively few. It is all the more striking, then, that the honorable burial of Jesus is multiply attested in Paul's formula, Mark's passion source, the sermons in Acts, Matthew and Luke's sources, and John.

{13} Raymond E. Brown, *The Death of the Messiah*, 2 vols. (Garden City, N.Y.: Doubleday, 1994), 2: 1240–1241.

{14} Lüdemann, "Zwischen Karfreitag und Ostern," p. 22.

{15} Ingo Broer, "Die Glaube an die Auferstehung Jesu und das geschichtliche Verständnis des Glaubens in der Neuzeit," in *Osterglaube ohne Auferstehung?*, p.61. Broer observes that only a few scholars would support Lüdemann's interpretation of these passages as indicative of distinct burial traditions.

{16} See S. G. Wilson, "The Jews and the Death of Jesus in Acts," in *Anti-Judaism in Early Christianity*, vol. 1: *Paul and the Gospels*, ed. Peter Richardson, *Studies in Christianity and Judaism* 2 (Waterloo, Ontario: Wilfrid Laurier Press, 1986), p. 157; cf. Lloyd Gaston, "Anti-Judaism and the Passion Narrative in Luke and Acts," in *Anti-Judaism in Early Christianity*, vol. 1: *Paul and the Gospels*, p. 129.

{17} John A. T. Robinson, *The Human Face of God* (Philadelphia: Westminster, 1973), p. 131.

{18} Lüdemann, *Resurrection of Jesus*, p. 207.

{19} Ibid., p. 45.

{20} See my *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus*, pp. ***.

{21} Gerd Lüdemann, "Die Auferstehung Jesu," in *Fand die Auferstehung wirklich statt?*, ed. Alexander Bommarius (Düsseldorf: Parega Verlag, 1995), p. 21.

{22} See Edward Lynn Bode, *The First Easter Morning*, *Analecta Biblica* 45 (Rome: Biblical Institute Press, 1970), pp. 37–39.

{23} Lüdemann, "Die Auferstehung Jesu," pp. 18–19; idem, "Zwischen Karfreitag und Ostern," p. 22. He also suggests, inconsistently it seems, that the four-fold ο τ ι is indicative of disparate traditions. For arguments to the contrary, see my *Assessing the New Testament Evidence*, pp. ***.

{24} Lüdemann, "Zwischen Karfreitag und Ostern," p. 24, cites Jub. 23.31 as evidence of a non-corporeal conception of resurrection in Judaism; but this verse, which states that the bones of the dead rest in the earth whereas their spirits are with God, is simply an expression of the dualism typical of Hellenistic Judaism and actually supports the idea that it is the bones which are the proper object of the resurrection.

{25} Schwager reports that in contrast to the legend hypothesis it has become customary to assess positively the women's role at the crucifixion and on Easter morning (Raymund Schwager, "Die heutige Theologie und das leere Grab Jesu," *Zeitschrift für Katholische Theologie* 115 [1993]: 436).

{26} Lüdemann, *Resurrection of Jesus*, p. 124.

{27} See discussion in my "The Guard at the Tomb," *New Testament Studies* 30 (1984): 279–280.

{28} John P. Meier, *A Marginal Jew*, 3 vols., vol. 2: *Mentor, Message, and Miracles*, Anchor Bible Reference Library (New York: Doubleday, 1994), p. 150.

{29} Jacob Kremer, *Die Osterevangelien–Geschichten um Geschichte* (Stuttgart: Katholisches Bibelwerk, 1977), pp. 49–50; cf. his more recent judgment that "most exegetes tend to ascribe to the tomb narratives a historical core, in whatever way this may be more precisely delineated (*Lexikon für Theologie und Kirche* [1993], s.v. "Auferstehung Christi I. Im Neuen Testament," by Jacob Kremer).

{30} Lüdemann, *Resurrection of Jesus*, p. 118.

{31} Lüdemann, "Auferstehung Jesu," p. 21.

{32} Klaus Berger, "Ostern fällt nicht aus! Zum Streit um das 'kritischste Buch über die Auferstehung'," *Idea Spektrum* 3 (1994): 21–22. Cf. idem, "Die Auferstehung Jesu Christi," in *Fand die Auferstehung wirklich statt?*, p. 48.

{33} Lüdemann, "Auferstehung Jesu," p. 19.

{34} Hans Freiherr von Campenhausen. *Der Ablauf der Osterereignisse und das leere Grab*, 3d rev ed., Sitzungsberichte der Heidelberger Akademie der Wissenschaften (Heidelberg: Carl Winter, 1966).

{35} Lüdemann, *Resurrection of Jesus*, p. 116.

{36} Lüdemann, "Zwischen Karfreitag und Ostern," p. 23.

{37} Lüdemann, *Resurrection of Jesus*, p. 121.

{38} Wolfgang Trilling, *Fragen zur Geschichtlichkeit Jesu* (Düsseldorf: Patmos Verlag, 1966), p. 153. With respect to Jesus's miracles, Trilling had written: "We are convinced and hold it for historically certain that Jesus did in fact perform miracles The miracle reports occupy so much space in the Gospels that it is impossible that they could all have been

subsequently invented or transferred to Jesus" (Ibid., p. 153). The fact that miracle-working belongs to the historical Jesus is no longer disputed.

{39} Lüdemann, *What Really Happened?*, p. 80.

{40} N. T. Wright, video-taped lecture presented at Asbury Theological Seminary, November, 1999.

{41} Joachim Jeremias, "Die älteste Schicht der Osterüberlieferungen," in *Resurrexit*, ed. Édouard Dhanis (Rome: Libreria Editrice Vaticana, 1974), p. 194.

{42} Lüdemann, "Zwischen Karfreitag und Ostern," p. 27.

{43} Luke Timothy Johnson, *The Real Jesus* (San Francisco: Harper San Francisco, 1996), p. 136.

{44} C. Behan McCullagh, *Justifying Historical Descriptions* (Cambridge: Cambridge University Press, 1984), p. 19.

{45} I am not using the word "hallucination" pejoratively; rather a hallucination is a non-veridical vision. It is an appearance to its percipient which has no extra-mental correlate and is a projection of the percipient's own brain. It is therefore purely subjective and corresponds to no reality. That is what Lüdemann takes the resurrection appearances to be. A vision, he explains, is the visual appearing of persons, things, or scenes which have no external reality (Lüdemann, "Auferstehung Jesu," p. 22). He says that visions and hallucinations belong to the same realm, viz., "what we ourselves bring forth, what ultimately has no basis in objective reality" (Ibid., p. 23). They are the product of "imagination and fantasy" (idem, "Zwischen Karfreitag und Ostern," p. 28). I suspect that any preference on Lüdemann's part for the terminology of "visions" rather than "hallucinations" merely reflects a desire to make the hypothesis more palatable to religious sensibility. For a subjective vision just is a hallucination; if not, then some explanation is owed us of what the difference is between a subjective vision and a hallucination.

{46} Lüdemann, "Auferstehung Jesu," p. 25.

{47} Lüdemann, *Resurrection of Jesus*, pp. 174–175.

{48} Ibid., p. 26.

{49} Ibid., pp. 26–27.

{50} But see Michael Goulder, "The Baseless Fabric of a Vision," in *Resurrection Reconsidered*, ed. G. D'Costa (Oxford: One World, 1996), 48–61, who catalogues a number of interesting cases of mass delusions in order to explain how Peter's hallucinatory experience could have been multiplied in a series of secondary visions. But it is a striking feature of Goulder's catalogue that *none* of his cases of collective behavior, such as sightings of Big Foot or of UFO's, are instances of hallucinations or subjective visions at all. No one attempts to explain Big Foot sightings by saying that people were having subjective visions of Big Foot. Rather they saw a dark form moving in the distant bushes or found large footprints in the snow or mud or in other cases simply concocted a story. Or again, UFO sightings turn out

for the most part to be weather balloons, ball lightning, optical illusions, or lies, not hallucinations. Hallucinations require a very special psycho-biological preparation and are usually associated with mental illness or substance abuse. The sorts of collective behavior to which Goulder appeals are not hallucinatory experiences. But in the case of the post-mortem appearances of Jesus it is universally acknowledged that the disciples did see appearances of the Risen Lord. To be sure, there may well have also been in the early church false claims to an appearance of the Lord analogous to the mass behavior described by Goulder; but no one thinks that the Twelve, for example, had merely mistaken a distant shape for Christ or concocted the story of his appearance and then were prepared to go to tortuous deaths in attestation to its truth. Thus, the resurrection appearances remain unparalleled by Goulder's cases.

{51} Gerd Lüdemann, *Resurrection of Jesus*, p. 109.

{52} *Ibid.*, p. 107.

{53} Hans Kessler, *Sucht den Lebenden nicht bei den Toten*, new ed. (Würzburg: Echter, 1995), p. 425.

{54} *Lexikon für Theologie und Kirche* (1993), s.v. "Auferstehung Christi I. Im Neuen Testament," by Jacob Kremer.

{55} Lüdemann, *What Really Happened to Jesus?*, p. 66.

{56} Lüdemann, *Resurrection of Jesus*, p. 89.

{57} Martin Hengel and Anna Maria Schwemer, *Paul between Damascus and Antioch*, trans. John Bowden (Louisville: Westminster/John Knox Press, 1997), 342; cf. 40–41. See also Martin Hengel, *The Pre-Christian Paul*, in collaboration with Roland Deines (London: SCM, 1991), p. 79.

{58} Grass, *Ostergeschehen und Osterberichte*, pp. 233–243.

{59} Krister Stendahl, "Paul among Jews and Gentiles," in *Paul among Jews and Gentiles* (Philadelphia: Fortress, 1976), pp. 12–13; cf. *idem*, "The Apostle Paul and the Introspective Conscience of the West," in *Paul among Jews and Gentiles*, p. 80.

{60} Lüdemann, *Resurrection of Jesus*, p. 80.

{61} Lüdemann himself observes that this interpretation is "given up almost everywhere" (*Ibid.*).

{62} Kessler, *Sucht den Lebenden*, p. 423.

{63} Lüdemann, "Zwischen Karfreitag und Ostern," p. 39.

{64} Lüdemann, *Resurrection of Jesus*, p. 30: "Anyone who does not share the presupposition made here will not be able to make anything of what follows."

{65} John Dominic Crossan, *Jesus: A Revolutionary Biography* (San Francisco: Harper San Francisco, 1994), p. 169.

{66} Lüdemann, *What Really Happened?*, p. 10.

{67} Klaus Berger, "Ostern fällt nicht aus!," p. 21.

{68} See the very interesting recent discussions about the warrant for methodological naturalism in science, e.g., Paul de Vries, "Naturalism in the Natural Sciences: A Christian Perspective," *Christian Scholar's Review* 15 (1986): 388–96; Alvin Plantinga, Howard J. Van Till, Pattle Pun, and Ernan McMullin, "Symposium: Evolution and the Bible," *Christian Scholar's Review* 21 (1991): 8–109; William Hasker, "Evolution and Alvin Plantinga," *Perspectives on Science and Christian Faith* 44 (1992): 150–62; Alvin Plantinga, "On Rejecting The Theory of Common Ancestry: A Reply to Hasker," *Perspectives on Science and Christian Faith* 44 (1992): 258–63; Alvin Plantinga, "Methodological Naturalism," paper presented at the symposium "Knowing God, Christ, and Nature in the Post-Positivist Era," University of Notre Dame, April 14–17, 1993; J. P. Moreland, "Theistic Science and Methodological Naturalism," in *The Creation Hypothesis*, ed. J. P. Moreland (Downer's Grove, Ill.: Inter-Varsity Press, 1994), pp. 41–66; J. P. Moreland, Stephen C. Meyer, and Richard H. Bube, "Conceptual Problems and the Scientific Status of Creation Science: a Discussion," *Perspectives on Science and Christian Faith* 46 (1994): 2–25.

{69} Lüdemann, "Auferstehung Jesu," p. 16.

{70} Peter Lipton, *Inference to the Best Explanation* (London: Routledge, 1991).

{71} Notice his failure to interact with Pannenberg's critique of "the all-powerfulness of analogical thinking in historical research and the postulate of the similarity in principle of all events" (Lüdemann, "Zwischen Karfreitag und Ostern," p. 20; cf. Wolfhart Pannenberg, "Die Auferstehung Jesu–Historie und Theologie," *Zeitschrift für Katholische Theologie* 91 [1994]: 318–328).

{72} Lüdemann, *Resurrection of Jesus*, p. 12.

{73} *Ibid.*, p. 249.

{74} Thomas V. Morris, *Philosophy and the Christian Faith*, University of Notre Dame Studies in the Philosophy of Religion 5 (Notre Dame, Ind.: University of Notre Dame Press, 1988), pp. 3–4.

{75} See George Campbell, *Dissertation on Miracles* (1762; rep. ed.: London: T. Tegg & Son, 1834); Gottfried Less, *Wahrheit der christlichen Religion* (Göttingen: G. L. Förster, 1776); William Paley, *A View of the Evidences of Christianity*, 2 vols., 5th ed. (London: R. Faulder, 1796; reprint ed.: Westmead, England: Gregg, 1970); Richard Swinburne, *The Concept of Miracle* (New York: Macmillan, 1970); John Earman, "Bayes, Hume, and Miracles," *Faith and Philosophy* 10 (1993): 293–310; George Mavrodes, "Miracles and the Laws of Nature," *Faith and Philosophy* 2 (1985): 333–346; William Alston, "God's Action in the World," in *Divine Nature and Human Language* (Ithaca, N. Y.: Cornell University Press, 1989), pp. 197–222.

{76}Antony Flew in *Did Jesus Rise from the Dead*, ed. Terry L. Miethe (San Francisco: Harper & Row, 1987), p. 4.

Reply to Evan Fales: On the Empty Tomb of Jesus

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Evan Fales' curious hypothesis that the gospel narratives of the empty tomb are of the genre of mythology and so were not taken to be historical accounts by either their purveyors or their recipients is critically examined. Then Fales's responses to eleven lines of evidence supporting the historicity of the discovery of Jesus' empty tomb are considered.

"Reply to Evan Fales: On the Empty Tomb of Jesus." *Philosophia Christi* 3 (2001): 67-76.

Evan Fales writes with a self-confidence and matter-of-ictness that belies the unconventional character of his rather maverick views on New Testament studies. Fales thinks that the gospel narratives are neither fundamentally historical accounts of the ministry of Jesus nor largely legendary stories of the same. Rather they are of the genre of *mythology*, akin to contemporaneous pagan myths, which neither their purveyors nor their recipients thought to take literally as history.

Now from D. F. Strauss through Rudolf Bultmann the role of myth in the shaping of the gospels was a question of lively debate in New Testament scholarship. But with the advent of the so-called "Third Quest" of the historical Jesus and what one author has called "the Jewish reclamation of Jesus," {1} that is, the rediscovery of the Jewishness of Jesus, scholars have come to appreciate that the proper context for understanding Jesus and the gospels is first-century Palestinian Judaism, not pagan mythology. A most informative article on the demise of myth as a useful interpretive category for the gospels is Craig Evans's "Life-of-Jesus

Research and the Eclipse of Mythology," in which he chronicles and accounts for the "major shift" away from mythology as a relevant factor in gospel interpretation.{2}

Given that Jesus and the gospels find their natural home in first century, Palestinian Judaism, recourse to pagan mythology to explain them has become otiose. Hence, we find James Dunn, called upon to write the article on "Myth" for the *Dictionary of Jesus and the Gospels*, questioning even the need for such an entry in the dictionary: "Myth is a term of at best doubtful relevance to the study of Jesus and the Gospels...The fact that 'myth' even appears here as a subject related to the study of Jesus and the Gospels can be attributed almost entirely to the use of the term by two NT scholars"—Strauss and Bultmann.{3} In lamenting that most commentators have no "knowledge of—or at least, they certainly ignore—the tools that modern anthropology has provided for the analysis of myths and myth construction," Fales tacitly recognizes that his views in gospel interpretation would be rejected by the vast majority of NT critics (and not, therefore, simply by "fundamentalists!"). What he does not appreciate is that the construal of the gospels in terms of myth has been tried and found wanting by NT scholarship.

Fales's own view (as he has expressed it elsewhere) is what we might call a sociological theory of myths. He thinks that people in their myths are exhibiting a theoretically explicit and far deeper awareness of the ontology of social structures than has been held to be the case. Native myth-making is *literally* intelligent, native speculation about social interaction and articulation of the legal charter for it. Myths are intended primarily as social charters about the way society is or ought to be structured. Thus, Fales thinks that talk about gods, spirits, and so forth is really at root theoretical talk about social phenomena and norms. Presumably the gospel resurrection narratives are expressions of such social theorizing, but the truth they mean to express is part of the "long story" that Fales repeatedly declines to tell.

Now on the face of it this sociological theory of myths (which Fales admits is rejected by the majority of experts) is extraordinarily implausible. The half-truth it embodies is that myths do serve to found social institutions and practices. But it is an enormous jump to claim that native myth-making *literally is* theoretical speculation about social structures. Surely native peoples really do believe in the gods, spirits, and so forth which they say they believe in. Fales's view is presumptuous in thinking that we know better than they do what they believe in.

In any case, the application of this theory to Christian origins is a category mistake. Contrary to Fales, the gospels are not of the genre of myth. The gospels are closest in their genre to ancient biography. The Acts of the Apostles, the second part of Luke's double work, is indisputably historical writing—and accurate history, to boot, as amply demonstrated by Colin Hemer in his *The Book of Acts in the Setting of Hellenistic History*.{4} According to Greco-Roman historian A. N. Sherwin-White, "For Acts the confirmation of historicity is overwhelming. . . . any attempt to reject its basic historicity even in matters of detail must now appear absurd. Roman historians have long taken it for granted."{5} Luke's historical interest and demonstrated accuracy in the book of Acts give us reason to take seriously his avowed historical interest and care throughout his double work (Lk 1.1–4).

With regard to the resurrection narratives in particular, Fales's theory resuscitates the old *religionsgeschichtliche Methode* of the late nineteenth/early twentieth centuries. Scholars in comparative religion at that time ransacked ancient and contemporary mythology in the effort to find parallels to various Christian beliefs, and some even sought to explain those beliefs on the basis of the influence of such parallels. The resurrection narratives and even the disciples'

coming to believe in Jesus' resurrection were thought to be explained through the influence of myths about Osiris (a.k.a. Tammuz, Adonis) or divine-human figures like Hercules. Apart from his general sociological theory of myths, Fales does not appear to add anything new to this old story.

The *religionsgeschichtliche* approach to the resurrection soon collapsed and is today almost universally abandoned, primarily for two reasons: (1) *The supposed parallels were spurious*. The ancient world was a virtual cornucopia of myths of gods and heroes. Comparative studies in religion and literature require sensitivity to the similarities and differences, or distortion and confusion inevitably result. Some of these mythological figures are merely symbols of the crop cycle (Osiris, *et al.*); others have to do with apotheosis by assumption into heaven (Hercules, Romulus); still others concern disappearance stories, which seek to answer the question of where the hero has gone by saying that he lives on in a higher sphere (Apollonius, Empedocles); others are cases of political Emperor-worship (Julius Caesar, Augustus). None of these is parallel to the Jewish notion of resurrection from the dead. With respect to the resurrection narratives, David Aune, a specialist in ancient literature, concludes that "no parallel to them is found in Graeco-Roman biography."[\[6\]](#) Rather the resurrection narratives, like the gospels in general, are to be interpreted within a Jewish context.

With respect specifically to the empty tomb narrative, what putative parallel to such an account will Fales find in ancient mythology? The closest would probably be apotheosis stories such as told by Diodorus Siculus. As Hercules climbs up on his funeral pyre, lightning strikes and consumes the pyre. No trace of Hercules is to be found. The conclusion: "he had passed from among men into the company of the gods."[\[7\]](#) Now the empty tomb story is essentially different from such a myth. The resurrection is not the transformation of the man from Nazareth into God. "The notion of deification," says Aune, "is totally alien to the Synoptic Gospels."[\[8\]](#) Rather what we have in the empty tomb story is not apotheosis, but the Jewish idea of resurrection. The literary key to the story is the angel's words, "He is risen! He is going before you into Galilee." (Mk 16. 6–7). If this were an apotheosis story, the angel would say something like, "He has passed from the realm of mortal men and become like God."[\[9\]](#) The empty tomb story is thus illustrative of the general point that once one sees how the gospel narratives are naturally at home in Judaism there is no reason to ignore this immediate context and reach further to putative pagan parallels.[\[10\]](#)

(2) *There is no genealogical connection between pagan myths and the origin of the disciples' belief in Jesus' resurrection*. Orthodox Jews knew of these pagan myths and found them abhorrent (Ez. 8. 14–15). Thus, even though Philo (*Life of Moses* 2. 2888) and Josephus (*Antiquities of the Jews* 4. 8, 48 § 326) are willing to call Moses a divine man because of his great virtue and good works, they reject any attempt to immortalize or deify him. According to Hengel, Jewish belief in the resurrection of the dead actually served as a prophylactic against the pagan myths:

The development of the apocalyptic resurrection-, immortality-, and judgment-doctrine in Jewish Palestine explains why—in a contrast to Alexandrian Judaism—the Hellenistic *mystery religions* and their language could gain virtually no influence there. Insofar as the apocalyptic Hassidic piety took up the question of the fate of the individual after death, it answered that basic question of human existence, which arose in a more elementary way in Hellenistic times and abetted the spread of the mystery religions from the second century B. C.[\[11\]](#)

Therefore, we find almost no trace of cults of dying and rising gods in first century Palestine.{12}

Moreover, as Hans Grass observes, it would be "unthinkable" in any case that the original disciples would come sincerely to believe that God had raised Jesus from the dead just because they had heard myths about Osiris!{13} Fales seeks to avoid this knock-out punch by claiming that the disciples did not *really* believe that Jesus was risen from the dead; this myth was in reality a statement about social structures (sociological theory of myths). But this move is surely the *reductio ad absurdum* of Fales's reconstruction. As Gregory Boyd aptly writes,

If anything is clear from Paul's writings, it is that he and his audience held deep convictions about the story of Christ...*They believed it was true*. Now one can certainly argue that they were wrong....But we need seriously to question whether anyone 2,000 years [later] is in a position to assume that their fundamental motivation for believing their story was not what *they* thought it was. Such an approach constitutes a presumptuous, speculative psychologizing of the evidence.

If we had independent compelling evidence that these early Christian communities were creating myths to justify their social program, that would be another matter. But no such evidence is available. The fact that what Paul and his audience believe may not fit into the naturalistic worldview cannot itself justify the presumption of telling the apostle and his audience what they were 'really' doing.{14}

The New Testament expectation that in light of Jesus' resurrection the general resurrection of the dead was imminent, Paul's energetic disquisitions in response to the Corinthians' sceptical question about the general resurrection, "With what kind of body do they come?" (1 Cor. 15.35), as well as the portrayal in the apostolic sermons in Acts of the resurrection as a literal event verified by witnesses, show that belief in Jesus' resurrection was a historical claim, not a disguised social theory. We have every reason to think that the disciples and the churches they founded believed that Jesus was literally risen from the dead.

Thus, Fales's whole approach to the gospels is fundamentally wrong-headed and is recognized as such by NT scholarship.

What, then, may be said of his responses to the specific lines of evidence I adduced on behalf of the historicity of Jesus' burial and empty tomb?

1. *Multiple, independent attestation of the burial*. Fales says that he does not see why John's independence of the Synoptics implies an independent source. The answer is simply that the differences between John and Mark's accounts show that they are not using the same source.{15} Minimally, John's literary independence proves the existence of a shared pre-Markan burial tradition. Moreover, Mathew and Luke have other sources than Mark. Then there is Paul's early tradition (1 Cor 15.4). This multiplicity of sources is important because it is, according to Marcus Borg, the "first" and "most objective" criterion of historicity: "The logic is straightforward: if a tradition appears in an early source *and* in another independent source, then not only is it early, but it is also unlikely to have been made up." {16} The burial narrative passes this test and so should be assessed as historical.

2. *Joseph of Arimathea*. Fales makes no response. But notice that Jesus' interment by a Sanhedrist renders implausible the suggestion that the tomb's location could have remained unknown, even if it was at first known only to Joseph.

3. *Simplicity of the burial account*. No response by Fales.

4. *Jewish interest in burial sites*. No response.

5. *No other burial traditions*. Fales sees independent traditions preserved in Acts for a burial of Jesus by the Jews. What Fales fails to appreciate is the antipathy in the early Church toward the Jewish leadership, who had, in Christian eyes, engineered a judicial murder of Jesus.^{17} Thus, Luke tends to blame the Jews for everything that was done to Jesus, even going so far as to attribute the *crucifixion* of Jesus to the Jews (2. 23, 36; 4. 10)! Oblivious to this *Tendenz*, Fales takes literally the verses stating that the Jews executed Jesus and "hanged him from a tree." This is cringingly bad exegesis. The three NT authors who use this metaphor for crucifixion also state explicitly that Jesus was crucified. The reason for the metaphor is to hark back to the curse of Deut. 21. 22. The purpose is to show that Christ took the curse of sin upon himself for our redemption (Gal. 3. 13). Moreover, the crucifixion of Jesus is incontestably a historical fact.^{18} Hence, even the sceptical Robert Funk, chairman of the Jesus Seminar, declares, "The crucifixion was one indisputable fact which neither [the early Christians] nor their opponents could deny."^{19}

6. *The burial supports the empty tomb*. Fales does not deny this implication, which is why those who deny the empty tomb find themselves obliged to attack the honorable burial of Jesus, "one of the earliest and best-attested facts about Jesus."^{20}

7. *Paul implies the empty tomb*. No response. I note simply that Paul's identification with Christ's death, burial, and resurrection (Rom 6.3–4) in a spiritual sense in no way precludes literal, bodily resurrection (Rom. 8.11, 22–23).

8. *Pre-Markan passion source*. Fales does not deny the presence of the empty tomb story in this early source. But he lists four other public events in the passion story which he thinks are not historically credible. For if they were historical, we should expect them to be independently attested, which they are not. If they are not historical, then we should expect the Jews to have refuted them—unless, that is, the narratives are myths which neither friend nor foe took to be historical in character.

Fales's argument is insufficiently nuanced historically. In the first place, he fails to distinguish between legend, myth, and redaction. We have already seen that the gospels are not of the genre of myth. So Fales's insistence that myths (like redaction) do not require a long, formative period of gestation is quite irrelevant to the issue at hand, which is whether the gospel narratives can in their core be legendary. When A. N. Sherwin-White says that "even two generations are too short a span to allow the mythical tendency to prevail over the hard historic care of the oral tradition,"^{21} he is talking about legends, not myths. The early date of the passion tradition militates against its being legendary at its core. That does not preclude redaction of the tradition or even legendary accretions in the circumstantial features of the narratives.

All four of the events mentioned by Fales are circumstantial features of the crucifixion story. Even if these features of the narrative are judged to be unhistorical features due to legend or

redaction, no one takes that to call into question the historicity of the core of the story, namely, that Jesus died by crucifixion—well, no one, perhaps, but Fales! Moreover, a closer look reveals that the resurrection of the saints is a Matthean addition to the story, not part of the pre-Markan passion narrative, and the centurion's confession can hardly be called a public event comparable to Jesus' crucifixion. The rending of the veil would have been a highly private event, since only the high priest had access to the Holy of Holies. If anything, Fales ought to have argued that so private an event as the rending of the veil could not have been known to the evangelists. So that leaves us with the darkness at noon as an example of an allegedly unhistorical public event in the earliest tradition. Could this have been a historical event? Fales's argument from want of independent attestation merely illustrates the mixed evidence typically facing the historian. The earliness of the tradition counts in favor of the historicity of the event; but the absence of independent attestation counts against it. {22} The historian must weigh such considerations against one another. If Fales is right, that gives us good reason to be sceptical about this feature of the narrative; but one would not therefore be led to deny the fact of Jesus' crucifixion, which is abundantly independently attested. Fales's contention that if this reported event were unhistorical, the Jews would have refuted the gospel report of it is exceedingly naïve. He does not seem to appreciate that we have scarcely any extant Jewish literature from the first century; the later references to Jesus (sometimes under pseudonyms) in the rabbinical literature are brief denunciations of him as a sorcerer. Were it not for Mathew's guard story, we should not even know what Jews of the period were saying in response to the proclamation of the resurrection. It is thus unrealistic *in excelsis* to think that unhistorical assertions in the gospels would produce a literary record preserved to this day of Jewish refutations—nor is such an assumption any part of my case for the historicity of the empty tomb.

But is Fales right? Again, the same paucity of literature mentioned above mitigates the force of his argument from silence. What is the probability that if such an event as the darkness at Jesus' crucifixion occurred, then it would have been mentioned by the principal source we have, Josephus? Josephus barely mentions Jesus at all—why would he relate the darkness at noon, which is not even evidently a miraculous event, if it occurred? I am just not confident that he would have recorded this event if it had occurred. But I am confident that our historical assessment of such circumstantial features of the narrative has no substantive impact on the historicity of its core.

9. *Absence of legendary accretions to the empty tomb narrative.* No response from Fales. But notice that the sort of elaborations Fales sees to the crucifixion account are noticeably absent from the empty tomb story.

10. *Women witnesses to the empty tomb.* Fales sees this feature of the narrative as derived from pagan mythology. We have already seen, however, the implausibility of such a provenance for the resurrection and empty tomb narratives. And with regard to the women's role in particular, one has only to read the myths of Tammuz, Adonis, Osiris, and so forth to see that Fales' suggestion is fanciful. In the cult of Adonis and Attis, women figure prominently in the annual funereal laments for the deceased god. But such a role bears no resemblance to the women's discovery of the empty tomb, nor does the empty tomb pericope (surprisingly!) involve any lament. Neither is Ishtar's journey into the underworld to bring back her husband Tammuz from the realm of the dead analogous to the discovery of the empty tomb. In the Osiris myth his wife Isis searches for the pieces of his dismembered body and buries them throughout Egypt (which serves to explain why so many burial sites for Osiris are claimed!); but the empty tomb narrative involves no such search for the body

because the place of Jesus' interment is known. Thus, it is a long stretch to see such myths as underlying the narratives when much closer at hand are the actual women followers of Jesus, who in accordance with Jewish custom would do precisely what they are portrayed as doing.

11. *The Jewish polemic*. Fales denies that we know what the earliest Jewish polemic was against the proclamation of Jesus' resurrection. All we have is a single, uncorroborated, Christian story which is probably a legend. My point, however, in no way assumes the historicity of Matthew's guard story. Rather what is important is that Matthew is so exercised by an allegation which was "widely spread among the Jews to this day" (Mt. 28. 15) that he includes a lengthy addition to the Markan empty tomb narrative in order to refute it. I have elsewhere argued on the basis of vocabulary and tradition history that this dispute is, indeed, early.^{23} And the tradition shows that even the opponents of the nascent Christian movement recognized that Jesus' body was missing.

In short, we have good reasons for accepting the empty tomb as part of our picture of the historical Jesus, whereas Fales's *religionsgeschichtliche* alternative lacks credibility.

Notes

^{1}Donald A. Hagner, *The Jewish Reclamation of Jesus* (Grand Rapids, Mich.: Zondervan, 1984).

^{2}Craig A. Evans, "Life-of-Jesus Research and the Eclipse of Mythology," *Theological Studies* 54 (1993): 3–36.

^{3}*Dictionary of Jesus and the Gospels*, ed. Joel B. Green, *et al.* (Downer's Grove, Ill.: Inter-Varsity Press, 1992), s.v. "Myth," by James D. G. Dunn.

^{4}Colin J. Hemer, *The Book of Acts in the Setting of Hellenistic History*, *Wissenschaftliche Untersuchungen zum Neuen Testament* 49 (Tübingen: J. C. B. Mohr, 1989).

^{5}A. N. Sherwin-White, *Roman Society and Roman Law in the New Testament* (Oxford: Clarendon Press, 1963), p. 189.

^{6}D. E. Aune, "The Genre of the Gospels," in *Gospel Perspectives II*, ed. R. T. France and David Wenham (Sheffield: JSOT Press, 1981), p. 48. In fact, it is doubted that there even was a category of "dying and rising god." Quoting Buckert to the effect that "The evidence for resurrection is late and tenuous in the case of Adonis, and practically non-existent in the case of Attis; not even Osiris returns to real life, but instead attains transcendent life beyond death," Mark Smith comments, "In view of the many difficulties, it is presently impossible to accept a general category of a 'dying and rising god' in the ancient Mediterranean and Levantine world" (Mark S. Smith, *The Ugaritic Baal Cycle* [Leiden: E. J. Brill, 1994], p. 70).

^{7}Diodorus of Sicily *The Library of History* 4. 38. 4–5. Loeb Classical Library 303, trans. C. H. Oldfather (Cambridge, Mass.: Harvard University Press, 1935).

^{8}Aune, "Genre," p. 47. "The empty tomb...and his various appearances are not evidence of deification; rather, they function to corroborate the reality of the resurrection" (*Ibid.*, p. 48).

{9} Cf. Diodorus's verdict concerning Aristeas that he "was never seen again of men and became the recipient of immortal honors" (Diodorus *Library of History* 4. 82. Loeb Classical Library 340, trans. C. H. Oldfather (Cambridge, Mass.: Harvard University Press, 1939).

{10} A similar conclusion may be drawn concerning the resurrection appearance stories. See John Alsup, *The Post-Resurrection Appearance Stories of the Gospel-Tradition* (Stuttgart: Calwer Verlag, 1975), who shows that neither the myths of Osiris, Adonis, Attis, and Tammuz, nor apotheosis stories of Apollonius of Tyana, Romulus, Aristeas, and others, nor cultic practices concerning Asclepius and Apullias, once examined, are of the same form as the resurrection appearance stories of the gospels.

{11} Martin Hengel, *Judentum und Hellenismus*, Wissenschaftliche Untersuchungen zum Neuen Testament 10 (Tübingen: J. C. B. Mohr, 1969), pp. 368–369.

{12} Gerhard Kittel, "Die Auferstehung Jesu," *Deutsche Theologie* 4 (1937): 159. Not until the time of Hadrian in the second century is there evidence of an Adonis cult in Bethlehem.

{13} Hans Grass, *Ostergeschehen und Osterberichte*, 4th ed. (Göttingen: Vandenhoeck & Ruprecht, 1974), p. 133. See also Walter Künneth, *The Theology of the Resurrection*, trans. J. W. Leitch (St. Louis: Concordia Publishing House, 1965), pp. 58–62.

{14} Gregory Boyd, *Cynic, Sage, or Son of God* (Wheaton, Ill.: Victor Books, 1998), p. 177. Nor can Fales's appeal to anthropological studies of such contemporary phenomena as cargo cults, shamanism, and native American religion. These are simply irrelevant to first century, Palestinian Judaism.

{15} There has been some discussion as to whether John and Luke may have shared a tradition (which still leaves us with an independent pre-Markan tradition). But see my "The Disciples' Inspection of the Empty Tomb (Luke 24, 12.24; John 20, 1–10)," in *John and the Synoptics*, ed. A. Denaux, Bibliotheca Ephemeridum Theologicarum Lovaniensium 101 (Louvain: University Press, 1992), pp. 614–619.

{16} Marcus J. Borg and N. T. Wright, *The Meaning of Jesus* (San Francisco: Harper Collins, 1999), p. 12.

{17} See S. G. Wilson, "The Jews and the Death of Jesus in Acts," in *Anti-Judaism in Early Christianity*, vol. 1: *Paul and the Gospels*, ed. Peter Richardson, Studies in Christianity and Judaism 2 (Waterloo, Ontario: Wilfrid Laurier Press, 1986), pp. 155–164; see also Lloyd Gaston, "Anti-Judaism and the Passion Narrative in Luke and Acts," in *Ibid.*, p. 129.

{18} As John Meier explains, "For two obvious reasons practically no one would deny the fact that Jesus was executed by crucifixion: (1) This central event is reported or alluded to not only by the vast majority of NT authors, but also by Josephus and Tacitus....(2) Such an embarrassing event created a major obstacle to converting Jews and Gentiles alike...that the Church struggled to overcome...." (John P. Meier, "The Circle of the Twelve: Did It Exist during Jesus' Public Ministry?" *Journal of Biblical Literature* 116 [1997]: 664–665).

{19} Robert Funk, video-taped Jesus Seminar lecture.

{20} John A. T. Robinson, *The Human Face of God* (Philadelphia: Westminster, 1973), p. 131.

{21} Sherwin-White, *Roman Society*, p. 190.

{22} It is only fair to note that the chronicler Julius Africanus, writing about 221, does say that the classical historian Thallus in his history (AD 52) refers to the darkness at noon: "This darkness Thallus, in the third book of his *History*, calls, as appears to me without reason, an eclipse of the sun" (*Chronography* 18, in *Ante-Nicene Fathers*, 10 vols., ed. Alexander Roberts and James Donaldson [rep. ed.: Peabody, Mass.: Hendrickson, 1994], 6: 136). Origen, as well as Africanus, takes the chronicler Phlegon's (b. 80) reference in the thirteenth or fourteenth book of his *Chronicles* to an eclipse during the reign of Tiberius to be an attempted explanation of the darkness at noon (Origen *Against Celsus* II. 33 in *Ante-Nicene Fathers*; 4: 445; cf. Tertullian *Apology* 21 in *Ante-Nicene Fathers*, 3: 35). These references illustrate precisely the problem before us. Since Thallus and Phlegon's works have been lost and neither Origen nor Africanus provides a direct quotation, we do not know whether these writers were referring explicitly to the event of Jesus' crucifixion or, if so, how they knew of it. A solar eclipse whose deepest penumbra cut right across Asia Minor and the eastern end of the Mediterranean occurred in AD 29 (see: sunearth.gsfc.nasa.gov/eclipse/SEHistory.html), so the Church Fathers could have mistaken references to this event as references to the darkness at the time of the crucifixion. Even if the ancient historians were referring to the darkness at the crucifixion, we do not know whether they had any independent knowledge of it. Phlegon evidently knew of the Gospel of John, so it is not unlikely that he was merely responding to the Gospel accounts. But such a conclusion is not so readily available for Thallus, since his history threatens to ante-date the time of the Gospels' composition. It would at least show an extremely early tradition concerning the event. So at worst we are left with agnosticism. We cannot justifiably claim with Fales that there just was no independent attestation of the event. And given the paucity of surviving literature from the first century, as well as the possibly merely local impact of the events, an argument from silence is by nature tenuous. See the sensible comments by R. T. France, *The Evidence for Jesus*, The Jesus Library (London: Hodder and Stoughton, 1986), pp. 19–20, 24.

{23} See my "The Guard at the Tomb," *New Testament Studies* 30 (1984): 273–281.

From Easter to Valentinus and the Apostles' Creed Once More: A Critical Examination of James Robinson's Proposed Resurrection Appearance Trajectories

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

James Robinson argues that parallel trajectories, springing from primitive Christian experiences of post-resurrection appearances of Christ as a luminous bodily form, issued in the second-century Gnostic understanding of the appearances as unembodied radiance and in the second-century orthodox view of the appearances as non-luminous physical encounter. Craig examines his four arguments in support of these hypothesized trajectories and finds them unconvincing. There is no reason to think that the primitive experiences always involved luminosity or that if they did, this was taken to imply non-physicality. Nor does the evidence support the view that Gnostics rejected corporal or even physical resurrection appearances of Christ.

"From Easter to Valentinus and the Apostle's Creed Once More: A Critical Examination of James Robinson's Proposed Resurrection Appearance Trajectories." *Journal for the Study of the New Testament* 52 (1993): 19-39.

Introduction

Several years ago in his SBL Presidential Address, James Robinson sought to delineate three related sets of parallel trajectories stretching from a common origin in primitive Christianity to their termini in second-century Gnosticism and in credally orthodox Christianity, both of these later viewpoints being divergent (mis)interpretations of the beliefs and experiences of the earliest Christians. {1} Trajectory 1 represents the development beginning with the traditions concerning the first disciples' experiences of Jesus' post-resurrection appearances and ending with, on the one hand, the orthodox interpretation of these as physical, corporeal manifestations of the resurrected Christ, and, on the other hand, the Gnostic interpretation of these as visions of disembodied radiance. Trajectory 2 charts the emergence of the orthodox doctrine of the final resurrection of believers in each individual's fleshly body, on the one hand, and of the Gnostic doctrine of spiritual and mystical resurrection attained already in baptism, on the other, from the original apocalyptic expectation of a resurrection of believers at the end of time in a luminous, heavenly body comparable to Christ's. Finally, Trajectory 3 concerns the evolution of the sayings attributed to Jesus to, on the one hand, the orthodox incarnation of Jesus' sayings within the pre-Easter biography of Jesus in the canonical Gospels and, on the other hand, the mystification of Jesus' sayings by means of hermeneutically loaded dialogues of the risen Christ with his Gnostic disciples. Robinson

emphasizes that neither the orthodox nor the Gnostic position represents the original Christian position, though both are consistent and serious efforts to interpret it.{2} Although both positions should be heeded as worthy segments of the heritage of transmission and interpretation of Christian beliefs, nevertheless neither can be literally espoused by serious critical thinkers of today.{3}

The existence of Trajectory 1 is logically foundational for Robinson's construction of the other two, and so in this paper I wish to focus our critical attention on his case for the existence of this first trajectory. According to Robinson, the primitive resurrection appearances were visualizations of the resurrected Christ as a luminous, heavenly body. But due to their aversion to bodily existence, Gnostics disembodied Christ's appearances so as to retain the original luminous visualization while abandoning any corporeality associated with that radiance. In reaction, the emerging orthodoxy emphasized the corporeality of the resurrection appearances by construing them in terms of the resurrection of the flesh, so that in the canonical Gospels Christ's appearances are not only corporeal, but material as well.

Robinson's proposed reconstruction is probably quite appealing to many, since he is claiming, in effect, that the received view in German theology of the resurrection body and appearances of Christ was, in fact, the view of the primitive church itself, and it is rather reassuring to believe that one is holding steadfastly to the faith of the *Urgemeinde* in the face of extremist corruptions thereof. But does a dispassionate weighing of the evidence really support Robinson's proposal? In order to answer that question, let us turn to an examination of his arguments.

Examination of Robinson's Proposed Trajectories

In support of his claim that the primitive traditions of Jesus' post-resurrection appearances related luminous, bodily visualizations which were subsequently construed in opposite directions by orthodoxy and Gnosticism, Robinson adduces four lines of evidence: (1) the only two NT eyewitnesses of a resurrection appearance both authenticate visualizations of luminous appearances; (2) vestiges of luminous appearances remain in the non-luminous resurrection appearance stories and in the misplaced appearance stories; (3) the only two eyewitnesses of a resurrection appearance both identify the resurrected Christ with the Spirit; and (4) the outcome of these trajectories may be seen in second-century Gnosticism.

In support of (1), Robinson appeals to the experiences of (a) the apostle Paul and (b) John of Patmos. (a) On the basis of Paul's reference to Christ's 'glorious body' in Phil. 3:21 (cf. I Cor. 15:43), Robinson concludes, 'Thus, it is clear that Paul visualized the resurrected Christ as a heavenly body, luminous'.{4} The Acts accounts of Paul's Damascus Road encounter (Acts 9:1-19; 22:4-16; 26:9-19) seem to reflect accurately Paul's own visualization of his experience. (b) In Rev. 1:13-16 we have another resurrection appearance narrated, although it is usually overlooked because it lies outside the Gospels. Like Paul, John of Patmos experienced an 'uninhibited luminous visualization of the resurrection'.{5} Since these are the only two resurrection appearances recorded by eyewitnesses and both were of the luminous kind, we may conclude 'that the original visualizations of resurrection appearances had been luminous, the experiencing of a blinding light, a heavenly body such as Luke reports Stephen saw (Acts 7:55-56)'.{6}

In support of (2), Robinson sees vestiges of the original luminous, non-human visualizations in the following: (a) the angelic attendants at the empty tomb of Jesus are described as clothed

in 'white' (Mk 16:5), in 'dazzling apparel' (Lk. 24:4), having an appearance 'like lightning and ... raiment white as snow' (Mt. 28:2-3). Says Robinson, 'In the canonical Gospels this luminous apparition of the attendant is all that is left of the luminous visualization of the resurrected Christ...' {7} (b) In 'quite docetic style' Jesus passes through locked doors (Jn 20:19, 26; cf. Lk. 24:36) and disappears abruptly (Lk. 24:31, 51; Acts 1:9). (c) The non-recognition motif of some resurrection appearance stories (Jn 20:14-15; 21:4; Lk. 24:16, 31) may derive ultimately from the luminous visualization, as is evident from Paul's question 'Who are you, Lord?' in his Damascus Road experience (Acts 9:5; 22:8; 26:15). It is understandable that one would not recognize a blinding light, but the lack of recognition and then sudden recognition of Jesus is no longer intelligible in the canonical Gospels' all-too-human visualizations. Thus, this motif may be a vestige from the more primitive luminous, non-human visualizations. (d) Christ's resurrection appearance to Peter seems to be described in 2 Pet. 1:16-17 using the motif of luminosity. Although these verses probably refer to Jesus' transfiguration, the Markan account of that event (Mk 9:2-8) is probably a misplaced resurrection narrative. 'Mark has "historicized" what was originally the resurrection appearance to Peter, tying it down to an unambiguous bodiliness by putting it well before the crucifixion, in spite of its luminousness...' {8} Robinson conjectures that the reason Mark narrates no resurrection appearances is 'perhaps because those available were so luminous as to seem disembodied'. {9}

In support of (3), Robinson argues that in the two instances where the NT contains an eyewitness report of a resurrection appearance, the identification of that appearance as the Spirit seems near at hand. (a) Paul calls the resurrection body 'spiritual' (I Cor. 15:44), identifies the last Adam as 'a life-giving Spirit' (I Cor. 15:45) and calls Christ 'the Spirit' (2 Cor. 3:17-18). (b) John of Patmos describes his experience as 'in the Spirit' (Rev. 1:10) and, although the revelation is from the resurrected Christ, John repeatedly exhorts his readers to hear 'what the Spirit says to the churches' (Rev. 2:7, 11, 17, 29; 3:6, 13, 22). In fact, says Robinson, it is precisely 'this identification of the luminously resurrected Christ as the Spirit' that Luke rejects when he denies that what the disciples saw was a ghost. {10}

Finally, in support of (4), Robinson cites a number of second-century Gnostic texts which, he claims, show that the resurrection appearances were being construed as visions of disembodied radiance. It was in reaction to this tendency that the non-luminous resurrection appearance stories in Matthew, Luke, and John were composed. Thus, just as the trajectory from Easter to Valentinus involved increasing spiritualization, so the trajectory from Easter to the Apostles' Creed involved increasing materialization.

Examination of Argument (1)

Robinson's first argument, that the only two NT witnesses of a resurrection appearance both authenticate visualizations of luminous appearances, implicitly presupposes that we do not have the voice of an eyewitness behind the resurrection appearance stories in the Gospel of John. But whatever his identity, the person known in Johannine circles as the Beloved Disciple is explicitly stated to be an eyewitness whose testimony stands behind the events narrated in the Gospel (Jn 21:24). Although in the past some scholars have regarded the Beloved Disciple as a pure symbol lacking any historical referent, the leading contemporary commentators, such as Brown and Schnackenburg, agree that the Beloved Disciple was a historical person whose testimony, as an eyewitness to some of the events recorded in the latter part of the Gospel of John, including the appearances, stands authoritatively behind them. {11} And, of course, the appearances related in that Gospel are physical and bodily.

Moreover, Robinson's point seems to serve a purpose more polemical than historical, since it ignores altogether the genuinely relevant question of whether the appearance traditions embodied in the Gospels are historically credible in favor of the less relevant question of whether the accounts are first-hand, eyewitness reports. It would be far too facile to dismiss as unhistorical the narratives of, for example, the post-resurrection appearance to the Twelve simply because they were not written by an eyewitness. Hence, even if Robinson's first point were correct, it is far from clear how much force it really has.

But is it in fact correct? Consider first (a) Paul's testimony concerning his Damascus Road experience. Because Paul elsewhere characterizes Christ's resurrection body as 'glorious', are we justified in inferring that it is luminous? In I Cor. 15:40-41 Paul uses 'glory' as a synonym for luminosity, for the differing glory of the sun, moon and stars is their varying brightness. Significantly, the difference between the glory of terrestrial versus celestial bodies is used as an analogy between the present body and the resurrection body. But did Paul think that whereas our earthly body is dull, our resurrection body will be literally luminous? Is that the difference he means to express between them in saying that the resurrection body is glorious? There are reasons to doubt it, for in contrasting the earthly body with the resurrection body, the antithesis he draws in I Cor. 15:43 is not between their relative luminescence, but between their relative *honor*. The present body is dishonorable, no doubt due to sin and its consequences (e.g. mortality), whereas the resurrection body is glorious (cf. the contrast between the lowly state of the earthly body and the exalted state of Christ's resurrection body in Phil. 3.21). This suggests that the glory of the resurrection body has to do with majesty, exaltation, honor and so forth, rather than its becoming luminous.^{12} Indeed, if it were not for the Acts narrative of Paul's experience on the Damascus Road, it seems extremely doubtful that anyone could have taken Paul's 'glorious' to mean that the resurrection body would be shining. Paul himself gives no indication of the nature of Christ's appearance to him.^{13} From all we know from his hand, the appearance to Paul could have been as physical as the resurrection appearances in the Gospels.^{14} In fact, it has even been argued that Luke has de-materialized the appearance to Paul because it was in Luke's scheme a post-ascension encounter and so could not involve Christ's material presence, since Christ had ascended!^{15} Be that as it may, I think it is evident that Paul does not provide eyewitness testimony to a luminous resurrection appearance of Christ.

Still, most critics are prepared to accept the general historicity of the Acts account, and Robinson might appeal to that as grounds for regarding the original resurrection appearances as visualizations of a luminous body. But now a number of difficulties arise.

If one is willing to accept the substantial historicity of Luke-Acts with regard to the appearance to Paul, then one must re-open the question of the historical credibility of Luke-Acts with respect to the appearances to the disciples. Why are we willing to accept the one but not the other, apart from an aversion to the physical realism of the Gospel appearances?^{16}

On what grounds do we assume that Paul's Damascus Road experience involved the visualization of a bodily shape? As the narrative presents it the experience was of a non-corporeal radiance and auditory phenomena, which were also, with some inconsistency, also experienced by Paul's traveling companions. In other words, the narrative presents *prima facie* precisely the sort of unembodied luminous experience which Robinson wishes to locate on the Gnostic trajectory. Paul's experience thus provides no clear basis for the claim that visualizations of a luminous bodily form were primitive.

On what basis are we to assume that Paul's experience on the Damascus Road was normative for the experiences of the disciples, so that its form can be imposed on them and used as a yardstick for assessing historicity? It is sometimes said that in placing himself in the list of witnesses to the resurrection appearances in I Cor. 15:3-8, Paul implies that all of these experiences were of the same sort. But surely Paul's concern here is with *who* appeared, not with *how* he appeared; moreover, in placing himself in the list, Paul is not trying to put the others' experiences on a plane with his own, but, if anything, is rather trying to level up his own experience to the objectivity and reality of the others'.^{17} Luke presents Paul's experience as *sui generis*, and, far from contradicting this, Paul also seemed aware of its unusualness (I Cor. 15:8) and was anxious to class himself with the apostles as a recipient of an authentic resurrection appearance. If we are to use Paul's experience as a criterion for the historicity of other appearance narratives, then Robinson owes us substantial reasons for such a methodology.

Robinson's argument seems to rest upon a fundamental presupposition that luminosity and physicality are mutually exclusive categories, such that if the visualized bodily shape were luminous, it could not also be material and tangible. Without such an assumption I cannot see that the demonstration that the original visualizations of Jesus were characterized by luminosity does anything logically to prove that they did not also involve the perception of a physical object. Unfortunately, Robinson's presupposition is obviously false. Paul himself, as we have seen, referred to the brightness of the sun, moon and stars, which he no doubt took to be physical objects; even more relevantly, he mentions the brightness of Moses' face as it shone with splendor (2 Cor. 3:7, 12). The decisive counter-example to Robinson's principle is his own example of the transfiguration, in which Jesus' face and garments shone, but for all that did not become immaterial or intangible. Robinson simply assumes that the luminosity of some appearing entity is evidence of that entity's non-physicality. Indeed, that conclusion seems to be implicit in Robinson's use of the very term 'visualization', which he never defines, but which seems to carry with it connotations of subjectivity and non-physicality. After all, one would hardly speak of the disciples' 'visualizing' the pre-Easter Jesus; why, then, apply this term to the post-resurrection appearances, unless one is already assuming their purely intra-mental reality? The vocabulary associated with the resurrection appearances in the NT is fully consistent with their physicality and objectivity.^{18} Hence, the demonstration that the original resurrection appearances involved luminosity does nothing to demonstrate that the physicality of those appearances is a later corruption on the trajectory from Easter to the Apostles' Creed. It seems to me, then, that on the basis of Paul's experience, we are not entitled to conclude either that the original resurrection appearances were characterized by luminosity or that, even if they were, they were therefore non-physical in character.

(b) What, then, can we conclude about John of Patmos's experience of the exalted Christ? It is rather surprising that Robinson should categorize this as a resurrection appearance. The reason it is 'overlooked' by all students of the resurrection is not because it occurs outside the Gospels, but because it is quite clearly a vision rather than a resurrection appearance.^{19} Although the resurrection appearances took place within a community that enjoyed visions, revelations and ecstatic experiences (I Cor. 12-13; 2 Cor. 12:1-5; Gal. 2:1; Acts 16:9), that community nevertheless drew a distinction between visions of Christ and the resurrection appearances of Christ: the appearances were restricted to a small circle designated as witnesses, and even to them Jesus did not continually reappear but appeared only at the beginning of their new life. Thus, for example, although Paul considers Christ's appearance to him to have been 'last of all' (I Cor. 15:8), nevertheless, he continued to experience 'visions and revelations of the Lord' (2 Cor. 12:1; cf. Acts 22:17). Similarly, the revelation of Christ to

John on Patmos is clearly a vision of the exalted Christ, replete with allegorical imagery, not a resurrection appearance of Christ. In the same way, the visions of Christ seen by Stephen, Ananias and Paul (Acts 7:55-56; 9:10; 22:17) are not regarded by Luke as resurrection appearances of Christ, but as veridical, divinely induced visions of Christ. Thus, Robinson's appeal to John's experience as an eyewitness account of a resurrection appearance is spurious.

Nor is this all, however, for the question at once arises as to what distinguishing feature served to mark off an experience as a resurrection appearance of Jesus rather than as a merely veridical vision of Jesus? So far as I can tell, the answer of the NT to that question is that only an appearance involved extra-mental realities, whereas a vision, even if veridical, was purely intra-mental. {20} But if that is the case, then Robinson's construction collapses, since the hypothesized trajectories did not then grow out of visualizations of Christ lacking any extra-mental referent, experiences which would have been indistinguishable from simple visions. It is therefore incumbent upon Robinson, at the expense of his construction, to provide us with a more plausible explanation of the basis upon which the early church distinguished between resurrection appearances and visions of Christ.

I thus find Robinson's first argument based on the testimony of Paul and John rather unconvincing. We have not seen any compelling reasons to think that the original resurrection appearances were uniformly characterized by luminosity or that if they were, this fact implies non-physicality. On the contrary, the distinction drawn by the NT church between a resurrection appearance and a veridical vision suggests that the appearances were conceived to be physical events in the external world.

Examination of Argument (2)

Let us then turn to point (2) concerning the vestiges of luminosity in the canonical Gospel appearance stories. With the collapse of point (1), Robinson faces here a very difficult methodological problem: how does one prove that elements of luminosity in the narratives are truly a vestige rather than simply a feature of the stories? In other words, in the absence of a prior proof that the original resurrection appearances were uniformly luminous in character, the elements of luminosity in the Gospel stories cannot themselves be taken as evidence of some more primitive stage. With that in mind, let us consider Robinson's examples.

a. The Angelic Attendants at the Tomb

Robinson is not clear whether the primitive tradition underlying these stories attributed luminosity to the angels or whether this feature of the story is a relic of a luminosity originally attributed to the risen Christ but, under the pressure of opposing Gnosticism, now transferred to the angelic attendants. If the luminescence is truly a vestige of a luminous resurrection appearance, then it would seem that the latter would have to be the case. But the difficulty in proving such a supposed transference is that divine beings are typically portrayed as radiant or clothed in white robes (Ezek. 10; Dan. 7:9; 10:5-6; Lk. 2:9; Acts 1:10; 2 Cor. 11:14; Rev. 4:4; 10:1; 1 En. 62:15- 16; 2 En. 22:8). So why should it be thought that the angels being dressed in white or dazzling in appearance is a vestige of a radiance originally attributed to the risen Christ? Robinson himself seems to recognize the frailty of such an inference, for he asserts, 'The apologetic that apparently caused the resurrected Christ's luminosity to fade into the solidity of a physical body did not affect the luminosity of the accompanying figure(s)'. {21} In this statement he seems to allow that the radiance of the angel(s) is primitive and that only the original luminescence of Christ has disappeared. But in that case, how is the angelic

radiance a *vestige* of a luminous resurrection appearance? Once one allows it to be primitive and distinct, then it becomes question-begging to assume that it is all that remains of a doubly ascribed luminescence in the original tradition.

b. The Docetic Elements in the Narratives

Contrary to what Robinson states, Jesus is never said to pass through locked doors in the appearance narratives. He simply appeared miraculously in the closed room, even as he miraculously vanished during bread-breaking in Emmaus. The physical demonstrations of showing his wounds and eating before the disciples indicate that Jesus is conceived to appear physically. His appearances are no more docetic than are similar angelic appearances, which may also begin and end abruptly. In fact, it is instructive to note that the rabbis distinguished between a mere vision of an angel and an extra-mental appearance of an angel precisely on the basis of whether food seen to be consumed by the angelic visitant remains or is gone after the angel disappears.^{22} The mode of his coming or going is irrelevant to his physical reality.

c. The Non-recognition Motif as a Vestige of Luminous Appearances

This is an ingenious and more interesting argument. Two questions arise in assessing its force. Does luminosity serve to obscure the identity of the individual appearing? And does the non-recognition motif serve some theological purpose in the resurrection narratives or is it a useless, vestigial feature in those accounts? In favor of an affirmative answer to the first question Robinson appeals to Paul's question, 'Who are you, Lord?' in the Acts narrative of his Damascus Road experience. But the force of this example is diminished by two facts. (1) The Acts account does not say that Paul saw any bodily form whatsoever in the blinding light that surrounded him. Hearing the voice, he asks for the identity of the speaker. Thus, the incident is not portrayed as a recognition scene.^{23} (2) Since Paul had apparently never known the earthly Jesus, it is not clear that he could be expected to recognize him (as opposed to, say, an angel), even if he saw him in the light. Since they had lived with Jesus, the disciples' case would thus be different. Moreover, a forceful counter-example to Robinson's claim that luminescence conceals identity is again his own example of the transfiguration of Jesus. The disciples had no difficulty recognizing Jesus and distinguishing him from Elijah and Moses. This counter-example presses all the more strongly against Robinson if one takes this pericope to be a misplaced resurrection appearance story. Hence, I think it is far from clear that the luminosity of an appearing individual masks his identity. As to the second question, is the nonrecognition motif really so unintelligible and useless that it is probably vestigial? I am not so sure. Could it not, for example, serve to underline the difference between the earthly Jesus and the numinous, risen Lord, to say to the disciples that their former way of relating to Jesus was now at an end and a new relationship had begun? That seems to be the point of Jesus' cryptic remark to Mary, 'Do not cling to me, for I have not yet ascended to the Father...' (Jn 20:17). So while the nonrecognition motif is puzzling, it is not evident that it should be regarded as a relic of some earlier stage in the tradition.

d. The Account of the Transfiguration

It is remarkable that Robinson is prepared to accept 2 Pet. 1:16-17 as a factual description of the appearance to Peter, while rejecting the Gospel accounts of the resurrection appearances. One can only take this double standard to result from Robinson's apologetic zeal. As to the claim that the transfiguration represents a misplaced resurrection appearance story, while we

may agree that Mark does think of it as a proleptic display of Christ's coming glory, perhaps even rendering a narration of a resurrection appearance in fulfillment of the angel's prediction (16:7) therefore superfluous, nevertheless the narrative is so firmly embedded in its context that it is unlikely to be a misplaced appearance story .{24} More importantly, we have seen that this story actually serves to undercut rather than support Robinson's construction, for it shows that luminosity is not incompatible with physicality and does not serve to obscure the identity of the glorified individual. Hence, it seems to me that Robinson has failed to demonstrate that the elements of luminosity in the canonical Gospels are truly vestiges or that their presence supports his proposed trajectories.

Examination of Argument (3)

Turning to point (3), we need to ask whether Paul and John of Patmos really believed, as Robinson apparently claims, that Jesus and the Holy Spirit are numerically identical, that in rising from the dead Jesus was somehow transformed into the Holy Spirit. Consider first the case of Paul. When Paul speaks of *soma pneumatikon*, we must not overlook the obvious fact that he is talking about a *soma* not an incorporeal spirit. Although *soma* is often taken to be a synonym for the whole person, it is evident that in I Corinthians 15 it is used to refer to the physical body and is roughly synonymous with 'flesh' in a morally neutral sense.{25} Modern commentators agree that by a 'spiritual body' Paul does not mean a body made out of spirit, but a body under the domination of and oriented toward the Spirit.{26} Now when Paul says that the last Adam became a life-giving Spirit, he does not mean that Jesus turned into the Holy Spirit (thereby negating his somatic reality) any more than when Paul says the first Adam became a living soul, he means that Adam turned into a disembodied *psyche*.{27}

Rather, he describes the same two entities respectively as *soma psychikon* (15.44), *psyche zosa* (15.45), *to psychikon* (15.46), and *soma pneumatikon* (15.44), *pneuma zoopoion* (15.45), *to pneumatikon* (15.46). It is because of his desire to construct a parallelism on the words of Gen. 2:7 that Paul abbreviates his reference to Christ's spiritual body in 15:45. As for 2 Cor. 3:17-18, there is no good reason to think that Paul is claiming more than an identity of *function* between the risen Lord and the Holy Spirit.{28} Given his teaching on the resurrection *soma* and his personal belief in the bodily return of Christ (I Thess. 4:16-17; 2 Thess. 1:7-8, 10; 2:1, 8; 1 Cor. 15:23; Phil. 3:20-21; 4:5; Col. 3:4), it seems to me exegetically fanciful to suppose that Paul thought the risen Christ was numerically identical with the Holy Spirit.

The evidence for the case of John is even less compelling for Robinson's thesis. John's being in the Spirit refers only to the mode of his vision of Christ. That Christ himself commands the churches to give heed to the Spirit affords no inference that Christ has turned into an unembodied Spirit, especially when one contemplates John's vision of Christ's millennial reign and personal presence in the new heavens and new earth (Rev. 20-21). Hence, I must confess that I find Robinson's third point to be the weakest of the four.

Examination of Argument (4)

Finally, in support of point (4) Robinson cites a number of second century Gnostic texts in order to show that the Gnostics held the resurrection appearances to be visualizations of pure radiance without any bodily form. Here two questions present themselves. (a) Are the second-century Gnostic beliefs the issue of a process of reinterpretation of primitive traditions of visualizations of a luminous bodily form? And (b) did the second-century Gnostics hold that

the resurrection appearances of Christ were visions of pure, unembodied radiance? With respect to (a), it seems clear that apart from his first three points, Robinson's fourth point alone does nothing to prove the existence of an earlier, developing trajectory, but only shows us what second-century Gnostics believed. What Robinson must show is that the second-century Gnostic position is the terminus of a process whereby primitive visualizations of a radiant bodily shape were transformed into visualizations of unembodied radiance. Not only has he failed to shoulder that burden of proof, but, it seems to me, such a hypothetical development is quite improbable. There is simply no evidence that the New Testament writers were opposed by persons who espoused luminous resurrection appearances lacking a bodily shape. In fact, Robinson appears to be lapsing back into nineteenth-century German exegesis's identification of *soma* with the *form* of the body and light or glory as its *substance*. Under the influence of idealism, theologians like Holsten and Lüdemann held that the *soma* is the form of the earthly body and the *sarx* its substance. {29} This enabled one to maintain that in the resurrection the *soma*, or bodily form was retained but was endowed with a new spiritual substance. In this way one could affirm a bodily resurrection without affirming its physicality. Hence, in the older commentaries such as Hans Lietzmann's commentary on the Corinthian correspondence, one finds the *soma pneumatikon* to be conceived as a body made out of *himmlischer Lichtsubstanz*. {30} Although Gundry states that this interpretation has now been almost universally abandoned, {31} Robinson seems to be presupposing such an understanding. For he thinks that the Gnostic aversion to the *soma* meant an aversion to bodily *form* and that Paul's affirmation of a resurrection *soma* meant an affirmation of bodily *form*. But what Paul affirmed and the Gnostics objected to was real, physical, material corporeality, not just the form thereof. Proto-Gnostics could have affirmed quite happily the allegedly primitive visualizations of an intangible, immaterial, luminous bodily form.

In fact--and this leads me to my second point (b)--an examination of Robinson's texts reveals that this is precisely what the Gnostics often *did* affirm. For, contrary to Robinson, the Gnostic resurrection appearance texts do not speak of a bodiless radiance, but usually refer to visions of a luminous human bodily form. The only text which suggests a bodiless radiance is found in the *Letter of Peter to Philip* and even that text is not unequivocal, stating, "then a great light appeared so that the mountain shone from the sight of him who had appeared" (134.10-13). {32} For the rest, bodily appearances are clearly described. For example, in the *Apocryphon of John* we find a sort of trinitarian vision described in which the same human being appears successively as a youth, an old man and a servant, all enveloped in light (1.302.9). {33} In the *Pistis Sophia* 1.4 we read of a post-ascension appearance of Jesus in radiant bodily form:

As they were saying these things and were weeping to one mother, on the ninth hour of the following day the heavens opened, and they saw Jesus coming down, giving light exceedingly, and there was no measure to the light in which he was. {34}

In the *Sophia of Jesus Christ* we read,

After he rose from the dead, his twelve disciples and seven women followed him and went to Galilee on the mountain that is called 'Place of Harvesttime and Joy'...The Savior appeared not in his first form, but in the invisible spirit. And his form was like a great angel of light. And his likeness I must not describe. No mortal flesh can endure it, but only pure and perfect flesh like that which he taught us about on the mountain called 'Of the Olives' in Galilee. And he said, 'Peace to you! My peace I give to you!' And they all wondered and were afraid.

The Savior laughed and said to them, 'What are you thinking about? Why are you perplexed?' (90.14-92.2).{35}

In fact in some of the Gnostic resurrection appearance stories the element of luminosity is completely lacking. For example, in the *Acts of Peter and the Twelve Apostles* Peter is confronted by a pearl merchant named Lithargoel, who is described in the following way:

A man came out wearing a cloth bound around his waist, and a gold belt girded it. Also a napkin was tied over his chest, extending over his shoulders and covering his head and arms. I was staring at the man, because he was beautiful in his form and stature. There were four parts of his body which I saw: the tops of his feet, and a part of his chest, and the palm of his hand, and his visage (2:10-24).{36}

Lithargoel later changes into the dress of a physician, and a recognition scene follows in which Lithargoel reveals his true identity as the risen Christ:

He answered and said, 'It is I! Recognize me, Peter.' He loosed his garment, which clothed him--the one into which he had changed himself because of us--revealing to us in truth that it was he.

We prostrated ourselves on the ground and worshipped him. We comprised eleven disciples. He stretched forth his hand and caused us to stand (9.13-23).{37}

This story is especially interesting, since it adopts the recognition motif from the canonical appearance stories and yet without any use of the luminosity motif. Another non-luminous resurrection appearance is related in the *Apocryphon of James*:

Now when the twelve disciples were all sitting together and recalling what the Savior had said to each one of them... lo, the Savior appeared, after he had departed from us, and we had waited for him. And after five hundred and fifty days since he had risen from the dead, we said to him, 'Have you departed and removed yourself from us?'

But Jesus, said, 'No, but I shall go to the place from whence I came. If you wish to come with me, come!'... And having called [James and Peter] he drew them aside and bade the rest occupy themselves with that which they were about (2.7-39).{38}

In this text it is only with Jesus' ascension into heaven that the fleshly body is stripped away; similarly in the *Pistis Sophia* 1.1-6 Jesus is said to have spent eleven years with his disciples after his resurrection prior to his ascension in radiant glory (and even in his post-ascension appearance he, at the disciples' request, retracts his radiance so as to appear in a non-luminescent condition). This is instructive because it shows that the resurrection of the physical body and physical appearances were not objectionable to Gnostics, since further transformation could always be deferred until the ascension. In fact, some Gnostic texts are quite content to preserve the flesh throughout resurrection and glorification, insisting only that in the resurrection the body comes to possess a higher, incorruptible flesh (*Treat. Res.* 47. 2-12).{39} Thus in *Gos. Phil.* 57.18-19 we read, 'It is necessary to rise in the flesh, since everything exists in it'.{40} With regard to Jesus' resurrection the same text states, 'The Lord rose from the dead. He became as he used to be, but now his body was perfect. He did indeed possess flesh, but this flesh is true flesh. Our flesh is not true, but we possess only an image of the true.' (68.31-37) {41} With such a conception of the resurrection body we can readily understand why Gnostic writings show no compunction about relating bodily and even

physical resurrection appearances. Thus, it seems that the view which Robinson wants to pass off as 'the original Christian position' is in danger of being even more Gnostic than that of the Gnostics!

It therefore seems to me that Robinson's construction of a trajectory from Easter to Valentinus collapses. The Gnostics did not take as their point of departure visualizations of a radiant bodily form and then disembodied them to arrive at visions of pure radiance. Rather, they departed from the primitive conception of physical, bodily resurrection appearances and sometimes dematerialized them in order to arrive at visualizations of a radiant bodily form. {42}

By the same token, it does not seem that Robinson has provided sufficient evidence to support his constructed parallel trajectory from Easter to the Apostles' Creed. We have seen no convincing reasons to think that the original resurrection appearances were visualizations of an immaterial and intangible refulgent bodily form. Indeed, had this been the case, then it is difficult to understand why the trajectory should have advanced to the Apostles' Creed's affirmation of the resurrection of the flesh, for faced with the supposed Gnostic denial of bodily form in the radiance, all that would have been necessary was to reaffirm the bodily form or shape of the resplendent glory, not to materialize it by means of crass physical demonstrations of displaying wounds and eating fish. And those who like Robinson are wont to speak of Luke or John's 'apologetic against Gnosticism' need to recall that the physicalism of the stories belongs to the traditional material received by these authors, not their redaction of it. There are, in fact, substantive reasons for thinking that the physicalism of the resurrection appearance stories is not a counter-response motivated by Gnostic opponents. {43} Therefore, I see no reason to think that Robinson's hypothesized trajectory from Easter to the Apostles' Creed is any firmer a span than the bridge he has built from Easter to Valentinus.

Conclusion

In summary, none of Robinson's four points supplies sufficient evidence for the existence of twin trajectories taking as their common point of departure primitive first-century visualizations of the resurrected Christ as a luminous bodily form and finding their respective termini in second-century Gnosticism's supposed reinterpretation of these experiences as visions of unembodied luminosity, on the one hand, and in the affirmation of the Apostle's Creed of the resurrection of the flesh, on the other. Robinson has invested an enormous amount of time and industry in the study of the Nag Hammadi documents, and he is understandably anxious that these texts should prove fruitful in the interpretation of the New Testament. But the results of this examination suggest that their value is not to be found in their relevance to the post-resurrection appearances of the Gospel tradition.

Endnotes

{1} J.M. Robinson, 'Jesus from Easter to Valentinus (or to the Apostles' Creed)', *JBL* 101 (1982), pp. 5-37.

{2} Robinson, 'Easter to Valentinus', p. 37.

{3} Robinson, 'Easter to Valentinus', p. 37.

{4} Robinson, 'Easter to Valentinus', p. 7.

{5} Robinson, 'Easter to Valentinus', p. 10.

{6} Robinson, 'Easter to Valentinus', p. 10.

{7} Robinson, 'Easter to Valentinus', p. 14.

{8} Robinson, 'Easter to Valentinus', p. 9.

{9} Robinson, 'Easter to Valentinus', p. 10.

{10} Robinson, 'Easter to Valentinus', p. 13.

{11} R.C. Brown, *The Gospel according to John* (AB, 29A; Garden City, NY: Doubleday, 1970), pp. 1119-20; *idem*, *The Community of the Beloved Disciple* (New York: Paulist Press, 1979), pp. 22-23; R. Schnackenburg, *Das Johannesevangelium* (3 vols.; HTKNT, 4; Freiburg: Herder, 1976), III, pp. 368, 452-56; so also B. Lindars (ed.), *The Gospel of John* (NCB; London: Oliphants, 1972), p. 602.

{12} See the study by J. Coppens, 'La glorification céleste du Christ dans la théologie néotestamentaire et l'attente de Jésus', in E. Dhanis (ed.), *Resurrexit* (Rome: Libreria Editrice Vaticana, 1974), pp. 37-40.

{13} Sometimes appeal is made to 2 Cor. 4.6, which is thought to refer to the blinding light on the Damascus Road. But in fact the verse does not seem to be connected to Paul's conversion experience: the light is the light of the gospel (4.4) and is compared to God's act of creation (cf. Gen. 1.3). There appears to be no reason to think that it refers to the Damascus Road experience.

{14} All Paul tells us is that Jesus appeared (*ophthe*) to him (I Cor. 15.8). that he saw (*heoraka*) Jesus (I Cor. 9. 1), and that God revealed (*apokalupsai*) his Son to him (Gal. 1.16). Dunn argues that Paul's use of *en emoi* in Gal. 1.16 instead of the simple dative shows that he is describing 'a personal subjective experience' (J.D.G. Dunn, *Jesus and The Spirit* [London: SCM 1975], pp. 105-106), but Dunn concedes that it is his *conversion* that Paul describes as a subjective experience; Paul 'is not talking about the visionary side of his conversion experience as such'. Hoffmann agrees that *en emoi* says nothing about the nature of Paul's experience, but he appeals to *apokalupsai* as evidence of the appearance's being visionary and eschatological (P. Hoffmann, 'Auferstehung II. Auferstehung Jesu Christi II/1. Neues Testament', *TRE* [1979], pp. 492-97). But apart from other difficulties, Hoffmann's argument rests on the unproven presupposition that in the mind of the biblical writers one cannot have an apocalyptic-eschatological experience of a physically real entity.

{15} See P. Borgen, 'From Paul to Luke', *CBQ* 31 (1969), p. 180; cf. C.F. Evans, *Resurrection and the New Testament* (SBT, 12; London: SCM Press, 1970), pp. 55-56; X. Léon-Dufour, 'L'apparition du Ressucité à Paul', in Dhanis (ed.), *Resurrexit*, p. 294; C.W. Hedrick, 'Paul's Conversion/Call: A Comparative Analysis of the Three Reports in Acts', *JBL* 100 (1981), pp. 430-31.

{16} See the remarks of J.E. Alsup, *The Post-Resurrection Appearance Stories of the Gospel-Tradition* (Stuttgart: Calwer Verlag, 1975), pp. 32, 34, 54.

{17} For good statements of this point, see B.F. Westcott, *The Gospel of the Resurrection* (London: Macmillan, 1906), pp. 93-94; J. Orr, *The Resurrection of Jesus* (London: Hodder & Stoughton, 1909), p. 39; P. Gardner-Smith, *The Narratives of the Resurrection* (London: Methuen, 1926), pp. 21-22; J.A.T. Robinson, 'Resurrection in the New Testament', *IDB*. Dunn even hypothesizes that Paul's placing himself in the list could be a case of special pleading--interpreting a less distinctive religious experience as a resurrection appearance in order to boost his claim to apostolic authority (Dunn, *Jesus and the Spirit*, p. 99)! Dunn rejects the hypothesis in the end because the pillar apostles accepted Paul's claim without serious dispute (*Jesus and the Spirit*, p. 108).

{18} See H. Grass, *Ostergeschehen und Osterberichte* (Göttingen: Vandenhoeck & Ruprecht, 4th edn, 1970), pp. 186-89.

{19} On the difference between a resurrection appearance and a vision see the discussion by Grass, *Ostergeschehen*, pp. 189-207. It should be noted that this distinction is conceptual in nature, not primarily linguistic.

{20} See the discussion in W.L. Craig, *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus* (Studies in the Bible and Early Christianity, 16; Lewiston, NY: Edwin Mellen, 1989), pp. 68-69.

{21} Robinson, 'Easter to Valentinus', p. 15.

{22} See various tests cited in K. Berger, *Die Auferstehung der Propheten und die Erhöhung des Menschensohnes* (SUNT, 13; Göttingen: Vandenhoeck & Ruprecht, 1976), pp. 159, 458.

{23} This conclusion is not affected by any inference from Paul's letters that he saw a bodily form in the light, for the question concerning the speaker's identity occurs in the Acts account only, and in that account there is no suggestion of a bodily form.

{24} For a discussion of suggested misplaced appearance stories, see C.H. Dodd, 'The Appearances of the Risen Christ: A Study in Form-Criticism of the Gospels', in *More New Testament Studies* (Manchester: Manchester University Press, 1968), pp. 119-22; R.H. Fuller, *The Formation of the Resurrection Narratives* (London: SPCK, 1972), pp. 160-67; Alsup, *Post-Resurrection Appearance Stories*, pp. 139-44.

{25} See J. Weiss, *Der erste Korintherbrief* (KEK, 5; Göttingen: Vandenhoeck & Ruprecht, 1910), p. 372. The most important work on this subject is certainly R.H. Gundry, *Soma in Biblical Theology* (Cambridge: Cambridge University Press, 1976); see his summary statement on p. 50. See also J. Gillman, 'Transformation in 1 Cor. 15, 50-53', *ETL* 58 (1982), pp. 328-39.

{26} See the discussion in Craig, *New Testament Evidence for the Resurrection*, pp. 133-37.

{27} Kleinknecht et al., '*pneuma*', *TWNT*. I am astounded by the number of scholars who appeal to I Cor. 15.45; 2 Cor. 3.17-18, etc., to prove that Christ turned into the Spirit at the

resurrection and so is now immaterial and invisible (e.g. Robinson, 'Easter to Valentinus', p. 13). Morissette shows from Jewish texts that 'life-giving' means 'to resurrect' and comments,

'The appellation "Spirit", for its part, is sometimes used by Paul to designate Christ. [Cf. 2 Cor. 3-17a, 18c; comp. Rom. 8:9-11. This affirmation is implied occasionally by Luke: Comp. Lk. 12.12; 21.15; Acts 16.6, 7.] Nonetheless, there is no formal identification whatever. [Between 2 Cor. 3.17a ('the Lord is the Spirit') and 18c ('the Lord who is the Spirit') Paul distinguishes in v. 17b 'where the Spirit of the Lord is, etc.']. The identification is always functional: it serves to show what Christ means "now" for the faithful. [The Apostle frequently attributes similar functions to Christ and the Spirit; W. D. Davies in *Paul and Rabbinic Judaism*, p. 177, has a good summary of these texts]. The statement of I Cor. 15.45b is no exception, as the verb *zoopoion* . . . and the entire context indicate' (Rodolphe Morissette, 'L'antithèse entre le "psychique" et le "pneumatique" en I Corinthiens, XV, 44 à 46', *RSR* 46 [1972], p. 141).

{28} See the remarks of Dunn (*Jesus and the Spirit*, pp. 318-26), particularly the following: 'Of course he is speaking primarily in existential rather than in ontological terms. Jesus still has a personal existence; there is, we may say, more to the risen Jesus than life-giving Spirit (cf., e.g., Rom. 1.3f.; 8.34; 1 Cor. 15.24-28). But so far as the religious experience of Christians is concerned Jesus and the Spirit are no different. The risen Jesus may not be experienced independently of the Spirit, and my religious experience which is not in character and effect an experience of Jesus Paul would not regard as a manifestation of the life-giving Spirit'(pp. 322-21).

{29} C. Holsten, *Zum Evangelium des Paulus und des Petrus* (Rostock: Stiller, 1868); H. Lüdemann, *Die Anthropologie des Apostel Paulus und ihre Stellung innerhalb seiner Heilslehre* (Kiel: Universitätsverlag, 1872).

{30} H. Lietzmann, *An die Korinther I, II* (rev. W.G. Kümmel; HNT, 9; Tübingen: J.C.B. Mohr, 4th edn, 1949), p. 194.

{31} Gundry, *Soma in Biblical Theology*, pp. 161-62, where he lists six factors contributing to this consensus.

{32} Text from J.M. Robinson (ed.), *The Nag Hammadi Library* (Leiden: Brill, 1977), p. 395.

{33} Robinson, *Nag Hammadi Library*, p. 99.

{34} Text in C. Schmidt (ed.), *Pistis Sophia* (trans. V. MacDermot; NHS, 9; Leiden: Brill, 1978), p. 15.

{35} Robinson, *Nag Hammadi Library*, pp. 207-208

{36} Robinson, *Nag Hammadi Library*, p. 266.

{37} Robinson, *Nag Hammadi Library*, p. 269.

{38} Robinson, *Nag Hammadi Library*, p. 30.

{39} Robinson, *Nag Hammadi Library*, p. 52. For a list of similar Gnostic affirmations of the resurrection of the flesh or body, see the comment on this passage by M.L. Peel, *The Epistle to Rheginos* (Philadelphia: Westminster Press, 1969).

{40} Robinson, *Nag Hammadi Library*, p. 135.

{41} Robinson, *Nag Hammadi Library*, p. 141.

{42} See the remarks of E.E. Ellis, *The Gospel of Luke* (NCB; London: Nelson, 1966), p. 175; Dunn, *Jesus and the Spirit*, pp. 119-20; K. Bornhäuser, *Das Recht des Bekenntnisses zur Auferstehung des Fleisches* (Gütersloh: Bertelsmann, 1899), pp. 47-61; W. Künneth, *The Theology of the Resurrection* (trans. J.W. Leitch; London: SCM Press, 1965), pp. 92-93.

{43} See discussion in Craig, *New Testament Evidence for the Resurrection*, pp. 335-39.

The Guard at the Tomb

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

"The Guard at the Tomb." *New Testament Studies* 30 (1984): 273-81

Of the canonical gospels, only Matthew relates the intriguing story of the setting of a guard at the tomb of Jesus (Mt. 27. 62-66; 28. 4, 11-15). The story serves an apologetic purpose: the refutation of the allegation that the disciples had themselves stolen Jesus' body and thus faked his resurrection. Behind the story as Matthew tells it seems to lie a tradition history of Jewish and Christian polemic, a developing pattern of assertion and counter-assertion:{2}

Christian: 'The Lord is risen!'

Jew: 'No, his disciples stole away his body.'

Christian: 'The guard at the tomb would have prevented any such theft.'

Jew: 'No, his disciples stole away his body while the guard slept.'

Christian: 'The chief priests bribed the guard to say this.'

Though Matthew alone of the four evangelists mentions the guard at the tomb (John mentions a guard in connection with Jesus' arrest; cf. Mk. 14. 44), the gospel of Peter also relates the story of the guard at the tomb, and its account may well be independent of Matthew, since the verbal similarities are practically nil.{3}

According to Matthew's version, on Saturday, that is, on the Sabbath, which Matthew strangely circumnavigates by calling it the day after the day of Preparation, the chief priests and Pharisees ask Pilate for a guard to secure the tomb to prevent the disciples from stealing the body and thus 'fulfilling' Jesus' prediction of rising on the third day. Pilate says, 'You have a guard; make it as secure as you can.' It is not clear if this means that Pilate gave them a Roman guard or told them to use their own temple guard. The Gospel of Peter uses a Roman guard, but this is probably read into the tradition and may be designed to emphasize the strength of the guard. If one might mention a psychological consideration, Pilate would probably be by this point so disgusted with the Jews that he might well rebuff them; but legends know no psychological limits. If Pilate rebuffed the Jews, then one wonders why this part of the story be told at all; but if the Jews really did go to Pilate, then perhaps this detail was remembered. If Pilate gave them a guard it is strange that Matthew does not make this explicit, like the Gospel of Peter, as this would strengthen his apologetic. The fact that the guards return to the chief priests is evidence that a Jewish guard is intended; contrast the Gospel of Peter, where the Roman guard report to Pilate the events at the tomb. The mention of the governor in v. 14 might indicate a Roman guard, but then it would not be clear how the Jews could do anything to keep them out of trouble. The fact that Roman guards could be executed for sleeping on watch and taking a bribe would further point to a Jewish guard. In the Gospel of Peter the bribe and the sleeping story are eliminated; Pilate simply commands the Roman guard to keep silent. If one gives the story the benefit of a doubt, one would assume that the guard is Jewish; but if one is convinced the story is a worthless legend then nothing could prevent one from taking the guard as Roman. So the guard is set and the sepulcher sealed. It has been said that Matthew omits the anointing motif because of the guard and the sealing,{4} but this holds no weight, for the women were clearly ignorant of such actions taken on the Sabbath. Rather it could be that Matthew is following different traditions here, since v. 15 makes it evident that there is a tradition history behind Matthew's story.{5} Before the women arrive, an angel of the Lord rolls back the stone, and the guard are paralyzed with fear. It is not said that the guard see the resurrection or even that this is the moment of the resurrection.{6} After the women leave, some of the guard go to the Jewish authorities, who bribe them to say that the disciples stole the body. This story has been spread among the Jews until this day, adds Matthew.

Matthew's account has been nearly universally rejected as an apologetic legend by the critics. The reasons for this judgment, however, are of very unequal worth. For example, the fact that the story is an apologetic answering the allegation that the disciples stole the body does not therefore mean that it is unhistorical. The best way to answer such a charge would not be by inventing fictions, but by narrating the true story of what happened. Similarly, it counts for nothing to press the theological objection against the story, as is often done, that it overshoots the remaining witness of the New Testament that Jesus only appeared to his own, but remained hidden to his enemies.{7} Some theologians are appalled at the thought that pagan guards might see the 'Risen Christ'.{8} But the account says nothing about any appearance of

Jesus to the guards at all. On the contrary, the angel expressly says, 'He is not here; for he has risen'; but the tomb is opened presumably that the women might come and 'see the place where he lay' (Mt. 28. 6). And in any case, the New Testament witness is that Jesus did appear to sceptics, unbelievers and even enemies (Thomas, James and Paul). The idea that only the eye of faith could see the risen Jesus is foreign to the gospels and to Paul, for they all agree on the physical nature of the resurrection appearances.^{9} It is sometimes urged that the chief priests and Pharisees would not go to Pilate on the Sabbath day. But such an inference is not very weighty, since it is not said that they went *en masse*, but merely met there,^{10} and it is not said that they entered the praetorium (cf. Jn. 18. 28). In any case, the objection underestimates the hypocrisy of men who, at least according to the gospel portrait, could bind others with heavy burdens, but they themselves not lift a finger to help. Nor is it very compelling to object to the story because it contains inherent absurdities, for example, that the guards would not know it was the disciples because they were asleep or that a Roman guard would never agree to spread a story for which they could be executed.^{11} The first assumes that the Jews could not have fabricated a stupid cover-up story; really this story was as good as any other. At any rate the inference that it was disciples of Jesus was not so far-fetched, for who else would steal the body? The second absurdity assumes the guard was Roman, for which the positive evidence is slim. And even if the guard were Roman, perhaps the Jews' promise to 'satisfy the governor' meant telling him the truth about the guards' loyal service, if they would agree to lie to the people.

Rather the more serious difficulties with the story are two: (1) it is not related in the pre-Markan passion story nor in the other gospels, and (2) it presupposes not only that Jesus predicted his resurrection in three days, but also that the Jews understood this clearly while the disciples remained in ignorance. With regard to the first, it is exceedingly odd that the other gospels know nothing of so major an event as the placing of a guard around the tomb. This suggests that the account is a late legend reflecting years of Jewish/Christian polemic. The designation of Jesus as an impostor is in fact an earmark of Jewish polemic against Christianity (Justin *Dialogue with Trypho* 108; *Testament of the Twelve Patriarchs* (Levi) 16. 3). But perhaps this polemical interest supplies the very reason why this event, even if historical, was not included in the pre-Markan passion story. For the pre-Markan passion story arose in the life of the *Urgemeinde* before the *Auseinandersetzung* with Judaism and thus antedates the Jewish/Christian polemics. Since the guard played virtually no role in the events of the discovery of the empty tomb -- indeed the Matthean account does not exclude that the guard had already left before the women arrived --, the pre-Markan passion story may simply omit them. If the slander that the disciples stole the body was restricted to certain quarters ('the story has been spread among Jews [*para Ioudaiois*] to this day'), then it cannot be ruled out that Luke or John might not have these traditions. And the evangelists often inexplicably omit what seem to be major incidents that must have been known to them (for example, Luke's great omission of Mk. 6. 45 - 8. 26) so that it is dangerous to use omission as a test for historicity.

As for the second objection, we must be careful not to exclude *a priori* the possibility that Jesus did predict his resurrection, since ruling this out in advance would be to return to eighteenth century theological rationalism's presupposition against the supernatural. And if philosophical presuppositions cannot exclude Jesus' prediction, neither can theological, for example, that this represents a sort of 'triumphalism' that minimizes the extent of Jesus' sacrifice, since he knew he would rise again. Theological conceptions of what is 'appropriate' to Jesus' person and work cannot dictate to history what must have happened; rather theological conceptions may simply have to be changed in the light of history, whether this

appeals to our religious sensibilities or not. The only grounds for accepting or rejecting Jesus' predictions as historical must be empirical.

What, then, are the empirical grounds for thinking that Jesus did not predict his resurrection? It is sometimes asserted that Jesus' prediction of his resurrection is incompatible with the despair and hopelessness of the disciples. But this fails to reckon with the clear statements of the gospels that the disciples could not understand how a dying and rising Messiah could be possible (Mk. 8. 32; 9. 10). The concept was utterly foreign to them and made no sense with their conceptions of the triumphant King of Israel, though, Mark emphasizes, Jesus told them *plainly* that he was to suffer, be killed, and rise (Mk. 8. 32). It is interesting that when Jesus tells Martha that Lazarus will rise again, her response is, 'I know that he will rise again in the resurrection at the last day' (Jn. 11. 24). The disciples may have had no expectation that Jesus' prophesied resurrection would be otherwise; in fact this is implied by their question concerning the eschatological coming of Elijah prior to the resurrection (Mk. 9. 10-11).^{12} So the fact that the disciples failed to grasp the significance of the predictions is actually quite plausible and cannot be urged against their historicity. It may be asserted that the language of the predictions is *ex ecclesia* and that therefore they are written back into the life of Jesus. But, in fact, there are no words in the predictions that Jesus himself could not have employed. The use of 'the third day' could have meant only a short time.^{13} But even if this detail was added from the kerygma, that does not imply that Jesus could not have predicted his resurrection. In the same way, the speech of the Jews to Pilate is Matthew's construction, and the third day motif may reflect the kerygmatic formulation in I Cor. 15. 4. In fact the Jews may have asked for a guard to be posted for an indeterminate period of time or the duration of the feast. That the predictions of the resurrection have taken on kerygmatic coloring does not prove that they were not made.

Perhaps the most serious difficulty with the guard story, however, is that if the disciples did not grasp the import of the resurrection predictions, then the Jews, who had much less contact with Jesus, would not have grasped them either. This is, however, essentially an argument from silence, since Matthew does not tell us how the Jews learned of Jesus' prediction. It assumes that we have recorded in the gospels all instances on which Jesus spoke of his resurrection or that if this prediction was conveyed to the Jews surreptitiously we must know about it. It is possible that the actions of the Jews were not motivated by any knowledge of resurrection prophecies at all, but were simply an afterthought to prevent any possible trouble that could be caused at the tomb by the disciples during the feast. Taken together these considerations have a cumulative weight, however, and in themselves would probably cause one to be sceptical about the historicity of the guard story.

But there are other considerations that count positively in its favor. For example, if the story is an apologetic fiction designed to preclude the theft of the body by the disciples, then the story is not entirely successful, for there is an obvious time period during which the disciples could have stolen the body undetected, namely between six o'clock Friday night and sometime Saturday morning. Because the tomb is already empty when the angel opens it, it is possible that it was already empty when the guards sealed the stone. Matthew fails to say that the sepulcher was opened and checked before it was sealed, so that it is possible that the disciples had removed the body and replaced the stone Friday night after Joseph's departure. Of course we would regard such a ruse as historically absurd, but the point is that if the guard is a Christian invention aimed at refuting the Jewish allegation that the scheming disciples had stolen the body, then the writer has not done a very good job. For the way an apologetic legend handles this story, see the Gospel of Peter: the scribes, Pharisees, and elders go on

Friday to Pilate, who gives them a *Roman* guard; together the soldiers, the scribes, and the elders proceed to the sepulcher, and *they* all roll the great stone across the entrance of the tomb (no mention of Joseph of Arimathea whatsoever!), seal it seven times, and keep watch. On Sunday morning *Jesus himself* is seen coming out of the tomb with the two angels, and the witnesses include not only the soldiers and the elders, but also a crowd from Jerusalem and the countryside who had come to see the sepulcher! This is a fail-safe apologetic: the Romans and the Jews are the ones responsible for the entombment of Jesus on the same day of his death, they remain there without interruption, and when the tomb is opened, it is not empty, but Jesus comes out before the eyes of a multitude of witnesses. By contrast in Matthew's story the guard is something of an afterthought; the fact that they were not thought of and posted until the next day could reflect the fact that only Friday night did the Jews learn that Joseph had, contrary to expectation, placed the body in a tomb, rather than allowing it to be discarded in a common grave. This could have motivated their unusual visit to Pilate the next day.

But perhaps the strongest consideration in favor of the historicity of the guard is the history of polemic presupposed in this story. The Jewish slander that the disciples stole the body was probably the reaction to the Christian proclamation that Jesus was risen. {14} This Jewish allegation is also mentioned in Justin *Dialogue with Trypho* 108. To counter this charge the Christians would need only point out that the guard at the tomb would have prevented such a theft and that they were immobilized with fear when the angel appeared. At this stage of the controversy there is no need to mention the bribing of the guard. This arises only when the Jewish polemic answers that the guard had fallen asleep, thus allowing the disciples to steal the body. The sleeping of the guard could only have been a Jewish development, as it would serve no purpose to the Christian polemic. The Christian answer was that the Jews bribed the guard to say this, and this is where the controversy stood at Matthew's time of writing. But if this is a probable reconstruction of the history of the polemic, then it is very difficult to believe the guard is unhistorical. {15} In the first place it is unlikely that the Christians would invent a fiction like the guard, which everyone, especially their Jewish opponents, would realize never existed. Lies are the most feeble sort of apologetic there could be. Since the Jewish/ Christian controversy no doubt originated in Jerusalem, then it is hard to understand how Christians could have tried to refute their opponents' charge with a falsification which would have been plainly untrue, since there were no guards about who claimed to have been stationed at the tomb. But secondly, it is even more improbable that confronted with this palpable lie, the Jews would, instead of exposing and denouncing it as such, proceed to create another lie, even stupider, that the guard had fallen asleep while the disciples broke into the tomb and absconded with the body. If the existence of the guard were false, then the Jewish polemic would never have taken the course that it did. Rather the controversy would have stopped right there with the renunciation that any such guard had ever been set by the Jews. It would never have come to the point that the Christians had to invent a third lie, that the Jews had bribed the fictional guard. So although there are reasons to doubt the existence of the guard at the tomb, there are also weighty considerations in its favor. It seems best to leave it an open question. Ironically, the value of Matthew's story for the evidence for the resurrection has nothing to do with the guard at all or with his intention of refuting the allegation that the disciples had stolen the body. The conspiracy theory has been universally rejected on moral and psychological grounds, so that the guard story as such is really quite superfluous. Guard or no guard, no critic today believes that the disciples could have robbed the tomb and faked the resurrection. Rather the real value of Matthew's story is the incidental -- and for that reason all the more reliable -- information that Jewish polemic never denied that the tomb was

empty, but instead tried to explain it away. Thus the early opponents of the Christians themselves bear witness to the fact of the empty tomb.{16}

NOTES

{1} This discussion note stems from research conducted at the Universität München under a fellowship from the Alexander von Humbolt Foundation.

{2} Cf. Paul Rohrbach, *Die Berichte über die Auferstehung Jesu Christi* (Berlin: Georg Reimer, 1898), p. 79.

{3} So B. A. Johnson, 'The Empty Tomb in the Gospel of Peter Related to Mt. 28.1-7' (Ph.D. dissertation, Harvard University, 1966), p. 17. This does not commit one to Johnson's view that this was an appearance tradition.

{4} Kirsopp Lake, *The Historical Evidence for the Resurrection of Jesus Christ* (London: Williams & Norgate, 1907; New York: G. P. Putnam's Sons, 1907), p. 61; Walter Grundmann, *Das Evangelium nach Mathäus*, 3rd ed., THKNT I (Berlin: Evangelische Verlagsanstalt, 1972), p. 568; Josef B1inzter, 'Die Grablegung Jesu in historischer Sicht', in *Resurrexit*, ed. Edouard Dhanis (Rome: Libreria Editrice Vaticana, 1974), p. 82.

{5} Evidence of pre-Matthean tradition is also found in the many words which are *hapax legomena* for the New Testament: *epaurion*, *paraskeue*, *planos/plane*, *koustodia*, *asphalizo*, *sphragizo*; also the expression 'chief priests and Pharisees' (cf. 21. 45) is unusual for Matthew and never appears in Mark or Luke, but is common in John (7. 32, 45; 9. 47, 57; 18. 3). For discussion see I. Broer, *Die Urgemeinde und das Grab Jesu*, SANT 31 (München: Kösel Verlag, 1972), pp., 69-78; F. Neirynck, 'Les femmes au tombeau: Etude de la rédaction mathéenne', *NTS* 15 (1968-9): pp. 168-90. On the independence of Matthew from Mark see E. Ruckstuhl and J. Pfammatter, *Die Auferstehung Jesu Christi* (Lucerne and München: Rex, 1968).

{6} Contrast the Gospel of Peter 8.35- 42:

'now in the night in which the Lord's day dawned, when the soldiers, two by two in every watch, were keeping guard, there rang out a loud voice in heaven, and they saw the heavens opened and two men come down from there in a great brightness and draw nigh to the sepulcher. The stone which had been laid against the entrance to the sepulcher started of itself to roll and gave way to the side, and the sepulcher was opened, and both the young men entered in. When now those soldiers saw this, they awakened the centurion and the elders - for they also were there to assist at the watch. And whilst they were relating what they had seen, they saw again three men come out from the sepulcher, and two of them sustaining the other, and a cross following them, and the heads of the two reaching to heaven, but that of him who was led of them by the hand overpassing the heavens. And they heard a voice out of the heavens crying "Thou hast preached to them that sleep?", and from the cross there was heard the answer, "Yea".'

and the *Ascension of Isaiah* 3. 16:

'Gabriel, the Angel of the Holy Spirit, and Michael, the chief of the holy Angels, on the third day will open the sepulcher: and the Beloved sitting on their shoulders will come forth.'

{7} Grundmann, *Matthäus*, p. 565; John E. Alsup, *The Post-Resurrection Appearance Stories of the Gospel-Tradition*, CTM A5 (Stuttgart: Calwer Verlag, 1975), p. 117.

{8} Thus, Grass says that besides the particularities, the guard story is unbelievable because heathen guards would see the resurrection. (Hans Grass, *Ostergeschehen und Osterberichte*, 4th ed. [Göttingen: Vandenhoeck & Ruprecht, 1970], p. 25.) Von Campenhausen also states the story implies pagan guards would be witnesses of the resurrection and we cannot agree that this should be. (Hans Freiheirr von Campenhausen, *Der Ablauf der Osterereignisse und das leere Grab*, 3rd rev. ed., SHAW [Heidelberg: Carl Winter, 1966], p. 29.) Similarly O'Collins makes the astounding assertion that had Annas and Caiaphas been with the disciples when Jesus appeared, they would not have seen anything. (Gerald O'Collins, *The Easter Jesus* [London: Carlton, Longman & Todd, 1973], p. 59.) This, despite what Grass repeatedly describes as the 'massive realism' of the gospels! Cf. Koch, *Auferstehung*, pp. 59-60, 204, who is scandalized by the objectivity of the gospel appearances, which he vainly attempts to construe in wholly subjective categories.

{9} On the agreement between Paul and the gospels on the nature of the resurrection body, see Robert H. Gundry, *Soma in Biblical Theology* (Cambridge: Cambridge University Press, 1976), pp. 159-83; Ronald J. Sider, 'The Pauline Conception of the Resurrection Body in I Corinthians XV.35-54', *NTS* 21 (1975): pp. 428-39; Alexander Sand, *Der Begriff 'Fleisch' in den paulinischen Hauptbriefen*, BU 2 (Regensburg: Friedrich Pustet, 1967), pp. 152-3; Jean Héring, *La première épître de saint Paul aux Corinthiens*, 2nd ed., CNT 7 (Neuchatel, Switzerland: Delachaux et Niestlé, 1959), pp. 146-8; H. Clavier, 'Brèves remarques sur la notion de *soma pneumatikon*,' in *The Background of the New Testament and Its Eschatology*, ed. W. D. Davies and W. Daube (Cambridge University Press, 1956), pp. 342-62; Wilhelm Michaelis, *Die Erscheinungen der Auferstandenen* (Basel: Heinrich Majer, 1944), p. 96.

{10} See Ernst Lohmeyer, *Das Evangelium des Matthäus*, 4th ed., ed. W. Schmauch, KEKNT (Göttingen: Vandenhoeck & Ruprecht, 1967), p. 400.

{11} Lake, *Evidence*, p. 178; Willi Marxsen, *The Resurrection of Jesus of Nazareth*, trans. Margaret Kohl (London: SCM, 1970), p. 46; Grundmann, *Mätthaus*, p. 571. Orr thinks that the guard's accepting the bribe is not so far-fetched, since their fleeing was already a breach of duty. (James Orr, *The Resurrection of Jesus* (London: Hodder & Stoughton, 1909], p. 160.) Von Campenhausen brings forth other absurdities, such as the fact that the guard reported to Jews and that Christians, despite the guards' lie, know everything. (Von Campenhausen, 'Ablauf', p. 29). But the former is evidence the guard was Jewish; the latter should not surprise us, since secret conspiracies almost always come to light. In any case the Jews' conversation with Pilate is probably an imaginative Christian re-construction of what they inferred took place, which would explain the third day motif and kerygmatic language employed. Perry regards the placement of a Jewish guard at the tomb by the Jews, without knowledge of Jesus' prediction, as historically defensible. (Michael Perry, *The Easter Enigma*, with an Introduction by Austin Farrer London: Faber & Faber, 1959], pp. 98-9.)

{12} Though the doctrine of resurrection is attested in the Old Testament and flowered in the intertestamental period, the Jewish conception of resurrection was always of a general and eschatological resurrection. Nowhere do we find any notion of the resurrection of an isolated individual or of a resurrection before the end of the world. (See remarks of Ulrich Wilckens, *Auferstehung*, TT 4 [Stuttgart and Berlin: Kreuz Verlag, 1970], p. 31; Joachim Jeremias, 'Die

älteste Schicht der Osterüberlieferung', in *Resurrexit*, p. 194.) Hence, the disciples' misunderstanding has a historical ring.

{13} Barnabas Lindars, *New Testament Apologetic: The Doctrinal Significance of Old Testament Quotations* (Philadelphia: Westminster Press, 1961; London: SCM Press, 1961), pp. 59- 72; O'Collins, *Easter*, p. 12. Even if one agrees with Lehmann that the third day motif is a theological expression, drawn from the LXX and later elaborated in Rabbinic exegesis, meaning the day of God's deliverance, victory, and taking control (Karl Lehmann, *Auferweckt am dritten Tag nach der Schrift*, QD 38 [Freiburg: Herder, 1968], pp. 262-90), there is no reason that if the early church could have used this expression, Jesus himself could not also have used it in the same sense in predicting his resurrection. Hooke also reminds us that all of Jesus' eschatological sayings presuppose his resurrection, as do his statements at the Last Supper. (S. H. Hooke, *The Resurrection of Christ as History and Experience* [London: Darton, Longman & Todd, 1967], p. 30; cf. Michael Ramsey, *The Resurrection of Christ* [London: Centenary Press, 1945], pp. 38-9.)

{14} The proclamation may have been in the words repeated twice in Mt. 27. 64; 28. 7: 'He has risen from the dead.' Contrary to Grass, *Ostergeschehen*, p. 23, this could evoke the response that the disciples stole the body, if the empty tomb were also a historical fact. The Jewish response need not presuppose the Christians were using the empty tomb itself as an apologetic argument.

{15} The argument presupposes either that the underlying tradition is pre-Matthean or that the gospel itself was written prior to AD 70, for after that time the people in a position to know the truth would have been killed or dispersed. That the tradition is pre-Matthean is clear: (1) The Jewish polemic behind the story most probably came out of Jerusalem itself in response to the apostolic proclamation of Jesus' resurrection. (2) A reconstruction of the history of the polemic shows that Matthew inherited the controversy about the guard. That he did not invent the guard *de novo* to counteract a simple Jewish theft charge is evident from the additional elements of the guards' sleeping and the bribe. (3) The narrative itself contains non-Matthean characteristics, as pointed out in note 5. That the Gospel of Peter knows a non-Matthean tradition of the guard story also indicates that the story did not originate with Matthew. Since the controversy thus ante-dates the destruction of Jerusalem, it is very difficult to construe it as a heated exchange over an imaginary entity. This conclusion is only strengthened if Matthew itself was written before AD 70, as argued, for example, by Bo Reicke, 'Synoptic Prophecies on the Destruction of Jerusalem', in *Studies in New Testament and Early Christian Literature*, ed. D. E. Aune (Leiden: E. J. Brill, 1972), pp. 121-34; J. A. T. Robinson, *Redating the New Testament* (London: SCM Press, 1976), pp. 19-26, 86-117.

{16} Mahoney objects that the Jews argued as they did only because it would have been 'colorless' to say the tomb was unknown or lost. (Robert Mahoney, *Two Disciples at the Tomb*, TW 6 [Bern: Herbert Lang, 1974], p. 100.) But here Grass is right: if the grave were unknown or lost, then the preachers of the resurrection would have been met by the reaction of Acts 2. 13: 'They are filled with new wine.' I seriously doubt whether being 'colorless' was regarded by the Jewish hierarchy as such an awful thing that they preferred inventing the empty tomb for the Christians. And if the burial place of Jesus was known, as is probable (Blinzler, 'Grablegung', pp. 94-6, 101-2), the reaction of the Jews becomes even more problematical: for instead of pointing to the tomb of Jesus or exhibiting his corpse, they entangled themselves in a hopeless series of absurdities trying to explain away the absence of his body. The fact that the enemies of Christianity felt obligated to explain away the empty

tomb shows not only that the tomb was known (confirmation of the burial story), but also that it was *empty*.

The Problem Of Miracles: A Historical And Philosophical Perspective

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

"The Problem of Miracles: A Historical and Philosophical Perspective." In *Gospel Perspectives VI*, pp. 9-40. Edited by David Wenham and Craig Blomberg. Sheffield, England: JSOT Press, 1986.

Nineteenth Century Collapse of Belief in Miracles

There are two steps to follow in establishing that a miracle has occurred, according to the Göttingen professor of theology Gottfried Less in his *Wahrheit der christlichen Religion* (1758): first, one must determine the historicity of the event itself and, second, one must determine the miraculous character of that event.^{1} During the ensuing century, the viability of both of these steps came to be regarded with scepticism, resulting in the general collapse within German theology of the credibility of the gospel miracle stories.

Denial of the Miraculous Nature of Gospel Miracles

First to go was the second step. German Rationalists of the late seventeenth/early eighteenth centuries were willing, indeed, sometimes eager, to grant the historicity of the event itself, as called for in step one. But they were at pains to provide a purely natural explanation for the event, thus undercutting step two. Given that events with supernatural causes do not occur, there simply had to be some account available in terms of merely natural causes. Thus Karl

Bahrtdt, in his *Ausführung des Plans und Zwecks Jesu* (1784-92) explains the feeding of the 5000 by postulating a secret store of bread which Jesus and his disciples distributed to the multitude; Jesus' walking on the water was effected by a platform floating just beneath the surface; his raising the dead was actually reanimation from a coma, thus preventing premature burial. This last explanation provided the key to explaining Jesus' own resurrection. By the end of the eighteenth century, the theft hypothesis, so dear to Deism, had apparently pretty much lost conviction, and a new explanation was needed. This German Rationalism found in the apparent death (*Scheintod*) theory. According to Bahrtdt, Jesus' death and resurrection were a hoax engineered by Jesus himself to convince people that he was the Messiah.

But the dean of the natural explanation school was certainly H. E. G. Paulus, professor of theology at Heidelberg. In his *Philologisch-kritischer und historischer Kommentar über das Neue Testament* (1800-02), *Das Leben Jesu, als Grundlage einer reinen Geschichte des Urchristentums* (1828), and *Exegetisches Handbuch über die drei ersten Evangelien* (1830), he perfected the art of explaining naturalistically the miraculous elements in the gospels while retaining a close adherence to the letter of the text. A pantheist who accepted Spinoza's dictum, '*Deus sive Natura*,' Paulus rejected all miracles *a priori*. Although he staunchly insisted that the main point of his *Leben Jesu* was not to explain away miracles,{2} it is nevertheless true that he expended a great deal of effort doing precisely this, and it is chiefly for this effort that he is remembered. According to Paulus, miracles are not the important thing, but rather the spirit of Jesus as seen in his thought and actions.{3} It is the person of Jesus in his moral character and courage that is truly miraculous. '*Das Wunderbare von Jesus ist er selbst*.'{4} The true meaning of Christianity is to be found in the teachings of Jesus, which, Paulus says, are self-evidently true, as demonstrated by their inner spirituality. In any case, literal miracles, even if they had occurred, would contribute nothing toward grounding the Christian truth. 'The main point is already certain in advance, that the most inexplicable changes in the course of Nature can neither overturn nor prove any spiritual truth, since it cannot be seen from any event of Nature for what spiritual purpose it should so happen and not otherwise.'{5} Once a person has grasped the spiritual truth of Jesus' person and teaching, miracles become superfluous anyway. 'The proof from miracles itself always demands first, as it must, that the claims should be worthy of God and not contrary to reason. If this be the case, then a miracle is no longer necessary as a proof for them.'{6} Paulus's *a priori* rejection of the miraculous is perhaps best seen in his response to the objection, why all this effort to explain away the extraordinary as something within the order of nature?{7} He answers, in order to find the more probable explanation; and, he adds, the more probable explanation is that which can be made easier to believe. Since for post-Enlightenment thinkers, miracles had ceased to be believable, a natural explanation would always be preferred. When Paulus states further that probability always depends on whether an effect can be derived from the causes at hand,{8} then the presuppositional nature of his anti-supernaturalism becomes clear. For now the most probable explanation is seen by definition to be a purely natural explanation; hence, his efforts to explain away the miraculous.

It is noteworthy that Schleiermacher, the father of modern theology, followed Paulus's lead in these regards. Schleiermacher remained rationalistic with respect to the denial of miracles, and he attached no religious importance to the resurrection of Jesus. In his lectures of 1832, *Der Christus des Glaubens und der Jesus der Geschichte*, he passively accepts Paulus's theory of Jesus' merely apparent death, stating that it is unimportant whether the death and resurrection were real or apparent. Schleiermacher himself believed that Jesus' resurrection was only a resuscitation and that he continued to live physically with the disciples for a time after this event.

Denial of the Historicity of Gospel Miracles

Just three years after Schleiermacher's lectures, however, a work appeared which sounded the death knell for the natural explanation school and also served to undercut the first step of Less's procedure: David Friedrich Strauss's *Das Leben Jesu*. In its consistent application of mythological explanations to the New Testament, Strauss's work obviated any need to concede the historicity of the gospel miracles even *qua* events. Strauss rejected the conspiratorial theories typified by the Deist Hermann Samuel Reimarus as characteristic of the eighteenth century's simplistic, naive approach to matters of religious belief. In his helpful treatise, *Hermann Samuel Reimarus und seine Schutzschrift für die vernünftigen Verehrer Gottes* (1861), Strauss describes the prior century's reductionistic attitude toward revealed religion: 'All positive religions without exception are works of deception: that was the opinion that the eighteenth century cherished within its heart, even if it did not always pronounce it as frankly as did Reimarus.'⁹ Thus, whenever miraculous events were encountered in the Scriptures, these were facily explained away as lies or hoaxes deliberately perpetrated by the persons involved. This sort of explanation completely misunderstands the nature of religious commitment and devotion, charges Strauss. Only the eighteenth century could have conjoined deliberate deception with the apostles' religious zeal; for these are two incompatible things. The nineteenth century considers it a foregone conclusion that no historically permanent religion was ever founded through deception, but that all were founded by people who were themselves convinced. Christianity cannot, therefore, be passed off as simply a hoax. When Reimarus says that Christianity is not a divine revelation, but a human fraud, we know today that this is an error, that Christianity is not a fraud. But the rejection of Reimarus's hypothesis does not entail embracing the supernaturalists' explanation. Reimarus's '*Nein*' to the traditional view remains '*Nein*,' but his '*Ja*' to deception must yield to a better answer.

That answer was not to be found in the natural explanation school epitomized by Paulus. The contrived and artificial character of so many of these explanations was painfully apparent, and the proffered explanations were no more believable than the miracles themselves. Moreover, the natural system of interpretation, while it sought to preserve the historical certainty of the narrative, nevertheless lost its ideal truth. For example, if the transfiguration were, as Paulus claimed, an accidental, optical phenomenon and the two men either images of a dream or simply unknown persons, then what, asks Strauss, is the significance of the narrative? What was the motive for preserving in the church's memory a story so void of ideas and barren of inference, resting upon a delusion? Strauss believed that the natural explanation school abandoned the substance to save the form, whereas his alternative would, by renouncing the historical facticity of the narrative, rescue and preserve the idea which resides in it and which alone constitutes its vitality and spirit.

This alternative Strauss found in the mythological interpretation of the gospels. According to this view, the miraculous events recorded in the gospels never occurred, but are the product of religious imagination and legend, and, hence, require no historical explanation as the Supernaturalists, Deists, and Rationalists assumed. Although Strauss had his predecessors in employing the concept of myth to explain particular elements in the Scriptural narratives, he was the first to compose a wholesale account of the life of Jesus utilizing mythological explanation as the key hermeneutical method. According to Strauss himself, up until the time of his writing, myth had been applied to the childhood and ascension stories of Jesus' life, but not the life of Jesus itself; this yielded a framework in which 'the entrance to the gospel history was through the decorated portal of mythus, and the exit was similar to it, whilst the

intermediate space was still traversed by the crooked and toilsome paths of natural interpretations.'^{10} In his *Leben Jesu*, Strauss sought to show in detail how all supernatural events in the gospels can be explained as either myth, legend, or redactional additions.

Strauss claimed to operate without any religious or dogmatic presuppositions; he ascribed this neutrality to the influence of his philosophical studies. Nevertheless, it is clear that Strauss did operate on the basis of certain philosophical (if we wish not to call these religious or dogmatic) presuppositions, such as the impossibility of miracles. As an acknowledged pantheist and in later life a materialist, Strauss proceeded, like the Rationalists before him, from the assumption that miracles are impossible in principle. According to Strauss, this is not a presupposition requiring proof; on the contrary, to affirm that miracles are possible is a presupposition which requires proof.^{11} God acts immediately on the universe only as a whole, but not on any particular part; on any particular part he acts only mediately through the causal laws of all other parts of nature. Hence, with regard to the resurrection, God's interposition in the regular course of nature is 'irreconcilable with enlightened ideas of the relation of God to the world.'^{12} Thus, any purportedly historical account of miraculous events must be dismissed out of hand; 'indeed no just notion of the true nature of history is possible without a perception of the inviolability of the chain of finite causes, and of the impossibility of miracles.'^{13} Thus, although Strauss rejected the Rationalist hermeneutic of natural explanation in favor of the mythological, he remained rationalistic in his rejection of the miraculous.

Strauss's application of the category of myth to the miraculous element in the gospels proved a decisive turning point. According to Schweitzer in his history of the Life of Jesus movement *Von Reimarus zu Wrede* (1906), the critical study of the life of Jesus falls into two periods with Strauss. 'The dominant interest in the first is the question of miracle. What terms are possible between a historical treatment and the acceptance of supernatural events? With the advent of Strauss, this problem found a solution, viz., that these events have no rightful place in history, but are simply mythical elements in the sources.'^{14} By the mid-1860's the question of miracles had lost all importance. Schweitzer explains,

That does not mean that the problem of miracle is solved. From the historical point of view it is really impossible to solve it, since we are not able to reconstruct the process by which a series of miracle stories arose, or a series of historical occurrences were transformed into miracle stories, and these narratives must simply be left with a question mark standing against them. What has been gained is only that the exclusion of miracle from our view of history has been universally recognized as a principle of criticism, so that miracle no longer concerns the historian either positively or negatively. Scientific theologians of the present day who desire to show their 'sensitivity,' ask no more than that two or three little miracles may be left to them--in the stories of the childhood perhaps, or in the narratives of the resurrection. And these miracles are, moreover, so far scientific that they have at least no relation to those in the text, but are merely spiritless, miserable little toy dogs of criticism, flea-bitten by rationalism, too insignificant to do historical science any harm, especially as their owners honestly pay the tax upon them by the way in which they speak, write, and are silent about Strauss.^{15}

Until Strauss it had been pretty generally agreed that the events in question had actually occurred--it was just a matter of explaining how they took place. But with Strauss, the miraculous events recorded in the gospels never in fact happened: the narratives are unhistorical tales determined by myth and legend.

Strauss's work completely altered the whole tone and course of German theology. By rejecting on the one hand the conspiratorial theory of Reimarus and on the other the natural explanation theory of Paulus, and by proposing a third explanation of the gospel narratives in terms of myth, legend, and redaction, Strauss in effect dissolved the central dilemma of eighteenth century orthodoxy's argument for the miracles of Jesus: that if the miracles be denied, then the apostles must be written off as either deceivers or deceived, neither of which is plausible. The evangelists were now seen to be neither deceivers nor deceived, but rather they stood at the end of a long process in which the original events were re-shaped through mythological and legendary influences. The dissolution of the orthodox dilemma did not logically imply that the Supernaturalist view was therefore false. But this Strauss not only took to have been shown by Reimarus-inspired objections concerning contradictions and inconsistencies in the narratives, but for him this was simply given by definition in his criteria for discerning mythological motifs, which were in turn predicated upon the *a priori* presupposition of the impossibility of miracles. Any event which stood outside the inviolable chain of natural causes and effects was *ipso facto* unhistorical and therefore to be mythologically accounted for. In Strauss's later *Glaubenslehre*, he explains in some detail *die Auflösung des Wunderbegriffs*, recounting the arguments of Spinoza, Hume, and Lessing to show that the concept has now become obsolete.{16} This was the legacy which Strauss bequeathed to his successors. The same naturalistic assumption that guided Strauss's historical investigations also determines, for example, the influential work of Rudolf Bultmann in our own century.{17} Bultmann's approach to the New Testament was guided by, among others, two underlying presuppositions: (1) the existence of a full-blown pre-Christian Gnosticism and (2) the impossibility of miracles. While he sought to present evidence in support of (1), he simply assumed (2). Like Strauss he seemed to regard the impossibility of miracles as a presupposition not requiring proof, and many contemporary scholars would also appear to accept a similar position. Pesch asserts that the central task of dogmatic theology today is to show how Jesus can be the central figure of God's revelation without presupposing 'a "theistic-supernaturalistic model of revelation and mediation," which is no longer acceptable to our thought.{18} According to Hans Frei, reasons for rejecting as unhistorical reports which run contrary to our general experience of natural, historical, or psychological occurrences 'have become standard explanation of the criteria that go into making unprejudiced ("presuppositionless") assessments of what is likely to have taken place in the past, and what is not.{19} Such a perspective makes it impossible even to regard the gospel miracles as events of history, much less to establish them as such.

The Eighteenth Century Crucible

The scepticism of the last and present centuries concerning miracles grew out of what Burns has called 'the Great Debate on Miracles' during the Deist controversy of the seventeenth and especially eighteenth centuries.{20} It would be well, therefore, to return to that great divide in order to rediscover and assess the rational foundations of contemporary criticism's rejection of the miraculous.

The Newtonian World-Machine

The backdrop for the eighteenth century debate was the widespread world-view of Newtonian mechanism. Under Newton's pervasive influence, the creation had come to be regarded as the world-machine governed by eternal and inexorable laws. Indeed, this complex and harmoniously functioning system was thought to constitute the surest evidence that God exists. Diderot wrote,

It is not from the metaphysician that atheism has received its most vital attack. . . . If this dangerous hypothesis is tottering at the present day, it is to experimental physics that the result is due. It is only in the works of Newton, of Muschenbroeck, of Hartzoecker, and of Nieuwentit, that satisfactory proofs have been found of the existence of a reign of sovereign intelligence. Thanks to the works of these great men, the world is no longer a God; it is a machine with its wheels, its cords, its pulleys, its springs, and its weights.{21}

Given such a picture of the world, it is not surprising that miracles were characterized as violations of the laws of nature. For the same evidence that pointed to a cosmic intelligence also served to promote belief in a Deity who master-minded the great creation but who took no personal interest in the petty affairs of men. It simply seemed incredible to think that God would intervene on this tiny planet on behalf of some people living in Judea. Voltaire exemplified this incredulous attitude. In his *Dictionary* article on miracles, he asserts that a miracle is, properly speaking, something admirable; hence, 'The stupendous order of nature, the revolution of a hundred millions of worlds around millions of suns, the activity of light, the life of animals, all are grand and perpetual miracles.'{22} But according to accepted usage, 'A miracle is the violation of mathematical, divine, immutable, eternal laws'{23} ; therefore, it is a contradiction in terms. But, it is said, God can suspend these laws if he wishes. But why should he wish so to disfigure this immense machine? It is said, on behalf of mankind. But is it not 'the most absurd of all extravagances to imagine that the infinite Supreme Being would on behalf of three or four hundred emmets on this little atom of mud 'derange the operation of the vast machinery that moves the universe?'{24} Voltaire's God, indeed the God of all Deists, was the cosmic architect who engineered and built the machine, but who would not be bothered to interfere in the trivial affairs of man. In this light miracles simply became unbelievable.

Benedict de Spinoza

The philosophical attack on miracles, however, antedated Newton's *Principia* (1687). As early as 1670 Benedict de Spinoza in his *Tractatus theologico-politicus* had argued against the possibility of miracles and their evidential value.{25} He attempts to establish four points: (1) nothing happens contrary to the eternal and unchangeable order of nature; (2) miracles do not suffice to prove God's existence; (3) biblical 'miracles' are natural events; and (4) the Bible often uses metaphorical language concerning natural events so that these appear miraculous. I shall leave (3) and (4) to my colleagues in biblical studies, but the first two contentions merit closer exposition here. (1) Spinoza argues that all that God wills or determines is characterized by eternal necessity and truth. Because there is no difference between God's understanding and will, it is the same to say God knows or wills a thing. Therefore the laws of Nature flow from the necessity and perfection of the divine nature. So should some event occur which is contrary to these laws, that would mean the divine understanding and will are in contradiction with the divine nature. To say God does something contrary to the laws of Nature is to say God does something contrary to his own nature, which is absurd. Therefore, everything that happens flows necessarily from the eternal truth and necessity of the divine nature. What is called a miracle is merely an event that exceeds the limits of human knowledge of natural law. (2) Spinoza maintains, in rationalist tradition, that a proof for the existence of God must be absolutely certain. But if events could occur to overthrow the laws of Nature, then nothing is certain, and we are reduced to scepticism. Miracles are thus counter-productive; the way in which we are certain of God's existence is through the unchangeable order of Nature. By admitting miracles, which break the laws of Nature, warns Spinoza, we create doubts about the existence of God and are led into the arms of atheism!

And at any rate, an event contrary to the laws of Nature would not warrant the conclusion to God's existence: the existence of a lesser being with enough power to produce the effect would suffice. Finally, a miracle is simply a work of Nature beyond man's ken. Just because an event cannot be explained by us, with our limited knowledge of Nature's laws, does not mean that God is the cause in any supernatural sense.

David Hume

If Spinoza attacked the possibility of the *occurrence* of a miracle, Hume attacked the possibility of the *identification* of a miracle. In his essay 'Of Miracles,' which constitutes the tenth chapter of his *Enquiry*, Hume presses a two-pronged attack against the identification of a miracle in the form of an 'Even if . . . , but in fact . . .' counterfactual judgment.^{26} That is to say, in the first portion of the essay, he argues against the identification of any event as a miracle while granting certain concessions, then in the second half he argues on the basis of what he thinks is in fact the case. We may differentiate the two prongs of his argument by referring to the first as his 'in principle' argument and to the second as his 'in fact' argument. The wise man, he begins, proportions his belief to the evidence. To decide between two hypotheses, one must balance the experiments for each against those for the other in order to determine which is probably true; should the results be one hundred to one in favor of the first hypothesis, then it is a pretty safe bet that the first is correct. When the evidence makes a conclusion virtually certain, then we may speak of a 'proof,' and the wise man will give whole-hearted belief to that conclusion. When the evidence renders a conclusion only more likely than not, then we may speak of a 'probability,' and the wise man will accept the conclusion as true with a degree of confidence proportionate to the probability. So it is with human testimony. One weighs the reports of others according to their conformity with the usual results of observation and experience; thus, the more unusual the fact reported, the less credible the testimony is. Now, Hume argues, even if we concede that the testimony for a particular miracle amounts to a *full proof*, it is still in principle impossible to identify that event as a miracle. For standing opposed to this proof is an equally full proof, namely the evidence for the unchangeable laws of nature, that the event in question is not a miracle. 'A miracle is a violation of the laws of nature, and as a firm and unalterable experience has established these laws, a proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined.'^{27} Thus the testimony of the uniform experience of mankind stands on one side of the scales against the testimony in any particular case that a transgression of that experience has occurred. Thus, proof stands against proof, and the scales are evenly balanced. Since the evidence does not incline in either direction, the wise man cannot believe in a miracle with any degree of confidence. Indeed, Hume continues, no testimony could establish that a miracle has taken place unless the falsehood of that testimony would be an even greater miracle than the fact it seeks to establish. And even then the force of the evidence would only be the difference between the two.

But in fact the evidence for miracles does not amount to a full proof. Indeed, the evidence is so poor, it does not amount even to a probability. Therefore, the decisive weight falls on the side of the scale containing the full proof for the regularity of nature, a weight so heavy that no evidence for a purported miracle could hope to counterbalance it. Hume supplies four reasons, which are a catalogue of typical Deist objections to miracles, why in fact the evidence for miracles is so negligible: (1) No miracle in history is attested by a sufficient number of men of good sense and education, of unimpeachable integrity so as to preclude deceit, of such standing and reputation so that they would have a good deal to lose by lying,

and in sufficiently public a manner. (2) People crave the miraculous and will believe absurd stories, as the multitude of false miracles shows. (3) Miracles only occur among barbarous peoples. (4) All religions have their own miracles and therefore cancel each other out in that they support irreconcilable doctrines. Hume adduces three examples: Vespasian's healing of two men as related by Tacitus, a healing reported by Cardinal de Reutz, and the healings at the tomb of the Abbé Paris. The evidence for miracles, therefore, does not even begin to approach the proof of the inviolability of nature's laws. Hume concludes that miracle can never be the foundation for any system of religion.

The Defense of Miracles

Orthodox defenders were not lax in responding to the objections of Spinoza and Hume, as well as to the popular Newtonian world view in general. Let us consider first some of the replies to Spinoza's arguments against the impossibility of miracles and then some of the responses to Hume's case against the identification of miracles.

1. Response to Spinoza

In his *Sentimens de quelques théologiens* (1685) Jean Le Clerc attempted to present an apologetic for Christianity that would be invulnerable to Spinoza's criticisms. He not only tried to answer Spinoza's biblical criticism but also his philosophical objections. Against these Le Clerc maintains that the empirical evidence for the miracles and the resurrection of Christ is more perspicuous and evidently true than Spinoza's abstract reasoning.{28} Le Clerc's point would seem to be that the back of this *a priori*, philosophical speculation is simply broken under the weight of the evidence. For Le Clerc empirical argument takes precedence over speculative argument. But he also rebuffs Spinoza's specific tenets. Against the allegation that miracles are simply natural events, Le Clerc insists that no one will be convinced that Jesus' resurrection and ascension could happen as naturally as a man's birth. Nor is it convincing to say Jesus' miracles could be the result of unknown natural laws, he continues, for why, then, are not more of these effects produced and how is it that at the very instant Jesus commanded a paralyzed man to walk 'the Laws of Nature (unknown to us) were prepared and ready to cause the. . . Paralytic Man to walk'?{29} Both of these considerations show that the miraculous facts of the gospel, which can be established historically, are indeed of divine origin.

Considerable analysis was brought to the concept of miracle by Samuel Clarke in his Boyle lectures *A Discourse concerning the Unchangeable Obligations of Natural Religion and the Truth Christian Revelation* (1705). He points out that to the power of God all events--miraculous or not--are alike. Furthermore, it is possible that created beings, including angels and demons, may have the power to produce any event, with the sole exception of *creatio ex nihilo*.{30} Reflecting Newtonian influence, Clarke asserts that matter has only the power to continue in its present state, be it rest or motion. Anything that is *done* in the world is done either by God or by created intelligent beings. The so-called natural forces of matter, such as gravitation, are properly speaking the effect of God's acting on matter at every moment. The implication of this is that the so-called 'course of nature' is a fiction; what we discern as the course of nature is nothing else than God's will, producing certain effects in a continual and uniform manner.{31} Thus, a miracle is not against the course of nature, which really does not exist, except only insofar as it is an unusual event which God does.{32} Thus, the regular 'works' of nature prove the being and attributes of God, and miracles prove the interposition of God into the regular order in which he acts.{33} Now from the miracle itself as an isolated

event, it is impossible to determine whether it was performed immediately by God or by an angel or by a demonic spirit. Clarke insists that miracles done by demonic spirits are 'true and real' miracles that occur because God does not restrain the demonic spirit from acting at that point.{34} The means of distinguishing between demonic miracles and miracles wrought mediately or immediately by God is the *doctrinal* context in which the miracle occurs:

If the doctrine attested by miracles, be in itself *impious*, or manifestly *tending to promote Vice*; then without all question the Miracles . . . are neither wrought by God himself, nor by his Commission; because our natural knowledge of the Attributes of God, and of the necessary difference between good and evil, is greatly of more force to prove any such doctrine to be false, than any Miracles in the World can be to prove it true . . . {35}

Should the doctrine be neutral in itself, but another person performs greater miracles within a context of doctrine contrary to the first, then the latter is to be accepted as the miracle of divine origin.{36} Thus, the correct theological definition of a miracle is this: 'a work effected in a manner unusual, or different from the common and regular method of Providence, by the interposition either of God himself, or of some intelligent Agent superior to Man, for the proof or Evidence of some particular Doctrine, or in attestation to the Authority of some particular Person.'{37} The relationship between doctrine and miracle is that miracle proves that a higher power is involved, and the doctrinal context of the miracle enables us to discern the source of the miracle as either God or Satan. Thus, the miracles prove the doctrine, but ' . . at least the *indifference* of the Doctrine, is a necessary Condition or Circumstance, without which the *Doctrine* is not capable of being proved by any Miracles.'{38} When applied to Jesus' miracles, this criterion proves that Jesus was 'a Teacher sent from God' and that he has 'a Divine Comission.'{39}

In his *Traité de la vérité de la religion chrétienne* (1730-88), Jacob Vernet also seeks to answer the objection that any miracle is impossible because it is contrary to the order of Nature.{40} He defines a miracle as 'a striking work which is outside the ordinary course of Nature and which is done by God's all-mighty will, such that witnesses thereof regard it as extraordinary and supernatural.'{41} Vernet does not, like Clarke, deny that there is a course of nature, but he does insist that the so-called course or order of nature is really composed of incidental states of events, not necessary or essential states. They depend on the will of God, and it is only the constant and uniform procession of the normal course of nature that leads us to think it is invariable. God does not change nature's course entirely, but can make exceptions to the general rules when he deems it important. These miracles serve to show that the course of nature 'is not the effect of a blind necessity, but of a free Cause who interrupts and suspends it when he pleases.'{42} It might also be objected that the miracles are the result of a yet undiscovered operation of Nature itself.{43} Vernet replies that when the miracles are diverse and numerous, this possibility is minimized because it is hardly possible that all these unknown, marvelous operations should occur at the same time. Perhaps a single, isolated miracle might be so explained away, but not a series of miracles of different sorts.

In Claude François Houtteville's *La religion chrétienne prouvée par les faits* (1740), the Abbé argues against Spinoza that miracles are possible.{44} A miracle he defines as 'a striking action superior to all finite power,' or more commonly, as 'a singular event produced outside the chain of natural causes.'{45} Given the existence of God, one sees immediately that miracles are possible, for a perfect Being who created the world also conserves it in being, and all the laws of its operation are directed by his sovereign hand. Against Spinoza's charge that miracles are impossible because natural law is the necessary decree of God's nature, and

God's nature is immutable, Houtteville rejoins that natural law is not necessary, that God is free to establish whatever laws he wills. Moreover, God can change his decrees when he wishes. And even if he could not, miracles could be part of God's eternal plan and decree for the universe just as much as natural laws, so that the occurrence of a miracle in no way represents a change of mind or decree on God's part. Houtteville even suggests that miracles are not contrary to nature, but only to what we know of nature. From God's perspective, they may conform to certain laws unknown to us.

Thus, the orthodox response to Spinoza's objections was quite multi-faceted. Hume's objections also elicited a variegated response.

2. Response to Hume

Although it was against Woolston's attacks on miracles that Thomas Sherlock wrote his *Tryal of the Witnesses of the Resurrection of Jesus* (1729), the counsel for Woolston presents an argument against miracles that is anticipatory of Hume. Woolston's attorney argues that because Jesus' resurrection violates the course of Nature, no human testimony could possibly establish it, since it has the whole witness of nature against it. To this Sherlock replies: (1) If testimony is admitted only when the matter is deemed possible according to our conceptions, then many natural matters of fact would be excluded.{46} For example, a man living in a hot climate would never believe in that case testimony from others that water could exist in a solid state as ice.{47} (2) The resurrection is simply a matter of sense perception.{48} If we met a man who claimed to have been dead, we would be suspicious. But of what? --not that he is now alive, for this contradicts all our senses, but that he was ever dead. But would we say it is impossible to prove by human testimony that this man died a year ago? Such evidence is admitted in any court of law. Conversely, if we saw a man executed and later heard the man had come to life again, we would suspect, not that he was dead, but that he was alive again. But would we say that it is impossible for human testimony to prove that a man is alive? The reason we are suspicious in these cases is not because the matter itself does not admit of being proved by evidence, but only because we are more inclined to believe our own senses rather than reports of others which go contrary to our pre-conceived opinions of what can and cannot happen. Thus, considered as a fact, the resurrection requires no greater ability in the witnesses than to be able to distinguish between a dead man and a living man. Sherlock does admit that in such miraculous cases we may require more evidence than usual, but it is absurd to say that such cases admit of no evidence. (3) The resurrection contradicts neither right reason nor the laws of nature.{49} Sherlock takes yet a third course from Clarke and Vernet. The so-called course of Nature arises from the prejudices and imaginations of men. Our senses tell us what the usual course of things is, but we go beyond our senses when we conclude that it cannot be otherwise. The uniform course of things runs contrary to resurrection, but that does not prove it to be absolutely impossible. The same Power that gave life to dead matter at first can give it to a dead body again; the latter feat is no greater than the former.

Gottfried Less in his *Wahrheit der christlichen Religion* (1758) discusses at length Hume's objections to miracles. Less defines a miracle as a work beyond the power of all creatures.{50} Of course, a miracle is such only in a context; healing itself, for instance, is not necessarily a miracle unless no natural means are employed. Also there are two types of miracles: (1) first degree miracles, which are wrought by the immediate power of God, and (2) second degree miracles, which are above any human power but are wrought by finite spiritual beings such as angels. First degree miracles are incapable of being proved because

we never know whether a finite spiritual being might not be at work. Thus, only second degree miracles can be proved to have occurred.

So understood, miracles are possible.{51} Because God is the Lord of nature and can make events happen, it follows that miracles are physically possible. And because miracles are a part of God's eternal plan to confirm his teaching, they are morally possible. But did the gospel miracles occur? Although Hume discounts the testimony of the apostles because they were unlearned men, it is clear that to prove merely that something happened (for example, a disease's being healed by sheer verbal command) one need be no scholar but simply have five good senses and common sense. In fact, the New Testament witnesses fulfill even Hume's conditions for credibility of reports of miracles.{52} Thus, Hume should concede the historical certainty of the gospel miracles *qua* events.

But were these events miracles? Less now turns to a refutation of Hume's objections to establishing miracles by historical testimony.{53} Hume's principal argument is that testimony to miracles has the experience of the world and the centuries against it. In response, Less argues: (1) Because nature is the freely willed order of God, a miracle is just as possible as any event. Therefore, it is just as believable as any event. (2) Testimony to an event cannot be refuted by experiences and observations. Otherwise we would never be justified in believing anything outside our present experience; no new discoveries would be possible. (3) There is no contradiction between experience and Christian miracles. Miracles are different events (*contraria*) from experience in general, but not contradictory events (*contradictoria*) to experience in general.{54} The contradiction to the testimony that under the reign of Tiberius Caesar, Jesus raised certain persons from the dead and himself so rose three days after his death must necessarily be the exact opposite of this statement, namely, that Jesus never raised anyone from the dead and never himself so rose. This latter has to be proved to destroy the gospel testimony. It is hardly enough to assert that experience in general says that dead men do not rise, for with this the Christian testimony is in full agreement. Only when the exact opposite is proved to be true can Christian testimony be said to contradict experience. Hume's other objections are easily dismissed: (1) No miracle has a sufficient number of witnesses. This is false with regard to the gospel miracles, for they were publicly performed. (2) People tend to believe and report miraculous stories without proper scrutiny. This shows only that our scrutiny of such stories ought to be cautious and careful. (3) Miracles originate among ignorant and barbaric peoples. This cannot be said to describe Jesus' miracles, which took place under Roman civilization in the capital city of the Jews. (4) All religions have their miracles. This is in fact not true, for no other religion purports to prove its teachings through miracles, and there are no religious miracles outside Jewish-Christian miracles. Less later examines in considerable detail the miracles alleged by Hume to have equal footing with Christian miracles, particularly the miracles at the tomb of the Abbé Paris.{55} In all these cases, the evidence that miracles have occurred never approaches the standard of the evidence for the gospel miracles. Therefore, none of Hume's objections can overturn the evidence for the gospel miracles.

William Paley's *A View of the Evidences of Christianity* (1794) is primarily a studious investigation of the historical evidence for Christianity from miracles, and Paley's preliminary considerations to his investigation aim at an across-the-board refutation of Hume's objections. Paley makes it clear from the beginning that he presupposes the existence of the God proved by the teleological argument.{56} Given the existence of God, miracles are not incredible.{57} For why should it be thought incredible that God should want to reveal himself in the natural world to men, and how could this be done without involving a

miraculous element? Any antecedent improbability in miracles adduced in support of revelation is not such that sound historical testimony cannot surmount it. This, says Paley, suffices to answer 'a modern objection to miracles,' which he later identifies as that of David Hume. {58} The presupposition of Hume's argument, he continues, is that '... it is contrary to experience that a miracle should be true, but not contrary to experience that testimony should be false.' {59} Like Less, Paley argues that the narrative of a fact can be said to be contrary to experience only if we, being at the time and place in question, were to see that the alleged event did not in fact take place. What Hume really means by 'contrary to experience' is simply the want of similar experiences. (To say a miracle is contrary to universal experience is obviously question-begging.) But in this case, the improbability arising from our want of similar experiences is equal to the probability that, given the event as true, we should also have similar experiences. But suppose Christianity was inaugurated by miracles; what probability is there then that we today must also have such experiences? It is clear that any such probability is negligible; hence, any improbability arising from our lack of such experience is also negligible. A miracle is not like a scientific experiment capable of being subsumed under a law and repeated, for then it would not be contrary to nature as such and would cease to be a miracle. The objection to miracle from want of similar experiences presupposes either (1) that the course of nature is invariable or (2) that if it can be varied, these variations must be frequent and general. But if the course of nature be the agency of an intelligent Being, should we not expect him to interrupt his appointed order only seldom on occasions of great importance? As to the cause of miracle, this is simply the volition of Deity, of whose existence and power we have independent proof. As to determining whether a miracle has in fact occurred, Paley considers Hume's account of the matter to be a fair one: which in any given case is more probable, that the miracle be true or that the testimony be false? But in saying this, Paley adds, we must not take the miracle out of the theistic and historical context in which it occurred, nor can we ignore the question of how the evidence and testimony arose. The real problem with Hume's scepticism becomes clear when we apply it to a test case: suppose twelve men, whom I know to be honest and reasonable persons, were to assert that they personally saw a miraculous event in which it was impossible that they had been tricked; further, the governor called them before him for an inquiry and told them that if they did not confess the imposture they would be tied up to a gibbet; and they all went to their deaths rather than say they were lying. According to Hume, I should still not believe them. But such incredulity, states Paley, would not be defended by any skeptic in the world.

Paley maintains against Hume's 'in fact' argument that no parallel to the gospel miracles exists in history. {60} Paley examines closely Hume's three examples and concludes that it is idle to compare such cases with the evidence for the miracles of the gospels. {61} In none of these cases is it unequivocal that a miracle has occurred. Even in other unexplained instances, it is still true that there is no evidence that the witnesses have passed their lives in labor, danger, and suffering voluntarily undergone in attestation to the truth of the accounts they delivered. Thus, the circumstance of the gospel history is without parallel.

Spinoza's arguments for the impossibility of miracles and Hume's arguments against the identification of miracles were thus contested from various standpoints. It is noteworthy that virtually all of the Christian thinkers presupposed the existence of God in their arguments. It was not a case of theism versus atheism, but of Christian theism versus Deism. In that sense they did not try to found a system of religion on miracles; rather they argued that given the existence of God, miracles are possible and that no *a priori* barrier exists to the discovery of actual miracles on the basis of historical testimony.

Assessment of the Debate

Natural Law and Miracles

It will be remembered that the world view that formed the backdrop to the Deist controversy was a model of the universe as a Newtonian world-machine that bound even the hands of God. So ironclad a view of natural law is, however, untenable. Natural law is today understood essentially as *description*, not *prescription*. This does not mean that it cannot serve as a basis for prediction, for it does; but our formulation of a natural law is never so certain as to be beyond reformulation under the force of observed facts. Thus an event cannot be ruled out simply because it does not accord with the regular pattern of events. The advance of modern physics over the Newtonian world-machine is not that natural law does not exist, but that our formulation of it is not absolutely final. After all, even quantum physics does not mean to assert that matter and energy do not possess certain properties, such that anything and everything can happen; even indeterminacy occurs within statistical limits and concerns only the microscopic level. On the macroscopic level, firm natural laws do obtain.{62} But the knowledge of these properties and laws is derived from and based on experience. The laws of nature are thus not 'laws' in the rigid, prescriptive sense, but inductive generalizations.

This would appear to bring some comfort to the modern believer in miracles, for now he may argue that one cannot rule out *a priori* the fact that a certain event has occurred which does not conform to known natural law, since our formulation of natural law is never final and so must take account of the fact in question. It seems to me, however, that while this more descriptive understanding of natural law re-opens the door of possibility to certain anomalous events in the world, it does not help much in settling the question of miracles. The advantage gained is that one cannot rule out the occurrence of a certain event *a priori*, but the evidence for it must be weighed. The defender of miracles has thus at least gained a hearing. But one is still operating under the assumption, it would appear, that if the event really did run contrary to natural law, then it would be impossible for it to have occurred. The defender of miracles appeals to the fact that our natural laws are only inductive generalizations and so never certain, in order to gain admittance for his anomalous event; but presumably if an omniscient mind knew with certainty the precise formulations of the natural laws describing our universe then he would know *a priori* whether the event was or was not actually possible, since a true law of nature could not be violated.

As Bilynskyj argues, whether one adopts a regularity theory of natural law (according to which laws are simply descriptive of events and have no special modal quality) or a necessitarian theory (according to which natural laws are not merely descriptive of events but possess a special sort of modality determining nomic necessity/possibility), still so long as natural laws are conceived of as universal inductive generalizations the notion of a 'violation of a law of nature' is incoherent.{63} For on the regularity theory, since a law is a generalized description of *whatever* occurs, it follows that an event which occurs cannot violate a law. And on the necessitarian theory, since laws are universal generalizations which state what is physically necessary, a violation of a law cannot occur if the generalization is to remain truly universal. So long as laws are conceived of as universal generalizations, it is logically impossible to have a violation of a true law of nature.

Suppose that one attempts to rescue the notion of a 'violation' by introducing into the law certain *ceteris paribus* conditions, for example, that the law holds only if either (1) there are no other causally relevant natural forces interfering, or (2) there are no other causally relevant

natural or supernatural forces interfering. Now clearly, (1) will not do the trick, for even if there were no natural forces interfering, the events predicted by the law might not occur because God would interfere. Hence, the alleged law, as a purportedly universal generalization, would not be true, and so a law of nature would not be violated should God interfere. But if, as (2) suggests, we include supernatural forces among the *ceteris paribus* conditions, it is equally impossible to violate the law. For now the statement of the law itself includes the condition that what the law predicts will occur only if God does not intervene, so that if he does the law is not violated. Hence, so long as natural laws are construed as universal generalizations about events, it is incoherent to speak of miracles as 'violations' of such laws.

The upshot of Bilynskyj's discussion is that either natural laws ought not to be construed as universal generalizations about events or that miracles should not be characterized as violations of nature's laws. He opts for the first alternative, arguing that laws of nature are really about the dispositional properties of things based on the kinds of things they are.{64} He observes that most laws today, when taken as universal generalizations, are literally not true. They must include certain *ceteris paribus* clauses about conditions which seldom or perhaps never obtain, so that laws become subjunctive conditionals concerning what would occur under certain idealized conditions. But that means that laws are true counterfactuals with no application to the real world. Moreover, if laws are merely descriptive generalizations, then they do not really explain anything; rather than telling why some event occurs, they only serve to tell us how things are. Bilynskyj therefore proposes that natural laws ought to be formulated as singular statements about certain kinds of things and their dispositional properties: things of kind A have a disposition to manifest quality *F* in conditions *C*, in virtue of being of nature *N*.{65} Laws can be stated, however, as universal dispositions, for example, 'All potassium has a disposition to ignite when exposed to oxygen.' On this understanding, to assert that an event is physically impossible is not to say that it is a violation of a law of nature, since dispositional laws are not violated when the predisposed behavior does not occur; rather an event *F* is not produced at a time *t* by the powers (dispositions) of the natural agents which are causally relevant to *F* at *t*.{66} Accordingly, a miracle is an act of God which is physically impossible and religiously significant.{67} On Bilynskyj's version of the proper form of natural laws, then, miracles turn out to be physically impossible, but still not violations of those laws.

I have a great deal of sympathy for Bilynskyj's understanding of natural law and physical impossibility. So as not to create unnecessary stumbling blocks, however, the defender of miracles might ask whether one might not be able to retain the standard necessitarian theory of natural laws as universal generalizations, while jettisoning the old characterization of miracles as 'violations of the laws of nature' in favor of 'events which lie outside the productive capacity of nature.' That is to say, why may we not take a necessitarian theory of natural law according to which laws contain *ceteris paribus* conditions precluding the interference of both natural and supernatural forces and hold that a miracle is not, therefore, a violation of a law of nature, but an event which cannot be accounted for wholly by reference to relevant natural forces? Natural laws are not violated by such events because they state what will occur only if God does not intervene; nevertheless, the events are still naturally impossible because the relevant natural causal forces do not suffice to bring about the event. Bilynskyj's objections to this view do not seem insuperable.{68} He thinks that on such a view it becomes difficult to distinguish between miracles and God's general providence, since according to the latter doctrine every event has in a sense a supernatural cause. This misgiving does not seem insurmountable, however, for we might construe God's providence as

Bilynskyj himself does, as God's conservation of (and, we might add, concurrence with) all secondary causes and effects in being, while reserving only his immediate and extra-concurrent causal activity in the world for inclusion in a law's *ceteris paribus* conditions. Bilynskyj also objects that the physical impossibility of a miracle is the reason we attribute it to supernatural causation, not *vice versa*. To define physical impossibility in terms of supernatural causation thwarts the motivation for having the concept of physical impossibility in the first place. But my suggestion is not to define physical impossibility in terms of supernatural causation, but, as Bilynskyj himself does, in terms of what cannot be brought about wholly by natural causes. One may argue that some event *E* is not a violation of a natural law, but that *E* is naturally impossible. Therefore, it requires a supernatural cause. It seems to me, therefore, that even on the necessitarian theory of natural law, we may rid ourselves of the incoherent notion of 'violation of the laws of nature' and retain the concept of the naturally impossible as the proper characterization of miracle.

So although an initial advantage has been won by the construal of natural laws as descriptive, not prescriptive, this advantage evaporates unless one abandons the incoherent characterization of a miracle as a 'violation of a law of nature' and adopts instead the notion of an event which is naturally impossible. Now the question which must be asked is how an event could occur which lies outside the productive capacity of natural causes. It would seem to be of no avail to answer with Clarke that matter has no properties and that the pattern of events is simply God's acting consistently, for, contrary to his assertion, physics does hold that matter possesses certain properties and that certain forces such as gravitation and electromagnetism are real operating forces in the world. Bilynskyj points out that Clarke's view entails a thorough-going occasionalism, according to which fire does not really burn nor water quench, which runs strongly counter to common sense.^{69} Nor will it seem to help to answer with Sherlock and Houtteville that nature may contain within itself the power to produce events contrary to its normal operation, for this would not seem to be the case when the properties of matter and energy are sufficiently well-known so as to preclude to a reasonably high degree of certainty the occurrence of the event in question. Moreover, though this might secure the possibility of the event, so as to permit a historical investigation, it at the same time reduces the event to a freak of nature, the result of pure chance, not an act of God. It seems most reasonable to agree with modern science that events like the feeding of the 5000, the cleansing of the leper, and Jesus' resurrection really do lie outside the capability of natural causes.

But that being admitted, what has actually been proved? All that the scientist conceivably has the right to say is that such an event is naturally impossible. But with that conclusion the defender of miracles may readily agree. We must not confuse the realms of logical and natural possibility. Is the occurrence of a miracle logically impossible? No, for such an event involves no logical contradiction. Is the occurrence naturally impossible? Yes, for it cannot be produced by natural causes; indeed, this is a tautology, since to lie outside the productive capacity of natural causes is to be naturally impossible.

The question is: what could conceivably make miracles not just logically possible, but really, historically possible? Clearly the answer is the personal God of theism. For if a personal God exists, then he serves as the transcendent cause to produce events in the universe which are incapable of being produced by causes within the universe (that is to say, events which are naturally impossible. But it is to such a personal, transcendent God that the orthodox defenders of miracles appealed. Given a God who conserves the world in being moment by moment (Vernet, Houtteville), who is omnipotent (Clarke), and free to act as He wills

(Vernet, Less), the orthodox thinkers seem to be entirely justified in asserting that miracles are really possible. The question is whether given such a God miracles are possible, and the answer seems obviously, yes. It must be remembered that even their Deist opponents did not dispute God's existence, and Clarke and Paley offered elaborate defenses for their theism. But more than that: if the existence of such a God is even *possible*, then one must be open to the historical possibility of miracles. Only an atheist can deny the historical possibility of miracles, for even an agnostic must grant that if it is possible that a transcendent, personal God exists, then it is equally possible that He has acted in the universe. Hence, it seems that the orthodox protagonists in the classical debate argued in the main correctly against their Newtonian opponents and that their response has been only strengthened by the contemporary understanding of natural law.

Spinoza

1. First objection

With regard to Spinoza's objections to miracles, the orthodox thinkers seem to have again argued cogently. Turning to his first objection, that nothing happens contrary to the eternal and unchangeable order of nature, it must be remembered that Spinoza's system is a pantheistic one, in which God and nature are interchangeable terms. When we keep this in mind, it is little wonder that he argued against miracles on the basis of the unchangeable order of nature, for, there being no ontological distinction between God and the world, a violation of nature's laws is a violation of the being of God. But, of course, the question is not whether miracles are possible on a pantheistic basis, but whether they are possible on a theistic basis. If God is personal and ontologically distinct from the world, there seems to be no reason why even a total alteration of the laws of nature should in any way affect God's being. There would seem to be no reason why God could not have established a different set of laws for this universe nor why he could not now change them. Vernet correctly argues against Spinoza that nature's laws are freely willed by God and are therefore subject to change. Contrary to Spinoza, the properties of matter and energy do not flow from the being of God with inexorable necessity, but are the result of his choice. Hence, he does not violate his own nature should he choose to produce an event in the world which is not the result of the immanent causes operating in the universe. Houtteville and Less also argued soundly against Spinoza that if God willed from eternity to produce a miracle at some point in time, then there is no change on God's part, either in his being or decrees. Thus, Spinoza's objection to miracles on the basis of the unchangeableness of nature is system-dependent upon pantheism.

2. Second Objection

Spinoza's second objection, it will be remembered, was that miracles do not suffice to prove God's existence. So stated, the objection found no foothold in the apologies of most orthodox thinkers, for virtually all of them used miracles, not as a proof for the existence of God, but as a proof of his action in the world. Thus, the objection was strictly speaking irrelevant. But Spinoza's supporting reasoning was pertinent to their arguments. His main point appears to have been that a proof for God's existence must be absolutely certain. Since, therefore, we conclude to the existence of God on the basis of the immutable laws of nature, anything that impugned those laws would make us doubt God's existence. Underlying this reasoning would appear to be two assumptions: (1) a proof for God's existence must be demonstratively certain and (2) God's existence is inferred from natural laws. The Christian thinkers denied respectively both of these assumptions. The first is based on Spinoza's rationalism, which

prevents him from recognizing the cogency of an argument unless he can affix his *Q. E. D.* at the argument's conclusion. His more empirically minded opponents, however, saw no reason to think that an argument which was not deductively demonstrative could not provide sufficient warrant for theism. Paley, for example, tried to give overwhelming empirical evidence in his *Natural Theology* for God as the designer of the universe; though not achieving demonstrative certainty, the argument's aim was to make it much more plausible to believe in God than not. The demise of Spinozistic rationalism seems to be sufficient testimony that subsequent generations have not shared Spinoza's concern for geometric certainty. The second assumption, for its part, would not have relevance for someone who argued for God's existence by other means. For example, Clarke, while espousing the same concern for demonstrative certainty as Spinoza, based his theism on cosmological and ontological arguments. Hence, the objection that miracles rendered natural law uncertain, even if true, would not strike against Clarke.

But is the objection in fact true? Spinoza seemed to think that the admission of a genuine miracle would serve to overthrow the natural law pre-empted by the miracle. If one retains the old 'violation' concept of miracle, this is certainly true. But if we abandon that notion, as I have suggested, in favor of the naturally impossible, then we can see that Clarke and Paley were correct in arguing that a miracle does not serve to abrogate the regularity of nature in general; it only shows the intervention of God at that point in the natural causal nexus. As Swinburne has argued, a natural law is not abolished because of one exception; the counter-instance must occur repeatedly whenever the conditions for it are present.^{70} If an event occurs which is contrary to a law of nature and we have reasons to believe that this event would not occur again under similar circumstances, then the law in question will not be abandoned. One may regard an anomalous event as repeatable if another formulation of the natural law better accounts for the event in question, and if it is no more complex than the original law. If any doubt exists, the scientist may conduct experiments to determine which formulation of the law proves more successful in predicting future phenomena. In a similar way, one would have good reason to regard an event as a non-repeatable counter-instance to a law if the reformulated law were much more complicated than the original without yielding better new predictions or by predicting future phenomena unsuccessfully where the original formulation predicted successfully. If the original formulation remains successful in predicting all new phenomena as the data accumulate, while no reformulation does any better in predicting the phenomena and explaining the event in question, then the event should be regarded as a non-repeatable counter-instance to the law. Hence, a miraculous event would not serve to upset the natural law:

We have to some extent good evidence about what are the laws of nature, and some of them are so well-established and account for so many data that any modifications to them which suggest to account for the odd counter-instance would be so clumsy and *ad hoc* as to upset the whole structure of science. In such cases the evidence is strong that if the purported counter-instance occurred it was a violation of the laws of nature.^{71}

Swinburne unfortunately retains the violation concept of miracle, which would invalidate his argument; but if we conceive of a miracle as a naturally impossible event, he is on target in reasoning that the admission of such an event would not lead to the abandonment of a natural law. Spinoza's fear, therefore, that miracles would destroy natural laws seems unjustified. In fact Spinoza's argument, if taken seriously, would prove a positive impediment to science, for on his principles not even repeatable counter-instances to a natural law could be allowed, since these would impugn the present natural law. In other words, Spinoza assumes we have

the final formulation of the natural laws known to us. While he will admit that there may be unknown natural laws, he cannot permit the revision of known laws. But such a position is unscientific. If one adjusted Spinoza's position to admit the possible revision of a natural law by repeatable counter-instances, then any argument for miracles based on those laws would, of course, share in the uncertainty of our formulations. If, however, we were confident that a particular formulation of a law were genuinely descriptive of reality, then the occurrence of an event shown by the law to be naturally impossible could not overthrow this law. Rather than lead us away from God, such a situation could lead us to see the hand of God in that event, for there would be no other way it could be produced. And that was precisely the position of the orthodox defenders of miracles.

Spinoza's sub-contention that a miracle need not prove God's existence, but only the existence of a lesser being, was not effective against most defenders of miracles quite simply because they were not trying to prove the existence of God. Having either proved or presupposed the existence of God, they used miracles chiefly to prove Christian theism was true. On the other hand, the protagonists in the classical debate over miracles were greatly concerned about the possibility of demonic miracles and how to identify a truly divine miracle. Their answer to this problem constitutes one of their most important and enduring contributions to the discussion of miracles. They argued that the doctrinal context of the miracle makes it clear whether the miracle is truly from God. Thus, they drew attention to the context in which the miracle occurred as the basis for the interpretation of that miracle. This is extremely important, for a miracle without a context is inherently ambiguous. But in the case of Jesus' miracles and resurrection the context is religiously significant: they occur in the context of and as the climax to Jesus' own unparalleled life, teaching, and personal claim to authority, and served as signs of the inbreaking of the Kingdom. Here is a context of events that, as Paley rightly emphasized, is unique in the history of mankind. It ought, therefore, to give us serious pause, whereas some isolated scientific anomaly might occasion only curiosity. In this way the religious context of a miracle furnishes us with the proper interpretation of that miracle.

Spinoza's concern with lesser divine beings, such as angels and demons, would probably not trouble too many twentieth century minds. It would be very odd, indeed, were an atheist to grant the miracles and resurrection of Jesus as historical and miraculous events and yet assert that perhaps only an angel wrought them. Finite spirit beings are usually conceived to exist only within a wider theistic framework, such that to infer directly that God is responsible for such events would not appear to many to be an unwarranted inference. In this way, then, contrary to Spinoza's allegation, miracles *taken within their religious context* could, it seems, provide an adequate justification for a Christian theism.

Spinoza's final sub-point, that a miracle may simply be the effect of an unknown cause in nature, does not properly strike against the possibility of the *occurrence* of a miracle, but against the *identification* of the occurrence of a miracle. Granted that miracles are possible, how can we know when one has occurred? This is admittedly a very thorny problem, and undoubtedly most of our reserve over against purported miracles stems from an underlying suspicion that the event is somehow naturally explicable, even though we do not know how. The problem has been persuasively formulated in modern times by Antony Flew:

Protagonists of the supernatural, and opponents too, take it for granted that we all possess some natural (as opposed to revealed) way of knowing that and where the unassisted

potentialities of nature (as opposed to a postulated supernature) are more restricted than the potentialities which, in fact, we find to be realized or realizable in the universe around us.

This is a very old and apparently very easy and tempting assumption. . . . Nevertheless, the assumption is entirely unwarranted. We simply do not have, and could not have, any natural (as opposed to revealed) criterion which enables us to say, when faced with something which is found to have actually happened, that here we have an achievement which nature, left to her own unaided devices, could never encompass. The natural scientist, confronted with some occurrence inconsistent with a proposition previously believed to express a law of nature, can find in this disturbing inconsistency no ground whatever for proclaiming that the particular law of nature has been supernaturally overridden.{72}

The response of Sherlock and Houtteville that an unknown law of nature may be God's means of acting is surely inadequate, for it may equally be the case that the event in question is no act of God at all, but a product of entirely natural but unknown causes. Le Clerc and Vernet have taken a better tack: when the miracles occur precisely at a momentous time (say, a man's leprosy vanishing when Jesus spoke the words, 'Be clean') and do not recur regularly in history and when the miracles in question are various and numerous, the chance of their being the result of unknown natural properties seems negligible. If the miracles were naturally caused, one would expect them to occur repeatedly and not by coincidence at just the proper moments in Jesus' ministry. And though an isolated miracle might be dismissed as the effect of an unknown operation of nature, Vernet seems to be correct in regarding this possibility as minimal when the entire scope of Jesus' miracles is surveyed.

A final remark on Spinoza's reasoning ought to be made. The objection does not, like Hume's, spring from the nature of historical investigation; rather it could be pressed by witnesses of Jesus' miracles and resurrection appearances themselves. But in this case, the objection loses all conviction: for can we imagine, say, doubting Thomas, when confronted with the risen Jesus, studiously considering whether some unknown natural cause might have produced what he experienced? There comes a point when the back of scepticism is broken by the sheer reality of a wonder before us. At any rate, had Jesus himself been confronted with such scepticism, would he not have attributed it to hardness of heart in his opponent? Having shown the historical credibility of the gospel accounts of Jesus' miracles, should that be possible, a defender of miracles might simply leave the question of their miraculous nature to be settled between his hearer and God. Perhaps Pascal was right in maintaining that God has given evidence sufficiently clear for those with an open heart, but sufficiently vague so as not to compel those whose hearts are closed.

Hume

1. 'In principle' argument

Hume's 'in principle' argument against the identification of a miracle, for its part, seems either question-begging or mistaken.{73} To say that uniform experience is against miracles is implicitly to assume that the miracles in question did not occur. Otherwise the experience could not be said to be truly uniform. Thus, to say uniform experience stands against miracles begs the question. If, however, we relax the term 'uniform' to mean simply 'general' or 'usual,' then the argument fails of cogency. For then it is no longer incompatible that general experience be that miracles do not occur and that the gospel miracles did occur. Hume seems to confuse the realms of science and history: the general experience of mankind has allowed

us to formulate certain laws which describe the physical universe. That dead men do not rise is, for example, a generally observed pattern in our experience. But at most this only shows that a resurrection is naturally impossible. That is a matter of science. But it does not prove that such a naturally impossible event has never occurred. That is a matter of history. As Less and Paley pointed out, the testimony in history for the general pattern of events cannot overturn good testimony for any particular event. Since they are not *contradictoria*, they cannot even be weighed in the same scale. Thus, Hume's argument, if it is not simply question-begging, rests on a sort of category mistake.

Moreover, as Sherlock argued, since a miracle is just as much a matter of sense perception as any other event, it is, in principle, provable by historical testimony in the same way as a non-miraculous event. *Qua* history, they stand exactly on a par. It is contrary to sound historical methodology to suppress particular testimony out of regard for general testimony. In the case of the resurrection, for example, if the testimony which we have in the New Testament makes it probable that Jesus' tomb was really found empty on the first day of the week by some of his women followers and that he later appeared to his disciples in a non-hallucinatory fashion, then it is bad historical methodology to argue that this testimony *must* be somehow false because historical evidence shows that all other men have always remained dead in their graves. Nor can it be argued that the testimony must be false because such an event is naturally impossible, for it may well be the case that history proves that a naturally impossible event has, in fact, occurred. As Paley contended, Hume's argument could lead us into situations where we would be led to deny the testimony of the most reliable of witnesses to an event because of general considerations, a situation which results in an unrealistic scepticism. In fact, as Sherlock and Less correctly contended, this would apply to non-miraculous events as well. There are all sorts of events which make up the stuff of popular books on unexplained mysteries (such as levitation, disappearing persons, spontaneous human combustions and so forth) which have not been scientifically explained, but, judging by their pointless nature, sporadic occurrence, and lack of any religious context, are probably not miracles. It would be folly for a historian to deny the occurrence of such events in the face of good eyewitness evidence to the contrary simply because they do not fit with known natural laws. Yet Hume's principle would require the historian to say that these events never actually occurred. The fact is, the historian does, in certain cases, seem able to determine the facticity of a historical event without knowing how or whether it accords with natural laws.

Finally, it might be urged against Hume's 'in principle' argument, if God's existence is possible, then as Paley argued, he may have chosen to reveal himself decisively in history at one point, and there is no probability that we should experience the same events today. Hence, the occurrence of those events uniquely in the past cannot be dismissed because such events are not experienced at other times. As long as God's existence is possible, then it is equally possible that he has acted uniquely at a point in history, in which case the question simply becomes whether such an event did take place. But then it is a question of evidence, not of principle, as Hume maintained.

Antony Flew, while acknowledging the failure of Hume's argument, has sought to reformulate a successful version of the argument against the identification of a miracle:

. . . it is only and precisely by presuming that the laws that hold today held in the past and by employing as canons all our knowledge--or presumed knowledge--of what is probable or improbable, possible or impossible, that we can rationally interpret the detritus of the past as evidence and from it construct our account of what actually happened. But in this context,

what is impossible is what is physically, as opposed to logically, impossible. And 'physical impossibility' is, and surely has to be, defined in terms of inconsistency with a true law of nature.

. . . our sole ground for characterizing a reported occurrence as miraculous is at the same time a sufficient reason for calling it physically impossible.{74}

Now this objection actually seems to be inconsistent with the final point of Spinoza's second objection against miracles, which Flew also sought to defend. There, it will be remembered, it was asserted that our knowledge of nature is so incomplete that we can never regard any event whatsoever as miraculous, since it could be the effect of an unknown law of nature. This would compel us to take a totally open attitude toward the possibility of any given event, for virtually anything would be possible in nature. We should never be entitled to say an event is naturally impossible. But now Hume's objection asserts precisely the opposite, namely, that our knowledge of natural law is so complete that we can not only determine which events would be naturally impossible, but we are able to impose this over the past to expunge such events from the record. The two positions are incompatible. Flew thus seems to have worked himself into a dilemma: either naturally impossible events can be specified or not. If they can, then such an event's occurring could be identified as a miracle. If they cannot, then we must be open to anything's happening in history. Flew cannot have it both ways: he cannot line up behind both Spinoza and Hume. Now I have contended that naturally impossible events can sometimes be specified and that an event such as Jesus' feeding the 5000 ought to be regarded as naturally impossible. Does that mean therefore, as Flew alleges, that it must be regarded *a priori* as unhistorical? Not at all; Flew has made an unjustifiable identification between natural (or in his terms, physical) possibility and actual, historical possibility. The assumption here is that naturally impossible events cannot occur, or in other words, that miracles cannot happen, which is question-begging, since this is precisely the point to be proved. Flew's argument really boils down to the assertion that in order to study history, one must assume the impossibility of miracles. To this question we shall now turn.

In recent times the classical debate over the identification of miracles has continued in the dispute over principles of historical methodology. It has been contended that the historical method is inherently restricted to non-miraculous events; for example, D. E. Nineham asserts,

It is of the essence of the modern historian's method and criteria that they are applicable only to purely human phenomena, and to human phenomena of a normal, that is non-miraculous, non-unique, character. It followed that any picture of Jesus that could consistently approve itself to an historical investigator using these criteria, must *a priori* be of a purely human figure and it must be bounded by his death.{75}

On what basis can it be said that the historical method applies only to non- miraculous phenomena? According to Carl Becker, it is because that method presupposes that the past is not dissimilar to our present experience:

History rests on testimony, but the qualitative value of testimony is determined in the last analysis by tested and accepted experience . . . the historian knows well that no amount of testimony is ever permitted to establish as a past reality a thing that cannot be found in present reality. . . . In every case the witness may have a perfect character--all that goes for nothing . . .

... We must have a past that is the product of all the present. With sources that say it was not so, we will have nothing to do; better still, we will make them say it was so.{76}

Becker's historical relativism allows him to reshape the past with impunity so that it is made to accord with our experience of the present. The result is that miracles must be expunged by the historian, for these are not found in the experience of his own generation.{77} According to this outlook, historians must adopt as a methodological principle a sort of 'historical naturalism' that excludes the supernatural.

This viewpoint is simply a restatement of Ernst Troeltsch's principle of analogy.{78} According to Troeltsch, one of the most basic of historiographical principles is that the past does not differ essentially from the present. Though events of the past are of course not the same events as those of the present, they must be the same *in kind* if historical investigation is to be possible. Troeltsch realized that this principle was incompatible with miraculous events and that any history written on this principle will be sceptical with regard to the historicity of the events of the gospels.

Pannenberg, however, has persuasively argued that Troeltsch's principle of analogy cannot be legitimately employed to banish from the realm of history all non-analogous events.{79} Properly defined, analogy means that in a situation which is unclear, the facts ought to be understood in terms of known experience; but Troeltsch has elevated the principle to constrict all past events to purely natural events. But that an event bursts all analogies cannot be used to dispute its historicity. When, for example, myths, legends, illusions, and the like are dismissed as unhistorical, it is not because they are unusual, but because they are analogous to present forms of consciousness having no objective referent. When an event is said to have occurred for which no analogy exists, its reality cannot be automatically dismissed; to do this we should require an analogy to some known form of consciousness lacking an objective referent that would suffice to explain the situation. Pannenberg has thus upended Troeltsch's principle of analogy such that it is not the *want* of an analogy that shows an event to be unhistorical, but the *presence* of a positive analogy to known thought forms that shows a purportedly miraculous event to be unhistorical. Thus, he has elsewhere affirmed that if the Easter traditions were shown to be essentially secondary constructions analogous to common comparative religious models, the Easter appearances were shown to correspond completely to the model of hallucinations, and the empty tomb tradition were evaluated as a late legend, then the resurrection would be subject to evaluation as unhistorical.{80} In this way, the lack of an analogy to present experience says nothing for or against the historicity of an event. Troeltsch's formulation of the principle of analogy attempts to squeeze the past into the mold of the present without providing any warrant for doing so. As Richard Niebuhr has protested, Troeltsch's principle really destroys genuine historical reasoning, since the historian must be open to the uniqueness of the events of the past and cannot exclude *a priori* the possibility of events like the resurrection simply because they do not conform to his present experience.{81} But Pannenberg's formulation of the principle preserves the analogous nature of the past to the present or to the known, thus making the investigation of history possible, without thereby sacrificing the integrity of the past or distorting it.

This means that there seems to be no *in principle* philosophical objection to establishing the occurrence of a miracle by means of historical research. According to Pannenberg, a theological interpretation of history will be tested positively by 'its ability to take into account all known historical details' and negatively by 'the proof that without its specific assertions the accessible information would not be at all or would be only incompletely explicable'.{82}

More exactly, Bilynskyj proposes four criteria for identifying some event *E* as a miracle: (1) the evidence for the occurrence of *E* is at least as good as the evidence for other acceptable but unusual events similarly distant in space and time from the point of inquiry; (2) an account of the natures and/or powers of the causally relevant natural factors necessary to explain *E* would be clumsy and *ad hoc*; (3) there is no evidence for one or more of the natural causes which could produce *E* except for the inexplicability of *E* itself; and (4) there is some justification for a supernatural explanation of *E*, apart from the inexplicability of *E*.^{83} The historian ought first perhaps, as a methodological principle, to seek natural causes of the events under investigation; but when no natural causes can be found that plausibly account for the data and a supernatural hypothesis presents itself as part of the historical context in which the events occurred, then it would not seem to be illicit to prefer the supernatural explanation.

2. 'In fact' arguments

If, then, there seems to be no 'in principle' argument against establishing miracles by means of the historical method, what may be said concerning Hume's four 'in fact' arguments against miracles? All of Hume's arguments have force; but the fact remains that these general considerations cannot be used to pronounce on the historicity of any particular miracle. They only serve to make us cautious in our investigation. Hume's fourth point does seek to preclude any investigation by asserting that the miracles of various religions cancel each other out. Less, Campbell, and Paley argued fairly convincingly, however, against his three specific examples of purported miracles, but limits of space require that I simply refer the reader to their extended discussions. In any case, it still remains an *empirical* question whether a miracle supporting a counter-Christian claim is equally or better attested than Jesus' miracles and resurrection. There is no way to settle the issue apart from an investigation.

Conclusion

It seems to me, therefore, that the lesson to be learned from the classical debate over miracles, a lesson that has been reinforced by contemporary scientific and philosophical thought, is that the presupposition of the impossibility of miracles should, contrary to the assumption of nineteenth and for the most part twentieth century biblical criticism, play no role in determining the historicity of any event. While many scholars still operate under such an assumption, there seems now to be a growing recognition that such a presupposition is illegitimate. The presupposition against the possibility of miracles survives in theology only as a hangover from an earlier Deist age and ought to be once for all abandoned.^{84}

Notes

^{1} Gottfried Less, *Wahrheit der christlichen Religion*, 4th ed. (Göttingen & Bremen: Georg Ludewig Forster, 1776) 260-62.

^{2} Heinrich Eberh. Gottlob Paulus, *Das Leben Jesu, als Grundlage einer reinen Geschichte des Urchristentums*, 2 vols. (Heidelberg: C. F. Winter, 1826) 2.2, xi.

^{3} *Ibid.*, 2.2, xlv.

^{4} *Ibid.*, 2.2, xi.

^{5} *Ibid.*

{6} Ibid., 2.2, xlv.

{7} Ibid., 1, 283-84.

{8} Ibid., 1, 284.

{9} David Friedrich Strauss, *Hermann Samuel Reimarus und seine Schutzschrift für die vernünftigen Verehrer Gottes* (Leipzig: F. A. Brockhaus, 1862) 271.

{10} Idem, *The Life of Jesus Critically Examined*, trans. George Eliot, ed. with an Introduction by Peter C. Hodgson (London: SCM, 1973) 64.

{11} Ibid., 80.

{12} Ibid., 736.

{13} Ibid., 75.

{14} Albert Schweitzer, *The Quest of the Historical Jesus*, 3rd ed., trans. W. Montgomery (London: Adam & Charles Black, 1954) 10.

{15} Ibid., 11 0-11.

{16} David Friedrich Strauss, *Die christliche Glaubenslehre in ihrer geschichtlichen Entwicklung und im Kämpfe mit der modernen Wissenschaft* (Tübingen: C. F. Osiander, 1840) 224-53.

{17} Rudolf Bultmann, 'New Testament and Mythology,' in *Kerygma and Myth*, 2 vols., ed. Hans-Werner Bartsch, trans. R. E. Fuller (London: SPCK, 1953) 2, 1-44. Bultmann's *a priori* assumption of history and the universe as a closed system is especially evident in idem, 'Bultmann Replies to his Critics,' in *ibid.*, 1, 197. According to Niebuhr, Bultmann retained uncriticized the nineteenth century idea of nature and history as a closed system. (Richard R. Niebuhr, *Resurrection and Historical Reason* [New York: Charles Scribner's Sons, 1957] 60-61.)

{18} Rudolf Pesch, 'Die Entstehung des Glaubens an den Auferstandenen,' *ThQ* 153 (1973) 227.

{19} Hans Frei, *The Eclipse of the Biblical Narrative: A Study in Eighteenth and Nineteenth Century Hermeneutics* (New Haven: Yale University Press, 1974) 240.

{20} Three helpful discussions of this debate are John S. Lawton, *Miracles and Revelation* (New York: Association Press, 1959); R. M. Burns, *The Great Debate on Miracles* (London: Associated University Presses, 1981); Colin Brown, *Miracles and the Critical Mind* (Grand Rapids: Eerdmans, 1984).

{21} Denis Diderot, 'Philosophical Thoughts,' in *Diderot's Early Philosophical Works*, trans. Margaret Jourdain (Chicago: Open Court, 1916) pensée 18.

{22} Marie François Arrouet de Voltaire, *Dictionnaire philosophique* (Paris: Garnier, 1967) s.v. 'Miracles'.

{23} Ibid.

{24} Ibid.

{25} Benedict de Spinoza, *Tractatus theologico-politicus* 6.

{26} David Hume, 'An Enquiry concerning Human Understanding,' in *Enquiries concerning Human Understanding and concerning the Principles of Morals*, ed. L. A. Selby- Bigge, 3rd ed. rev. P. H. Niddich (Oxford: Clarendon Press, 1975) 10.1, 90; 10.11, 92 (pp. 114, 116). For a lengthy discussion of this essay, see Burns, *Debate*, 131-75. Remarkably, Burns does not see the counterfactual nature of Hume's argument, so that on Burns's exposition the essay tends to fall into two unconnected halves, with far too much emphasis by Burns on the second half. The same oversight hampers the discussion by Brown, *Miracles*, 79-100.

{27} Hume, 'Enquiry,' 10.11, 101 (p. 131).

{28} Jean Le Clerc, *Five Letters Concerning the Inspiration of the Holy Scriptures* (London: 1690) 235. The *Sentimens* was translated into English under this title.

{29} Ibid., 235-36.

{30} Samuel Clarke, *A Discourse concerning the Unchangeable Obligations of Natural Religion and the Truth and Certainty of the Christian Revelation* (London: W. Botham, 1706) 351-52.

{31} Ibid., 354-55.

{32} Ibid., 356-57.

{33} Ibid., 359.

{34} Ibid., 361.

{35} Ibid., 362-63. Notice that Clarke does not arbitrarily exclude certain doctrines as incapable of being proved, but he presupposes what he has already argued concerning natural theology and ethics. Cf. *ibid.*, 369-70.

{36} Ibid., 363-64.

{37} Ibid., 367.

{38} Ibid., 368-69.

{39} Ibid., 368. The foregoing exposition makes evident how gross a distortion of Clarke's view is presented by Burns, *Debate*, 96-103, who ascribes to Clarke an 'extreme evidentialism' whereby miracles divorced from their doctrinal context are proof of

Christianity. In fact, Clarke is entirely one with the typical orthodox response to Deism. Following Burns in his misinterpretation of Clarke is Brown, *Miracles*, 56-57.

{40} J. Alph. Turretin, *Traité de la vérité de la religion chrétienne*, 2nd ed., 7 vols., trans. J. Vernet (Genève: Henri-Albert Gosse, 1745-55) 5, 235. Vernet translated the first volume written by Turretin in Latin and proceeded to add several volumes of his own. Vernet has Spinoza particularly in mind here.

{41} Ibid., 5, 2-3.

{42} Ibid., 5, 24.

{43} Ibid., 5, 272.

{44} Claude François Houtteville, *La religion chrétienne prouvée par les faits*, 3 vols. (Paris: Mercler & Boudet, 1740) 1, 32-50.

{45} Ibid., 1, 33.

{46} Thomas Sherlock, *The Tryal of the Witnesses of the Resurrection of Jesus* (London: J. Roberts, 1729) 60.

{47} Originally mentioned by John Locke, *An Essay concerning Human Understanding*, 4.15, 5 and taken up by Hume in a footnote in his essay on miracles, this example was regarded as the Achilles heel of Hume's argument, for Hume had to admit that on his principles the man in the tropics should not in fact believe the testimony of travelers concerning ice.

{48} Sherlock, *Tryal*, 60-62.

{49} Ibid., 63-64.

{50} Less, *Wahrheit*, 243.

{51} Ibid., 254-60.

{52} Ibid., 280-84.

{53} Ibid., 366-75.

{54} Campbell in his *Dissertation On Miracles* (1762) makes the same point: 'The two thousand instances formerly known, and the single instance attested, as they relate to different facts, though of a contrary nature, are not contradictory. There is no inconsistency in believing both.' (George Campbell, *The Works of George Campbell*, 6 vols. [London: Thomas Tegg, 1840] 1, 23.)

{55} Less, *Wahrheit*, 471-549; see also discussion in Campbell, *Dissertation*, 88-116.

{56} William Paley, *A View of the Evidences of Christianity*, 2 vols., 5th ed. (London: R. Faulder, 1796; repr. Westmead: Gregg International Publishers, 1970) 1, 2-3. Cf. 2, 409. For Paley's classic exposition of the teleological argument, see his *Natural Theology* (1802).

{57} Idem, *Evidences*, 1, 3- 15,

{58} Ibid., 1, 5,7.

{59} Ibid., 1, 6.

{60} Ibid., 1, 329-83.

{61} Ibid., 1, 369-83.

{62} Even with regard to quantum laws, one may plausibly speak of events which are naturally impossible. See Mary Hesse, 'Miracles and the Laws of Nature,' in *Miracles*, ed. C. F. D. Moule (London: Mowbray, 1965) 38.

{63} Stephen S. Bilynskyj, 'God, Nature, and the Concept of Miracle' (Ph.D. Diss.: Notre Dame, 1982) 10-42.

{64} Ibid., 46-53.

{65} Ibid., 117.

{66} Ibid., 138.

{67} Ibid., 146.

{68} Ibid., 43-44.

{69} Ibid., 86-97; for further criticism see 97-101.

{70} R. G. Swinburne, 'Miracles,' *PQ* 18 (1968) 321.

{71} Ibid., 323.

{72} *Encyclopedia of Philosophy*, s.v. 'Miracles,' by Antony Flew.

{73} For a penetrating critique of Hume's reasoning see George I. Mavrodes, 'Testimony and the Resurrection,' paper read at 'Christianity Challenges the University,' Dallas, Tex.; Feb. 7-10, 1985. He points out that the propositions 'Miracles are not common in the world' and 'Jesus performed miracles' are not epistemological alternatives, so that the evidence for each may amount to a full proof and each be simultaneously believed by a rational person. Of course, 'There are no miracles in the world' is an epistemological alternative to 'Jesus performed miracles,' but we have no grounds for assuming the former to be true. My lack of experiencing a miracle first-hand does not serve to make the universal statement probable because there is no probability that I should experience a miracle myself. In his comment on Mavrodes's paper, Antony Flew admitted the failure of Hume's argument, but pressed the

objection from his *Encyclopedia of Philosophy* article discussed below concerning historiographical naturalism.

{74} *Encyclopedia of Philosophy*, s.v. 'Miracles'.

{75} D. E. Nineham, 'Some Reflections on the Present Position with regard to *The Jesus of History*,' *CQR* 166 (1965) 6-7.

{76} Carl Becker, 'Detachment and the Writing of History,' in *Detachment and the Writing of History*, ed. Phil L. Snyder (Ithaca: Cornell University Press, 1958; Westport, Conn.: Green, 1972) 12-13.

{77} *Ibid.*, 14. For an incisive critique of historical relativism and its dictum that 'the past is the product of the present,' see Maurice Mandelbaum, *The Problem of Historical Knowledge* (New York: Harper & Row, 1967).

{78} Ernst Troeltsch, 'über historische und dogmatische Methode in der Theologie,' in idem, *Gesammelte Schriften* (Tübingen: J. C. B. Mohr, 1913) 2, 729-53. Cf. Bradley's principle of uniformity (F. H. Bradley, *The Presuppositions of Critical History*, ed. Lionel Rubinoff [Chicago: J. M. Dent & Sons, 1968], 100) and its critique at the hands of R. G. Collingwood, *The Idea of History*, ed. T. M. Know (Oxford: University Press, 1956) 139.

{79} Wolfhart Pannenberg, 'Redemptive Event and History,' in idem, *Basic Questions in Theology*, 2 vols., trans. G. H. Kehm (Philadelphia: Fortress, 1970) 1, 40-50.

{80} Idem, cited in James M. Robinson, 'Revelation as Word and History,' in *New Frontiers in Theology*, ed. James M. Robinson & John B. Cobb, Jr. (New York: Harper & Row, 1967) 3, 33.

{81} Niebuhr, *Resurrection*, 170.

{82} Pannenberg, 'Redemptive Event and History,' 1, 78.

{83} Bilynskyj, 'Miracles,' 222.

{84} Portions of this research were carried out at Cambridge University and the Ludwig-Maximilians-Universität München under a fellowship from the Alexander von Humboldt Foundation. For a fuller and more meticulously documented account, see my *The Historical Argument for the Resurrection of Jesus during the Deist Controversy* (Toronto: Edwin Mellen, 1986).

The Historicity of the Empty Tomb of Jesus

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

An examination of both Pauline and gospel material leads to eight lines of evidence in support of the conclusion that Jesus's tomb was discovered empty: (1) Paul's testimony implies the historicity of the empty tomb, (2) the presence of the empty tomb pericope in the pre-Markan passion story supports its historicity, (3) the use of 'on the first day of the week' instead of 'on the third day' points to the primitiveness of the tradition, (4) the narrative is theologically unadorned and non-apologetic, (5) the discovery of the tomb by women is highly probable, (6) the investigation of the empty tomb by the disciples is historically probable, (7) it would have been impossible for the disciples to proclaim the resurrection in Jerusalem had the tomb not been empty, (8) the Jewish polemic presupposes the empty tomb.

Source: "The Historicity of the Empty Tomb of Jesus." *New Testament Studies* 31 (1985): 39-67.

Until recently the empty tomb has been widely regarded as both an offense to modern intelligence and an embarrassment for Christian faith; an offense because it implies a nature miracle akin to the resuscitation of a corpse and an embarrassment because it is nevertheless almost inextricably bound up with Jesus' resurrection, which lies at the very heart of the Christian faith. But in the last several years, a remarkable change seems to have taken place, and the scepticism that so characterized earlier treatments of this problem appears to be fast receding.^{2} Though some theologians still insist with Bultmann that the resurrection is not a historical event,^{3} this incident is certainly presented in the gospels as a historical event, one of the manifestations of which was that the tomb of Jesus was reputedly found empty on the first day of the week by several of his women followers; this fact, at least, is therefore in principle historically verifiable. But how credible is the evidence for the historicity of Jesus' empty tomb?

In order to answer this question, we need to look first at one of the oldest traditions contained in the New Testament concerning the resurrection. In Paul's first letter to the Corinthians (AD 56-57) he cites what is apparently an old Christian formula (1 Cor 15. 3b-5), as is evident from the non-Pauline and Semitic characteristics it contains.^{4} The fact that the formula recounts, according to Paul, the content of the earliest apostolic preaching (I Cor 15. 11), a fact confirmed by its concordance with the sermons reproduced by Luke in Acts,^{5} strongly suggests that the formula originated in the Jerusalem church. We know from Paul's own hand that three years after his conversion (AD 33-35) at Damascus, he visited Jerusalem, where he met personally Peter and James (Gal 1. 18-19). He probably received the formula in

Damascus, perhaps in Christian catechesis; it is doubtful that he received it later than his Jerusalem visit, for it is improbable that he should have replaced with a formula personal information from the lips of Peter and James themselves.{6} The formula is therefore probably quite old, reaching back to within the first five years after Jesus' crucifixion. It reads:

... *hoti Christos apethanen huper ton hamartion hemon kata tas graphas,*
kai hoti etaphe,
kai hoti egegertai te hemera te trite kata tas graphas,
kai hoti ophthe Kepha, eita tois dodeka.

Does this formula bear witness to the fact of Jesus' empty tomb? Several questions here need to be kept carefully distinct. First we must decide: (1) does Paul *accept* the empty tomb, and (2) does Paul *mention* the empty tomb? It is clear that (1) does not imply (2), but (2) would imply (1). In other words, just because Paul may not mention the empty tomb, that does not mean he does not accept the empty tomb. Too many New Testament scholars have fallen prey to Bultmann's fallacy: '*Legenden sind die Geschichten vom leeren Grab, von dem Paulus noch nicht weiss.*'{7} Paul's citation of Jesus' words at the Last Supper (I Cor 11: 23-26) shows that he knew the context of the traditions he delivered; but had the Corinthians not been abusing the eucharist this knowledge would have remained lost to us. So one must not too rashly conclude from silence that Paul 'knows nothing' of the empty tomb. Next, if Paul does imply the empty tomb, then we must ask: (1) does Paul *believe* Jesus' tomb was empty, and (2) does Paul *know* Jesus' tomb was empty? Again, as Grass is quick to point out, (1) does not imply (2);{8} but (2) would imply (1). In other words, does Paul simply assume the empty tomb as a matter of course or does he have actual historical knowledge that the tomb of Jesus was empty? Thus, even if it could be proved that Paul believed in a physical resurrection of the body, that does not necessarily imply that he knew the empty tomb for a fact.

Some exegetes have maintained that the statement of the formula 'he was buried' implies, standing as it does between the death and the resurrection, that the tomb was empty.{9} But many critics deny this, holding that the burial does not stand in relation to the resurrection, but to the death, and as such serves to underline and confirm the reality of the death.{10} The close *Zusammenhang* of the death and burial is said to be evident in Rom 6, where to be baptized into Christ's death is to be baptized into his burial. Grass maintains that for the burial to imply a physical resurrection the sentence would have to read *apethanen ... kai hoti egegertai ek tou taphou*. As it is the burial does not therefore imply that the grave was empty. Grass also points out that Paul fails to mention the empty tomb in the second half of I Cor 15, an instructive omission since the empty tomb would have been a knock-down argument against those who denied the bodily resurrection.{11} It is also often urged that the empty tomb was no part of the early *kerygma* and is therefore not implied in the burial.

Now while I should not want to assert that the 'he was buried' was included in the formula in order to prove the empty tomb, it seems to me that the empty tomb is implied in the sequence of events related in the formula. For in saying that Jesus died -- was buried -- was raised -- appeared, one automatically implies that the empty grave has been left behind. The four-fold *hoti* and the chronological series of events weighs against subordinating the burial to the death. {12} In baptism the burial looks *forward* with confidence to the rising again (Rom 6. 4; Col. 2. 13).{13} And even if one denied the evidence of the four-fold *hoti* and the chronological sequence, the very fact that a dead-and-buried man was raised itself implies an empty grave. Grass's assertion that the formula should read *egegertai ek tou taphou* is not so obvious when we reflect on the fact that in I Cor 15. 12 Paul does write *ek nekron egegertai*

(cf. I Thess 1. 10; Rom 10. 9; Gal 1. 1; Mt. 27. 64; 28. 7).{14} In being raised from the dead, Christ is raised from the grave. In fact the very verbs *egegertai* and *anistanai* imply that the grave is left empty.{15} The notion of resurrection is unintelligible with regard to the spirit or soul alone. The very words imply resurrection of the body. It is the dead man in the tomb who awakens and is physically raised up to live anew. Thus the grave must be empty.{16} And really, even today were we to be told that a man who died and was buried rose from the dead and appeared to his friends, only a theologian would think to ask, 'But was his body still in the grave?' How much more is this true of first century Jews, who shared a much more physical conception of resurrection than we do! {17 } Grass's argument that had Paul believed in the empty tomb, then he would have mentioned it in the second half of I Cor 15 turns back upon Grass; for if Paul did not believe in the empty tomb, as Grass contends, then why did he not mention the purely spiritual appearance of Christ to him alluded to I Cor 15. 8 as a knock-down argument for the immateriality of Christ's resurrection body? Grass can only reply that Paul did not appeal to his vision of Jesus to prove that the resurrection body would be heavenly and glorious because the meeting 'eluded all description'. {18} Not at all; Paul could have said he saw a heavenly light and heard a voice (Acts 22. 6-7; 26. 13-14). In fact the very ineffability of the experience would be a positive argument for immateriality, since a physical body is not beyond all description. Grass misunderstands Paul's intention in discussing the resurrection body in I Cor 15. 35-56. Paul does not want to prove that it is physical, for that was presupposed by everyone and was perhaps what the Corinthians protested at. He wants to prove that the body is in some sense spiritual, and thus the Corinthians ought not to dissent. Hence, the mention of the empty tomb is wholly beside the point. There is thus no reason to mention the empty tomb, but good reason to appeal to Paul's vision, which he does not do. Could it be that in the appearance to him Paul did not see a determinative answer to the nature of the resurrection body? Finally as to the absence of the empty tomb in the kerygma, the statement 'he was buried' followed by the proclamation of the resurrection indicates that the empty tomb was implied in the kerygma. The formula is a summary statement,{19} and it could very well be that Paul was familiar with the historical context of the simple statement in the formula, which would imply that he not only accepted the empty tomb, but knew of it as well. The tomb is certainly alluded to in the preaching in Acts 2. 24-32.{20} The empty tomb is also implicit in Paul's speech in Antioch of Pisidia, which follows point for point the outline of the formula in 1 Cor. 15. 3-5: ' . . . they took him down from the tree, and laid him in a tomb. But God raised him from the dead; and for many days he appeared to those who came up with him from Galilee to Jerusalem.' (Acts 13. 29-31). No first century Jew or pagan would be so cerebral as to wonder if the tomb was empty or not. That the empty tomb is not more explicitly mentioned may be simply because it was regarded as *selbstverständlich*, given the resurrection and appearances of Jesus. Or again, it may be that the evidence of the appearances so overwhelmed the testimony of legally unqualified women to the empty grave that the latter was not used as evidence. But the gospel of Mark shows that the empty tomb was important to the early church, even if it was not appealed to as evidence in evangelistic preaching. So I think it quite apparent that the formula and Paul at least *accept* the empty tomb, even if it is not explicitly *mentioned*. {21}

A second possible reference to the empty tomb is the phrase 'on the third day.' Since no one actually saw the resurrection of Jesus, how could it be dated on the third day? Some critics argue that it was on this day that the women found the tomb empty, so the resurrection came to be dated on that day. {22} Thus, the phrase 'on the third day' not only presupposes that a resurrection leaves an empty grave behind, but is a definite reference to the historical fact of Jesus' empty tomb. But of course there are many other ways to interpret this phrase: (1) The third day dates the first appearance of Jesus. (2) Because Christians assembled for worship on

the first day of the week, the resurrection was assigned to this day. (3) Parallels in the history of religions influenced the dating of the resurrections on the third day. (4) The dating of the third day is lifted from Old Testament scriptures. (5) The third day is a theological interpretation indicating God's salvation, deliverance, and manifestation. Each of these needs to be examined in turn.

1. The third day dates the first appearance of Jesus. {23} In favor of this view is the proximity of the statement 'raised on the third day in accordance with the scriptures' with 'he appeared to Cephas, then to the Twelve'. Because Jesus appeared on the third day, the resurrection itself was naturally dated on that day. The phrase 'according to the scriptures' could indicate that the Christians, having believed Christ rose on the third day, sought out appropriate proof texts. This understanding has certain plausibility, for whether the disciples remained in Jerusalem or fled to Galilee, they could have seen Jesus on the third day after his death. If it can be proved, however, that the disciples returned slowly to Galilee and saw Christ only some time later, then this view would have to be rejected. A discussion of this question must be deferred until later. Against this understanding of the third day it is sometimes urged that the Easter reports do not use the expression 'on the third day' but prefer to speak of 'the first day of the week' (Mk 16. 2; Mt. 28. 1; Lk 24. 1; Jn 20. 1, 19). {24} All the 'third day' references are in the Easter kerygma, not the Easter reports. This is said to show not only the independence of the Easter reports from the kerygma, but also that neither the empty tomb nor the appearances of Christ can be the *direct* cause of the 'third day' motif. {25}

But why could they not be the root cause? All that has been proved by the above is that the Easter reports and the Easter preaching are literarily distinct, but that cannot prove that they are not twin offshoots of an original event. The event could produce the report on the one hand; on the other hand it would set the believers a-searching in the Old Testament for fulfilled scriptures. In this search they could find and adopt the language of the third day because, according to Jewish reckoning, the first day of the week was in fact the third day after Jesus' death. {26} Scriptures in hand, they could thus proclaim 'he was raised on the third day in accordance with the Scriptures'. This language could then be used by the evangelists outside the Easter reports or actually interwoven with them, as by Luke. Thus the same root event could produce two different descriptions of the day of the resurrection. But was that event the first appearance of Jesus? Here one cannot exclude the empty tomb from playing a role, for the time reference 'the first day of the week' (= 'on the third day') refers primarily to it. If the appearances first occurred on the same day as the discovery of the empty tomb, then these two events together would naturally date the resurrection, and the 'third day' language could reflect the LXX formulation, which is found in I Cor 15. 4 and was worked into the traditions underlying the gospels. So I think it unlikely that the date 'on the third day' refers to the day of the first appearance alone.

2. Because Christians assembled on the first day of the week, the resurrection was assigned to this day. {27} Although this hypothesis once enjoyed adherents, it is now completely abandoned. Rordorf's study *Der Sonntag* has demonstrated to the satisfaction of New Testament critics that the expression 'raised on the third day' has nothing to do with Christian Sunday worship. {28} More likely would be that because the resurrection was on the third day, Christians worshipped on that day. But even though the question of how Sunday came to be the Christian special day of worship is still debated, no theory is today propounded which would date the resurrection as a result of Sunday as a worship day.

3. *Parallels in the history of religions influenced the dating of the resurrection on the third day.* {29} In the hey-day of the history of religions school, all sorts of parallels in the history of other religions were adduced in order to explain the resurrection on the third day; but today critics are more sceptical concerning such alleged parallels. The myths of dying and rising gods in pagan religions are merely symbols for processes of nature and have no connection with a real historical individual like Jesus of Nazareth. {30} The three-day motif is found only in the Osiris and perhaps Adonis cults, and, in Grass's words, it is 'completely unthinkable' that the early Christian community from which the formula stems could be influenced by such myths. {31} In fact there is hardly any trace of cults of dying and rising gods at all in first century Palestine. It has also been suggested that the three day motif reflects the Jewish belief that the soul did not depart decisively from the body until after three days. {32} But the belief was actually that the soul departed irrevocably on the fourth day, not the third; in which case the analogy with the resurrection is weaker. But the decisive count against this view is that the resurrection would not then be God's act of power and deliverance from death, for the soul had not yet decisively left the body, but merely re-entered and resuscitated it. This would thus discredit the resurrection of Jesus. If this Jewish notion were in mind, the expression would have been 'raised on the fourth day' after the soul had forever abandoned the body and all hope was gone (cf. the raising of Lazarus). Some critics have thought that the third day reference is meant only to indicate, in Hebrew reckoning, 'a short time' or 'a while'. {33} But when one considers the emphasis laid on this motif not only in the formula but especially in the gospels, then so indefinite a reference would not have the obvious significance which the early Christians assigned to this phrase.

4. *The dating of the third day is lifted from Old Testament scriptures.* {34} Because the formula reads 'on the third day *in accordance with the scriptures*' many authors believe that the third day motif is drawn from the Old Testament, especially Hos 6. 2, which in the LXX reads *te hemera te trite*. {35} Although Metzger has asserted, with appeal to I Maccabees 7. 16-17 that the 'according to the scriptures' may refer to the resurrection, not the third day, {36} this view is difficult to maintain in light, not only of the parallel in I Cor 15. 3, but especially of Lk 24. 45 where the third day seems definitely in mind. Against taking the 'on the third day' to refer to Hos 6. 2 it has been urged that no explicit quotation of the text is found in the New Testament, or indeed anywhere until Tertullian (*Adversus Judaeos* 13). {37} New Testament quotations of the Old Testament usually mention the prophet's name and are of the nature of promise-fulfillment. But nowhere do we find this for Hos 6. 2. Grass retorts that there is indirect evidence for Christian use of Hos 6. 2 in the Targum Hosea's dropping the reference to the number of days; the passage had to be altered because Christians had preempted the verse. Moreover, Jesus' own 'predictions', written back into the gospel story by believers after the event, obviated the need to cite a scripture reference. {38} But Grass's first point is not only speculative, but actually contradicted by the fact that later Rabbis saw no difficulty in retaining the third day reference in Hosea. {39} No conclusion can be drawn from Targum Hosea's change in wording, for the distinctive characteristic of this Targum is its free haggadic handling of the text. And this still says nothing about New Testament practice of citing the prophet's name. As for the second point, Matthew's citation of Jonah (Mt. 12. 40) makes this rather dubious. According to Bode, Matthew's citation is the decisive argument against Hos 6. 2, since it shows the latter was not the passage which Christians had in mind with regard to the three day motif. {40} But to my mind the greatest difficulty with the Hos 6. 2 understanding of 'on the third day' is that it necessitates that the disciples without the instigation of any historically corresponding event would find and adopt such a scripture reference. For this understanding requires that no appearances occurred and no discovery of the empty tomb was made on the third day/ first day of the week. Otherwise these events

would be the basis for the date of the resurrection, not Hos 6. 2 alone. But if there were no such events, then it is very unlikely that the disciples should land upon Hos 6. 2 and apply it to Jesus's resurrection. It is much more likely that such events should prompt them to search the scriptures for appropriate texts, which could then be interpreted in light of the resurrection (Jn 2. 22; 12, 16; 20. 8-9).{41} And insofar as the empty tomb tradition or appearance traditions prove accurate the understanding in question is undermined. For if the empty tomb was discovered on the first day of the week or Peter saw Jesus on the third day, then the view that 'the third day' was derived solely from scripture is untenable. At most one could say that the language of the LXX was applied to these events. The falsity of the gospel traditions concerning both the discovery of the empty tomb and the day of the first appearance is thus a *sine qua non* for the Hos 6. 2 understanding, and hence should either of these traditions prove accurate, the appeal to Hos 6. 2 as the *basis* (as opposed to the *language*) for the date of the resurrection must be rejected.

5. *The third day is a theological interpretation indicating God's salvation, deliverance, and manifestation.* {42} This understanding is, I think, the only serious alternative to regarding the third day motif as based on the historical events of the resurrection, and it has been eloquently expounded by Lehmann and supported by Bode and McArthur as well. To begin with, there are nearly 30 passages in the LXX that use the phrase *te hemera te trite* to describe events that happened on the third day.{43} On the third day Abraham offered Isaac (Gen. 22. 4; cf. Gen. 34. 25; 40. 20). On the third day Joseph released his brothers from prison (Gen. 42. 18). After three days God made a covenant with his people and gave the law (Ex 19. 11, 16; cf. Lev 8. 18; Num. 7. 24; 19. 12, 19; Judg 19. 8; 20. 30). On the third day David came to Ziklag to fight the Amalekites (I Sam 30. 1) and on the third day thereafter heard the news of Saul and Jonathan's death (2 Sam 1, 2). On the third day the kingdom was divided (I Kings 12. 24; cf. 2 Chron 10. 12). On the third day King Hezekiah went to the House of the Lord after which he was miraculously healed (2 Kings 20. 5, 8). On the third day Esther began her plan to save her people (Esther 5. 1; cf. 2 Mace II. 18). The only passage in the prophets mentioning the third day is Hos 6. 2. Thus, the third day is a theologically determined time at which God acts to bring about the new and the better, a time of life, salvation, and victory. On the third day comes resolution of a difficulty through God's act.

A second step is to consider the interpretation given to such passages in Jewish Midrash (Midrash Rabbah, Genesis [Mikketz] 91. 7; Midrash Rabbah, Esther 9. 2; Midrash Rabbah, Deuteronomy [Ki Thabo] 7. 6; Midrash on Psalms 22. 5).{44} From Jewish Midrash it is evident that the third day was the day when God delivered the righteous from distress or when events reached their climax. It is also evident that Hos 6. 2 was interpreted in terms of resurrection, albeit at the end of history. The mention of the offering of Isaac on the third day is thought to have had a special influence on Christian thought, as we shall see.

A third step in the argument is comparison of other Rabbinical literature concerning the third day with regard to the resurrection (Targum Hosea 6. 2; B. Sanhedrin 97a; B. Rosh Hashanah 3 la; P. Berakoth S. 2; P. Sanhedrin 11. 6; Pirkê de Rabbi Eliezer 51. 73b-74a; Tanna de-be Ehyahu, p. 29).{45} These passages make it evident that the rabbis were interpreting Hos 6. 2 in the sense of an eschatological resurrection.

Now according to Lehmann, when one brings together the testimonies of the Midrash Rabbah, the rabbinic writings, and the passages from the LXX, then it becomes highly probable that I Cor 15. 4 can be illuminated by these texts and their theology. Of particular importance here is the sacrifice of Isaac, which grew to have a great meaning for Jewish theology.{46} In pre-

Christian Judaism the sacrifice of Isaac was already brought into connection with the Passover. He became a symbol of submission and self-sacrifice to God. The offering of Isaac was conceived to have salvific worth. In the blood of the sacrifices, God saw and remembered the sacrifice of Isaac and so continued His blessing of Israel. This exegesis of Gen. 22 leaves traces in Rom 4. 17, 25; 8. 32 and Heb 11. 17-19. This last text particularly relates the resurrection of Jesus to the sacrifice of Isaac. When we consider the formula in I Cor 15, with its Semitic background, then it is much more probable that the expression 'on the third day' reflects the influence of Jewish traditions that later came to be written in the Talmud and Midrash than that it refers to Hos 6. 2 alone as a proof text. Thus, 'on the third day' does not mark the discovery of the empty tomb or the first appearance, nor is it indeed any time indicator at all, but rather it is the day of God's deliverance and victory. It tells us that God did not leave the Righteous One in distress, but raised him up and so ushered in a new eon.

Lehmann's case is well-documented and very persuasive; but doubt begins to arise when we consider the *dates* of the citations from Talmud and Midrash.^{47} For all of them are hundreds of years later than the New Testament period. Midrash Rabbah, which forms the backbone of Lehmann's case, is a collection from the fourth to the sixth centuries. Pirkê de Rabbi Eliezer is a collection from the outgoing eighth century. The Midrash on Psalm 22 contains the opinions of the Amoraim, rabbinical teachers of the third to the fifth centuries. The Babylonian Talmud and the so-called Jerusalem Talmud are the fruit of the discussions and elaborations of these Amoraim on the Mishnah, which was redacted, arranged, and revised by Rabbi Judah ha-Nasi about the beginning of the third century. The Mishnah itself, despite its length, never once quotes Hos 6. 2; Gen. 22. 4; 42. 17; Jonah 2. 1; or any other of the passages in question which mention the third day. The Targum on Hosea, says McArthur, is associated with Jonathan b. Uzziel of the first century; but this ascription is quite uncertain and in any case tells us nothing concerning Hos 6. 2 in particular, since the Targum as a whole involves a confluence of early and late material. Thus all the citations concerning the significance of the third day and interpreting Hos 6. 2 in terms of an eschatological resurrection may well stem from literature centuries removed from the New Testament period,

Lehmann believes that these citations embody traditions that go back orally prior to the Christian era. But if that is the case then should not we expect to confront these motifs in Jewish literature contemporaneous with the New Testament times, namely, the Apocrypha and Pseudepigrapha? One would especially expect to confront the third day motif in the apocalyptic works. In fact, it is conspicuously absent. The book of I Enoch, which is quoted in Jude, had more influence on the New Testament writers than any other apocryphal or pseudepigraphic work and is a valuable source of information concerning Judaism from 200 BC to AD 100. In this work the eschatological resurrection is associated with the number seven, not three (91. 15-16; 93). Similarly in 4 Ezra, a first century compilation, the eschatological resurrection takes place after seven days (7. 26-44). A related work from the second half of the first century and a good representative of Jewish thought contemporaneous with the New Testament, 2 Baruch gives no indication of the day of the resurrection at history's end (50-51). Neither does 2 Macc 7. 9-42; 12. 43-45 or the Testament of the Twelve Patriarchs (Judah) 25. 1, 4; (Zebulun) 10. 2; (Benjamin) 10. 6-18. All these works, which stem from intertestamental or New Testament times, have a doctrine of eschatological resurrection, but not one of them knows of the third day motif. Evidently the number seven was thought to have greater divine import than the number three (cf. Rev 1. 20; 6. 1; 8. 2; 15. 1, 7). In 2 Macc 5. 14; 11. 18 we find 'three days' and 'third day' mentioned in another context, but their meaning is wholly non-theological, indicating only 'a short time' or 'the day after tomorrow'. Lehmann's case would be on firmer ground if he were able to find passages in

Jewish literature contemporary with the New Testament which employ the third day motif or associate the resurrection with the third day. It appears that this interpretation is a peculiarity of later rabbinical exegesis of the Talmudic period.

Moreover, there is no indication that the New Testament writers were aware of such exegesis. Lehmann states that the conception of the offering of Isaac as a salvific event is characteristic of the New Testament. But this is not the question; the issue is whether the interpretation of the offering of Isaac *on the third day* plays a role in the New Testament. Here the evidence is precisely to the contrary: Rom 4. 17, 25 not only have nothing to do with the offering of Isaac (it is to Gen. 15, not 22 that Paul turns for his doctrine of justification by faith), but refer to Jesus's resurrection without mentioning the third day; Rom 8. 32 makes no explicit mention of Isaac and no mention, implicit or explicit, of the resurrection, not to speak of the third day; Heb 11. 17-19 does not in fact explicitly use Isaac as a type of Christ, but more importantly does not in any way mention the third day. This latter passage seems to be crucial, for in this passage, of all places, one would expect the mention of the third day theme in connection with the resurrection. But it does not appear. This suggests that the connection of the sacrifice of Isaac with a third day motif was not yet known. In the other passage in which the offering of Isaac is employed (Jas 2. 21-23), there is also no mention of the third day motif. (And James even goes on to use the illustration of Rahab the harlot and the spies, again without mentioning the three day theme, as did later Rabbinic exegesis.) Hence, the appeal to the offering of Isaac as evidence that the New Testament knows of the rabbinic exegesis concerning the theological significance of the third day is counter-productive.

Finally, Lehmann's interpretation labors under the same difficulty as did the appeal to Hos 6. 2 alone; namely, in order for this interpretation to be true, the traditions of the discovery of the empty tomb and of the time of the first appearances *must* be false. For if these events did occur on the third day/first day of the week, this would undoubtedly have affected the early believers' dating of those events. But then the dating cannot be wholly ascribed to theological motifs. If we say that the traditions are false, the question then becomes whether the disciples would have adopted the language of the third day. For suppose the first appearance of Christ was to Peter, say, a week later as he was fishing in Galilee. Would the believers then say that Jesus was raised on the third day rather than the seventh? Lehmann says yes; for the 'third day' is not meant in any sense as a time indicator, but is a purely theological concept. But were the disciples so speculative? Certainly Luke understands the third day as a time indicator, for he writes 'But on the first day of the week ... That very day ... it is now the third day ... the Christ should suffer and on the third day rise from the dead' (Lk 24. 1, 13, 21, 46). Lehmann and Bode's response is that Luke as a Gentile did not understand the theological significance of the third day, which would have been clear to his Jewish contemporaries, and so mistook it as a time indicator. {48} This cannot but make one feel rather uneasy about Lehmann's hypothesis, for it involves isolating Luke from all his Jewish contemporaries. And I suspect that this dichotomy between historical understanding and theological significance is an import from the twentieth century. The Rabbis cited in the Talmud and Midrash no doubt believed both that the events in question really happened on the third day and that they were theologically significant, for they include in their lists of events that occurred on the third day not only events in which the third day was important theologically (as in the giving of the law) but also events in which the third day was not charged with theological significance (as in Rahab and the spies). There is no reason to think that the New Testament writers did not think Jesus actually rose on the third day; John, for example, certainly seems to take the three day figure as a time indicator by contrasting it with the 46 years it took to build the temple (Jn 2. 20). But in this case, it is doubtful that they would have adopted the language of the third

day unless the Easter events really did take place on the third day. This suggests that while the LXX may have provided the *language* for the dating of the resurrection, the historical events of Easter provided the *basis* for dating the resurrection. The events of Easter happened on 'the first day of the week', but the language of 'the third day' was adopted because (1) the first day of the week was in fact the third day subsequent to the crucifixion, and (2) the third day in the LXX was a day of climax and of God's deliverance.

I think this is the most likely account of the matter. This means that the phrase 'on the third day' in the formula of I Cor 15 is a time indicator for the events of Easter, including the empty tomb, employing the language of the Old Testament concerning God's acts of deliverance and victory on the third day, perhaps with texts like Jonah 2. 11 and Hos 6. 2 especially in mind. The phrase is, in Liechtenstein's words, a fusion of historical facts plus theological tradition. {49}

There can be little doubt, therefore, that Paul accepted the idea of an empty tomb as a matter of course. But did he know the empty tomb of Jesus? Here we must go outside the confines of I Cor 15 and take a larger view of the historical context in which Paul moved. We know from Paul's own letters that Paul was in Jerusalem three years after his conversion, and that he stayed with Peter two weeks and also spoke with James (Gal 1. 18-19). We know that fourteen years later he was again in Jerusalem and that he ministered with Barnabas in Antioch (Gal 2. 1, I 1). We know that he again was later traveling to Jerusalem with financial relief for the brethren there (Rom 15. 25; 1 Cor 16. 3; 2 Cor 8-9). Furthermore, his letters testify to his correspondence with his various churches, and his personal references make it clear that he had a team of fellow workers like Titus, Timothy, Silas, Aristarchus, Justus, and others who kept him well-informed on the situation in the churches; he also received personal reports from other believers, such as Chloe's people (I Cor 1. 11). Paul knew well not only the aberrations of the churches (Gal; I Cor 15. 29), but also the context of the traditions he delivered (I Cor 11. 23-26). Therefore, if the gospel accounts of the empty tomb embody old traditions concerning its discovery, it is unthinkable that Paul would not know of it. If Mark's narrative contains an old tradition coming out of the Jerusalem community, then Paul would have had to be a recluse not to know of it. This point seems so elementary, but it is somehow usually overlooked by even those who hold that Mark embodies old traditions. If the tradition of the empty tomb is old then *somebody* would have told Paul about it. But even apart from the Markan tradition, Paul must have known the empty tomb. Paul certainly *believed* that the grave was empty. Therefore Peter, with whom Paul spoke during those two weeks in Jerusalem, must also have believed the tomb was empty. A Jew could not think otherwise. Therefore, the Christian community also, of which Peter was the leader, must have believed in the empty tomb. But that can only mean that the tomb was empty. For not only would the disciples not believe in a resurrection if the corpse were still in the grave, but they could never have proclaimed the resurrection either under such circumstances. But if the tomb was empty, then it is unthinkable that Paul, being in the city for two weeks six years later and after that often in contact with the Christian community there, should never hear a thing about the empty tomb. Indeed, is it too much to imagine that during his two week stay Paul would want to visit the place where the Lord lay? Ordinary human feelings would suggest such a thing. {50} So I think that it is highly probable that Paul not only accepted the empty tomb, but that he also knew that the actual grave of Jesus was empty.

With this conclusion in hand, we may now proceed to the gospel accounts of the discovery of the empty tomb to see if they supply us with any additional reliable information. Found in all four gospels, the empty tomb narrative shows sure evidence of traditional material in the

agreement between the Synoptics and John. It is certain that traditions included that on the first day of the week women, at least Mary Magdalene, came to the tomb early and found the stone taken away; that they saw an angelic appearance; that they informed the disciples, at least Peter, who went, found the tomb empty with the grave clothes lying still in the grave, and returned home puzzled; that the women saw a physical appearance of Jesus shortly thereafter; and that Jesus gave them certain instructions for the disciples. Not all the Synoptics record all these traditions; but John does, and at least one Synoptic confirms each incident; thus, given John's independence from the Synoptics, these incidents are traditional. That is not to say they are historical.

The story of the discovery of the empty tomb was in all likelihood the conclusion or at least part of the pre-Markan passion story.^{51} About the only argument against this is the juxtaposition of the lists in Mk 15. 47 and 16. 1, which really affords no grounds for such a conclusion at all.^{52} At the very most, this could only force one to explain one or the other as an editorial addition; it would not serve to break off the empty tomb story from the passion narrative.^{53} The most telling argument in favor of 16. 1-8's belonging to the passion story is that it is unthinkable that the passion story could end in defeat and death with no mention of the empty tomb or resurrection. As Wilckens has urged, the passion story is incomplete without victory at the end.^{54} Confirmation of the inclusion of 16. 1-8 in the pre-Markan passion story is the remarkable correspondence to the course of events described in I Cor 15: died -- was buried -- rose -- appeared; all these elements appear in the pre-Markan passion story, including Christ's appearance (v. 7). Thus, there are strong reasons for taking the empty tomb account as part of the pre-Markan passion story.

Like the burial story, the account of the discovery of the empty tomb is remarkably restrained. Bultmann states, ' . . . Mark's presentation is extremely reserved, in so far as the resurrection and the appearance of the risen Lord are not recounted.' ^{55} Nauck observes that many theological motifs that might be expected are lacking in the story: (1) the proof from prophecy, (2) the in-breaking of the new eon, (3) the ascension of Jesus' Spirit or his descent into hell, (4) the nature of the risen body, and (5) the use of Christological titles.^{56} Although kerygmatic speech appears in the mouth of the angel, the fact of the discovery of the empty tomb is not kerygmatically colored. All these factors point to a very old tradition concerning the discovery of the empty tomb.

Mark begins the story by relating that when the Sabbath was past (Saturday night), the women bought spices to anoint the body. The next morning they went to the tomb. The women's intention to anoint the body has caused no end of controversy. It is often assumed that the women were coming to finish the rushed job done by Joseph on Friday evening; John, who has a thorough burial, mentions no intention of anointing. It is often said that the 'Eastern climate' would make it impossible to anoint a corpse after three days. And it would not have violated Sabbath law to anoint a body on the Sabbath, instead of waiting until Sunday (Mishnah Shabbat 23. 5). Besides, the body had been already anointed in advance (Mk 14. 8). And why do the women think of the stone over the entrance only after they are underway? They should have realized the venture was futile.

But what in fact were the women about? There is no indication that they were going to complete a task poorly done. Mark gives no hint of hurry or incompleteness in the burial. That Luke says the women saw 'how' the body was laid (Lk 29. 55) does not imply that the women saw a lack which they wished to remedy; it could mean merely they saw that it was laid in a tomb, not buried, thus making possible a visit to anoint the body. The fact that John does not

mention the intention of anointing proves little, since Matthew does not mention it either. So there seems to be no indication that the women were going to complete Jesus' burial. In fact what the women were probably doing is precisely that described in the Mishnah, namely the use of aromatic oils and perfumes that could be rubbed on or simply poured over the body.{57} Even if the corpse had begun to decay, that would not prevent this simple act of devotion by these women. This same devotion could have induced them to go together to open the tomb, despite the stone. (That Mark only mentions the stone here does not mean they had not thought of it before; it serves a literary purpose here to prepare for v. 4). The opening of tombs to allow late visitors to view the body or to check against apparent death was Jewish practice,{58} so the women's intention was not extraordinary. It is true that anointing could be done on the Sabbath, but this was only for a person lying on the death bed in his home, not for a body already wrapped and entombed in a sealed grave outside the city. Blinzler points out that, odd as it may seem, it would have been against the Jewish law even to carry the *aromata* to the grave site, for this was 'work' (Jer 17. 21-22; Shabbath 8. 1)!{59} Thus, Luke's comment that the women rested on the Sabbath would probably be a correct description. Sometimes it is asserted that Matthew leaves out the anointing motif because he realized one could not anoint a corpse after three days in that climate. But Mark himself, who lived in the Mediterranean climate, would surely also realize this fact, if indeed it be true.{60} Actually, Jerusalem, being 700 metres above sea level, can be quite cool in April; interesting is the entirely incidental detail mentioned by John that at night in Jerusalem at that time it was cold, so much so that the servants and officers of the Jews had made a fire and were standing around it warming themselves (Jn 18. 18). Add to this the facts that the body, interred Friday evening, had been in the tomb only a night, a day, and a night when the women came to anoint it early Sunday morning, that a rock-hewn tomb in a cliff side would stay naturally cool, and that the body may have already been packed around with aromatic spices, and one can see that the intention to anoint the body cannot in any way be ruled out.{61} The argument that it had been anointed in advance is actually a point in favor of the historicity of this intention, for after 14. 8 Mark would never invent such a superfluous and almost contradictory intention for the women.

The gospels all agree that around dawn the women visited the tomb. Which women? Mark says the two Maries and Salome; Matthew mentions only the two Maries; Luke says the two Maries, Joanna, and other women; John mentions only Mary Magdalene. There seems to be no difficulty in imagining a handful of women going to the tomb. Even John records Mary's words as 'we do not know where they have laid him'(Jn 20. 2). It is true that Semitic usage could permit the first person plural to mean simply 'I' (cf. Jn 3. 11, 32), but not only does this seem rather artificial in this context, but then we would expect the plural as well in v. 13.{62} In any case, this ignores the Synoptic tradition and makes only an isolated grammatical point. When we have independent traditions that women visited the tomb, then the weight of probability falls decisively in favor of Mary's 'we' being the remnant of a tradition of more than one woman. John has perhaps focused on her for dramatic effect.

Arriving at the tomb the women find the stone rolled away. According to the Synoptics the women actually enter the tomb and see an angelic vision. John, however, says Mary Magdalene runs to find Peter and the Beloved Disciple, and only after they come and go from the tomb does she see the angels. Mark's young man is clearly intended to be an angel, as is evident from his white robe and the women's reaction.{63} Although some critics want to regard the angel as a Markan redaction, the exclusion of the angelophany from the pre-Markan passion story is arbitrary, since the earliest Christians certainly believed in the reality of angels and demons and would not hesitate to relate such an account as embodied in vs. 5-

8.{64} And John confirms that there was a tradition of the women's seeing angels at the tomb, especially in light of the fact that he keeps the angels in his account even though their role is oddly superfluous. {65}

Many scholars wish to see v. 7 as a Markan interpolation into the pre-Markan tradition.{66} But the evidence for this seems remarkably weak, in my opinion.{67} The fundamental reason for taking 16. 7 as an insertion is the belief that 14. 28 is an insertion, to which 16. 7 refers. But what is the evidence that 14. 28 is an interpolation? The basic argument is that vs. 27 and 29 read smoothly without it.{68} This, however, is the weakest of reasons for suspecting an insertion (especially since the verses read just as smoothly when v. 28 is left in!), for the fact that a sentence can be dropped out of a context without destroying its flow may be entirely coincidental and no indication that the sentence was not originally part of that context. In fact there are positive reasons for believing 14. 28 is not an insertion.{69} It is futile to object that in 14. 29 Peter only takes offense at v. 27, not v. 28, for of course he objects only to Jesus' telling him they will all fall away, and not to Jesus' promise to go before them (cf. the same pattern in 8. 31-32). On this logic one would have to leave out not only the prediction of the resurrection, but also the striking of the shepherd, since Peter jumps over that as well. There thus seem to be no good reasons to regard 14. 28 as a redactional insertion and positive reasons to see it as firmly welded in place.{70} This means that 16. 7 is also in place in the pre- Markan tradition of the passion story. The content of the verse reveals the knowledge of a resurrection appearance of Christ to the disciples and Peter in Galilee.

Mk 16. 8 has caused a great deal of consternation, not only because it seems to be a very odd note on which to end a book, but also because all the other gospels agree that the women did report to the disciples. But the reaction of fear and awe in the presence of the divine is a typical Markan characteristic.{71} The silence of the women was surely meant just to be temporary,{72} otherwise the account itself could not be part of the pre-Markan passion story.

According to Luke the disciples do not believe the women's report (Lk 24. 11). But Luke and John agree that Peter and at least one other disciple rise and run to the tomb to check it out (Lk 24. 12, 24; Jn 20. 2-10). Although Lk 24. 12 was regarded by Westcott and Hort as a Western noninterpolation, its presence in the later discovered P⁷⁵ has convinced an increasing number of scholars of its authenticity. That Luke and John share the same tradition is evident not only from the close similarity of Lk 24. 12 to John's account, but also from the fact that Jn 20. 1 most nearly resembles Luke in the number, selection, and order of the elements narrated than any other gospel.{73}

Lk 24. 24 makes it clear that Peter did not go to the tomb alone; John names his companion as the Beloved Disciple. This would suggest that John intends this disciple to be a historical person, and his identification could be correct.{74} The authority of the Beloved Disciple stands behind the gospel as the witness to the accuracy of what is written therein (Jn 21. 24; the verse certainly applies to the gospel as a whole, not just the epilogue, for the whole gospel enjoys the authentication of this revered disciple, not merely a single chapter{75}), and the identification of his role in the disciples' visit to the empty tomb could be the reminiscence of an eyewitness. So although only Peter was named in the tradition, accompanied by an anonymous disciple, the author of the fourth gospel claimed to know who this unnamed disciple was and identifies him. The Beloved Disciple is portrayed as a real historical person who went with Peter to the empty tomb and whose memories stand behind the fourth gospel as their authentication.

If the Beloved Disciple in chap. 20 is then conceived as a historical person, is his presence an unhistorical, redactional addition? Schnackenburg thinks that few words need to be said to prove that he is an unhistorical addition: in vs. 2, 3 he is easily set aside, the competitive race to the tomb is redactional, v. 9 is in style and content from the evangelist, and v. 9 refers in reality to Mary and Peter.^{76} But these considerations do not prove that the Beloved Disciple was not historically present, but only that he was not mentioned in the particular tradition. That could have been proved from Lk 24. 12 alone. What I am suggesting is that the reminiscences of the Beloved Disciple are employed by the evangelist to supplement and fill out his tradition. Thus the first three considerations ought not to surprise us. Indeed, the third consideration supports the fact that the Beloved Disciple's role here was not added later to the gospel by any supposed editor who tacked on chap. 21. That *hon ephilei* instead of *hon egapa* is used in v. 2 also indicates that the evangelist himself wrote these words and not a later redactor. In fact the unity and continuity of vs. 2-10 preclude that the evangelist wrote only of Peter and Mary's visit and that the Beloved Disciple was artfully inserted by a later editor. Lk 24. 24 reveals that Peter did not go to the tomb alone, so one cannot exclude that the Beloved Disciple went with him. As for v. 9, it plainly refers to the disciples in v. 10 (Mary is not even mentioned after v. 2) and is not part of the pre-Johannine tradition, being typical for John (cf. 2. 22; 12. 16). Thus, the evangelist, who knew the Beloved Disciple and wrote on the basis of his memories, includes his part in these events. If it be said that the evangelist simply invented the figure of the Beloved Disciple, 21. 24 becomes a deliberate falsehood, the close affinities between chaps. 1-20 and 21 are ignored, it becomes difficult to explain how then the person of the Beloved Disciple should come to exist and why he is inserted in the narratives, and the widespread concern over his death becomes unintelligible. The evangelist and the gospel certainly stem out of the same circle that appended chap. 21 and adds its signature in 21. 24c. Therefore, it seems to me, the role of the Beloved Disciple in 20. 2-10 can only be that of a historical participant whose memories fill out the tradition received. There seems to be no plausible way of denying the historicity of the Beloved Disciple's role in the visit to the empty tomb.^{77}

It might be urged against the historicity of the disciples' visit to the tomb that the disciples had fled Friday night to Galilee and so were not present in Jerusalem. But not only does Mk 14. 50 not contemplate this, but it seems unreasonable to think that the disciples, fleeing from the garden, would return to where they were staying, grab their things, and keep on going all the way back to Galilee. And scholars who support such a flight must prove that the denial of Peter is unhistorical, since it presupposes the presence of the disciples in Jerusalem. But there is no reason to regard this tradition, attested in all four gospels, as unhistorical.^{78} In its favor is the fact that it is improbable that the early Christians should invent a tale concerning the apostasy of the man who was their leader.

Sometimes it is said that the disciples could not have been in Jerusalem, since they are not mentioned in the trial, execution, or burial stories. But could it not be that the disciples were hiding for fear of the Jews, just as the gospels indicate? There is no reason why the passion story would want to portray the church's leaders as cowering in seclusion while only the women dared to venture about openly, were this not historical; the disciples could have been made to flee to Galilee while the women stayed behind. This would even have had the advantage of making the appearances unexpected by keeping the empty tomb unknown to the disciples. But, no, the pre-Markan passion story says, 'But go, tell his disciples and Peter that he is going before you to Galilee; there you will see him . . .'(Mk 16. 7). So the disciples were probably in Jerusalem, but lying low. Besides this, it is not true that the disciples are missing entirely from the scene. All the gospels record the denial of Peter while the trial of Jesus was

proceeding; John adds that there was another disciple with him, perhaps the Beloved Disciple (Jn 18. 15). According to Luke, at the execution of Jesus, 'all his acquaintances ... stood at a distance and saw these things' (Lk 23. 49). John says that the Beloved Disciple was at the cross with Jesus' mother and bore witness to what happened there (Jn 19. 26-27, 35). Attempts to interpret the Beloved Disciple as a symbol here or to lend a purely theological meaning to the passage are less than convincing. So it is not true that the disciples are completely absent during the low point in the course of events prior to the resurrection. There are therefore a good number of traditions that the disciples were in Jerusalem during the weekend; that at least two of them visited the tomb cannot therefore be excluded.

It is often asserted that the story of the disciples' visit to the tomb is an apologetic development designed to shore up the weak witness of the women. Not only does there seem to be no proof for this, but against it stand the traditions that the disciples were in Jerusalem. For if the women did find the tomb empty on Sunday morning, and reported this to the disciples, then it is implausible that the disciples would sit idly by not caring to check out the women's news. That one or two of them should run back to the tomb with the women, even if only to satisfy their doubts that the women were mistaken, is very likely. Hence, attempts to dismiss the empty tomb narratives as unhistorical legends are not only insufficiently supported by the evidence, but contain positive implausibilities.

Having examined the testimony of Paul and the gospels concerning the empty tomb of Jesus, what is the evidence in favor of its historicity?

1. Paul's testimony implies the historicity of the empty tomb. Few facts could be more certain than that Paul at least *believed* in the empty tomb. But the question now presses, how is it historically possible for the apostle Paul to have presupposed so confidently the empty tomb of Jesus if in fact the tomb were not empty? Paul was in Jerusalem six years after the events themselves. The tomb must have been empty by then. But more than that, Peter, James, and the other Christians in Jerusalem with whom Paul spoke must have also accepted that the tomb was found empty at the resurrection. It would have been impossible for the resurrection faith to survive in face of a tomb containing the corpse of Jesus. The disciples could not have adhered to the resurrection; even if they had, scarcely any one would have believed them; and their Jewish opponents could have exposed the whole affair as a poor joke by displaying the body of Jesus. Moreover, all this aside, had the tomb not been empty, then Christian theology would have taken an entirely different route than it did, trying to explain how resurrection could still be possible, though the body remained in the grave. But neither Christian theology nor apologetics ever had to face such a problem. It seems inconceivable that Pauline theology concerning the bodily resurrection could have taken the direction that it did had the tomb not been empty from the start. But furthermore, we have observed that the 'he was raised' in the formula corresponds to the empty tomb pericope in the gospels, the *egegertai* mirroring the *egerthe*. This makes it likely that the empty tomb tradition stands behind the third element of the formula, just as the burial tradition stands behind the second. Two conclusions follow. First, the tradition that the tomb was found empty must be reliable. For time was insufficient for legend to accrue, and the presence of the women witnesses in the *Urgemeinde* would prevent it. Second, Paul no doubt knew the tradition of the empty tomb and thus lends his testimony to its reliability. If the discovery of the empty tomb is not historical then it seems virtually inexplicable how both Paul and the early formula could accept it.

2. The presence of the empty tomb pericope in the pre-Markan passion story supports its historicity. The empty tomb story was part of, perhaps the close of, the pre-Markan passion

story. According to Pesch, {79} geographical references, personal names, and the use of Galilee as a horizon all point to Jerusalem as the fount of the pre-Markan passion story. As to its age, Paul's Last Supper tradition (I Cor 11. 23-25) presupposes the pre-Markan passion account; therefore, the latter must have originated in the first years of existence of the Jerusalem *Urgemeinde*. Confirmation of this is found in the fact that the pre-Markan passion story speaks of the 'high priest' without using his name (14. 53, 54, 60, 61, 63). This implies (nearly necessitates, according to Pesch) that Caiaphas was still the high priest when the pre-Markan passion story was being told, since then there would be no need to mention his name. Since Caiaphas was high priest from A.D. 18-37, the *terminus ante quem* for the origin of the tradition is A.D. 37. Now if this is the case, then any attempt to construe the empty tomb account as an unhistorical legend is doomed to failure. It is astounding that Pesch himself can try to convince us that the pre-Markan empty tomb story is a fusion of three *Gattungen* from the history of religions: door-opening miracles, epiphany stories, and stories of seeking but not finding persons who have been raised from the dead! {80} On the contrary: given the age (even if not as old as Pesch argues) and the vicinity of origin of the pre-Markan passion story, it seems more plausible to regard the empty tomb story as substantially accurate historically.

3. *The use of 'the first day of the week' instead of 'on the third day' points to the primitiveness of the tradition.* The tradition of the discovery of the empty tomb must be very old and very primitive because it lacks altogether the third day motif prominent in the kerygma, which is itself extremely old, as evident by its appearance in I Cor 15. 4. If the empty tomb narrative were a late and legendary account, then it could hardly have avoided being cast in the prominent, ancient, and accepted third day motif. {81} This can only mean that the empty tomb tradition ante-dates the third day motif itself. Again, the proximity of the tradition to the events themselves makes it idle to regard the empty tomb as a legend. It makes it highly probable that on the first day of the week the tomb was indeed found empty.

4. *The nature of the narrative itself is theologically unadorned and nonapologetic.* The resurrection is not described, and we have noted the lack of later theological motifs that a late legend might be expected to contain. This suggests the account is primitive and factual, even if dramatization occurs in the role of the angel. Very often contemporary theologians urge that the empty tomb is not a historical proof for the resurrection because for the disciples it was in itself ambiguous and not a proof. But that is precisely why the empty tomb story is today so credible: because it was not an apologetic device of early Christians; it was, as Wilckens nicely puts it, 'a trophy of God's victory'. {82} The very fact that they saw in it no proof ensures that the narrative is substantially uncolored by apologetic motifs and in its primitive form.

5. *The discovery of the tomb by women is highly probable.* Given the low status of women in Jewish society and their lack of qualification to serve as legal witnesses, {83} the most plausible explanation, in light of the gospels' conviction that the disciples were in Jerusalem over the weekend, why women and not the male disciples were made discoverers of the empty tomb is that the women were in fact the ones who made this discovery. This conclusion is confirmed by the fact that there is no reason why the later Christian church should wish to humiliate its leaders by having them hiding in cowardice in Jerusalem, while the women boldly carry out their last devotions to Jesus' body, unless this were in fact the truth. Their motive of anointing the body by pouring oils over it is entirely plausible; indeed, its apparent conflict with Mk 14. 8 makes it historically probable that this was the reason why the women went to the tomb. Furthermore, the listing of the women's names again precludes unhistorical

legend at the story's core, for these persons were known in the *Urgemeinde* and so could not be associated with a false account.

6. *The investigation of the empty tomb by the disciples is historically probable.* Behind the fourth gospel stands the Beloved Disciple, whose reminiscences fill out the traditions employed. The visit of the disciples to the empty tomb is therefore attested not only in tradition but by this disciple. His testimony has therefore the same first hand character as Paul's and ought to be accepted as equally reliable. The historicity of the disciples' visit is also made likely by the plausibility of the denial of Peter tradition, for if he was in Jerusalem, then having heard the women's report he would quite likely check it out. The inherent implausibility of and absence of any evidence for the disciples' flight to Galilee render it highly likely that they were in Jerusalem, which fact makes the visit to the tomb also likely.

7. *It would have been impossible for the disciples to proclaim the resurrection in Jerusalem had the tomb not been empty.* The empty tomb is a *sine qua non* of the resurrection. The notion that Jesus rose from the dead with a new body while his old body lay in the grave is a purely modern conception. Jewish mentality would never have accepted a division of two bodies, one in the tomb and one in the risen life. {84} When therefore the disciples began to preach the resurrection in Jerusalem, and people responded, and the religious authorities stood helplessly by, the tomb must have been empty. The fact that the Christian fellowship, founded on belief in Jesus' resurrection, could come into existence and flourish in the very city where he was executed and buried seems to be compelling evidence for the historicity of the empty tomb.

8. *The Jewish polemic presupposes the empty tomb.* From Matthew's story of the guard at the tomb (Mt. 27. 62-66; 28. 11-15), which was aimed at refuting the widespread Jewish allegation that the disciples had stolen Jesus' body, we know that the disciples' Jewish opponents did not deny that Jesus' tomb was empty. When the disciples began to preach that Jesus was risen, the Jews responded with the charge that the disciples had taken away his body, to which the Christians retorted that the guard would have prevented any such theft. The Jews then asserted that the guard had fallen asleep and that the disciples stole the body while the guard slept. The Christian answer was that the Jews had bribed the guard to say this, and so the controversy stood at the time of Matthew's writing. The whole polemic presupposes the empty tomb. Mahoney's objection, that the Matthaean narrative presupposes only the preaching of the resurrection, and that the Jews argued as they did only because it would have been 'colorless' to say the tomb was unknown or lost, fails to perceive the true force of the argument. {85} The point is that the Jews did not respond to the preaching of the resurrection by pointing to the tomb of Jesus or exhibiting his corpse, but entangled themselves in a hopeless series of absurdities trying to explain away his empty tomb. The fact that the enemies of Christianity felt obliged to explain away the empty tomb by the theft hypothesis shows not only that the tomb was known (confirmation of the burial story), but that it was *empty*. (Oddly enough, Mahoney contradicts himself when he later asserts that it was more promising for the Jews to make fools of the disciples through the gardener-misplaced-the-body theory than to make them clever hoaxers through the theft hypothesis. {86} So it was not apparently the fear of being 'colorless' that induced the Jewish authorities to resort to the desperate expedient of the theft hypothesis.) The proclamation 'He is risen from the dead' (Mt. 27. 64) prompted the Jews to respond, 'His disciples ... stole him away' (Mt. 28. 13). Why? The most probable answer is that they could not deny that his tomb was empty and had to come up with an alternative explanation. So they said the disciples stole the body, and from there the polemic began. Even the gardener hypothesis is an attempt to

explain away the empty tomb. The fact that the Jewish polemic never denied that Jesus' tomb was empty, but only tried to explain it away is compelling evidence that the tomb was in fact empty.

Taken together these eight considerations furnish powerful evidence that the tomb of Jesus was actually found empty on Sunday morning by a small group of his women followers. As a plain historical fact this seems to be amply attested. As Van Daalen has remarked, it is extremely difficult to object to the fact of the empty tomb on historical grounds; most objectors do so on the basis of theological or philosophical considerations.^{87} But these, of course, cannot change historical fact. And, interestingly, more and more New Testament scholars seem to be realizing this fact; for today, many, if not most, exegetes would defend the historicity of the empty tomb of Jesus, and their number continues to increase.^{88}

NOTES

^{1} This research was funded through a grant from the Alexander von Humboldt Foundation and conducted at the Universität München and Cambridge University.

^{2} F.Gutwenger, 'Auferstehung und Auferstehungsleib Jesu', *ZKT* 9 (1969) 32.

^{3} See Rudolph Bultmann, 'Neues Testament und Mythologie', in *Kerygma und Mythos 1*, ed. Hans-Werner Bartsch, 5th ed., TF I (Hamburg: Herbert Reich, 1967) 44-8. Very typical is R. H. Fuller's characterization of the resurrection as a 'meta-historical event' (R. H. Fuller, *The Formation of the Resurrection Narratives* [London: SPCK, 1972] 23), a phrase which is actually a self-contradiction, since an event is that which happens and so is *ipso facto* a part of history. Robinson rightly scores Fuller's disclaimers that this 'meta-historical event' left only a negative mark on history: 'Yet the negative mark, by which he evidently means not simply that there was nothing to show for it but that there was *nothing* to show for it (i.e. an empty tomb), is 'within history' and must therefore be patient of historical inquiry.' (J. A. T. Robinson, *The Human Face of God* [London: SCM, 1973] 136.)

^{4} See Joachim Jeremias, *Die Abendmahlsworte Jesu*, 4th ed. (Göttingen: Vandenhoeck & Ruprecht, 1967) 95-8 and the thorough discussion in Karl Lehmann, *Auferweckt am dritten Tag nach der Schrift*, QD 38 (Freiburg: Herder, 1968) 68-157.

^{5} See Ulrich Wilckens, *Die Missionsreden der Apostelgeschichte*, 3rd ed., WMANTS (Neukirchen-Vluyn: Neukirchner Verlag, 1974) 190-223. According to Wilckens, the formula of I Cor 15 and the preaching of Acts both presuppose the same pattern, which stems out of the tradition of the passion and Easter reports. '*Lukas hat das Schema der an Juden gerichteten Apostelpredigten als solches nicht selbst gebildet, sondern aus christlich vermittelter Tradition jüdischer, deuteronomischer Umkehrpredigten übernommen.*' (Ibid., 205.)

^{6} So Hans Grass, *Ostergeschehen und Osterberichte*, 4th ed. (Göttingen: Vandenhoeck & Ruprecht, 1970) 95.

^{7} Rudolph Bultmann, *Theologie des Neuen Testaments*, 7th ed., ed. Otto Merk (Tübingen: J. C. B. Mohr, 1961) 48.

{8} Grass argues that even if Paul held that the old body would be raised transformed, that does not guarantee that Paul knew of Jesus' empty tomb. It would only show that he would have believed it to be so on dogmatic grounds. (Grass, *Ostergeschehen*, 172.)

{9} James Orr, *The Resurrection of Jesus* (London: Hodder & Stoughton, 1909) 39; Archibald Robertson and Alfred Plummer, *First Epistle of Saint Paul to the Corinthians*, 2nd ed., ICC (Edinburgh: T & T Clark, 1967) 334; Ernst-Bernard Allo, *Première épître aux Corinthiens* (Paris: Librairie Lecoffre, 1934) 391; Jindrich Mánek, 'The Apostle Paul and the Empty Tomb', *NT* 2 (1957) 277-8; C. F. D. Moule, 'St. Paul and Dualism: the Pauline Conception of the Resurrection', *NTS* 12 (1965-6) 122; Neville Clark, *Interpreting the Resurrection* (London: SCM, 1967), 82; C. F. D. Moule, ed., *The Significance of the Message of the Resurrection for Faith in Jesus Christ*, SBT 8 (London: SCM, 1968) 8; C. K. Barrett, *A Commentary on the First Epistle to the Corinthians*, BNTC (London: Adam & Charles Black, 1968) 339; Franz Mussner, *Die Auferstehung Jesu*, BH 7 (München: Kösel Verlag, 1969) 134; J. A. T. Robinson, *The Human Face of God* (London: SCM, 1973) 133; Jacob Kremer, 'Zur Diskussion über "das leere Grab"', in *Resurrexit*, ed. Edouard Dhanis (Rome: Libreria Editrice Vaticana, 1974) 143-4.

{10} Adolf von Harnack, *Die Verklärungsgeschichte Jesu, der Bericht des Paulus (I. Kor. 15, 3ff) und die beiden Christusvisionen des Petrus*, SAB (Berlin: Walter de Gruyter, 1922) 64; Ernst Lichtenstein, 'Der älteste christliche Glaubensformel', *ZKG* 63 (1950-1) 7-8; Eduard Lohse, *Martyrer und Gottesknecht* (Göttingen: Vandenhoeck & Ruprecht, 1955) 115; Karl Heinrich Rengstorff, *Die Auferstehung Jesu*, 4th rev. ed. (Witten: Luther- Verlag, 1960) 51-2; Grass, *Ostergeschehen*, 146; Hans Conzelmann, 'Zur Analyse der Bekenntnisformel in I Kor. 15, 3-5', *ET* 25 (1965) 7; Erhardt Güttgemanns, *Der leidende Apostel und sein Herr*, FRLANT 90 (Göttingen: Vandenhoeck & Ruprecht, 1966) 262-4; Hans Freiherr Von Campenhausen, *Der Ablauf der Osterereignisse und das leere Grab*, 3rd rev. ad., SHAW (Heidelberg: Carl Winter, 1966) 21; Ferdinand Hahn, *Christologische Hoheitstitel*, 3rd ed., FRLANT 83 (Göttingen: Vandenhoeck & Ruprecht, 1966) 203-4; Jeremias, *Abendmahlsworte*, 96; Karl Lehmann, *Auferweckt am dritten Tag nach der Schrift*, QD 38 (Freiburg: Herder, 1968) 69, 81; Eduard Lynn Bode, *The First Easter Morning*, AB 45 (Rome: Biblical Institute Press, 1970) 98; Berthold Klappert, 'Einleitung', in *Diskussion um Kreuz und Auferstehung*, ed. idem (Wuppertal: Aussaat Verlag, 1971) 16, 48.

{11} Grass, *Ostergeschehen*, 146-7.

{12} See Werner Kramer, *Christos, Kyrios, Gottessohn*, ATANT 44 (Stuttgart and Zürich: Zwingli Verlag, 1963) 15; Mussner, *Auferstehung*, 60-1; Ulrich Wilckens, *Auferstehung* (Stuttgart and Berlin: Kreuz Verlag, 1970) 20; Joseph Schmitt, 'Le "milieu" littéraire de la 'tradition' citée dans I Cor., XV, 3b-5', in *Resurrexit*, ed. Dhanis, 178. The fourfold *hoti* serves to emphasize equally each of the chronologically successive events, thus prohibiting the subordination of one event to another.

{13} Walter Künneth, *Theologie der Auferstehung*, 4th ed. (München: Claudius Verlag, 1951) 81; Rengstorff, *Auferstehung*, 61; Wilckens, *Auferstehung*, 22.

{14} This phrase implies a bodily resurrection, according to Robertson and Plummer, *Corinthians*, 351; Kremer, 'Diskussion', 144; Robert H. Gundry, *Soma in Biblical Theology* (Cambridge: Cambridge University Press, 1976) 177; cf. Paul Hoffmann, *Die Toten in Christus*, 3rd rev. ed., NTA 2 (Münster: Aschendorff, 1978) 180-5.

{15} On these verbs see *TWNT*, s.v. *anistemi*, *anastasis*, *exanistemi*, *exanastasis*, by Albrecht Oepke; *TWNT*, s.v. *egeiro*, *egersis*, *exegeiro*, *gregoreo (agrupneo)*, by Albrecht Oepke; C. F. Evans, *Resurrection and the New Testament*, SBT, 2nd Series 12 (London: SCM, 1970) 21-6.

{16} See the excellent study by Karl Bornhäuser, *Die Gebeine der Toten*, BFCT 26 (Gütersloh: C. Bertelsmann, 1921). Some critics acknowledge the accuracy of Bornhäuser's exposition of resurrection in the Old Testament, but brush it aside with a word, that the New Testament knows nothing of such a conception. They ignore his clear statement that what is here most important is not what is said in the New Testament, but what is presupposed by the New Testament. (Ibid., 6.) Bornhäuser's thesis is that in the Old Testament the grave is the place where the corpse decays but the bones remain and rest until the resurrection, at which they are raised. There is no *Auferweckung* of the soul, nor even of the flesh; it is much more, properly speaking, an *Auferstehung* and *Auferweckung* of the bones. (Ibid., 26.) The New Testament presupposes this same conception. Mt. 23. 27; Jn 5. 28 show that Jesus regarded the tomb as the place where the bones are, which would be raised at the resurrection. Paul's terminology is thoroughly Pharisaic; it should never have come to be, states Bornhäuser, the 'he was raised' should be understood as anything other than the resurrection from the grave. (Ibid., 33.) Phil 1. 23; 2 Cor 5. 8 show clearly that for Paul it is not the spirit that is asleep in death. When he says that those who are asleep will rise at the last trumpet (1 Thess 4. 13-17), he means the dead *in the graves*. Thus, the grave would have to be empty after the resurrection. (See also *Hastings' Encyclopaedia of Religion and Ethics*, s.v. 'Bones', by H. Wheeler Robinson; Joseph Bonsirven, *Le Judaïsme palestinien au temps de Jesus Christ*, 2 vols. [Paris: Beauchesne, 1934] 1: 484; Künneth, *Theology*, 94.)

{17} Rengstorf, *Auferstehung*, 62. Comments Ellis: 'it is very unlikely that the earliest Palestinian Christians could conceive of any distinction between resurrection and physical, "grave-emptying" resurrection. To them an *anastasis* (resurrection) without an empty grave would have been about as meaningful as a square circle.' (E. Earle Ellis, ed., *The Gospel of Luke*, NCB [London: Nelson, 1966] 273.) See also Moule, *Significance*, 9.

{18} Grass, *Ostergeschehen*, 172.

{19} The mention of the empty tomb would not pass well with the structure and rhythm of the formula in any case, since the subject of each sentence is *Christos* and the empty tomb is not something that Christ did.

{20} See Lichtenstein, 'Glaubensformel', 32; *Interpreter's Dictionary of the Bible*, s.v., 'Resurrection', by J. A. T. Robinson; Vincent Taylor, *The Gospel According to St. Mark*, 2nd ed. (London: Macmillan, 1966) 606.

{21} So Lichtenstein, 'Glaubensformel', 33; Wolfgang Nauck, 'Die Bedeutung des leeren Grabes für den Glauben an den Auferstandenen', *ZNW* 47 (1956) 247-8; Manek, 'Empty Tomb', 277-8; *Interpreter's Dictionary of the Bible*, s.v. 'Resurrection' by Robinson; Michael Perry, *The Easter Enigma* (London: Faber & Faber, 1959) 92; Rengstorf, *Auferstehung*, 61; Künneth, *Theologie*, 79-85; Lehmann, *Auferweckt*, 81; S. H. Hooke, *The Resurrection of Christ as History and Experience* (London: Darton, Longman & Todd, 1967) 114; Mussner, *Auferstehung*, 101; Wilckens, *Auferstehung*, 21; Raymond E. Brown, *The Gospel according to John*, AB 29A (Garden City, N.Y.: Doubleday & Co., 1970) 977; Berthold Klappert, 'Einleitung', 16; Gundry, *Soma*, 176-7.

{22} See Nauck, 'Bedeutung', 263; Gerhard Koch, *Die Auferstehung Jesu Christi*, GHT (Tübingen: J. C. B. Mohr, 1959) 33; Von Campenhausen, *Ablauf*, 12; Ellis, *Luke*, 273; Josef Blank, *Paulus und Jesus*, SANT 18 (München: Kösel Verlag, 1968) 153-6; Gerhard Lohfink, 'Die Auferstehung Jesu und die historische Kritik', *Bib Leb* 9 (1968) 95; Ludger Schenke, *Auferstehungsverkündigung und leeres Grab* (Stuttgart: Katholisches Bibelwerk, 1968) 108; Gerhart Delling, 'The Significance of the Resurrection of Jesus for Faith in Jesus Christ', in *Significance*, ed. Moule, 80; Jakob Kremer, *Des älteste Zeugnis von der Auferstehung Christi*, 3rd ed., SBS 17 (Stuttgart: Katholisches Bibelwerk, 1970) 4; Joachim Jeremias, *Neutestamentliche Theologie*, 2nd ed. (Gütersloh: Gerd Mohn, 1973) 288-9; Kremer, 'Grab', 142.

{23} J. W. Hunkin, 'The Problem of the Resurrection Narratives', *ExT* 46 (1935) 153; Charles Masson, 'Le tombeau vide: essai sur la formation d'une tradition', *RIP* 32 (1944) 170; Lichtenstein, 'Glaubensformel', 41; Hahn, *Hoheitstitel*, 205-6; G. W. H. Lampe and D. M. MacKinnon, *The Resurrection*, ed. William Purcell (London: A. R. Mowbray, 1966) 42.

{24} Lehmann, *Auferweckt*, 160- 1, 337; Bode, *Easter*, 117-19.

{25} Lehmann, *Auferweckt*, 161.

{26} Frederic Field, *Notes on the Translation of the New Testament* (Cambridge: Cambridge University Press, 1899) 11-13; Gerhard Kittel, *Rabbinica: Paulusim Talmud*, ARGU 1:3 (Leipzig: Hinrichs, 1920) 31-8; Werner Georg Kümmel, *Verheissung und Erfüllung* 3rd ed., ATANT 6 (Zürich: Zwingli Verlag, 1956) 61; Paul Billerbeck, *Kommentar zum Neuen Testament aus Talmud und Midrasch*, 6 vols., ed. Hermann L. Strack (München: Beck, 1922-63) 1: 649; TWNT, s.v. *hemera*, by Gerhard von Rad and Gerhard Delling; Taylor, *Mark*, 378; Lehmann, *Auferweckt*, 163-6.

{27} E. Schwartz, 'Osterbetrachtungen', ZNW 7 (1906) 1-33; Carl Clemen, *Religionsgeschichtliche Erklärung des Neuen Testaments*, 2nd ed. (Giessen: Topelmann, 1924) 105-7.

{28} Willy Rordorf, *Der Sonntag*, ATANT 43 (Zürich: Zwingli Verlag, 1962) 174-233; see also Grass, *Ostergeschehen*, 131-3; Lehmann, *Auferweckt*, 185-91.

{29} Clemen, *Erklärung*, 95-105; Wilhelm Bousset, *Kyrios Christos*, 5th ed., FRLANT 4 (Göttingen: Vandenhoeck & Ruprecht, 1965) 22-6.

{30} Künneth, *Theologie*, 39-53.

{31} Grass, *Ostergeschehen*, 133; cf. 134, See also the critique and literature in Lehmann, *Auferweckt*, 193-200; Bode, *Easter*, 110-11.

{32} Bousset, *Kyrios*, 25; Selby McCasland, 'The Scriptural Basis of "On the Third Day"', *JBL* 48 (1929) 124-37; E. C. Hoskyns, *The Fourth Gospel*, 2nd ed., ed. F. N. Davey (London: Faber, 1967) 199-200; Bruce M. Metzger, 'A Suggestion Concerning of I Cor. XV.4b', *JTS* 8 (1958) 118-23. On the Jewish belief, see R. Mach, *Der Zaddik in Talmud und Midrasch* (Leiden: E. J. Brill, 1957) 174. For a critique, see Lehmann, *Auferweckt*, 200-4; Bode, *Easter*, 113-15.

{33} Maurice Goguel, *La foi à la resurrection de Jésus dans le christianisme primitif* (Paris: Leroux, 1939) 164-5; Cecil J. Cadoux, *The Historic Mission of Jesus*, 2nd ed. (London: Lutterworth Press, 1941) 286-8; J. B. Bauer, 'Drei Tage', *Bib* 39 (1958) 354-8; Barnabas Lindars, *New Testament Apologetic, The Doctrinal Significance of Old Testament Quotations* (London: SCM 1961) 59-72; A. D. Nock, *Early Gentile Christianity and Its Hellenistic Background* (New York: Harper, 1964) 108; X. Léon Dufour, *Resurrection and the Message of Easter* (London: Geoffrey Chapman, 1974) 9. For a critique, see Lehmann, *Auferweckt*, 176-81; Bode, *Easter*, 111-12.

{34} See especially *TWNT*, s.v. *hemera* by Gerhard Delling; F. Nötscher, 'Zur Auferstehung nach drei Tagen', *Bib* 35 (1954) 313-19; Grass, *Ostergeschehen*, 136-8; Jacques Dupont, 'Ressuscité "le troisième jour"', *Bib* 40 (1959) 742-61; Friedrich Mildenerger, 'Auferstanden am dritten Tage nach der Schrift', *ET* 23 (1963) 265-80; C. H. Dodd, *According to the Scriptures* (London: Collins, 1965) 77, 103; Evans, *Resurrection*, 48-50.

{35} Other scriptures such as Jonah 2. 1; 2 Kings 20. 5 are so far removed from the idea of resurrection that they could not possibly have prompted belief that Jesus rose on the third day. Kirsopp Lake, after examining the various passages, admitted they were all improbable and confessed that the basis for the third day is unknown. (Kirsopp Lake, *The Historical Evidence for the Resurrection of Jesus* [London: Williams and Norgate, 1907] 29-33.) According to Lehmann most critics choose Hos 6. 2 out of desperation and want of an alternative. Among those who see Hos 6. 2 behind I Cor 15. 4 are F. C. Burkitt, C. R. Brown, J. Weiss, M. Goguel, J. Finegan, G. Delling, H.-D. Wendland, J. G. S. S. Thompson, J. Dupont, C. H. Dodd, U. Wilckens, H. Grass, H. E. Tödt, H. Conzelmann, F. Mildenerger, G. Strecker, G. Schunack, P. Stuhlmacher, J. Bowman, J. W. Doeve, J. Wijngaards, W. Rudolph, B. Lindars, M. Black, T. Bowman (for particulars, see Lehmann, *Auferweckt*, 228-9).

{36} Metzger, 'Suggestion', 121; cf. Johannes Weiss, *Der erste Korintherbrief*, 9th ed., KEKNT 5 (Göttingen: Vandenhoeck & Ruprecht, 1910) 348; Kremer, *Zeugnis*, 4; Gerald O'Collins, *The Easter Jesus* (London: Darton, Longman, & Todd, 1973) 15. For a critique, see Grass, *Ostergeschehen*, 135; Lehmann, *Auferweckt*, 242-61; Bode, *Easter*, 117.

{37} Georg Kittel, 'Die Auferstehung Jesu', *DT* 4 (1937) 160; Bode, *Easter*, 115-16.

{38} Grass, *Ostergeschehen*, 137-8.

{39} See Lehmann, *Auferweckt*, 226-7

{40} Bode, *Easter*, 116.

{41} As von Campenhausen urges, the detail 'on the third day' must have a biblical counterpart to warrant its inclusion, but the Scripture passages are so vague that the third day must have been somehow already given before it could be discovered in the Old Testament. (Von Campenhausen, *Ablauf*, 11-12.) So also Michael Ramsey, *The Resurrection of Christ* (London: Centenary Press, 1945) 25; C. F. D. Moule, *The Birth of the New Testament*, 2nd ed. rev. London: Adam & Charles Black, 1966, 84-5; Barrett, *First Epistle*, 340.

{42} Lehmann, *Auferweckt*, 262- 90; Bode, *Easter*, 119-26; Harvey K. McArthur, "'On the Third Day'", *NTS* 18 (1971) 81-6, holds a related view, but still casts his lot with Hos 6. 2; Fuller, *Formation*, 27.

{43} Wengst observes that Lehmann actually produces only 25 passages, not 'nearly 30' and of these only nine can be truly said to have the theological significance that Lehmann sees in the third day (Gen. 22. 4; Ex 19. 11, 16; Judg 20. 30; 1 Sam 30. 1, 2; 2 Kings 20. 5, 8; Esther 5. 1; Hos 6.2). (Klaus Wengst, *Christologische Formeln und Lieder des Urchristentums*, SNT 7 [Gütersloh: Gerd Mohn, 1972] 96.)

{44} Full citations may be found in Lehmann and McArthur.

{45} Full citations may be found in Lehmann and McArthur.

{46} See G. Vermes, *Scripture and Tradition in Judaism* (Leiden: E. J. Brill, 1961) 193-227; R. Le Déaut, *La nuit pascalle*, AB 22 (Rome: Pontifical Biblical Institute, 1963) 198-207; J. E. Wood, 'Isaac Typology in the New Testament', *NTS* 14 (1967-8) 583-89.

{47} Conzelmann dismisses Lehmann's case out of hand on this consideration alone. (Hans Conzelmann, *Der erste Brief an die Korinther*, KEKNT 5 [Göttingen: Vandenhoeck & Ruprecht, 1969] 302.) See also Wengst, *Formeln*, 96.

{48} Lehmann, *Auferweckt*, 174; Bode, *Easter*, 125-6.

{49} Lichtenstein, 'Glaubensformel', 43.

{50} Actually if Paul was in Jerusalem prior to his trip to Damascus, as Acts reports, then he probably would have heard of the empty tomb then, not, indeed, from the Christians, but from the Jewish authorities in whose employ he was. For even if the Christians in their enthusiasm had not checked to see if the tomb of Jesus was empty, the Jewish authorities could be guilty of no such oversight. So ironically Paul may have known of the empty tomb even before his conversion.

{51} Rudolf Pesch, *Das Markusevangelium*, 2 vols., HTKNT 2 (Freiburg: Herder, 1977) 2: 519-20; idem, 'Der Schluss der vormarkinische Passionsgeschichte und des Markusevangelium' in M. Sabbe, *L'Evangile selon Marc* (Leuven: Gembloux, 1974) 365-409. Taylor also finds that the burial and empty tomb stories were part of the pre-Markan passion story; his qualification that 16. 1-8 cannot have been a part of that tradition is entirely arbitrary and cannot explain what happened to the original story and why. (Taylor, *Mark*, 659.) See also Edouard Dhanis, 'L'ensevelissement de Jésus et la visite au tombeau dans l'évangile de saint Marc (Mc XV.40-XVI.8)', *Greg* 39 (1958) 391-2, 396; Joachim Jeremias, 'Die älteste Schicht der Osterüberlieferungen', in *Resurrexit*, ed. Dhanis, 186.

{52} Mk 15. 40-41, which first names the women, cannot be an independent piece of tradition, since it makes sense only in its context. But neither can these verses be editorially constructed out of 15. 47 and 16. 1 because then the appellation 'the younger' is inexplicable, as is the fusion of what would normally designate the wife of James and the wife of Joses into one woman, the mother of James and Joses. But if 15. 40-41 are part of the pre-Markan tradition, then so are probably 15. 47 and 16. 1. For rather than repeat the long identification of Mary in 15. 40, the tradition names her by one son in 15. 47 and the other in 16. 1; thus 15. 47 and 16. 1 actually presuppose each other's existence. And their juxtaposition is by no means a useless duplication: the omission and re-introduction of Salome's name suggests that the witnesses to the crucifixion, burial, and empty tomb are being recalled here.

{53} Thus Wilckens argues that 16. 1 is a later addition designed to protect the women against the charge of breaking the Sabbath. Originally 16. 2-6a was the close of the Passion story. (Wilckens, *Auferstehung*, 56-63.) For a critique of Wilckens' hypothesis see Josef Blinzler, 'Die Grablegung Jesu in historischer Sicht', in *Resurrexit*, ed. Dhanis, 65-6. Blinzler argues that all the lists are old and unchanged. (Ibid., 65-8.)

{54} Wilckens, *Auferstehung*, 61. The passion story could not have ended with the death and burial of Jesus without assurance of victory; the discovery of the empty tomb by the women was part of the passion story. (Brown, *John*, 978; Blinzler, 'Grablegung', 76; Rudolf Schnackenburg, *Das Johannesevangelium*, 3 vols., 2nd ed., HTKNT 4 [Freiburg: Herder, 1976] 3: 353.)

{55} Rudolf Bultmann, *Die Geschichte der synoptischen Tradition*, 8th ed., FRLANT 12 (Göttingen: Vandenhoeck & Ruprecht, 1970) 309.

{56} Nauck, 'Bedeutung', 243-67. According to Kremer, every theological reflection on the meaning of the resurrection is lacking, so the tradition must come from a very early time. For its origin in Palestine (Jerusalem) counts not only the interest in the empty tomb itself, but also the names of the women and the Semitic *te mia ton sabbaton* (cf. *prote sabbatou* [16. 9]; 'after three days' [8. 31; 9. 31; 10. 34]). (Kremer, "'Grab'", 153.)

{57} So Brown, *John*, 940; Blinzler, 'Grablegung', 81; William L. Lane, *The Gospel according to Mark*, NLCNT (London: Marshall, Morgan & Scott, 1974) 585.

{58} Semachoth 8; Ebel Rabbathi 4. 11. See further Ernst Lohmeyer, *Das Evangelium des Markus*, KEKNT 2 (Göttingen: Vandenhoeck & Ruprecht, 1937) 351; Blinzler, 'Grablegung', 81.

{59} Blinzler, 'Grablegung', 83.

{60} Koch, *Auferstehung*, 29; Brown, *John*, 982.

{61} Dhanis, 'Ensevelissement', 383; Paul Gaechter, 'Die Engellerscheinungen in den Auferstehungsberichten', *ZKT* 89 (1967) 195; Bode, *Easter*, 14, 16.

{62} So Brown, *John*, 984. Mahoney's answer that v. 13 is singular because Mary is being addressed a personal question misses the point that the Semitic idiom means precisely 'I' and would therefore be entirely appropriate. (Robert Mahoney, *Two Disciples at the Tomb*, TW 6 [Bern: Herbert Lang, 1974] 216.) Bode attempts to support the Semitic usage by other uses of *oidamen* in Jn 3. 2, 11; 9. 31; 14. 5; 21. 24 (Bode, *Easter*, 73-4.), but most of these are in fact genuine plurals! Bernard, Hoskyns, Barrett, Schnackenburg, and Kremer agree that *oidamen* implies more women. (J. H. Bernard, *Gospel according to St. John*, 2 vols., ICC [Edinburgh: T & T Clark, 1928] 2: 656; Hoskyns, *Fourth Gospel*, 540; C. K. Barrett, *The Gospel according to St. John*, 2nd ed. [London: SPCK, 1978] 563; Schnackenburg, *Johannesevangelium*, 3: 358; Jakob Kremer, *Die Osterevangelien: Geschichten um Geschichte* [Stuttgart: Katholisches Bibelwerk, 1977] 166.)

{63} On *neaniskos* as an angel, cf. 2 Macc 3. 26, 33; Lk 24, 4; Gospel of Peter 9; Josephus *Antiquities of the Jews* 5.277. The white robe is traditional for angels (cf. Rev 9. 13; 10. 1). In

Mark fear and awe are the typical responses to the divine. The other gospels understood Mark's figure as an angel.

{64} It is highly unlikely that the pre-Markan tradition lacked the angel, for the climax of the story comes with his words in vs. 5-6 and without him the tomb is ambiguous in its meaning. (Ulrich Wilckens, 'Die Perikope vom leeren Grabe Jesu in der nachmarkinischen Traditionsgeschichte', in *Festschrift für Friedrich Smend* [Berlin: Merseburger, 1963] 32; Schenke, *Grab*, 69-71; John E. Alsup, *The Post-Resurrection Appearance Stories of the Gospel Tradition*, CTM A5 [Stuttgart: Calwer Verlag, 1975] 92-3; Kremer, *Osterevangelien*, 45-7.)

{65} Rudolf Bultmann, *Das Evangelium des Johannes*, 19th ed., KEKNT (Göttingen: Vandenhoeck & Ruprecht, 1968) 529; Mahoney, *Disciples*, 216; Schnackenburg, *Johannesevangelium*, 3: 373.

{66} P. Gardner-Smith, *The Narratives of the Resurrection* (London: Methuen, 1926) 136; Bultmann, *Geschichte*, 308-9; Wilhelm Michaelis, *Die Erscheinungen des Auferstandenen* (Basel: Heinrich Majer, 1944) 19-20; Willi Marxsen, *Der Evangelist Markus* (Göttingen: Vandenhoeck & Ruprecht, 1956) 51, 75-6; Grass, *Ostergeschehen*, 21, 120; E. Gutwenger, 'Auferstehung und Auferstehungsleib Jesu', *ZKT* 91 (1969) 274; Schenke, *Grab*, 43-7; Evans, *Resurrection*, 78; Bode, *Easter*, 35-7; Kremer, 'Grab', 15 1; Fuller, *Formation*, 53, 60-1.

{67} For example, Schenke's troop of objections against v. 7: (1) it introduces a thought independent of v. 6; (2) *egerthe* is not mentioned further; (3) 14. 28 is an insertion; (4) v. 7 does not correspond with the women's reaction; (5) v. 7 introduces the apostles and switches to direct speech. (Schenke, *Grab*, 43-7.) Except for (3) these hardly merit refutation. V. 7 introduces a thought no more independent of v. 6 than v. 6b of v. 6a. There is no need to mention further the resurrection; having been raised, Jesus is going before the disciples to Galilee. Given Mark's theology, the women's reaction is typical. The introduction of the apostles says nothing for v. 7's being an insertion, nor does direct or indirect speech,

{68} It is sometimes urged that the Fayum Gospel Fragment, a third century compilation from the gospels which omits v. 28, testifies to a tradition lacking this verse. (Walter Grundmann, *Das Evangelium nach Markus*, 7th rev. ed., THKNT 2 [Berlin: Evangelische Verlaganstalt, 1977] 395.) But as a compilation the fragment by its very nature omits material and is no evidence for the absence of v. 28 in the passion tradition. See M. J. Lagrange, *L'Évangile selon saint Marc* (Paris: Librairie Lecoffre, 1966) 383; Lane, *Mark*, 510; Pesch, *Markusevangelium*, 2: 381.

{69} See Joachim Jeremias, *Neutestamentliche Theologie*, 2nd ed. (Gütersloh: Gerd Mohn, 1973) 282; Pesch, *Markusevangelium*, 2: 381-2.

{70} If there is an insertion, it is all of vs. 27-31; cf. Lk 22. 31-34; Jn 13. 36-38. (Lagrange, *Marc*, 383; Lane, *Mark*, 510.)

{71} See helpful chart and discussion in Bode, *Easter*, 37-9.

{72} So C. F. D. Moule, 'St. Mark xvi.8 once more', *NTS* 2 (1955-6) 58-9; Dhanis, 'Ensevelissement', 389; C. E. B. Cranfield, *The Gospel according to Saint Mark*, CGTC (Cambridge: Cambridge University Press, 1963) 469; Lagrange, *Marc*, 448; 1. Howard

Marshall, *The Gospel of Luke*, NIGTC (Exeter: Paternoster Press, 1978) 887. See the helpful discussion of the women's silence in Bode, *Easter*, 39-44. He distinguishes five possible interpretations: (1) The silence explains why the legend of the empty tomb remained so long unknown. (2) The silence is an instance of Mark's Messianic secret motif. (3) The silence was temporary. (4) The silence served the apologetic purpose of separating the apostles from the empty tomb. (5) The silence is the paradoxical human reaction to divine commands as understood by Mark. But (1) is now widely rejected as implausible, since the empty tomb story is a pre-Markan tradition. (2) is inappropriate in the post-resurrection period when Jesus may be proclaimed as the Messiah. As for (4), there is no evidence that the silence was designed to separate the apostles from the tomb. Mark does not hold that the disciples had fled back to Galilee independently of the women. So there is no implication that the disciples saw Jesus without having heard of the empty tomb. It is pointless to speak of 'apologetics' when Mark does not even imply that the disciples went to Galilee and saw Jesus without hearing the women's message, much less draw some triumphant apologetic conclusion as a result of this. In fact there were also traditions that the disciples did visit the tomb, after the women told them of their discovery, but Mark breaks off his story before that point. As for (5) this solution is entirely too subtle, drawing the conclusion that because people talked when Jesus told them not to, therefore, the women, having been told to talk, did not. Therefore (3) is most probable. The fear and silence are Markan motifs of divine encounter and were not meant to imply an enduring silence.

{73} See Mahoney, *Disciples*, 209.

{74} See Brown, *John*, 1119- 20.

{75} Leon Morris, *The Gospel according to John*, NICNT (Grand Rapids, Mich.: Wm. B. Eerdmans, 1971) 10.

{76} Schnackenburg, *Johannesevangelium*, 3: 359-60.

{77} I find it implausible either that the Beloved Disciple should have lied to his students that he was there when he was not or that the entire Johannine community should lie in asserting that their master had taken part in certain historical events when they know he had not. See excellent comments by Brown, *John*, 1127-9.

{78} So Brown, *John*, 840-1: 983; Kremer, "Grab", 158. Von Campenhausen, *Ablauf*, 44-5, also maintains the presence of the disciples in Jerusalem, but his view that Peter, inspired by the empty tomb, led the disciples back to Galilee to see Jesus fails in light of the traditions that the empty tomb did not awaken faith and is predicated on a doubtful interpretation of Lk 22. 31, which says nothing about Peter's convincing the others to believe that Jesus was risen.

{79} Pesch, *Markusevangelium*, 2: 21; cf. 2: 364-77.

{80} Ibid., 2: 522-36. Pesch thinks the stone's being rolled away is the product of door-opening miracle stories. When it is pointed out that no such door-opening is narrated in Mark, Pesch gives away his case by asserting that it is a 'latent' door-opening miracle! The angelic appearance he attributes to epiphany stories, though without showing the parallels. Finally, he appeals to a *Gattung* for seeking, but not finding someone for the search for Jesus' body, adducing several unclear OT texts (e.g. 2 Kings 2. 16-18; Ps 37. 36; Ez 26. 21) plus a spate of post-Christian or Christian-influenced sources (Gospel of Nicodemus 16. 6; Testament of Job

39-40) and even question-begging texts from the New Testament itself. He uncritically accepts Lehmann and MacArthur's analysis of the third day motif, which he equates with Mark's phrase 'on the first day'! His assertion that the fact that the women were known in the *Urgemeinde* cannot prevent legend since many legends are attested about the disciples is a *petitio principii*. He fails to come to grips with his own early dating and never shows how legend could develop in so short a span in the presence of those who knew better. For a critique of Pesch's position as well as a timely warning against New Testament exegesis's falling into the fallacies of the old history of religions school, see Peter Stuhlmacher, "'Kritischer müssten mir die Historisch-Kritischen sein!'", *TQ* 153 (1973) 244-51.

{81} Bode, *Easter*, 161; Brown agrees: '... the basic time indication of the finding of the tomb was fixed in Christian memory before the possible symbolism in the three-day reckoning had yet been perceived.' (Brown, *John*, 980.) The fact that *te mia ton sabbaton* is probably a Semitism (Barrett, *John*, 467; Bode, *Easter*, 6; Kremer, 'Grab', 15 2, *contra* J. H. Moulton and W. F. Howard, *A Grammar of New Testament Greek*, vol.: *I Prolegomena*, 3rd ed. [Edinburgh: T & T Clark, 1908] 95-6) also points to the early origin of the phrase.

{82} Wilckens, *Auferstehung*, 64.

{83} On the low rung of the social ladder occupied by women in Jewish society see J Sot 19a; B Kidd 82b. On their lack of qualification to serve as legal witnesses, see M Rosh Ha-Shanah 1.8.

{84} Bode, *Easter*, 162-3.

{85} Mahoney, *Disciples*, 159. His further objection that this admission by the Jews is found only in a Christian document also misses the point; the course of the argument in the polemic presupposes the empty tomb. The Christians were doing their best to refute the charge of theft, an allegation which tacitly presupposes the tomb was empty.

{86} Mahoney, *Disciples*, 243.

{87} D. H. van Daalen, *The Real Resurrection* (London: Collins, 1972) 41. So also O'Collins, *Easter*, 91.

{88} Kremer comments that 'By far, most exegetes hold firmly ... to the reliability of the biblical statements about the empty tomb. . . .' (Kremer, *Osterevangelien*, 49-50) and he furnishes this list, to which his own name may be added: Blank, Blinzler, Bode, von Campenhausen, Delome, Dhanis, Grundmann, Hengel, Lehmann, Léon-Dufour, Lichtenstein, Mánek, Martini, Mussner, Nauck, Rengstorff, Ruckstuhl, Schenke, Schmitt, K. Schubert, Schwank, Schweizer, Seidensticker, Strobel, Stuhlmacher, Trilling, Vögtle, Wilckens. He should also have mentioned Benoit, Brown, Clark, Dunn, Ellis, Gundry, Hooke, Jeremias, Klappert, Ladd, Lane, Marshall, Moule, Perry, J. A. T. Robinson, and Schnackenburg, as well as the Jewish scholars Lapidé and Vermes.

"No Other Name": A Middle Knowledge Perspective on the Exclusivity of Salvation Through Christ

Dr. William Lane Craig

William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

The conviction of the New Testament writers was that there is no salvation apart from Jesus. This orthodox doctrine is widely rejected today because God's condemnation of persons in other world religions seems incompatible with various attributes of God.

Analysis reveals the real problem to involve certain counterfactuals of freedom, *e.g.*, why did not God create a world in which all people would freely believe in Christ and be saved? Such questions presuppose that God possesses middle knowledge. But it can be shown that no inconsistency exists between God's having middle knowledge and certain persons' being damned; on the contrary, it can be positively shown that these two notions are compatible.

"'No Other Name': A Middle Knowledge Perspective on the Exclusivity of Salvation through Christ". *Faith and Philosophy* 6. (1989): 172-88.

Introduction

"There is salvation in no one else, for there is no other name under heaven given among men by which we must be saved" (Acts 4.12). So proclaimed the early preachers of the gospel of Christ. Indeed, this conviction permeates the New Testament and helped to spur the Gentile mission. Paul invites his Gentile converts to recall their pre-Christian days: "Remember that you were at that time separated from Christ, alienated from the commonwealth of Israel, and strangers to the covenants of promise, having no hope and without God in the world" (Ephesians 2.12). The burden of the opening chapters of Romans is to show that this desolate situation is the general condition of mankind. Though God's eternal power and deity are

evident through creation (1.20) and the demands of His moral law implanted on the hearts of all persons (2.15) and although God offers eternal life to all who seek Him in well-doing (2.7), the tragic fact of the matter is that in general people suppress the truth in unrighteousness, ignoring the Creator (1.21) and flouting the moral law (1.32). Therefore, "all men, both Jews and Greeks, are under the power of sin, as it is written: 'None is righteous, no, not one; no one understands, no one seeks for God...' (3.9-11). Sin is the great leveler, rendering all needy of God's forgiveness and salvation. Given the universality of sin, all persons stand morally guilty and condemned before God, utterly incapable of redeeming themselves through righteous acts (3.19-20). But God in His grace has provided a means of salvation from this state of condemnation: Jesus Christ, by his expiatory death, redeems us from sin and justifies us before God (3.21-26). It is through him and through him alone, then, that God's forgiveness is available (5.12-21). To reject Jesus Christ is therefore to reject God's grace and forgiveness, to refuse the one means of salvation which God has provided. It is to remain under His condemnation and wrath, to forfeit eternally salvation. For someday God will judge all men, "inflicting vengeance upon those who do not know God and upon those who do not obey the gospel of our Lord Jesus. They shall suffer the punishment of eternal destruction and exclusion from the presence of the Lord and from the glory of his might" (II Thessalonians 1.8-9).

It was not just Paul who held to this exclusivistic, Christocentric view of salvation. No less than Paul, the apostle John saw no salvation outside of Christ. In his gospel, Jesus declares, "I am the way, and the truth, and the life; no one comes to the Father, but by me" (John 14.6). John explains that men love the darkness of sin rather than light, but that God has sent His Son into the world to save the world and to give eternal life to everyone who believes in the Son. "He who believes is not condemned; he who does not believe is condemned already, because he has not believed in the name of the only Son of God" (John 3.18). People are already spiritually dead; but those who believe in Christ pass from death to life (John 5.24). In his epistles, John asserts that no one who denies the Son has the Father and identifies such a person as the antichrist (I John 2.22-23; 4.3; II John 9). In short, "He who has the Son has life; he who has not the Son of God has not life" (I John 5.12). In John's Apocalypse, it is the Lamb alone in heaven and on earth and under the earth who is worthy to open the scroll and its seven seals, for it was he that by his blood ransomed men for God from every tribe and tongue and people and nation on the earth (Revelation 5.1-14). In the consummation, everyone whose name is not found written in the Lamb's book of life is cast into the everlasting fire reserved for the devil and his cohorts (Revelation 20.15).

One could make the same point from the catholic epistles and the pastorals. It is the conviction of the writers of the New Testament that "there is one God, and there is one mediator between God and men, the man Christ Jesus, who gave himself as a ransom for all" (I Timothy 2.5-6).

Indeed, it is plausible that such was the attitude of Jesus himself. New Testament scholarship has reached something of a consensus that the historical Jesus came on the scene with an unparalleled sense of divine authority, the authority to stand and speak in the place of God Himself and to call men to repentance and faith.^{1} Moreover, the object of that faith was he himself, the absolute revelation of God: "All things have been delivered to me by my Father; and no one knows the Son except the Father, and no one knows the Father except the Son and anyone to whom the Son chooses to reveal him" (Matthew 11.27).^{2} On the day of judgment, people's destiny will be determined by how they responded to him: "And I tell you, everyone who acknowledges me before men, the Son of Man also will acknowledge before

the angels of God; but he who denies me before men will be denied before the angels of God" (Luke 12.8-9).{3} Frequent warnings concerning hell are found on Jesus' lips, and it may well be that he believed that most of mankind would be damned, while a minority of mankind would be saved: "Enter by the narrow gate, for the gate is wide and the way is easy, that leads to destruction, and those who enter by it are many. For the gate is narrow and the way is hard, that leads to life, and those who find it are few" (Matthew 7:13-14) .{4}

A hard teaching, no doubt; but the logic of the New Testament is simple and compelling: The universality of sin and the uniqueness Christ's expiatory sacrifice entail that there is no salvation apart from Christ. Although this exclusivity was scandalous in the polytheistic world of the first century, with the triumph of Christianity throughout the Empire the scandal receded. Indeed, one of the classic marks of the church was its catholicity, and for men like Augustine and Aquinas the universality of the church was one of the signs that the Scriptures are divine revelation, since so great a structure could not have been generated by and founded upon a falsehood.{5} Of course, recalcitrant Jews remained in Christian Europe, and later the infidel armies of Islam had to be combated, but these exceptions were hardly sufficient to overturn the catholicity of the church or to promote religious pluralism.

But with the so-called "Expansion of Europe" during the three centuries of exploration and discovery from 1450 to 1750, the situation changed radically.{6} It was now seen that far from being the universal religion, Christianity was confined to a small corner of the globe. This realization had a two-fold impact upon people's religious thinking: (i) it tended toward the relativization of religious beliefs. Since each religious system was historically and geographically limited, it seemed incredible that any of them should be regarded as universally true. It seemed that the only religion which could make a universal claim upon mankind would be a sort of general religion of nature. (ii) It tended to make Christianity's claim to exclusivity appear unjustly narrow and cruel. If salvation was only through faith in Christ, then the majority of the human race was condemned to eternal damnation, since they had not so much as even heard of Christ. Again, only a natural religion available to all men seemed consistent with a fair and loving God.

In our own day the influx into Western nations of immigrants from former colonies, coupled with the advances in telecommunications which have served to shrink the world toward a "global village," have heightened both of these impressions. As a result, the church has to a great extent lost its sense of missionary calling or been forced to reinterpret it in terms of social engagement, while those who continue to adhere to the traditional, orthodox view are denounced for religious intolerance. This shift is perhaps best illustrated by the attitude of the Second Vatican Council toward world mission. In its Dogmatic Constitution on the Church, the Council declared that those who have not yet received the gospel are related in various ways to the people of God.{7} Jews, in particular, remain dear to God, but the plan of salvation also includes all who acknowledge the Creator, such as Muslims. People who through no fault of their own do not know the gospel, but who strive to do God's will by conscience can also be saved. The Council therefore declared that Catholics now pray *for* the Jews, not for the *conversion* of the Jews and also declares that the Church looks with esteem upon Muslims.{8} Missionary work seems to be directed only toward those who "serve the creature rather than the Creator" or are utterly hopeless.{9} Carefully couched in ambiguous language and often apparently internally inconsistent,{10} the documents of Vatican II could easily be taken as a radical reinterpretation of the nature of the Church and of Christian missions, according to which great numbers of non-Christians are specifically related to the Church and therefore not appropriate subjects of evangelism.

The difficulty of the orthodox position has compelled some persons to embrace universalism and as a consequence to deny the incarnation of Christ. Thus, John Hick explains,

For understood literally the Son of God, God the Son, God-incarnate language implies that God can be adequately known and responded to only through Jesus; and the whole religious life of mankind, beyond the stream of Judaic-Christian faith is thus by implication excluded as lying outside the sphere of salvation. This implication did little positive harm so long as Christendom was a largely autonomous civilization with only relatively marginal interaction with the rest of mankind. But with the clash between the Christian and Muslim worlds, and then on an ever-broadening front with European colonization through the earth, the literal understanding of the mythological language of Christian discipleship has had a divisive effect upon the relations between that minority of human beings who live within the borders of the Christian tradition and that majority who live outside it and within other streams of religious life.

Transposed into theological terms, the problem which has come to the surface in the encounter of Christianity with the other world religions is this: If Jesus was literally God incarnate, and if it is by his death alone that men can be saved, and by their response to him alone that they can appropriate that salvation, then the only doorway to eternal life is Christian faith. It would follow from this that the large majority of the human race so far have not been saved. But is it credible that the loving God and Father of all men has decreed that only those born within one particular thread of human history shall be saved?[{11}](#)

But what exactly is the problem with God's condemning persons who adhere to non-Christian religions? I do not see that the very notion of hell is incompatible with a just and loving God. According to the New Testament, God does not want anyone to perish, but desires that all persons repent and be saved and come to know the truth (11 Peter 3.9; 1 Timothy 2.4). He therefore seeks to draw all men to Himself. Those who make a well-informed and free decision to reject Christ are self-condemned, since they repudiate God's unique sacrifice for sin. By spurning God's prevenient grace and the solicitation of His Spirit, they shut out God's mercy and seal their own destiny. They, therefore, and not God, are responsible for their condemnation, and God deeply mourns their loss.

Nor does it seem to me that the problem can be simply reduced to the inconsistency of a loving and just God's condemning persons who are either un-, ill-, or misinformed concerning Christ and who therefore lack the opportunity to receive Him. For one could maintain that God graciously applies to such persons the benefits of Christ's atoning death without their conscious knowledge thereof on the basis of their response to the light of general revelation and the truth that they do have, even as He did in the case of Old Testament figures like Job who were outside the covenant of Israel.[{12}](#) The testimony of Scripture is that the mass of humanity do not even respond to the light that they do have, and God's condemnation of them is neither unloving nor unjust, since He judges them according to standards of general revelation vastly lower than those which are applied to persons who have been recipients of His special revelation.

Rather the real problem, it seems to me, involves certain counterfactuals of freedom concerning those who do not receive special revelation and so are lost. If we take Scripture seriously, we must admit that the vast majority of persons in the world are condemned and will be forever lost, even if in some relatively rare cases a person might be saved through his response to the light that he has apart from special revelation.[{13}](#) But then certain questions

inevitably arise: Why did God not supply special revelation to persons who, while rejecting the general revelation they do have, would have responded to the gospel of Christ if they had been sufficiently well-informed concerning it? More fundamentally, Why did God create this world when He knew that so many persons would not receive Christ and would therefore be lost? Even more radically, why did God not create a world in which everyone freely receives Christ and so is saved?

Now all of these questions appear, at least, to presuppose that certain counterfactuals of freedom concerning people's response to God's gracious initiatives are true, and the last two seem to presuppose that God's omniscience embraces a species of knowledge known as middle knowledge (*scientia media*). For if there are no true counterfactuals of freedom, it is not true that certain persons would receive Christ if they were to hear the gospel, nor can God be held responsible for the number of the lost if He lacks middle knowledge, for without such knowledge He could only guess in the moment logically prior to His decree to create the world how many and, indeed, whether any persons would freely receive Christ (or whether He would even send Christ!) and be saved. Let us assume, then, that some such counterfactuals are true and that God has middle knowledge. {14}

For those who are unfamiliar with this species of knowledge and as considerable confusion exists concerning it, a few words about the concept of middle knowledge and its implications for providence and predestination might be helpful.

Scientia Media

Largely the product of the creative genius of the Spanish Jesuit of the Counter-Reformation Luis Molina (1535-1600), the doctrine of middle knowledge proposes to furnish an analysis of divine knowledge in terms of three logical moments. {15} Although whatever God knows, He has known from eternity, so that there is no temporal succession in God's knowledge, nonetheless there does exist a sort of logical succession in God's knowledge in that His knowledge of certain propositions is conditionally or explanatorily prior to His knowledge of certain other propositions. That is to say, God's knowledge of a particular set of propositions depends asymmetrically on His knowledge of a certain other set of propositions and is in this sense posterior to it. In the first, unconditioned moment God knows all *possibilia*, not only all individual essences, but also all possible worlds. Molina calls such knowledge "natural knowledge" because the content of such knowledge is essential to God and in no way depends on the free decisions of His will. By means of His natural knowledge, then, God has knowledge of every contingent state of affairs which could possibly obtain and of what the exemplification of the individual essence of any free creature could freely choose to do in any such state of affairs that should be actual.

In the second moment, God possesses knowledge of all true counterfactual propositions, including counterfactuals of creaturely freedom. That is to say, He knows what contingent states of affairs would obtain if certain antecedent states of affairs were to obtain; whereas by His natural knowledge God knew what any free creature *could* do in any set of circumstances, now in this second moment God knows what any free creature *would* do in any set of circumstances. This is not because the circumstances causally determine the creature's choice, but simply because this is how the creature would freely choose. God thus knows that were He to actualize certain states of affairs, then certain other contingent states of affairs would obtain. Molina calls this counterfactual knowledge "middle knowledge" because it stands in between the first and third moment in divine knowledge. Middle knowledge is like natural

knowledge in that such knowledge does not depend on any decision of the divine will; God does not determine which counterfactuals of creaturely freedom are true or false. Thus, if it is true that

If some agent *S* were placed in circumstances *C*, then he would freely perform action *a*,

then even God in His omnipotence cannot bring it about that *S* would refrain from *a* if he were placed in *C*. On the other hand, middle knowledge is unlike natural knowledge in that the content of His middle knowledge is not essential to God. True counterfactuals of freedom are contingently true; *S* could freely decide to refrain from *a* in *C*, so that different counterfactuals could be true and be known by God than those that are. Hence, although it is essential to God that He have middle knowledge, it is not essential to Him to have middle knowledge of those particular propositions which He does in fact know.

Intervening between the second and third moments of divine knowledge stands God's free decree to actualize a world known by Him to be realizable on the basis of His middle knowledge. By His natural knowledge, God knows what is the entire range of logically possible worlds; by His middle knowledge He knows, in effect, what is the proper subset of those worlds which it is feasible for Him to actualize. By a free decision, God decrees to actualize one of those worlds known to Him through His middle knowledge. According to Molina, this decision is the result of a complete and unlimited deliberation by means of which God considers and weighs every possible circumstance and its ramifications and decides to settle on the particular world He desires. Hence, logically prior, if not chronologically prior, to God's creation of the world is the divine deliberation concerning which world to actualize.

Given God's free decision to actualize a world, in the third and final moment God possesses knowledge of all remaining propositions that are in fact true in the actual world. Such knowledge is denominated "free knowledge" by Molina because it is logically posterior to the decision of the divine will to actualize a world. The content of such knowledge is clearly not essential to God, since He could have decreed to actualize a different world. Had He done so, the content of His free knowledge would be different.

Molina saw clearly the profound implications a doctrine of middle knowledge could have for the notions of providence and predestination. God's providence is His ordering of things to their ends, either directly or mediately through secondary agents. Molina distinguishes between God's absolute and conditional intentions for creatures. It is, for example, God's absolute intention that no creature should sin and that all should reach beatitude. But it is not within the scope of God's power to control what free creatures would do if placed in any set of circumstances. In certain circumstances, then, creatures would freely sin, despite the fact that God does not will this. Should God then choose to actualize precisely those circumstances, He has no choice but to allow the creature to sin. God's absolute intentions can thus be frustrated by free creatures. But God's conditional intentions, which are based on His middle knowledge and thus take account of what free creatures would do, cannot be so frustrated. It is God's conditional intention to permit many actions on the part of free creatures which He does not absolutely will; but in His infinite wisdom God so orders which states of affairs obtain that His purposes are achieved despite and even through the sinful, free choices of creatures. God thus providentially arranges for everything that does happen by either willing or permitting it, and He causes everything to happen insofar as He concurs with the decisions of free creatures in producing their effects, yet He does so in such a way as to preserve freedom and contingency.

Middle knowledge also serves to reconcile predestination and human freedom. On Molina's view predestination is merely that aspect of providence pertaining to eternal salvation; it is the order and means by which God ensures that some free creature attains eternal life. Prior to the divine decree, God knows via His middle knowledge how any possible free creature would respond in any possible circumstances, which include the offer of certain gifts of prevenient grace which God might provide. In choosing a certain possible world, God commits Himself, out of His goodness, to offering various gifts of grace to every person which are sufficient for his salvation. Such grace is not intrinsically efficacious in that it of itself produces its effect; rather it is extrinsically efficacious in accomplishing its end in those who freely cooperate with it. God knows that many will freely reject His sufficient grace and be lost; but He knows that many others will assent to it, thereby rendering it efficacious in effecting their salvation. Given God's immutable decree to actualize a certain world, those whom God knew would respond to His grace are predestined to do so in the sense that it is absolutely certain that they will respond to and persevere in God's grace. There is no risk of their being lost; indeed, *in sensu composito* it is impossible for them to fall away. But *in sensu diviso* they are entirely free to reject God's grace; but were they to do so, God would have had different middle knowledge and they would not have been predestined.{16} Similarly those who are not predestined have no one to blame but themselves. It is up to God whether we find ourselves in a world in which we are predestined, but it is up to us whether we are predestined in the world in which we find ourselves.

The Soteriological Problem of Evil

Years ago when I first read Alvin Plantinga's basically Molinist formulation of the Free Will Defense against the problem of evil, it occurred to me that his reasoning might also help to resolve the problem of the exclusivity of salvation through Christ, and my own subsequent study of the notion of middle knowledge has convinced me that this is in fact so.{17} For the person who objects to the exclusivity of salvation through Christ is, in effect, posing what one might call *the soteriological* problem of evil, that is to say, he maintains that the proposition

1. God is omniscient, omnipotent, and omnibenevolent

is inconsistent with

2. Some persons do not receive Christ and are damned.

Since (1) is essential to theism, we must therefore deny (2).

The orthodox Christian will point out, however, that (1) and (2) are not explicitly contradictory, since one is not the negation of the other, nor are they logically contradictory, since a contradiction cannot be derived from them using first order logic. The objector, then, must mean that (1) and (2) are inconsistent in the broadly logical sense, that is, that there is no possible world in which both are true. Now in order to show this, the objector must supply some further premise(s) which meets the following conditions: (i) its conjunction with (1) and (2) formally entails a contradiction, (ii) it is either necessarily true, essential to theism, or a logical consequence of propositions that are, and (iii) its meeting conditions (i) and (ii) could not be rationally denied by a right-thinking person.{18}

I am not aware of anyone who has tried to supply the missing premise which meets these conditions, but let us try to find some such proposition. Perhaps it might be claimed that the following two propositions will suffice:

3. God is able to actualize a possible world in which all persons freely receive Christ.
4. God prefers a world in which no persons fail to receive Christ and are damned to a world in which some do.

It might be claimed that anyone who accepts (1) must also accept (3) and (4), since (3) is true in virtue of God's omniscience (which includes middle knowledge) and His omnipotence, and (4) is true in virtue of His omnibenevolence.

But is (3) necessarily true or incumbent upon the theist who is a Molinist? This is far from clear. For although it is logically possible that God actualize any possible world (assuming that God exists in every possible world), it does not follow therefrom that it is feasible for God to actualize any possible world.{19} For God's ability to actualize worlds containing free creatures will be limited by which counterfactuals of creaturely freedom are true in the moment logically prior to the divine decree. In a world containing free creatures, God can strongly actualize only certain segments or states of affairs in that world, and the remainder He must weakly actualize, using His middle knowledge of what free creatures would do under any circumstances. Hence, there will be an infinite number of possible worlds known to God by His natural knowledge which are not realizable by Him because the counterfactuals of creaturely freedom which must be true in order for Him to weakly actualize such worlds are in fact false.{20} His middle knowledge serves to delimit, so to speak, the range of logically possible worlds to those which are feasible for Him to actualize. This might be thought to impugn divine omnipotence, but in fact such a restriction poses no non-logical limit to God's power.{21}

So the question is whether it is necessarily true or incumbent upon the Molinist to hold that within the range of possible worlds which are feasible to God there is at least one world in which everyone freely receives Christ and is saved. Now within Molinism there is a school known as Congruism which would appear to agree that such a position is mandatory for the theist .{22} According to Suarez, for any individual God might create there are gifts of prevenient grace which would be efficacious in winning the free consent of that individual to God's offer of salvation.{23} Such grace, which Suarez calls "congruent grace" (*gratia congrua*), consists in the divine gifts and aids which would be efficacious in eliciting the response desired by God, but without coercion. No grace is intrinsically efficacious, but congruent grace is always in fact efficacious because God knows via His middle knowledge that the creature would freely and affirmatively respond to it, were He to offer it. Accordingly, the Congruist might claim

5. God knows for any individual *S* under what circumstances *S* would freely receive Christ.

But why is it incumbent upon us to accept (5)? Given that persons are free, might there not be persons who would not receive Christ in any actual world in which they existed? Suarez himself seemed to vacillate at this point. When asked whether there is a congruent grace for every person God could create or whether some persons are so incorrigible that regardless of the grace accorded them by God, they would not repent, Suarez wants to say that God can win the free response of any creature He could create. But when pressed that it is logically

possible that some person should resist every grace, Suarez concedes that this is true, but adds that God could still save such a person by over- powering his will.^{24} But such coercive salvation is beside the point; so long as there might be individuals for whom no grace would be congruent, (5) cannot be regarded as necessary or essential to theism. On the contrary, the theist might hold that

6. For some individual *S*, there are no circumstances under which *S* would freely receive Christ.

In such a case, the theist could consistently maintain that there are no worlds feasible for God in which *S* exists and is saved.

The Congruist could, however, accept (6) and still insist that there are congruent graces for many other individuals and that God could actualize a world containing only such individuals, so that every one would receive Christ and be saved. But the Congruist must show more than that for certain (or even every) individual there are circumstances under which that person would freely receive Christ. He must show that the circumstances under which various individuals would freely receive Christ are compossible, so that all persons in some possible world would freely receive Christ and be saved. It is not even enough to show that the various circumstances are compossible; if he is to avoid the counterfactual fallacy of strengthening the antecedent, he must show that in the combined circumstances the consequent still follows. It might be that in circumstances C_1 , individual S_1 would do action *a* and that in circumstances C_2 individual S_2 would do *b* and that C_1 and C_2 are compossible, but it does not follow that in $C_1 - C_2$, S_1 would do *a* or that in $C_1 - C_2$, S_2 would do *b*. Hence, even if it were the case that for any individual He might create, God could actualize a world in which that person is freely saved, it does not follow that there are worlds which are feasible for God in which all individuals are saved. Contrary to (3) the theist might hold that

7. There is no world feasible for God in which all persons would freely receive Christ.

Unless we have good reason to think that (7) is impossible or essentially incompatible with Christian theism, the objector has failed to show (1) and (2) to be inconsistent.

That leads to (4), which, it is said, is incumbent upon anyone who accepts God's omnibenevolence. Now I think that it is obvious that, all things being equal, an omnibenevolent God prefers a world in which all persons are saved to a world containing those same persons some of whom are lost. But (4) is stronger than this. It claims that God prefers any world in which all persons are saved to any world in which some persons are damned. But again, this is far from obvious. Suppose that the only worlds feasible for God in which all persons receive Christ and are saved are worlds containing only a handful of persons. Is it not at least possible that such a world is less preferable to God than a world in which great multitudes come to experience His salvation and a few are damned because they freely reject Christ? Not only does this seem to me possibly true, but I think that it probably is true. Why should the joy and blessedness of those who would receive God's grace and love be prevented on account of those who would freely spurn it? An omnibenevolent God might want as many creatures as possible to share salvation; but given certain true counterfactuals of creaturely freedom, God, in order to have a multitude in heaven, might have to accept a number in hell. Hence, contrary to (4) the theist might well hold that

8. God prefers certain worlds in which some persons fail to receive Christ and are damned to certain worlds in which all receive Christ and are saved.

So unless we have good reason to think that (8) is impossible or essentially incompatible with Christian theism, the objector has again failed to show (1) and (2) to be inconsistent.

Since we have no good grounds for believing (3) and (4) to be necessary or essential to theism, or for that matter even contingently true, the opponent of the traditional Christian view has not succeeded in demonstrating that there is no possible world in which God is omniscient, omnipotent, and omnibenevolent and yet in which some persons do not receive Christ and are damned.

But, on the pattern of the Free Will Defense, we can yet go further. For I believe that we can demonstrate not only that (1) and (2) have not been shown to be inconsistent, but also that they are, indeed, consistent. In order to show (1) and (2) to be consistent, the orthodox defender has to come up with a proposition which is consistent with (1) and which together with (1) entails (2). This proposition need not be plausible or even true; it need be only a possibly true proposition, even if it is contingently false.

Now we have seen that it is possible that God wants to maximize the number of the saved: He wants heaven to be as full as possible. Moreover, as a loving God, He wants to minimize the number of the lost: He wants hell to be as empty as possible. His goal, then, is to achieve an optimal balance between these, to create no more lost than is necessary to achieve a certain number of the saved.

But it is possible that the balance between saved and lost in the actual world is such an optimal balance. It is possible that in order to create the actual number of persons who will be saved, God had to create the actual number of persons who will be lost. It is possible that the terrible price of filling heaven is also filling hell and that in any other possible world which was feasible for God the balance between saved and lost was worse. It is possible that had God actualized a world in which there are less persons in hell, there would also have been less persons in heaven. It is possible that in order to achieve this much blessedness, God was forced to accept this much loss. Even if we grant that God could have achieved a better ratio between saved and lost, it is possible that in order to achieve such a ratio God would have had to so drastically reduce the number of the saved as to leave heaven deficient in population (say, by creating a world of only four people, three of whom go to heaven and one to hell). It is possible that in order to achieve a multitude of saints, God had to accept an even greater multitude of sinners.

It might be objected that necessarily a loving God would not create persons who He knew would be damned as a concomitant of His creating persons who He knew would be saved. Given His middle knowledge of such a prospect, He should have refrained from creation altogether. But this objection does not strike me as true, much less necessarily so. It is possible that God loves all persons and desires their salvation and furnishes sufficient grace for the salvation of all; indeed, some of the lost may receive even greater gifts of prevenient grace than some of the saved. It is of their own free will that people reject the grace of God and are damned. Their damnation is the result of their own choice and is contrary to God's perfect will, which is that all persons be saved, and their previsioned obduracy should not be allowed to preclude God's creating persons who would freely respond to His grace and be saved.

But it might be further objected that necessarily a loving God would not create persons who would be damned as a concomitant of His creating persons who would be saved if He knew that the former would under other circumstances have freely responded to His grace and been saved. Therefore, He should not have created at all. Now one might respond by denying the necessary truth of such a proposition; one could argue that so long as people receive sufficient grace for salvation in whatever circumstances they are, then they are responsible for their response in such circumstances and cannot complain that had they been in different circumstances, then their reaction would have been different. But even if we concede that the objector's principle is necessarily true, how do we know that its antecedent is fulfilled? We have seen that it is possible that some persons would not freely receive Christ under any circumstances. Suppose, then, that God has so ordered the world that all persons who are actually lost are such persons. In such a case, anyone who actually is lost would have been lost in any world in which God had created him. It is possible, then, that although God, in order to bring this many persons to salvation, had to pay the price of seeing this many persons lost, nevertheless He has providentially ordered the world such that those who are lost are persons who would not have been saved in any world feasible for God in which they exist. On the analogy of transworld depravity, {25} we may accordingly speak of the property of *transworld damnation*, which is possessed by any person who freely does not respond to God's grace and so is lost in every world feasible for God in which that person exists (this notion can, of course, be more accurately restated in terms of individual essences and instantiations thereof).

Therefore, we are now prepared to furnish a proposition which is consistent with (1) and entails (2):

9. God has actualized a world containing an optimal balance between saved and unsaved, and those who are unsaved suffer from transworld damnation.

So long as (9) is even possible, one is consistent in believing both (1) and (2).

On the basis of this analysis, we now seem to be equipped to provide *possible* answers to the three difficult questions which prompted our inquiry. (i) Why did God not create a world in which everyone freely receives Christ and so is saved? There is no such world which is feasible for God. He would have actualized such a world were this feasible, but in light of certain true counterfactuals of creaturely freedom every world realizable by God is a world in which some persons are lost. Given His will to create a world of free creatures, God must accept that some will be lost. (ii) Why did God create this world when He knew that so many persons would not receive Christ and would therefore be lost? God desired to incorporate as many persons as He could into the love and joy of divine fellowship while minimizing the number of persons whose final state is hell. He therefore chose a world having an optimal balance between the number of the saved and the number of the damned. Given the truth of certain counterfactuals of creaturely freedom, it was not feasible for God to actualize a world having as many saved as but with no more damned than the actual world. The happiness of the saved should not be precluded by the admittedly tragic circumstance that their salvation has as its concomitant the damnation of many others, for the fate of the damned is the result of their own free choice. (iii) Why did God not supply special revelation to persons who, while rejecting the general revelation they do have, would have responded to the gospel of Christ if they had been sufficiently well-informed concerning it? There are no such persons. In each world in which they exist God loves and wills the salvation of persons who in the actual world have only general revelation, and He graciously and preveniently solicits their response by

His Holy Spirit, but in every world feasible for God they freely reject His grace and are lost. If there were anyone who would have responded to the gospel if he had heard it, then God in His love would have brought the gospel to such a person. Apart from miraculous intervention, "a single revelation to the whole earth has never in the past been possible, given the facts of geography and technology";^{26} but God in His providence has so arranged the world that as the gospel spread outward from its historical roots in first century Palestine, all who would respond to this gospel, were they to hear it, did and do hear it. Those who have only general revelation and do not respond to it would also not have responded to the gospel had they heard it. Hence, no one is lost because of lack of information due to historical or geographical accident. All who want or would want to be saved will be saved.

The above are only *possible* answers to the questions posed. We have been about a defense, not a theodicy, concerning the soteriological problem of evil. What I have shown is that the orthodox Christian is not inconsistent in affirming that an omniscient, omnipotent, and omnibenevolent God exists and that some people do not receive Christ and are damned. It might, of course, be countered that while the possibility of (9) shows the orthodox position to be consistent, still (9) is highly improbable, given the world in which we live, so that (2) still remains improbable, if not inconsistent, with regard to (1). But here the strength of the position I have been defending emerges beyond that of Plantinga's Free Will Defense. For while it seems fantastic to attribute all natural evil to the actions of demonic beings (*e.g.*, earthquakes' being caused by the demons pushing about tectonic plates), (9) does not seem similarly implausible. On the contrary I find the above account of the matter to be quite plausible not only as a defense, but also as a soteriological theodicy. Indeed, I think that it helps to put the proper perspective on Christian missions: it is our duty to proclaim the gospel to the whole world, trusting that God has so providentially ordered things that through us the good news will be brought to persons who God knew would respond if they heard it.

Conclusion

In conclusion, then, I think that a middle knowledge perspective on the problem of the exclusivity of the Christian religion can be quite fruitful. Since all persons are in sin, all are in need of salvation. Since Christ is God's unique expiatory sacrifice for sin, salvation is only through Christ. Since Jesus and his work are historical in character, many persons as a result of historical and geographical accident will not be sufficiently well-informed concerning him and thus unable to respond to him in faith. Such persons who are not sufficiently well-informed about Christ's person and work will be judged on the basis of their response to general revelation and the light that they do have. Perhaps some will be saved through such a response; but on the basis of Scripture we must say that such "anonymous Christians" are relatively rare. Those who are judged and condemned on the basis of their failure to respond to the light of general revelation cannot legitimately complain of unfairness for their not also receiving the light of special revelation, since such persons would not have responded to special revelation had they received it. For God in His providence has so arranged the world that anyone who would receive Christ has the opportunity to do so. Since God loves all persons and desires the salvation of all, He supplies sufficient grace for salvation to every individual, and nobody who would receive Christ if he were to hear the gospel will be denied that opportunity. As Molina puts it, our salvation is in our own hands.

Finally, I hope that no reader has been offended by what might appear to be a rather dry and dispassionate discussion of the salvation and damnation of people apart from Christ. But with such an emotionally explosive issue on the table, it seems to me that it is prudent to treat it

with reserve. No orthodox Christian *likes* the doctrine of hell or delights in anyone's condemnation. I truly wish that universalism were true, but it is not. My compassion toward those in other world religions is therefore expressed, not in pretending that they are not lost and dying without Christ, but by my supporting and making every effort myself to communicate to them the life-giving message of salvation through Christ.{27}

NOTES

{1} On Jesus' self-understanding, see James D. G. Dunn, *Jesus and the Spirit* (London: SCM Press, 1975), pp. 11 -92; Royce Gordon Gruenler, *New Approaches to Jesus and the Gospels* (Grand Rapids, Mich.: Baker, 1982), especially pt. 1.

{2} For arguments for the authenticity of this saying, see Dunn, *Jesus*, pp. 26-33, 371.

{3} On the authenticity of this and other "Son of Man" sayings, see Seyoon Kim, *The Son of Man as the Son of God* (Grand Rapids, Mich.: Wm. B. Eerdmans, 1985), especially pp. 88-89, and the literature cited there.

{4} The authenticity of this saying is supported by its multiple attestation (cf. Lk. 13:22-30), its Jewish milieu, and its coherence with Jesus's other teachings. The most plausible way to avoid the inference would be to deny the universal scope of the saying, restricting it to the Jews of Jesus' generation. But it hardly seems likely that Jesus believed that the majority of the Gentile world would respond to him in repentance and faith.

{5} Augustine *De vera religione* 3.5; 24.47; Augustine *De civitate Dei* 20.5; Thomas Aquinas *Summa contra gentiles* 1. 6.

{6} For a brief account, see my *The Historical Argument for the Resurrection of Jesus during the Deist Controversy*, Texts and Studies in Religion 23 (Lewiston, NY: Edwin Mellen Press, 1985), pp. 82-92.

{7} "Dogmatic Constitution on the Church" [*Lumen Gentium* 2.16], in *The Documents of Vatican II*, ed. W. M. Abbott (New York: Guild Press, 1966), p. 34.

{8} "Declaration on Non-Christian Religions," in *Documents*, pp. 663-66.

{9} "The Church" [*LG* 2.16], p. 35.

{10} For example, the constitution on the Church also affirms that anyone who knows that Christ is the unique way of salvation and that the Church is his body and yet refuses to become a Catholic cannot be saved ("The Church" [*LG* 2.14], in *Documents*, pp. 32-33). The ambiguity and inconsistency of the documents probably reflects the struggle between traditionalists and modernists in the Council.

{11} John Hick, "Jesus and the World Religions," in *The Myth of God Incarnate*, ed. John Hick (London: SCM, 1977), pp. 179-80.

{12} For a defense of such a position, see Stuart C. Hackett, *The Reconstruction of the Christian Revelation Claim* (Grand Rapids, Mich.: Baker, 1985), pp. 242-46.

{13} As we have seen, it is the testimony of Scripture that most persons who *hear* the gospel do not respond with saving faith and, moreover, that most of those without the light of the gospel do not even respond to the light of general revelation fact which sociological observations would seem to confirm. Hence, I would agree with Hick that attempts to resolve the difficulty by appeal to "anonymous Christians" or "implicit faith" or "the invisible church" are ultimately unavailing, but not because they are clinging to the husk of the old theology, but precisely because they are incompatible with it.

{14} Of course, this is a controversial assumption, But for a defense of the doctrine of middle knowledge see Alvin Plantinga, "Reply to Robert Adams, " in *Alvin Plantinga*, ed. James Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht, Holland: D. Reidel, 1985), pp. 372-82; Jonathan L. Kvanvig, *The Possibility of an All-Knowing God* (New York: St. Martin's, 1986), pp. 121-48; Alfred J. Freddoso, "Introduction," in Luis Molina, *On Divine Foreknowledge*, trans. with notes by Alfred J. Freddoso (Ithaca, New York: Cornell University Press, 1988); and my own *Divine Foreknowledge and Human Freedom* (Leiden: E. J. Brill, 1990).

{15} For Molina's doctrine, see Ludovici Molina *De liberi arbitrii cum gratia donis, divina praescientia, providentia, praedestinationae et reprobatione Concordia* 4. This section has been translated by Freddoso under the title in note 14. For Suarez's doctrine, see R. P. Francisci Suarez, *Opera omnia*, ed. Carolo Berton, vol. 11: *Opuscula theologica sex materiam de auxiliis gratiae absolventia quaestionesque de scientia, libertate et iustitia Dei elucidantia: Opusculum II: De scientia Dei futurorum contingentium* 2. 7.

{16} In a proposition taken in the composite sense, the modal operator governs the proposition as a whole, *e.g.*, "Necessarily, if God sees Socrates sitting, he is sitting." When the proposition is taken in the divided sense, the modal operator governs only a component of the proposition, *e.g.* "If God sees Socrates sitting, he is necessarily sitting. " The distinction is analogous to the more familiar difference between necessity *de dicto* and *de re*. In the case at hand, the proposition "If God via His middle knowledge and decree has foreknown and chosen to actualize a world in which Peter will be saved, then necessarily Peter will be saved" is true *in sensu composito*, but false *in sensu divivo*.

{17} For his reasoning see Alvin Plantings, *God and Other Minds* (Ithaca, NY: Cornell University Press, 1967), pp. 115-55; Alvin Plantinga, *The Nature of Necessity*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1974), pp. 164-95; Alvin Plantinga, "Self-Profile," in *Plantinga*, pp. 36-55.

{18} For an explanation of why each of these conditions must be met, see Plantinga, *God and Other Minds*, pp. 116-17, and Plantinga, "Self-Profile," pp. 39-40.

{19} See Thomas P. Flint, "The Problem of Divine Freedom," *American Philosophical Quarterly* 20 (1983): 257. According to Flint, although all worlds are possible for God to actualize, a world is feasible for God to actualize if and only if it is a member of that proper subset of all possible worlds determined by the counterfactuals of creaturely freedom which God knows to be true.

{20} See Plantinga, "Self-Profile," pp. 50-52.

{21} See Thomas P. Flint and Alfred J. Freddoso, "Maximal Power," in *The Existence and Nature of God*, ed. Alfred J. Freddoso (Notre Dame, Ind.: University of Notre Dame Press, 1983), pp. 93-98.

{22} On Congruism, see *Dictionnaire de théologie catholique*, ed. A. Vacant, E. Mangenot, E. Amann, (Paris: Letouzey et ane, 1923), s.v. "Congruisme," by H. Quilliet, vol. 3. 1, cols. 1120-1138; *Hastings' Encyclopaedia of Religion and Ethics*, s.v. "Molinism," by Aelfred Whitacre; Th. de Régnon, *Banes et Molin* (Paris: H. Oudin, 1883), pp. 122-60.

{23} Suarez, *Opera*, vol. 11: *Opuscula 1: De concursu et efficaci auxilio Dei ad actus libri arbitrii necessario* 3.6, 14, 16, 17, 20; Suarez, *Opera*, vol. 10: *Appendix prior: Tractatus de vera intelligentia auxi ii efficacis, ejusque concordia cum libertate voluntarii consensus* 1, 12, 13, 14.

{24} Suarez, *De concursu et auxilio Dei* 3.14, 16; Suarez, *De scientia Dei* 2.6.9.

{25} See Plantinga, *Nature of Necessity*, pp. 184-99.

{26} Hick, "Jesus and World Religions," p. 180.

{27} I am very grateful to Thomas Flint and Robert Gundry for helpful comments on the first draft of this paper.

Politically Incorrect Salvation

Dr. William Lane Craig



William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He lives in Atlanta, Georgia, with his wife Jan and their two teenage children Charity and John. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during

which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until 1994.

Contemporary religious pluralism regards the traditional Christian doctrine of salvation through Christ alone as unconscionable. The problem seems to be that the existence of an all-loving and all-powerful God seems incompatible with the claim that persons who do not hear and embrace the gospel of salvation through Christ will be damned. Closer analysis reveals the problem to be counterfactual in nature: God could not condemn persons who, though freely rejecting God's sufficient grace for salvation revealed through nature and conscience,

would have received His salvific grace mediated through the gospel. In response, it may be pointed out that God's being all-powerful does not guarantee that He can create a world in which all persons freely embrace His salvation and that His being all-loving does not entail that, even if such a world were feasible for Him, God would prefer such a world over a world in which some persons freely reject His salvation. Furthermore, it is possible that God has created a world having an optimal balance between saved and lost and that God has so providentially ordered the world that those who fail to hear the gospel and be saved would not have freely responded affirmatively to it even if they had heard it.

"Politically Incorrect Salvation." In *Christian Apologetics in the Post-Modern World*, pp. 75-97. Ed. T. P. Phillips and D. Ockholm. Downer's Grove, Ill.: Inter-Varsity, 1995.

Introduction: The Problem of Religious Diversity

"Diversity" is the shibboleth of the post-modern age. Nowhere is this more so than in the realm of theology or religious studies. The Harvard theologian Gordon Kaufman, observing that throughout most of Christian church history "the fundamental truth of the basic Christian claim was taken for granted, as was the untruth . . . of the claims of the church's opponents," says that by contrast today there has been "a striking change" among many Christian theologians:

Instead of continuing the traditional attempts to make definitive normative claims about 'Christian truth' or 'the Christian revelation,' many now see the plurality among religious traditions . . . as [itself] of profound human meaning and importance: what seems required now, therefore, rather than polemical pronouncements, is careful and appreciative study, together with an attitude of openness to what can be learned from this great diversity{1}

According to Kaufman, religious diversity calls for a response of openness, and openness is incompatible with normative truth claims and polemical pronouncements (that is, apologetics). Why is this so? Alan Bloom, I think, puts his finger on the answer when he observes that there is a pervasive conviction in our culture that "Relativism is necessary to openness; and this is the virtue, the only virtue, which all primary education for more than fifty years has dedicated itself to inculcating. Openness--and the relativism that makes it the only plausible stance in the face of various claims to truth . . .--is the great insight of our times."{2} Religious diversity thus calls for a response of openness, and a necessary condition of openness is relativism. Since religious relativism is obviously incompatible with the objective truth of Christianity, religious diversity therefore implies that normative Christian truth claims can be neither made nor defended.

Thus, we are led to the paradoxical result that in the name of religious diversity traditional Christianity is de-legitimated and marginalized.

Religious Diversity and Objective Truth

But why think that the alleged links between religious diversity and openness on the one hand and between openness and relativism on the other are so firmly forged? Why cannot someone who believes in the normative truth of the Christian world view, as it comes to expression in the catholic creeds, for instance, be open to seeing truth in and learning from other world

religions? Arthur Holmes has taught generations of Wheaton students that "all truth is God's truth," regardless of where it is to be found. The orthodox Christian has no reason to think that *all* the truth claims made by other world religions are false, but only those that are incompatible with Christian truth claims. So why must one be a relativist in order to be open to truth in other world religions?

No doubt the post-modernist answer to that question will be that the openness I contemplate here is insufficient; it opens the door only a crack. But religious diversity beckons us to throw open the doors of our minds to the legitimacy of religious truth claims logically incompatible with those of the Christian faith. Religious diversity requires us to view these supposedly competing claims as equally true as, or no less true than, or as equally efficacious as, Christian truth claims.

But why does religious diversity imply *this* sort of openness? The post-modernist is advocating much more than mere intellectual humility here. The post-modernist is not merely saying that we cannot know with certainty which religious world view is true and we therefore must be open-minded; rather he maintains that *none* of the religious world views is objectively true, and therefore none can be excluded in deference to the allegedly one true religion.

But why think such a thing? Why could not the Christian world view be objectively true? How does the mere *presence* of religious world views incompatible with Christianity show that distinctively Christian claims are not true? Logically, the existence of multiple, incompatible truth claims only implies that *all* of them cannot be (objectively) true; but it would be obviously fallacious to infer that not one of them is (objectively) true. So why could it not be the case that a personal God exists and has revealed Himself decisively in Jesus Christ, just as biblical Christianity affirms?

More than that, it needs to be seriously questioned whether the post-modernist, pluralistic position even makes sense. Here we need to ask ourselves what it means to say that an assertion is true and how we may test for truth. A statement or proposition is (objectively) true if and only if it corresponds to reality, that is to say, reality is just as the statement says that it is. Thus, the statement "The Cubs won the 1994 World Series" is true if and only if the Cubs won the 1994 World Series. In order to show a proposition to be true, we present evidence in the form of either deductive or inductive arguments which have that proposition as the conclusion. In both sorts of reasoning, logic and factual evidence are the keys to showing soundly that a conclusion is true. Since a proposition that is logically contradictory is necessarily false and so cannot be the conclusion of a sound argument, and since a proposition validly inferred from factually true premisses ought to be regarded as factually true, one may generalize these notions to say that a world view ought to be regarded as true just in case it is logically consistent and fits all the facts known in our experience. Such a test for truth has been called *systematic consistency*: "consistency" meaning obedience to the laws of logic and "systematic" meaning fitting all the facts known by experience.^{3} Although such a test *precludes* the truth of any world view which fails it, it does not *guarantee* the truth of a world view which passes it. For more than one view could be consistent and fit all the facts yet known by experience; or again, a view which is systematically consistent with all that we now know could turn out to be falsified by future discoveries. Systematic consistency thus underdetermines world views, and so (as in the case of all inductive reasoning) we must be content with plausibility or likelihood, rather than rational certainty.

Now under the influence of Eastern mysticism, many people today would deny that systematic consistency is a test for truth. They affirm that reality is ultimately illogical or that logical contradictions correspond to reality. They assert that in Eastern thought the Absolute or God or the Real transcends the logical categories of human thought. They are apt to interpret the demand for logical consistency as a piece of Western imperialism which ought to be rejected along with other vestiges of colonialism.

What such people seem to be saying is that the classical law of thought known as the Law of Excluded Middle is not necessarily true, that is to say, they deny that of a proposition and its negation, necessarily, one is true and the other is false. Such a denial could take two different forms. (1) It could be interpreted on the one hand to mean that a proposition and its negation *both* can be true (or both false). Thus, it is true both that God is love and, in the same sense, that God is not love. Since both are true, the Law of Contradiction, that a proposition and its negation cannot both be true (or both false) at the same time, is also denied. (2) On the other hand, the original denial could be interpreted to mean that of a proposition and its negation *neither* may be true (or neither false). Thus, it is not true that God is good and it is not true that God is not good; there is just no truth value at all for such propositions. In this case it is the classical Principle of Bivalence, that for any proposition, necessarily that proposition is either true or false, that is denied along with the Law of Excluded Middle.

Now I am inclined to say frankly that such positions are crazy and unintelligible. To say that God is both good and not good in the same sense or that God neither exists nor does not exist is just incomprehensible to me. In our politically correct age, there is a tendency to vilify all that is Western and to exalt Eastern modes of thinking as at least equally valid if not superior to Western modes of thought. To assert that Eastern thought is seriously deficient in making such claims is to be a sort of epistemological bigot, blinkered by the constraints of the logic-chopping Western mind. But this judgement is far too simplistic. In the first place, there are thinkers within the tradition of Western thought alone who have held the mystical views in question (Plotinus would be a good example), so that there is no warrant for playing off East against West in this matter. Secondly, the extent to which such thinking represents "the Eastern mind" has been greatly exaggerated. In the East the common man--and the philosopher, too--lives by the Laws of Contradiction and Excluded Middle in his everyday life; he affirms them every time he walks through a doorway rather than into the wall. It is only at an extremely theoretical level of philosophical speculation that such laws are denied. And even at that level, the situation is not monochromatic: Confucianism, Hinayana Buddhism, pluralistic Hinduism as exemplified in Sankhya-Yoga, Vaishesika-Nyaya, and Mimamsa schools of thought, and even Jainism do not deny the application of the classical laws of thought to ultimate reality.^{4} Thus, a critique of Eastern thought from within Eastern thought itself can be--and has been--made. We in the West should not therefore be embarrassed or apologetic about our heritage; on the contrary it is one of the glories of ancient Greece that her thinkers came to enunciate clearly the principles of logical reasoning, and the triumph of logical reasoning over competing modes of thought in the West has been one of the West's greatest strengths and proudest achievements.

Why think then that such self-evident truths as the principles of logic are in fact invalid for ultimate reality? Such a claim seems to be both self-refuting and arbitrary. For consider a claim like "God cannot be described by propositions governed by the Principle of Bivalence." If such a claim is true, then it is not true, since it itself is a proposition describing God and so has no truth value. Thus, such a claim refutes itself. Of course, if it is not true, then it is not true, as the Eastern mystic alleged, that God cannot be described by propositions governed by

the Principle of Bivalence. Thus, if the claim is not true, it is not true, and if it is true, it is not true, so that in either case the claim turns out to be not true. Or consider the claim that "God cannot be described by propositions governed by the Law of Contradiction." If this proposition is true, then, since it describes God, it is not itself governed by the Law of Contradiction. Therefore, it is equally true that "God can be described by propositions governed by the Law of Contradiction." But then which propositions are these? There must be some, for the Eastern mystic is committed to the truth of this claim. But if he produces any, then they immediately refute his original claim that there are no such propositions. His claim thus commits him to the existence of counter-examples which serve to refute that very claim.{5}

Furthermore, apart from the issue of self-refutation, the mystic's claim is wholly arbitrary. Indeed, no reason can ever be given to justify denying the validity of logical principles for propositions about God. For the very statement of such reasons, such as "God is too great to be captured by categories of human thought" or "God is wholly other," involves the affirmation of certain propositions about God which are governed by the principles in question. In short, the denial of such principles for propositions about ultimate reality is completely and essentially arbitrary.

Some Eastern thinkers realize that their position, as a position, is ultimately self-refuting and arbitrary, and so they are driven to deny that their position really is a position! They claim rather than their position is just a technique pointing to the transcendent Real beyond all positions. But if this claim is not flatly self-contradictory, as it would appear, if such thinkers literally *have no position*, then there just is nothing here to assess and they have nothing to say. This stupefied silence is perhaps the most eloquent testimony for the bankruptcy of the denial of the principles of logical reasoning.

This same debate between certain Eastern mystical modes of thought and classical logical thinking is being re-played in the debate between modernism and radical post-modernism. I want to say clearly that I carry no brief for Enlightenment theological rationalism. According to this modernist viewpoint, religious beliefs are rational if and only if one has evidence on which those beliefs are based. While I am convinced that there is sufficient evidence to make Christian belief rational, I do not believe that such evidence is necessary for Christian belief to be rational.{6} Not only is theological rationalism predicated on an epistemological foundationalism which is overly restrictive and finally self-refuting, but the Christian belief system itself teaches that the ground of our knowledge of the truth of the Christian faith is the self-authenticating witness of the Holy Spirit (Rom. 8. 15-16; I Jn. 5. 7-9). Argumentation and evidence may serve as confirmations of Christian beliefs and as means of showing to others the truth of those beliefs, but they are not properly the foundation of those beliefs. In a sense, then, my own religious epistemology could be called post-modern, and the provisional character of systematic consistency accords with intellectual humility advocated by post-modernism. But radical post-modernists would scorn these sops. They would regard me (perhaps justifiably!) as hopelessly pre-modern. They reject altogether Western rationality and metaphysics, claiming that there is no objective truth about reality. "The truth," as John Caputo says, "is that there is no truth." {7} But such a claim falls prey to precisely the same objections that I raised above {8}--indeed, the post-modernist claim is not really distinguishable from certain Buddhist philosophies. To assert that "The truth is that there is no truth" is both self-refuting and arbitrary. For if this statement is true, it is not true, since there is no truth. So-called deconstructionism thus cannot be halted from deconstructing itself. Moreover, there is just no reason that can be given for adopting the post-modern perspective

rather than, say, the outlooks of Western capitalism, male chauvinism, white racism, and so forth, since post-modernism has no more truth to it than these perspectives. Caught in this self-defeating trap, some post-modernists have been forced to the same recourse as Buddhist mystics: denying that post-modernism is really a view or position at all. But then, once again, why do they continue to write books and talk about it? They are obviously making some cognitive claims--and if not, then they literally have nothing to say and no objection to our employment of the classical canons of logic.

The Offense of Christian Particularism

So I ask again: Why could not the Christian world view be objectively true? Here we come to the nub of the issue. The problem seen by post-modernists in the objective truth of the Christian religion is that if that religion is objectively true, then multitudes of people, most of whom belong to other religious traditions, find themselves excluded from salvation, often through no fault of their own, due simply to historical and geographical accident, and therefore destined to hell or annihilation.{9} Many theologians find this situation morally unconscionable and have therefore abandoned the objective truth of Christianity in favor of various forms of religious relativism.

My own doctoral mentor John Hick is illustrative. Hick began his career as a fairly conservative Christian theologian. One of his first books was entitled *Christianity at the Centre*. Then he began to study more closely the other world religions. Though he had always had, of course, an awareness of these competing world views, he had not come to know and appreciate their adherents personally. As he learned to know some of the selfless, saintly persons in these other traditions, it became unthinkable to him that they should all be condemned to hell. These religions must be as equally valid channels of salvation as the Christian faith. But Hick realized that this meant denying the uniqueness of Jesus; somehow he and his exclusivistic claims must be got out of the way. He therefore came to regard the deity and incarnation of Christ as a myth or metaphor.{10} Today Hick is no longer even a theist, since what he calls "the Real," which is apprehended in the various world religions under culturally conditioned and objectively false religious paradigms, has objectively none of the distinctive properties of the God of theism.

Universalism is thus the *raison d'être* for the response of openness to religious diversity thought to be required by post-modernist thinkers.{11} Total openness and religious relativism spring from an abhorrence of Christian particularism.

The situation is not, however, so simple as it might seem at first. There are a number of distinctions that need to be made here which are often blurred. On the one hand there is the distinction between universalism and particularism of which I have spoken. *Universalism* is the doctrine that all human persons will partake of God's salvation; *particularism* holds that only some, but not all, human persons will partake of God's salvation. Particularism ranges between *broad* and *narrow* versions, one extreme being that scarcely any shall be lost in comparison with the saved and the other extreme that scarcely any shall be saved in comparison with the lost.

A second set of distinctions needs to be made between *pluralism*, *inclusivism*, and *exclusivism*. Christian exclusivism is the doctrine that salvation is appropriated only on the basis of Christ's work and through faith in him. Although exclusivism is most naturally associated with particularism, this is not necessary: Thomas Talbott, for example, would be

one who is both a Christian exclusivist and universalist, holding that hell is at worst a purgatory through which people pass until they freely place their faith in Christ and are saved.{12}

Christian inclusivism is the doctrine that salvation is appropriated only on the basis of Christ's work, but not necessarily through explicit faith in him. The term "inclusivism" has been misused to denominate the doctrine that salvation is *available* to all persons on the basis of Christ's work, but not necessarily through explicit faith in him.{13} Analogously, "exclusivism" has been misused to refer to the doctrine that salvation is *available* only on the basis of Christ's work and through faith in him. These represent a misuse of terms because on these definitions those who are saved could be extensionally equivalent--that is, the very same persons--whether inclusivism or exclusivism is true.{14} For clearly, just because salvation is *available* to more people under inclusivism than exclusivism, so defined, that does not imply that more people actually *avail* themselves of salvation under inclusivism than under exclusivism. But it seems perverse to call a view inclusivistic if it does not actually include any more people in salvation than so-called exclusivism.

Rather the distinction which has been mislabeled here is between what may be more appropriately dubbed *accessibilism* and *restrictivism*. Restrictivists typically maintain that salvation is accessible only through the hearing of the gospel and faith in Christ. Accessibilists maintain that persons who never hear the gospel can avail themselves of salvation through their response to God's general revelation alone.

Genuine inclusivists believe that salvation is not merely accessible to, but is actually accessed by persons who never hear the gospel. Inclusivism may be *broad* or *narrow*, ranging all the way from universalism to narrow particularism.

Although a broad inclusivism has become increasingly popular among Christian theologians who want to maintain the truth of Christianity in the face of religious diversity, the view faces severe biblical and missiological objections. Biblically, the teaching of the New Testament and of our Lord himself seems to be that while the harvest of redeemed persons will be multitudinous, the number of the lost will be also and perhaps even more multitudinous (Matt. 7.13-14; 24.9-12; Lk. 18.8b). In particular the fate of those who have not placed their faith explicitly in Christ for salvation seems bleak, indeed (Rom. 1.18-32; Eph. 2.12; 4.17-19).

Missiologically, a broad inclusivism undermines the task of world mission. Since vast numbers of persons in non-Christian religions are in fact already included in salvation, they need not be evangelized. Instead missions are reinterpreted along the lines of social engagement--a sort of Christian peace corps, if you will. Nowhere is this reinterpretation of missions better illustrated than in the documents of the Second Vatican Council. In its Dogmatic Constitution on the Church, the Council declared that those who have not yet received the gospel are related in various ways to the people of God.{15} Jews, in particular, remain dear to God, but the plan of salvation also includes all who acknowledge the Creator, such as Muslims. The Council therefore declared that Catholics now pray *for* the Jews, not for the *conversion* of the Jews and also declares that the Church looks with esteem upon Muslims.{16} Missionary work seems to be directed only toward those who "serve the creature rather than the Creator" or are utterly hopeless. The Council thus implies that vast multitudes of persons who consciously reject Christ are in fact saved and therefore not appropriate targets for evangelization.

Unfortunately, this same perspective has begun to make inroads into evangelical theology. At a meeting of the Evangelical Theology Group at the American Academy of Religion convention in San Francisco in November of 1992, Clark Pinnock declared, "I am appealing to evangelicals to make the shift to a more inclusive outlook, much the way the Catholics did at Vatican II." {17} Pinnock expresses optimism that great numbers of the unevangelized will be saved. "God will find faith in people without the persons even realizing he/she had it." He even entertains the possibility of people's being given another chance after death, once they have been freed from "whatever obscured the love of God and prevented them from receiving it in life." This move leads immediately to universalism, as Talbott recognizes, since once a person is free of everything that prevented his receiving salvation then, of course, he will receive salvation! Pinnock poses the question whether his inclusivism does not undermine the rationale and urgency of world mission. No, he answers, for (1) God has called us to engage in mission work and we should obey. But this provides no rationale for why God commanded such a thing and so amounts to just blind obedience to a command without rationale. (2) Missions is broader than just securing people's eternal destiny. True enough; but with that central rationale removed we are back to the Christian peace corps. (3) Missions should be positive; it is not an ultimatum "Believe or be damned." Of course; but it is difficult to see what urgency is left to world missions, since the people to whom one goes are already saved. I must confess that I find it tragically ironic that as the church stands on the verge of completing the task of world evangelization, it should be her own theologians who would threaten to trip her at the finish line.

Finally, *pluralism* is the doctrine that salvation, or what passes for salvation, is appropriated by persons through a multiplicity of conditions and means in various religions. One would naturally associate pluralism with universalism, but that is not strictly necessary, for a religious pluralist could regard some religions--say, those that focus on human sacrifice or cultic prostitution--as not furnishing legitimate avenues of salvation, if salvation is defined solely in "this-worldly" terms (for example, the production of a saintly character). If the pluralist is motivated to solve the problem of persons' being excluded from salvation by historical or geographical accident, however, then he must hold that salvation is accessible through every religion. Otherwise the unfortunates who languish in degenerate religions would be excluded from salvation.

The Problem with Christian Particularism

Now with those distinctions in mind, let us examine the problem before us more closely. What exactly is the problem with Christian particularism supposed to be?

Is it simply that a loving God would not consign people to hell? It does not seem to be. For the New Testament makes it quite clear that God's will and desire is that all persons should be saved and come to a knowledge of the truth (2 Pet. 3.9; I Tim. 2.4). He therefore draws all people to Himself by His prevenient grace. Anyone who makes a free and well-informed decision to reject Christ thus seals his own fate: he is self-condemned. In a sense, then, God does not send anybody to hell; rather people send themselves.

In response to these considerations, Marilyn Adams complains that damnation is so inconceivable a horror that human beings cannot fully understand the consequences of choosing for or against God. {18} She infers that they cannot exercise their free choice in this matter "with fully open eyes" and intimates that they should not be held fully responsible for such a choice. She goes on to argue that the consequences of sin (namely, hell) are so

disproportionate to the sinful acts themselves that to make a person's eternal destiny hinge on refraining from such acts is to place unreasonable expectations on that person. God's punishing people with hell would be both cruel and unusual punishment: cruel because the conditions placed on them are unreasonable and unusual because *any* sin, small or great, consigns one to hell.

A great deal could be said about Adams's reservations; but a little reflection shows most of them to be simply inapplicable to the situation as I envision it. First of all, Adams seems to assume that the consequences of sin are optional for God, that He could have simply chosen to absolve and sanctify everyone if He pleased. But for God simply to pardon all sin regardless of the response of the perpetrator would be for God merely to blink at moral evil. If God left the impenitent sinner unpunished, His holiness would be compromised and He would not be just. And even if God determined to absolve everyone, how could He sanctify the impenitent without violating their free will? So long as God respects the human freedom He has bestowed, He cannot guarantee that everyone can be made willing and fit for heaven. Thus, the consequences of sin are not arbitrarily up to God. They follow from the necessity of His moral nature and the character of human agency. The question, then, is really whether God was being cruel in creating significantly free creatures at all.

I do not think that Adams's argument shows that He was. Her argument concerns the undue burden laid on people by God's placing them in a situation in which they will go to hell unless they refrain from every single sin, no matter how small. But this is not our situation as I understand it. The orthodox Christian need not hold that every sin merits hell or has hell as its consequence; rather hell is the final consequence (and even just punishment) for those who irrevocably refuse to seek and accept God's forgiveness of their sins. By refusing God's forgiveness they freely separate themselves from God forever. The issue, then, is whether the necessity of making this fundamental decision is too much to ask of man.

We may agree with Adams that no one fully comprehends the horror of hell--or, for that matter, the bliss of heaven--and therefore fully grasps the consequences of his decision to accept or reject God's salvation. But it does not follow that God's giving people the freedom to determine their eternal destiny is therefore placing too heavy a responsibility on them. One need not understand the *full* consequences of heaven and hell in order to be able to choose responsibly between them. It is not unreasonable to expect of people that they should be able to decide *a fortiori* between infinite loss and infinite gain simply on the basis of their comprehension of the choice of enormous loss versus enormous gain. To deny to man the freedom to make this decision would be to side with Dostoyevsky's Grand Inquisitor in holding that God ought to have given men earthly bread and circuses rather than the Bread of Heaven because men cannot bear so dread a freedom.[{19}](#)

Moreover, Adams has left wholly out of account what I conceive to be an absolutely crucial element in this story: the prevenient grace of God mediated by the Holy Spirit. God has not left us to make this momentous choice on our own; rather it is the work of the Holy Spirit to convict people of sin and righteousness and judgement (Jn. 16.8) and to draw them to Himself (Jn. 6.44). God lovingly solicits and enables the human will to place one's faith in Christ. The exercise of saving faith is not a work we perform for salvation, but merely the allowing of the Holy Spirit to do His work in us. Far from making unreasonable expectations, God is ready to equip anyone for salvation. We have only not to resist. When someone refuses to come to Christ and be saved, therefore, it is only because he has willfully ignored and rejected the drawing of God's Spirit on his heart. Therefore, I cannot see that in providing us with the

freedom to determine our destiny by deciding for or against Christ, God has placed an unreasonable demand upon us.

Well, then, could the problem with Christian particularism be that God would not consign people to hell because they were uninformed or misinformed about Christ? Again, this does not seem to me to be the problem. For here the Christian may advocate some form of accessibilism. We can maintain that God does not judge those who have not clearly heard of Christ on the same basis as those who have. Rather we can, on the basis of Rom. 1-2, maintain that God judges persons who have not heard the gospel on the basis of God's general revelation in nature and conscience. Were they to respond to the much lower demands placed on them by general revelation, God would give them eternal life (Rom. 2.7). Salvation is thus universally accessible. Unfortunately the testimony of Scripture is that people do not in general live up to even these meager demands and are therefore lost. No one is unjustly condemned, however, since God has provided sufficient grace to all persons for salvation. Perhaps some do access salvation by means of general revelation, but if we take Scripture seriously we must admit that these are relatively few. In such a case, at most a narrow version of inclusivism would be true. Thus, given accessibilism, I do not see that Christian particularism is undermined simply by God's condemnation of persons who are not clearly informed about Christ.

Rather the real problem with Christian particularism is much more subtle. If God is all-knowing, then presumably He knew the conditions under which people would freely place their faith in Christ for salvation and those under which they would not. {20} But then a very difficult question arises: why does God not bring the gospel to people who He knew *would* accept it if they heard it, even though they reject the general revelation that they do have? Imagine, for example, a North American Indian--let us call him "Walking Bear"--who lived prior to the arrival of Christian missionaries. Suppose Walking Bear sees from the order and beauty of nature around him that a Creator of the universe exists and that he senses in his heart the demands of God's moral law implanted there. Unfortunately, like those described by Paul in Rom. 1, Walking Bear chooses to spurn the Creator and to ignore the demands of the moral law, plunging himself into spiritism and immorality. Thus suppressing the knowledge of God and flouting His moral law, Walking Bear stands under God's just condemnation and is destined for hell. But suppose that if only Walking Bear were to hear the gospel, if only the Christian missionaries had come earlier, then he would have believed in the gospel and been saved. His damnation then appears to be the result of bad luck; through no fault of his own he was born at the wrong place or time in history; his salvation or damnation thus seem to be the result of historical and geographical accident. Granted that his condemnation is not *unjust* (since he has freely spurned God's sufficient grace for salvation), nonetheless is it not *unloving* of God to condemn him? Would not an all-loving God have given him the same advantage that is enjoyed by that lucky individual who lives at a place and time such that he hears the gospel? Now Walking Bear's situation is essentially no different from the billions of people living today who have yet to hear a clear presentation of the gospel. Is not God cruel and unloving to condemn them?

It will be no good trying to answer this problem by any form of Christian inclusivism short of virtual universalism. The difficulty with Christian inclusivism is not simply that it goes too far in its unscriptural optimism that vast numbers of persons in non-Christian religions will be saved. Rather in truth it does not go far enough: for inclusivism makes no provision for those who *do* reject God's general revelation and so are condemned, but who *would have* accepted God's special revelation and been saved, if only they had heard it. Because inclusivism deals

only in the indicative mood, so to speak, it is impotent to resolve a problem framed in the subjunctive mood.

A Solution to the Problem of Particularism

Let us therefore make a fresh start on this problem. What is the logical structure of the objection to Christian particularism? The claim seems to be that Christian particularism is internally inconsistent in affirming on the one hand that God is all-powerful and all-loving and on the other that some people never hear the gospel and are lost. But why think that these two affirmations are inconsistent? After all, there's no *explicit* contradiction between them. So the post-modernist or universalist must think that these two statements are *implicitly* contradictory. But in that case there must be some hidden assumptions which need to be surfaced in order to show that these two statements are in fact inconsistent. But what are these hidden assumptions?

The detractor of Christian particularism seems to be making two hidden assumptions:

1. If God is all-powerful, then He can create a world in which everybody hears the gospel and is freely saved.
2. If God is all loving, then He prefers a world in which everybody hears the gospel and is freely saved.

Both of these assumptions must be necessarily true if Christian particularism is to be shown to be inconsistent.

But are they necessarily true? I think not. Consider assumption (1). I think we should agree that an all-powerful God can create a world in which everybody hears the gospel. But so long as people are free, there's simply no guarantee that everybody in that world would be freely saved. Sure, God could force everyone to repent and be saved by overpowering their wills, but that would be a sort of divine rape, not their being freely saved. It's logically impossible to *make* someone do something *freely*. So long as God desires free creatures, then, even He cannot guarantee that all will freely embrace His salvation. In fact, when you think about it, there is not even any guarantee that the balance between saved and lost in that totally evangelized world would be any better than it is in the actual world! It certainly seems possible that in any world of free creatures which God could create, some people would freely reject His salvation and be lost. Thus, assumption (1) is not necessarily true.

The possibility that assumption (1) is false already invalidates the argument against Christian particularism. But there is more: assumption (2) does not seem necessarily true either. Let us concede that there are in fact possible worlds in which everyone hears the gospel and is freely saved. Does God's being all-loving compel Him to prefer one of these worlds to be actual world? Not necessarily; for these worlds might have over-riding deficiencies in other respects. Suppose, for example, that the only worlds in which everybody hears and believes the gospel are worlds with only a handful of people in them. In any world in which God creates more people, at least one person refuses to receive God's salvation. Now I ask you: must God prefer one of these radically underpopulated worlds to a world in which multitudes do freely receive His salvation, even though others freely reject it? I think not. So long as God provides sufficient grace for salvation to every person in any world He creates, He is no less loving for preferring one of the more populous worlds, even though that implies that some people would freely reject Him and be lost.

Thus, neither of the assumptions underlying the objection to Christian particularism is necessarily true. It follows that no inconsistency has been shown in affirming both that God is all-powerful and all-loving and that some people never hear the gospel and are lost.

But we can go one step further. We can actually show that it is entirely consistent to affirm that God is all-powerful and all-loving and yet that many persons do not hear the gospel and are lost. Since God is good and loving, He wants as many people as possible to be saved and as few as possible to be lost. His goal, then, is to achieve an optimal balance between these, to create no more of the lost than is necessary to attain a certain number of the saved. But it is possible that the actual world (speaking here of the whole history of the world, past, present, and future) has such an optimal balance! It is possible that in order to create this many people who are saved, God also had to create this many people who are lost. It is possible that had God created a world in which fewer people go to hell, then even fewer people would have gone to heaven. It is possible that in order to create a multitude of saints, God had to create an even greater multitude of sinners.

But then what about persons who will in fact be lost because they never hear the gospel, but who would have been freely saved if only they had heard it? The solution proposed thus far preserves God's goodness and love on a global scale, but on an individual level surely an all-loving God would have done more to achieve such a person's salvation by ensuring that the gospel reaches him. But how do we know that there *are* any such persons? It is reasonable to assume that many people who never hear the gospel would not have believed it even if they had heard it. Suppose, then, that God has so providentially ordered the world that *all* persons who never hear the gospel are precisely such people. In that case, anybody who never hears the gospel and is lost would have rejected the gospel and been lost even if he had heard it. In supplying such persons with sufficient grace for salvation, even though He knows they will reject it, God is already exhibiting extraordinary love toward them, and bringing the gospel would be of no additional material benefit to them. Hence, no one could stand before God on the judgement day and complain, "Sure, God, I didn't respond to your revelation in nature and conscience. All right. But if only I had heard the gospel, *then* I would have believed!" God will say to them, "No, I knew that even if you had heard the gospel, you still would not have believed. Therefore, my judgement of you on the basis of my revelation in nature and conscience is neither unloving nor unfair."

Thus, it is possible that God has created a world which has an optimal balance between saved and lost and that those who never hear the gospel and are lost would not have believed in Christ even if they had heard of him. So long as this scenario is even *possible*, it proves that it is entirely consistent to affirm that God is all-powerful and all-loving and yet that some people never hear the gospel and are lost.

Again Adams objects to this solution that human beings are so burdened with psychological baggage from their childhoods that their freedom as adults is so impaired that they are no more competent to be entrusted with their eternal destiny than a two year old is to be allowed choices that could result in his death or serious injury.^{21} If God allowed people to consign themselves to hell, then He would be cruel to create people in a world with the combination of obstacles and opportunities found in the actual world and He would bear the primary responsibility for their damnation.

It seems to me, however, that Adams has a deficient conception of divine providence. God in His providence can so arrange the world that the myriad of obstacles and opportunities in the

actual world conspire to bring about an optimal balance between saved and lost. Certainly these obstacles and opportunities are not equally distributed among persons in the actual world, but as a just God who judges fairly God does not require that all persons must measure up to the same standards, but judges them according to the obstacles and opportunities which He has apportioned them. Moreover, as a loving God who wills and works for the salvation of all persons, He ensures that sufficient grace is given to every person for salvation. With respect to persons who do not respond to His grace under especially disadvantageous circumstances, God can so order the world that such persons are exclusively people who would *still* not have believed even had they been created under more advantageous circumstances. Far from being cruel, God is so loving that He arranges the world such that anyone who would respond to His saving grace under certain sets of circumstances is created precisely in one such set of circumstances, and He even provides sufficient grace for salvation to those who He knows would spurn it under any circumstances. In a certain sense, then, God is responsible for who is saved and who is lost, for it is He who decrees which circumstances to create and what persons to place in them. But this is simply a description of divine sovereignty, and I take it to be a positive, biblical feature of this account that it affirms a strong doctrine of divine sovereignty. At the same time, it affirms that in whatever circumstances people find themselves, God wills their salvation, and by the Holy Spirit He supplies sufficient grace for their salvation, and those persons are entirely free to embrace this salvation. Should they reject God's every effort to save them, it is they, not God, who are responsible in the sense of being culpable.

In the end Adams seems to recognize that the problems she raises are soluble for one who advocates a robust doctrine of providence and prevenient grace, according to which God arranges the world such that those who are lost would have been lost regardless of the circumstances under which they were created. But she claims that even if every world of free creatures which is feasible for God to create involved such impenitent persons, that still does not imply that the impenitent need be damned: they could simply be annihilated or maintained in a world like this one.^{22} But this riposte strikes me as very weak. The precise form of damnation is an in-house debate among Christian particularists; the salient point is that under Adams's two proposed scenarios not everyone enjoys salvation. Moreover, she again seems to presuppose that the consequences of rejecting God's grace are to some degree arbitrary rather than necessitated by divine justice, the demands of which could well rule out scenarios like annihilation or maintenance in a world so suffused with God's common grace as this one.

Finally, I, too, must deal with a missiological objection against my proposed solution.^{23} It might be said, "Why, then, should we engage in the enterprise of world mission, if all the people who are unreached would not believe the gospel even if they heard it?" But this question is based on a misunderstanding. It forgets that we are talking only about people who *never* hear the gospel. On the proposed view, God in His providence can so arrange the world that as the gospel spread out from first century Palestine, He placed people in its path who would believe it if they heard it. In His love and mercy, God ensures that no one who would believe the gospel if he heard it remains ultimately unreached. Once the gospel reaches a people, God providentially places there persons who He knew would respond to it if they heard it. He ensures that those who *never* hear it are only those who would not accept it if they did hear it. Hence, no one is lost because of a lack of information or due to historical and geographical accident. Anyone who wants or even would want to be saved will be saved.

The solution I have proposed to the problem of Christian particularism is only a *possible* solution. But I find it attractive because certain biblical passages also suggest something very close. For example, Paul in his Aereopagus address declared,

The God who made the world and everything in it is the Lord of heaven and earth and does not live in temples built by hands. And he is not served by human hands, as if he needed anything, because he himself gives all men life and breath and everything else. From one man he made every nation of men, that they should inhabit the whole earth; and he determined the times set for them and the exact places where they should live. God did this so that men would seek him and perhaps reach out for him and find him, though he is not far from each one of us (Acts 17.24-27).

This passage seems very consonant with the version of Christian particularism defended here.

Conclusion

In conclusion, then, salvation through faith in Christ alone may be and will no doubt remain politically incorrect salvation in a day and age which celebrates religious diversity. But that doctrine is not for all that therefore false. No inconsistency has been shown to exist in Christian particularism and exclusivism; on the contrary, we have seen that it is entirely consistent to maintain that God is both all-powerful and all-loving and yet that some people never hear the gospel and are lost, since it is possible that God has so providentially ordered the world as to achieve the optimal balance feasible between saved and lost in a world of free creatures and that He supplies sufficient grace to every person for salvation, ensuring that anyone who would respond to the gospel and be saved if he heard it lives at a time and place in history where he does hear it. Hence, while the Christian may be open to elements of truth found in non-Christian religions, his mind need not be agape to every religious truth claim, since he is under no obligation to embrace religious relativism, having rejected its *raison d'être* universalism. The proper response of the Christian to religious diversity is not merely to garner the elements of truth from the world's religions, but, far more importantly, to share with their adherents, in a spirit of love, the Way, the Truth, and the Life.

Endnotes

{1} Gordon D. Kaufman, "Evidentialism: A Theologian's Response," *Faith and Philosophy* 6 (1989): 40. For an incisive response to Kaufman see Eleonore Stump and Norman Kretzmann, "Theologically Unfashionable Philosophy," *Faith and Philosophy* 7 (1990): 329-339. (The reader should be aware that the original Stump-Kretzmann article has a page missing between 329-330, which was supplied with a later issue of the journal.) They point out that Kaufman's religious agnosticism is in fact less open than Christianity, since he must reject virtually all religious truth claims as (objectively) false.

{2} Alan Bloom, *The Closing of the American Mind* (New York: Simon & Schuster, 1987), p. 26. Calling the conflict between relativism and objectivism "the central cultural opposition of our time," Bernstein reports that as a result of this conflict "There is an uneasiness that has spread throughout intellectual and cultural life. It affects almost every discipline and every aspect of culture" (Richard J. Bernstein, *Beyond Objectivism and Relativism* [Oxford: Basil Blackwell, 1983], pp. 7, 1).

{3}Edward John Carnell, having borrowed this notion from Edgar Sheffield Brightman, popularized it among evangelical apologists (Edward John Carnell, *An Introduction to Christian Apologetics* [Grand Rapids, Mich.: Wm. B. Eerdmans, 1948], pp. 56-64). My explication of this notion is, however, different than Carnell's.

{4}For a good discussion, see Stuart C. Hackett, *Oriental Philosophy* (Madison: University of Wisconsin Press, 1979).

{5}It might be said that when one denies the validity of such logical principles for propositions about God, one is talking in a higher-level meta-language about propositions expressed in another lower-level language, much as one could talk in German, for example, about the rules for English grammar, and that since the principles of the lower-level language don't apply to the meta-language, no self-refuting situations arise. But the futility of this response is evident in the fact that one could then use the meta-language itself to describe God, since the restrictions only apply to the lower-level language.

{6}For support for both these claims, see my apologetics text *Reasonable Faith* (Wheaton, Ill.: Crossways, 1994).

{7}John D. Caputo, *Radical Hermeneutics* (Bloomington, Ind.: Indiana University Press, 1987), p. 156.

{8}For a trenchant critique of post-modern (ir)rationality, as well as attempted responses, see the discussion in James L. Marsh, John D. Caputo, and Merold Westphal, *Modernity and its Discontents* (New York: Fordham University Press, 1992), pp. 18-19, 89-92, 168-74, 199-201. See also the entertaining discussion in Plantinga, *Twin Pillars*, pp. 17-23.

{9}I include annihilation here, not because I consider it a biblical alternative to hell, but to underline the fact that adoption of annihilationism does nothing to solve the problem occasioned by religious diversity of less than universal salvation.

{10}John H. Hick, ed., *The Myth of God Incarnate* (London: SCM, 1977); idem, *The Metaphor of God Incarnate* (London: SCM, 1993).

{11}--As illustrated by Robert Müller's call for "a new universalism" in his plenary address "Interfaith Understanding" at the 1993 Parliament of the World's Religions, August 28-September 4, 1993, in Chicago, a veritable orgy of religious diversity.

{12}Thomas Talbott, "The Doctrine of Everlasting Punishment," *Faith and Philosophy* 7 (1990): 19-42; idem, "Providence, Freedom, and Human Destiny," *Religious Studies* 26 (1990): 227-245. For discussion see William Lane Craig, "Talbott's Universalism," *Religious Studies* 27 (1991): 297-308; Thomas Talbott, "Craig on the Possibility of Eternal Damnation," *Religious Studies* 28 (1992): 495-510; William Lane Craig "Talbott's Universalism Once More," *Religious Studies* 29 (1993): 497-518.

{13}See John W. Sanders, *No Other Name: an Investigation into the Destiny of the Unevangelized*, with a Foreword by Clark Pinnock (Grand Rapids, Mich.: Wm. B. Eerdmans, 1992).

{14} For example, Francis Schaeffer held that salvation is available to all persons through general revelation but that no one avails himself of it (Francis Schaeffer, *Death in the City*, in *The Complete Works of Francis Schaeffer: A Christian Worldview*, 2d ed.; vol. 4: *A Christian View of the Church* [Westchester, Ill.: Crossways, 1982], p. 278).

{15} "Dogmatic Constitution on the Church," in *The Documents of Vatican II*, ed. W.M. Abbott (New York: Guild Press, 1960), p. 34.

{16} "Declaration Non-Christian Religions," in *Documents*, pp. 663-666.

{17} Clark Pinnock, "The Finality of Jesus Christ in a World of Religions," paper delivered at the Evangelical Theology Group, American Academy of Religion, November 22, 1992.

{18} Marilyn McCord Adams, "The Problem of Hell: A Problem of Evil for Christians," in *Reasoned Faith*, ed. Eleonore Stump (Ithaca, N.Y.: Cornell University Press, 1993), pp. 308-311. For a defense of the doctrine of hell, see Jonathan L. Kvanvig, *The Problem of Hell* (Oxford: Oxford University Press, 1993).

{19} Fyodor Dostoyevsky, *The Brothers Karamazov*, trans. Constance Garnett, ed. with a Foreword by Manuel Komroff, Signet Classics (New York: New American Library, 1957), Book V, Chap. 5, pp. 233-240.

{20} Even if one denies that God has such knowledge, the problem still remains that some of the unreached who are condemned *might* respond to the gospel if they heard it. So how could a loving God fail to bring the gospel to them? Inclusivism offers nothing to solve this problem.

{21} Adams, "Problem of Hell," pp. 313-314; cf. p. 319.

{22} Ibid., pp. 315-316. She also alludes to Robert Adams's argument that there is no truth concerning what people would do under different circumstances. But neither she nor her husband has responded to the refutations of his argument by Alvin Plantinga, "Reply to Robert M. Adams," in *Alvin Plantinga*, ed. James E. Tomberlin and Peter Van Inwagen, Profiles 5 (Dordrecht: D. Reidel, 1985), pp. 371-382; Alfred J. Freddoso, "Introduction," to *On Divine Foreknowledge*, by Luis de Molina, trans. with Notes by A.J. Freddoso (Ithaca, N.Y.: Cornell University Press, 1988), pp. 68-75; William Lane Craig, *Divine Foreknowledge and Human Freedom*, Studies in Intellectual History 19 (Leiden: E.J. Brill, 1990), pp. 247-269. See further Robert M. Adams, "An Anti-Molinist Argument," in *Philosophy of Religion*, ed. James E. Tomberlin, Philosophical Perspectives 5 (Atascadero, Calif.: Ridgeway Publishing, 1991), pp. 343-353, and my response, "Robert Adams's New Anti-Molinist Argument," *Philosophy and Phenomenological Research* (forthcoming).

{23} See the critiques of William Hasker, "Middle Knowledge and the Damnation of the Heathen: a Response to William Craig," *Faith and Philosophy* 8 (1991): 380-389; David P. Hunt, "Middle Knowledge and the Soteriological Problem of Evil," *Religious Studies* 27 (1991): 3-26. For discussion see William Lane Craig, "Should Peter Go to the Mission Field?" *Faith and Philosophy* 10 (1993): 261-265.

WHY I BELIEVE GOD EXISTS

WILLIAM LANE CRAIG

William Lane Craig is Research Professor of Philosophy at Talbot School of Theology in La Mirada, California. He and his wife Jan live in Atlanta, Georgia. At the age of sixteen as a junior in high school, he first heard the message of the Christian gospel and yielded his life to Christ. Dr. Craig pursued his undergraduate studies at Wheaton College (B.A. 1971) and graduate studies at Trinity Evangelical Divinity School (M.A. 1974; M.A. 1975), the University of Birmingham (England) (Ph.D. 1977), and the University of Munich (Germany) (D.Theol. 1984). From 1980-86 he taught Philosophy of Religion at Trinity, during which time he and Jan started their family. In 1987 they moved to Brussels, Belgium, where Dr. Craig pursued research at the University of Louvain until assuming his position at Talbot in 1994. He has authored or edited over thirty books, including *The Kalam Cosmological Argument*; *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus*; *Divine Foreknowledge and Human Freedom*; *Theism, Atheism and Big Bang Cosmology*; and *God, Time and Eternity*, as well as over a hundred articles in professional journals of philosophy and theology, including *The Journal of Philosophy*, *New Testament Studies*, *Journal for the Study of the New Testament*, *American Philosophical Quarterly*, *Philosophical Studies*, *Philosophy*, and *British Journal for Philosophy of Science*.

Western philosophy, observes James Collins, has carried the burden of God.¹ From the first glimmerings of philosophy among the ancient Greeks through the dawn of the third millennium after Christ, the world's greatest thinkers from Plato to Plantinga have wrestled with the question of God. Is there a personal, transcendent being who created the universe and is the source of moral goodness? I think there is and that there are good reasons to think so.

GOD MAKES SENSE OF THE ORIGIN OF THE UNIVERSE

Have you ever asked yourself where the universe came from? Why everything exists instead of nothing? Typically, atheists have said that the universe is just eternal, and that's all. But surely this is unreasonable. If the universe never had a beginning, that means the number of past events in the history of the universe is infinite. But mathematicians recognize that the

1 James Collins, *God in Modern Philosophy* (Chicago: Henry Regnery, 1959).

idea of an infinite number of things leads to self-contradictions. For example, what is infinity minus infinity? Mathematically, you get self-contradictory answers. If you subtract all the odd numbers 1, 3, 5, . . . from all the natural numbers 0, 1, 2, 3, . . . , how many numbers do you have left? An infinite number. So infinity minus infinity is infinity. But suppose instead you subtract all the numbers greater than 2—how many are left? Three. So infinity minus infinity is 3! It needs to be understood that in both of these cases we have subtracted identical quantities from identical quantities and come up with self-contradictory answers. In fact, you can get any answer you want from zero to infinity! This shows that infinity is just an idea in one's mind, not something that exists in reality. David Hilbert, perhaps the greatest mathematician of this century, states, "The infinite is nowhere to be found in reality. It neither exists in nature nor provides a legitimate basis for rational thought. The role that remains for the infinite to play is solely that of an idea."² Therefore, since past events are not just ideas but are real, the number of past events must be finite. Therefore, the series of past events can't go back forever; rather, the universe at some point must have begun to exist.

This conclusion has been confirmed by remarkable discoveries in astronomy and astrophysics. The astrophysical evidence indicates that the universe began to exist in a great explosion called the big bang around fifteen billion years ago. Physical space and time were created in that event, as well as all the matter and energy in the universe. Therefore, as Cambridge astronomer Fred Hoyle points out, the big bang theory requires the creation of the universe from nothing. This is because, as one goes back in time, he reaches a point at which, in Hoyle's words, the universe was "shrunk down to nothing at all."³ Thus, what the big bang model requires is that the universe began to exist and was created out of nothing.

This tends to be very awkward for the atheist, for as Anthony Kenny of Oxford University urges, "A proponent of the big bang theory, at least if he is an atheist, must believe that the . . . universe came from nothing and by nothing."⁴ But surely that doesn't make sense. Out of nothing, nothing comes. In every other context, atheists recognize this fact. The great skeptic David Hume wrote, "But allow me to tell you that I never asserted so absurd a Proposition as that *anything might arise without a cause*."⁵ The contemporary atheist philosopher Kai Nielsen gives this illustration: "Suppose you suddenly hear a loud bang . . . and you ask me, 'What made that bang?' and I reply, 'Nothing, it just happened.' You would not accept that. In fact you would find my reply quite unintelligible."⁶ But what's true of the little bang must be true of the big bang as well. So why does the universe exist instead of just nothing? Where did it come from? There must have been a cause that brought the universe into being. As the great scientist Sir Arthur Eddington said, "The beginning seems to present insuperable difficulties unless we agree to look on it as frankly supernatural."⁷

We can summarize the argument thus far as follows:

2 David Hilbert, "On the Infinite," in *Philosophy of Mathematics*, ed. with an introduction by Paul Benacerraf and Hillary Putnam (Englewood Cliffs, N.J.: Prentice-Hall, 1964), 139, 141.

3 Fred Hoyle, *Astronomy and Cosmology* (San Francisco: W. H. Freeman, 1975), 658.

4 Anthony Kenny, *The Five Ways: St. Thomas Aquinas' Proofs of God's Existence* (New York: Schocken Books, 1969), 66.

5 David Hume, *The Letters of David Hume*, 2 vols., ed. J. Y. T. Greig (Oxford: Clarendon Press, 1932), I:187, letter to John Stewart, February 1754.

6 Kai Nielsen, *Reason and Practice* (New York: Harper & Row, 1971), 48.

7 Arthur Eddington, *The Expanding Universe* (New York: Macmillan, 1933), 124.

1. Whatever begins to exist has a cause.
2. The universe began to exist.
3. Therefore, the universe has a cause.

Given the truth of the first two premises, the third necessarily follows.

From the very nature of the case, as the cause of space and time, this supernatural cause must be an uncaused, changeless, timeless, and immaterial being that created the universe. The being must be uncaused because we've seen that there cannot be an infinite regress of causes. It must be timeless and therefore changeless because it created time. Because it also created space, it must transcend space as well and therefore be immaterial, not physical.

Moreover, I would argue, it must also be personal, for how else could a timeless cause give rise to a temporal effect such as the universe? If the cause were a mechanically operating set of necessary and sufficient conditions, then the cause could never exist without the effect. For example, water freezes because the temperature (the cause) is below 0°C. If the temperature were below 0° from eternity past, then any water that was around would be frozen from eternity. It would be impossible for the water to *begin* to freeze just a finite time ago. So if the cause is timelessly present, then the effect should be timelessly present as well. The only way for the cause to be timeless and the effect to begin in time is for the cause to be a personal agent who freely chooses to create an effect in time without any prior determining conditions. For example, a man sitting from eternity could freely will to stand up. Thus, we are brought not merely to a transcendent cause of the universe but to its personal Creator.

What objections might be raised against this argument? Premise 1: The fact that whatever begins to exist has a cause seems obviously true—at least more so than its denial. Yet a number of atheists, in order to avoid the argument's conclusion, deny the first premise. Some say that subatomic physics furnishes an exception to premise 1, since on the subatomic level events are said to be uncaused. In the same way, certain theories of cosmic origins are interpreted as showing that the entire universe could have sprung into being out of the subatomic vacuum.

This objection, however, is based on misunderstandings. In the first place, not all scientists agree that subatomic events are uncaused. A great many physicists today are quite dissatisfied with this view (the so-called Copenhagen Interpretation) of subatomic physics and are exploring deterministic theories such as that of David Bohm.⁸ Thus, subatomic physics is not a proven exception to premise 1. Second, even according to the traditional, indeterministic interpretation, particles do not come into being out of nothing. They arise as spontaneous fluctuations of the energy contained in the subatomic vacuum; they do not come from nothing.⁹ Third, the same point can be made about theories of the origin of the universe out

8 See James T. Cushing, Arthur Fine, and Sheldon Goldstein, *Bohmian Mechanics and Quantum Theory: An Appraisal*, Boston Studies in the Philosophy of Science 184 (Dordrecht, Holland: Kluwer Academic Publishers, 1996).

9 See John Barrow and Frank Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1986), 441.

of a primordial vacuum.¹⁰ Popular magazines touting such a theory as getting “something from nothing” simply do not understand that the vacuum is not nothing; it is a sea of fluctuating energy endowed with a rich structure and subject to physical laws. Philosopher of science Robert Deltete accurately sums up the situation: “There is no basis in ordinary quantum theory for the claim that the universe itself is uncaused, much less for the claim that it sprang into being uncaused from literally nothing.”¹¹

Other atheists have said that premise 1 is true for things *in* the universe, but it is not true *of* the universe itself. But this objection misconstrues the nature of the premise. Premise 1 does not state merely a physical law such as the law of gravity or the laws of thermodynamics, which are valid for things within the universe. Premise 1 is not a physical principle. Rather, premise 1 is a metaphysical principle, a principle about the very nature of reality: Being cannot come from nonbeing; something cannot come into existence uncaused from nothing. The principle therefore applies to all reality. It is thus metaphysically absurd that the universe should pop into being uncaused out of nothing. Even J. L. Mackie, one of the most prominent atheists of our day, admitted that he found such an idea incredible, commenting, “I myself find it hard to accept the notion of self-creation *from nothing*, even given unrestricted chance. And how *can* this be given, if there really is nothing?”¹² According to the atheistic view, the *potentiality* of the universe’s existence didn’t even exist prior to the big bang, since nothing is prior to the big bang. But then how could the universe become actual if there wasn’t even the potentiality of its existence? It makes much more sense to say that the potentiality of the universe lay in the power of God to create it.

So what about premise 2: The universe began to exist? The typical objection raised against the philosophical argument for the universe’s beginning is that modern mathematical set theory proves that an actual infinite number of things can exist. For example, there is an infinite number of members in the set $\{ 0, 1, 2, 3, \dots \}$. Therefore, there’s no problem with an infinite number of past events.

But this objection does not work. First, not all mathematicians agree that actual infinities exist even in the mathematical realm.¹³ They regard series such as $0, 1, 2, 3, \dots$ as merely *potentially* infinite; that is to say, such series approach infinity as a limit, but they never actually get there. Second, existence in the mathematical realm does not imply existence in the real world. To say that infinite sets exist is merely to postulate a realm of discourse, governed by certain axioms and rules that are simply presupposed, in which one can talk about such collections.¹⁴ Given the axioms and rules, one can discourse consistently about infinite sets. But that’s no guarantee that the axioms and rules are true or that an infinite number of things can exist in the real world. Third, the real existence of an infinite number of

10 See Bernulf Kanitscheider, “Does Physical Cosmology Transcend the Limits of Naturalistic Reasoning?” in *Studies on Mario Bunge’s “Treatise,”* ed. P. Weingartner and G. J. W. Dorn (Amsterdam: Rodopi, 1990), 346–47.

11 Robert Deltete, critical notice of *Theism, Atheism, and Big Bang Cosmology*, *Zygon* 30 (1995): 656 (the review was attributed to J. Leslie due to an editorial mistake at *Zygon*).

12 J. L. Mackie, *Times Literary Supplement* (5 February 1982): 126.

13 See, for example, Abraham Robinson, “Metamathematical Problems,” *Journal of Symbolic Logic* 38 (1973): 500–516.

14 See Alexander Abian, *The Theory of Sets and Transfinite Arithmetic* (Philadelphia: W. B. Saunders, 1965), 68; B. Rotman and G. T. Kneebone, *The Theory of Sets and Transfinite Numbers* (London: Oldbourne, 1966), 61.

things would violate the rules of infinite set theory. As we saw, trying to subtract infinite quantities leads to self-contradictions; therefore, infinite set theory just prohibits such operations to preserve consistency. In the real world, however, there's nothing to keep us from breaking this arbitrary rule. If I had an infinite number of marbles, I could subtract or divide them as I please.

Sometimes it's said that we can find counter examples to the claim that an infinite number of things cannot exist, so this claim must be false. For instance, isn't every finite distance capable of being divided into $1/2$, $1/4$, $1/8$, . . . on to infinity? Doesn't that prove that in any finite distance there is an infinite number of parts? The fallacy of this objection is that it once again confuses a potential infinite with an actual infinite. You can continue to divide any distance for as long as you want, but such a series is merely potentially infinite; infinity serves as a limit you endlessly approach but never reach. If you assume that any distance is *already* composed of an infinite number of parts, then you're begging the question. You're assuming what the objector is supposed to prove, namely, that there is a clear counterexample to the claim that an infinite number of things cannot exist.

As for the scientific confirmation of premise 2, it has been the overwhelming verdict of the scientific community that no theory is more probable than the big bang theory. The devil is in the details, and once you get down to specifics, you find that there is no mathematically consistent model that has been so successful in its predictions or as corroborated by the evidence as the traditional big bang theory. For example, some theories, such as the oscillating universe (which expands and re-contracts forever) or the chaotic inflationary universe (which continually spawns new universes), have a potentially infinite future but turn out to have only a finite past.¹⁵ Vacuum fluctuation universe theories (which postulate an eternal vacuum out of which our universe was born) cannot explain why, if the vacuum was eternal, we do not observe an infinitely old universe.¹⁶ The quantum gravity universe theory propounded by the famous physicist Stephen Hawking, if interpreted realistically, still involves an absolute origin of the universe even if the universe does not begin in a so-called singularity, as it does in the standard big bang theory.¹⁷ In sum, according to Hawking, "Almost everyone now believes that the universe, and *time itself*, had a beginning at the Big Bang."¹⁸

In light of the evidence, premises 1 and 2 seem more plausible than their denials. Hence, it is plausible that a transcendent Creator of the universe exists. People sometimes resist this conclusion because they claim that it is a pseudo-explanation of the origin of the universe. "Just because we can't explain it doesn't mean God did it," they protest. But such a response misconstrues the argument. In the first place, this argument is a deductive argument. Therefore, if the premises are true and the logic is valid, the conclusion follows, period. It

15 See I. D. Novikov and Ya. B. Zeldovich, "Physical Processes near Cosmological Singularities," *Annual Review of Astronomy and Astrophysics* 11 (1973): 401–2; A. Borde and A. Vilenkin, "Eternal Inflation and the Initial Singularity," *Physical Review Letters* 72 (1994): 3305, 3307.

16 Christopher Isham, "Creation of the Universe as a Quantum Process," in *Physics, Philosophy and Theology: A Common Quest for Understanding*, ed. R. J. Russell, W. R. Stoeger, and G. V. Coyne (Vatican City: Vatican Observatory, 1988), 385–87.

17 See John D. Barrow, *Theories of Everything* (Oxford: Clarendon Press, 1991), 67–68.

18 Stephen Hawking and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton, N.J.: Princeton University Press, 1996), 20.

doesn't matter if it's explanatory or not. The conclusion is entailed by the premises, so you can't object to the conclusion once you have granted the premises. Moreover, in no place does the argument postulate God to plug up a gap in our scientific knowledge. The scientific evidence is used only to confirm the truth of premise 2, which is a religiously neutral statement that can be found in any textbook on astronomy. God's existence is implied only by the conjunction of premise 1 with premise 2. Finally, the hypothesis of God is, in fact, genuinely explanatory, though it is not a scientific but a personal explanation.¹⁹ It explains some effect in terms of an agent and his intentions. We employ such explanations all the time.

For example, if you were to come into the kitchen and find the kettle boiling and ask me, "Why is the kettle boiling?" I might give you an explanation in terms of the kinetic energy communicated to the water by the flame by means of the heat-conducting metal used in the manufacture of the kettle, which causes the molecules of the water in the kettle to vibrate faster and faster until they are thrown off in the form of steam. Or I might say, "I put it on to make a cup of tea!" Both are equally legitimate explanations, and in many contexts, only a personal explanation will do. In the case of cosmic origins, as Oxford philosopher Richard Swinburne points out, there *cannot* be a scientific explanation of a first state of the universe, since there is nothing before it. Therefore, if a personal explanation does not exist, then there is simply no explanation at all—which is metaphysically absurd, since on that account the universe just popped into being uncaused out of nothing.

Other atheists have charged that the argument's conclusion is incoherent, since a cause must come before its effect, and there is no moment before the big bang. This objection, however, is easy to answer. Many causes and effects are simultaneous. Thus, the moment of God's causing the big bang is the moment of the occurrence of the big bang. We can then say that God existed alone without the universe before the big bang, not in physical time but in an undifferentiated metaphysical time, or that he is strictly timeless and entered into time at the moment of creation. No incoherence has been shown in either of these alternatives.

But people will say, "But if the universe must have a cause, then what is God's cause?" This question reveals an inattentiveness to the formulation of the argument. The first premise does not state, whatever *exists* has a cause, but rather, whatever *begins to exist* has a cause. The difference is important. The insight that lies at the root of premise 1 is that being cannot come from nonbeing, something cannot come from nothing. God, since he never began to exist, would not require a cause, for he never came into being. This is not a special pleading for God, since this is exactly what the atheist has always claimed about the universe: that it is eternal and uncaused. The problem is that the atheist's claim is now rendered untenable in light of the beginning of the universe.

Finally, someone might wonder, "But isn't God supposed to be infinite? Your argument shows that the infinite cannot exist. So how can God exist?" In fact, the argument was that an infinite number of things cannot exist. God is not a collection of an infinite number of things. As a nonphysical being, he doesn't even have parts. When theologians speak of God's infinity, they are thus using the term in a *qualitative* not a *quantitative* sense. They mean that God is absolutely holy, uncreated, self-existent, all-powerful, all-present, and so forth. It's not a mathematical concept. Thus, there's no contradiction.

19 On this distinction, see the discussion by Richard Swinburne, *The Existence of God*, rev. ed. (Oxford: Clarendon Press, 1991), 32–48.

In sum, we have a powerful reason based on the origin of the universe to believe that an uncaused, changeless, timeless, immaterial, personal Creator of the universe exists.

GOD MAKES SENSE OF THE COMPLEX ORDER IN THE UNIVERSE

During the last thirty years or so, scientists have discovered that the existence of intelligent life depends on a complex and delicate balance of initial conditions given in the big bang itself. Scientists once believed that whatever the initial conditions of the universe, eventually intelligent life might evolve. But we now know that our existence is balanced on a knife's edge. It seems vastly more probable that a life-prohibiting universe rather than a life-permitting universe such as ours should exist. The existence of intelligent life depends on a conspiracy of initial conditions that must be fine-tuned to a degree that is literally incomprehensible and incalculable. For example, Stephen Hawking has estimated that if the rate of the universe's expansion one second after the big bang had been smaller by even one part in a hundred thousand million million, the universe would have re-collapsed into a hot fireball.²⁰ British physicist P. C. W. Davies has calculated that the odds against the initial conditions being suitable for later star formation (without which planets could not exist) is one followed by a thousand billion billion zeroes, at least.²¹ He also estimates that a change in the strength of gravity or of the weak force by only one part in 10,100 would have prevented a life-permitting universe. Roger Penrose of Oxford University has calculated that the odds of the big bang's low entropy condition existing by chance are on the order of one out of 10¹⁰(123).²² There are around fifty such quantities and constants present in the big bang that must be fine-tuned in this way if the universe is to permit life. And it's not just each quantity that must be finely tuned; their ratios to one another must be also finely tuned. Therefore, improbability is added to improbability to improbability until our minds are reeling in incomprehensible numbers. (For a more thorough presentation of the fine-tuning evidenced in nature and the improbability of our universe's appearance, as it is, by chance, see chapter 8 of this book by Hugh Ross.)

Three possibilities exist for explaining the presence of this remarkable fine-tuning of the universe: natural law, chance, or design. The first alternative holds that the fine-tuning of the universe is physically necessary. There is some unknown theory that would explain the way the universe is. It had to be the way it is, and there was really no chance or little chance of the universe not being life-permitting. By contrast, the second alternative states that the fine-tuning is due entirely to chance. It's just an accident that the universe is life-permitting, and we're the lucky beneficiaries. The third alternative rejects both of these accounts in favor of an intelligent mind behind the cosmos who designed the universe to permit life. Which of these alternatives is the most plausible?

On the face of it, the first alternative seems extraordinarily implausible. It requires us to believe that a life- *prohibiting* universe is virtually physically impossible. But surely it does seem possible. If the matter and antimatter had been differently proportioned, if the universe had expanded just a little more slowly, if the entropy of the universe were slightly greater—any of these adjustments and more would have prevented a life-permitting universe, yet all seem perfectly possible physically. The person who maintains that the universe must be life-

20 Stephen W. Hawking, *A Brief History of Time* (New York: Bantam Books, 1988), 123.

21 P. C. W. Davies, *Other Worlds* (London: Dent, 1980), 160–61, 168–69.

22 P. C. W. Davies, "The Anthropic Principle," *Particle and Nuclear Physics* 10 (1983): 28.

permitting is taking a radical line that requires strong proof. But there is none; this alternative is simply put forward as a bare possibility.

Moreover, there is good reason to reject this alternative. First, there are models of the universe that are different from the existing universe. As John Leslie explains:

The claim that blind necessity is involved—that universes whose laws or constants are slightly different “aren’t real physical possibilities” . . . is eroded by the various physical theories, particularly theories of random symmetry breaking, which show how a varied ensemble of universes might be generated.²³

If, as Leslie suggests, subatomic indeterminacy (or uncausedness) is real, then it must be possible for the universe to be different, since a number of physical variables depend on subatomic processes that are random in nature.

Second, even if the laws of nature were necessary, one would still have to supply initial conditions. As P. C. W. Davies states:

Even if the laws of physics were unique, it doesn’t follow that the physical universe itself is unique. . . . The laws of physics must be augmented by cosmic initial conditions. . . . There is nothing in present ideas about “laws of initial conditions” remotely to suggest that their consistency with the laws of physics would imply uniqueness. Far from it. . . .

It seems, then, that the physical universe does not have to be the way it is: it could have been otherwise.²⁴

The extraordinarily low entropy condition of the early universe would be a good example of an arbitrary quantity that seems to have been put in at the creation as an initial condition. We really do not know how much certain constants and quantities could have varied from their actual values, but this admitted uncertainty becomes less important when the number of the variables to be fine-tuned is high. For example, the chances of all fifty known variables being finely tuned, even if each variable has a 50 percent chance of being its actual value, is less than 3 out of 10¹⁷.

Finally, if there is a single, physically possible universe, then the existence of this incredibly complex world-machine might be itself powerful evidence that a designer exists. Some theorists call the hypothesis that the universe must be life-permitting “the Strong Anthropic Principle,” and it is often taken as indicative of God’s existence. As physicists Barrow and Tipler write in their *Anthropic Cosmological Principle*, “The Strong Anthropic Principle . . . has strong teleological overtones. This type of notion was extensively discussed in past centuries and was bound up with the question of evidence for a Deity.”²⁵ Thus, the first alternative is not plausible to begin with and is perhaps indicative of design.

What about the second alternative, that the fine-tuning of the universe is due to chance? The problem with this alternative is that the odds against it are so incomprehensibly great that they cannot be reasonably faced. Students or laymen who blithely assert that “it could have happened by chance” simply have no conception of the fantastic precision of the fine-tuning

23 John Leslie, *Universes* (London: Routledge, 1989), 202.

24 P. C. W. Davies, *The Mind of God* (New York: Simon & Schuster, 1992), 169.

25 Barrow and Tipler, *Anthropic Cosmological Principle*, 15.

requisite for life. They would never embrace such a hypothesis in any other area of their lives. For example, they would not use such a hypothesis to explain how there came to be a car in one's driveway.

But it's important to understand that the probability is not the only thing at stake here. After all, fantastically improbable events happen every day. Your own existence, for example, is the result of an incredibly improbable union of a certain sperm and a certain egg, yet no one would infer that their union was therefore designed. Rather, what is at stake in eliminating the hypothesis of chance is what theorists call "specified probability": the demonstration that the event in question is not only improbable but also conforms to an independently discovered pattern.²⁶ Any sequence of letters hammered out by a chimpanzee seated at a typewriter is equally improbable. If we find that the chimpanzee has typed a beautiful sonnet, however, then we know this is not the result of blind chance, since the sonnet conforms to the independently given pattern of grammatical English sentences. In the same way, physics and biology tell us independently of any knowledge of the early conditions of the universe what physical conditions are requisite for life. We then discover how incredibly improbable such conditions are. It is this combination of a specified pattern plus improbability that serves to render the chance hypothesis implausible.

With this in mind, we can immediately see the fallacy of those who say that the existence of any universe is equally improbable, and therefore, there is nothing here to be explained. It is not the improbability of some universe or other's existing that concerns us; rather, it is the specified probability of a life-permitting universe's existence that is at issue. Thus, the proper analogy to the fine-tuning of the universe is not, as defenders of the chance hypothesis often suppose, a lottery in which any individual's winning is fantastically and equally improbable but which some individual has to win. Rather, the analogy is a lottery in which a single white ball is mixed into a billion black balls, and you are asked to reach in and pull out a ball. Any ball you pick will be equally improbable; nevertheless, it is overwhelmingly more probable that whichever ball you pick, it will be black rather than white. Similarly, the existence of any particular universe is equally improbable, but it is incomprehensibly more probable that whichever universe exists, it will be life-prohibiting rather than life-permitting. It is the enormous, specified improbability of the fine-tuning that presents the hurdle for the chance hypothesis.

How can the atheist get over this hurdle? Some thinkers have argued that we really shouldn't be surprised at the finely tuned conditions of the universe, for if the universe were not fine-tuned, then we wouldn't be here to be surprised about it! Given that we are here, we should expect the universe to be fine-tuned. But such reasoning is logically fallacious. The statement "We shouldn't be surprised that we do not observe conditions of the universe incompatible with our existence" is true. If the conditions of the universe were incompatible with our existence, we couldn't be here to observe them. So it's not surprising that we don't observe such conditions. But from that statement it does not logically follow that "we shouldn't be surprised that we *do* observe conditions of the universe that *are* compatible with our existence." Given the incredible improbability of such finely tuned conditions, it is surprising that we observe them.

26 See William A. Dembski, *The Design Inference: Eliminating Chance through Small Probabilities*, Cambridge Studies in Probability, Induction, and Decision Theory (Cambridge: Cambridge University Press, 1998), 167–74.

John Leslie provides an analogy to illustrate the fallacy of the objector's reasoning. Imagine you are traveling abroad, and you are arrested on trumped-up drug charges and dragged in front of a firing squad of one hundred trained marksmen, all with rifles aimed at your heart. You hear the command, "Ready! Aim! Fire!" and then the deafening roar of the guns. And then you observe that you are still alive, that *all* one hundred trained marksmen missed! What would you conclude? "I guess I really shouldn't be surprised that they all missed. After all, if they hadn't all missed, then I wouldn't be here to be surprised about it! Given that I am here, I should expect them all to miss." Of course not! You would immediately suspect that they all missed on purpose, that the whole thing was a setup, engineered for some reason by someone. You wouldn't be surprised that you do not observe that you are dead (since if you were dead, you wouldn't be there to observe it), but you would be quite rightly surprised that you do observe that you are alive (in view of the enormous improbability of all the marksmen missing). You wouldn't just write off your survival to chance.

Theorists who defend the alternative of chance have therefore been forced to adopt an extraordinary hypothesis: the many worlds hypothesis. According to this hypothesis, our universe is but one member of a greater collection of universes, all of which are real, actually existing universes, not merely possible universes. In order to ensure that somewhere in the world ensemble there will appear by chance a universe finely tuned for life, it is further stipulated that there are an infinite number of universes in the collection (so that every possibility will be realized) and that the physical constants and quantities are randomly ordered (so that the worlds are not all alike). Thus, somewhere in this world ensemble there will appear by chance alone finely tuned universes such as ours. We should not be surprised to observe finely tuned conditions, since observers like us exist only in those universes that are finely tuned.

The very fact that detractors of the design hypothesis have to resort to such a remarkable hypothesis underlines the point made earlier: Fine-tuning is not explicable in terms of natural law alone or in terms of sheer chance in the absence of a world ensemble. The many worlds hypothesis is a sort of backhanded compliment to the design hypothesis in its recognition that the fine-tuning cries out for explanation. But is the many worlds hypothesis as plausible as the design hypothesis?

It seems not. In the first place, the many worlds hypothesis is no more scientific, and no less metaphysical, than the hypothesis of a cosmic designer. As the scientist-theologian John Polkinghorne says, "People try to trick out a 'many universe' account in sort of pseudo-scientific terms, but that is pseudo-science. It is a metaphysical guess that there might be many universes with different laws and circumstances."²⁷ But as a metaphysical hypothesis, the many worlds hypothesis is arguably inferior to the design hypothesis because the design hypothesis is simpler. According to a principle known as Ockham's razor, we should not multiply causes beyond what is necessary to explain the effect. It is simpler to postulate one cosmic designer to explain our universe than to postulate the infinitely bloated collection of universes required by the many worlds hypothesis. Therefore, the design hypothesis is preferred.

27 J. C. Polkinghorne, *Serious Talk: Science and Religion in Dialogue* (Valley Forge, Pa.: Trinity Press International, 1995), 6.

Second, there is no known way for generating a world ensemble. No one has been able to explain how or why such a collection of universes could or should exist. Moreover, the attempts that have been made require fine-tuning themselves. For example, although some cosmologists appeal to so-called inflationary theories of the universe to generate a world ensemble, the only consistent inflationary model is Linde's chaotic inflationary theory, and it requires fine-tuning to start the inflation. As Robert Brandenburger of Brown University writes, "Linde's scenario does not address a crucial problem, namely the cosmological constant problem. The field which drives inflation in Linde's scenario is expected to generate an unacceptably large cosmological constant *which must be tuned to zero by hand*. This is a problem which plagues *all* inflationary universe models."²⁸

Third, there is no evidence for the existence of a world ensemble apart from the fine-tuning itself. But the fine-tuning is equally evidence for a cosmic designer. Indeed, the hypothesis of a cosmic designer is again the better explanation because we have independent evidence of the existence of such a designer in the form of the other arguments for the existence of God.

Fourth, the many worlds hypothesis is guilty of what probability theorists call "multiplying one's probabilistic resources without warrant," that is to say, arbitrarily assuming that one has more chances than it appears just to increase the odds of getting some result. If we're allowed to do that, *anything* can be explained away. For example, a cardplayer who gets four aces every time he deals could explain this away by saying that there are an infinite number of universes with poker games going on in them, and therefore, in some of them someone always by chance gets four aces every time he deals, and—lucky me!—we just happen to be in one of those universes. This sort of arbitrary multiplying of one's probabilistic resources would render rational conduct impossible.

Thus, the many worlds hypothesis collapses and along with it the alternative of chance, which it sought to rescue. Both the natural law alternative and the chance alternative are therefore implausible.

We can summarize this second argument as follows:

1. The fine-tuning of the universe is due to either law, chance, or design.
2. It is not due to law or chance.
3. Therefore, it is due to design.

What objections might be raised to the alternative of design? According to this hypothesis, a cosmic designer exists who fine-tuned the initial conditions of the universe for intelligent life. Such a hypothesis supplies a personal explanation of the fine-tuning of the universe. Is this explanation implausible?

Detractors of design sometimes object that the designer himself remains unexplained. It is said that an intelligent mind also exhibits complex order, so that if the universe needs an explanation, so does its designer. If the designer does not need an explanation, why does the universe?

²⁸ Robert Brandenburger, personal communication.

This popular objection is based on a misconception of the nature of explanation. It is widely recognized that in order for an explanation to be the best explanation, one needn't have an explanation of the explanation (indeed, such a requirement would generate an infinite regress, so that everything becomes inexplicable). If the best explanation of a disease is a previously unknown virus, doctors need not be able to explain the virus in order to know it caused the disease. If archaeologists determine that the best explanation of certain artifacts is a lost tribe of ancient people, the archaeologists needn't be able to explain the origin of the people in order to say justifiably that they produced the artifacts. If astronauts should find traces of intelligent life on some other planet, we need not be able to explain such extraterrestrials in order to recognize that they are the best explanation. In the same way, believing that the design hypothesis is the best explanation of the fine-tuning doesn't depend on our ability to explain the designer.

Moreover, the complexity in a mind is not really analogous to the complexity of the universe. A mind's *ideas* may be complex, but a mind itself is a remarkably simple thing, being an immaterial entity not composed of parts. Moreover, a mind, in order to be a mind, must have certain properties such as intelligence, consciousness, and volition. These are not contingent properties that it might lack but are essential to its nature. Therefore, it is difficult to see any analogy between the contingently complex universe and a mind. Detractors of design have evidently confused a mind's thoughts (which may be complex) with the mind itself (which is fairly simple). Postulating an uncreated mind behind the cosmos is thus not at all like postulating an undesigned cosmos.

Some people object to design by pointing to examples of alleged design that we regard as evil or hurtful. For example, a deadly bacterium or a tapeworm is a complex entity, but how could we ascribe such creatures to a divine designer?

This objection is simply irrelevant to the design hypothesis, which says nothing about the moral qualities of the cosmic designer. A bacterium or even a single flagellum (not to speak of a tapeworm) is so fantastically complex an organism that it cannot be explained in terms of natural law and chance alone.²⁹ What their existence appears to call into question is not the need of a designer but the goodness or benevolence of the designer. That is an issue for the next argument we shall consider, the moral argument. To think moral considerations call into question the hypothesis of design would be to say that thumbscrews or a torture rack does not require the existence of an intelligent designer!

Thus, the design hypothesis does not share in the implausibility of its competitors and is a familiar sort of explanation we employ every day. It is, therefore, the best explanation of the amazing fine-tuning of our universe.

GOD MAKES SENSE OF OBJECTIVE MORAL VALUES IN THE WORLD

If God does not exist, then objective moral values do not exist. When I speak of *objective* moral values, I mean moral values that are valid and binding whether anybody believes in them or not. Thus, to say, for example, that the Holocaust was objectively wrong is to say that

29 See Michael Behe, *Darwin's Black Box* (New York: Free Press, 1996), 51–73.

it was wrong even though the Nazis who carried it out thought it was right and that it would still have been wrong even if the Nazis had won World War II and succeeded in exterminating or brainwashing everyone who disagreed with them. Now, if God does not exist, then moral values are not objective in this way.

Many theists and atheists alike concur on this point. For example, Bertrand Russell observed:

Ethics arises from the pressures of the community on the individual. Man . . . does not always instinctively feel the desires which are useful to his herd. The herd, being anxious that the individual should act in its interests, has invented various devices for causing the individual's interest to be in harmony with that of the herd. One of these . . . is morality.³⁰

Michael Ruse, a philosopher of science at the University of Guelph, agrees. He explains:

Morality is a biological adaptation no less than are hands and feet and teeth. Considered as a rationally justifiable set of claims about an objective something, ethics is illusory. I appreciate that when somebody says "Love thy neighbor as thyself," they think they are referring above and beyond themselves. Nevertheless, such reference is truly without foundation. Morality is just an aid to survival and reproduction . . . and any deeper meaning is illusory.³¹

Friedrich Nietzsche, the great atheist of the last century who proclaimed the death of God, understood that the death of God meant the destruction of all meaning and value in life.

But we must be very careful here. The question here is not, "Must we believe in God in order to live moral lives?" I'm not claiming that we must. Nor is the question, "Can we *recognize* objective moral values without believing in God?" I think that we can. Nor is the question, "Can we formulate an adequate system of ethics without reference to God?" So long as we assume that human beings have objective moral value, the atheist could probably draft a moral code with which the theist would largely agree.

Rather, the question is, "If God does not exist, do objective moral values exist?" Like Russell and Ruse, I don't see any reason to think that in the absence of God, the herd morality evolved by *Homo sapiens* is objective. After all, if there is no God, then what's so special about human beings? They're just accidental by-products of nature that have evolved relatively recently on an infinitesimal speck of dust lost somewhere in a hostile and mindless universe and that are doomed to perish individually and collectively in a relatively short time. According to the atheistic view, an action such as rape may not be socially advantageous, and so in the course of human development has become taboo, but such a view does absolutely nothing to prove that rape is really wrong. It follows, therefore, that there's nothing wrong with your raping someone. Thus, without God there is no absolute right and wrong that imposes itself on our conscience.

But the problem (as Francis Beckwith explains in chapter 1) is that objective values *do* exist, and deep down we all know it. There's no more reason to deny the objective reality of moral values than the objective reality of the physical world. As John Healey, the executive

30 Bertrand Russell, *Human Society in Ethics and Politics* (New York: Simon & Schuster, 1955), 124.

31 Michael Ruse, "Evolutionary Theory and Christian Ethics," in *The Darwinian Paradigm*, ed. Michael Ruse (London: Routledge, 1989), 262–69.

director of Amnesty International wrote in a fund-raising letter, “I am writing you today because I think you share my profound belief that there are indeed some moral absolutes. When it comes to torture, to government-sanctioned murder, to ‘disappearances’—there are no lesser evils. These are outrages against all of us.”³² Actions such as rape and child abuse aren’t just socially unacceptable behavior—they’re moral abominations. Some things are really wrong. Similarly, love, equality, and self-sacrifice are really good. But if moral values cannot exist without God and moral values do exist, then it follows logically and inescapably that God exists.

We can summarize this argument as follows:

1. If God does not exist, objective moral values do not exist.
2. Objective moral values do exist.
3. Therefore, God exists.

Again, let us consider possible objections that might be raised against this argument. Some atheist philosophers, unwilling to bite the bullet and affirm that acts such as rape or the torture of a child are morally neutral actions, have tried to affirm objective moral values in the absence of God, thus in effect denying premise 1. Let’s call this alternative atheistic moral realism. Atheistic moral realists affirm that moral values and duties do exist in reality and are not dependent on evolution or human opinion, but they insist that they are also not grounded in God. Indeed, moral values have no further foundation. They just exist.

I must confess that this alternative strikes me as incomprehensible, an example of trying to have your cake and eat it too. What does it mean to say, for example, that the moral value justice just exists? I understand what it is for a person to be just, but I draw a complete blank when it is said that, in the absence of any people, justice itself exists. Moral values seem to exist as properties of persons, not as abstractions—or at any rate, I don’t know what it means for a moral value to exist as an abstraction. Atheistic moral realists, seeming to lack any adequate foundation in reality for moral values, just leave them floating in an unintelligible way.

Second, the nature of moral duty or obligation seems incompatible with atheistic moral realism. Let’s suppose for the sake of argument that moral values do exist independently of God. Suppose that values such as mercy, justice, love, forbearance, and the like just exist. How does that result in any moral obligations for me? Why would I have a moral duty, say, to be merciful? Who or what lays such an obligation on me? As the ethicist Richard Taylor points out, “A duty is something that is owed. . . . But something can be owed only to some person or persons. There can be no such thing as duty in isolation.”³³ God makes sense of moral obligation because his commands constitute for us our moral duties. Taylor writes:

Our moral obligations can . . . be understood as those that are imposed by God. . . . But what if this higher-than-human lawgiver is no longer taken into account? Does the concept of a moral

32 John Healey, fund-raising letter, 1991.

33 Richard Taylor, *Ethics, Faith, and Reason* (Englewood Cliffs, N.J.: Prentice-Hall, 1985), 83.

obligation . . . still make sense? . . . The concept of moral obligation [is] unintelligible apart from the idea of God. The words remain but their meaning is gone.³⁴

As a nontheist, Taylor, therefore, thinks that we literally have no moral obligations, that there is no right or wrong. The atheistic moral realist rightly finds this abhorrent, but, as Taylor clearly sees, according to an atheistic view there simply is no ground for duty, even if moral values somehow exist.

Third, it is fantastically improbable that just the sort of creatures would emerge from the blind evolutionary process who correspond to the abstractly existing realm of moral values. This would be an utterly incredible coincidence. It is almost as though the moral realm *knew* that we were coming. It is far more plausible that both the natural realm and the moral realm are under the hegemony or authority of a divine designer and lawgiver than to think that these two entirely independent orders of reality just happened to mesh.

Thus, it seems to me that atheistic moral realism is not a plausible view but is basically a halfway house for philosophers who don't have the stomach for the moral nihilism or meaninglessness that their own atheism implies.

What, then, about premise 2: Objective moral values do exist? Some people, as we have seen, deny that objective moral values exist. I agree with them that *if* there is no God, then moral values are just the products of sociobiological evolution or expressions of personal taste. But I see no reason to believe that is the case. Those who think so seem to commit the genetic fallacy, which is an attempt to invalidate something by showing how it originated. For example, a socialist who tried to refute your belief in democratic government by saying, "The only reason you believe in democracy is that you were raised in a democratic society!" would be guilty of the genetic fallacy. Even if it were true that your belief is the result of cultural conditioning, that does absolutely nothing to show that your belief is false (think of people who have been culturally conditioned to believe that the earth is round!). The truth of an idea is not dependent on how that idea originated. It's the same with moral values. If moral values are *discovered* rather than *invented*, then our gradual and fallible apprehension of the moral realm no more undermines the objective reality of that realm than our gradual, fallible apprehension of the physical world undermines the objective reality of the physical realm. We know objective moral values exist because we clearly apprehend some of them. The best way to show this is simply to describe moral situations in which we clearly see right and wrong: the abuse of a child, incest, rape, ethnic cleansing, racism, witch burning, the Inquisition, and so forth. If someone fails to see the objective moral truth about such matters, then he is simply morally handicapped, like a color-blind person who cannot tell the difference between red and green, and there's no reason to think that his impairment should make us call into question what we see clearly.

From the truth of the two premises, the conclusion follows logically that, therefore, God exists. Many atheists have objected to basing moral values in God. Frequently a dilemma known as the Euthyphro Argument is presented: Either something is good because God commands it or else God commands something because it is good. If you say something is good because God commands it, this makes right and wrong arbitrary; God could have commanded that acts of hatred, brutality, cruelty, and so on be good, and then we would be morally obligated to do such things, which seems crazy. On the other hand, if God commands

34 Ibid., 83–84.

something because it is good, then the good is independent of God after all. Thus, morality can't be based on God's commands.

Plato himself saw the solution to this objection: You split the horns of the dilemma by formulating a third alternative, namely, *God is the good*. The good is the moral nature of God himself. That is to say, God is necessarily holy, loving, kind, just, and so on, and these attributes of God comprise the good. God's moral character expresses itself toward us in the form of certain commandments, which become for us our moral duties. Hence, God's commandments are not arbitrary but necessarily flow from his own nature. They are necessary expressions of the way God is.

The atheist might press, "But why think that God's nature constitutes the good?" In one sense, the answer to that question is that there just isn't anything else available. There has to be some explanatory ultimate, some stopping point, and we've seen that without God there are no objective moral values. Therefore, if there are objective moral values, they cannot be based in anything but God! In addition, however, God's nature is an appropriate stopping point for the standard of goodness, for by definition, God is a being who is worthy of worship. When you think about what it means to worship someone, then it is evident that only a being who is the embodiment of all moral goodness is worthy to be worshiped.

Thus, God makes sense of ethics in a way that atheism cannot. In addition to the metaphysical and scientific arguments for God, therefore, we have a powerful moral argument for God. This moral argument also helps to solve the problem raised by the design argument concerning the moral character of the designer of the universe. We now see that moral evil in the world does not disprove God's goodness; on the contrary, it actually *proves* it. We may argue:

1. If God does not exist, objective moral values do not exist.
2. Evil exists.
3. Therefore, objective moral values exist (some things are truly evil).
4. Therefore, God exists.

Thus, evil paradoxically helps to prove God's existence, since without God things would not be good or evil. Notice that this argument shows the compatibility of God and evil without giving a clue as to *why* God permits evil. That is a separate question that is addressed in chapter 14 by John S. Feinberg and has been addressed by many other theologians.³⁵ But even in the absence of an answer to the why question, the present argument proves that evil does not call into question but actually requires God's existence.

We thus have good grounds for believing in the existence of an all-good, uncaused, timeless, changeless, immaterial, personal creator and designer of the universe, which is what most people mean by "God." But what about people who lack the education, resources, or time to comprehend these sometimes abstruse reasons for the existence of God? Can they know that God exists wholly apart from arguments? I'm persuaded that they can, for God can

35 See Douglas Geivett, *Can a Good God Allow Evil?* in this same series.

be known through immediate experience. This was the way people in the Bible knew God, as Professor John Hick explains:

God was known to them as a dynamic will interacting with their own wills, a sheer given reality, as inescapably to be reckoned with as destructive storm and life-giving sunshine. . . . They did not think of God as an inferred entity but as an experienced reality. . . . To them God was not a proposition completing a syllogism, or an idea adopted by the mind, but the experiential reality which gave significance to their lives.³⁶

For these people, God was not the best explanation of their religious experience and so they believed in him; rather, in their religious experience they came to know God *directly*.

Philosophers call beliefs such as this “properly basic beliefs.” They aren’t based on some other beliefs; rather, they are part of the foundation of a person’s system of beliefs. Other properly basic beliefs include the belief in the reality of the past, the existence of the external world, and the presence of other minds such as your own. When you think about it, none of these beliefs can be proven. How could you prove that the world was not created five minutes ago with built-in appearances of age, such as food in our stomachs from the breakfasts we never really ate and memory traces in our brains of events we never really experienced? How could you prove that you are not a brain in a vat of chemicals being stimulated with electrodes by some mad scientist to believe that you are here reading this book? How could you prove that other people are not really automata who exhibit all the external behavior of persons with minds, when in reality they are soul-less, robot-like entities?

Although these sorts of beliefs are basic for us, that doesn’t mean they’re arbitrary. Rather, they are grounded in the sense that they’re formed in the context of certain experiences. In the experiential context of seeing and feeling and hearing things, I naturally form the belief that there are certain physical objects that I am sensing. Thus, my basic beliefs are not arbitrary but appropriately grounded in experience. There may be no way to prove such beliefs, and yet it is perfectly rational to hold them. You would have to be crazy to think that the world was created five minutes ago or that you are a brain in a vat! Such beliefs are thus not merely basic but *properly* basic.

In the same way, belief in God is for those who seek him a properly basic belief grounded in our experience of God, as we discern him in nature, conscience, and other means. This has an important lesson. If, through experiencing God, we can know in a properly basic way that God exists, then a real danger exists that proofs for God could actually distract one’s attention from God himself. The Bible promises, “Draw near to God and he will draw near to you” (James 4:8 RSV). We mustn’t so concentrate on the proofs for God that we fail to hear the inner voice of God speaking to our own heart. For those who listen, God becomes an immediate reality in their lives.

Someone might object that an atheist or an adherent to some nonpersonal religious faith such as Taoism could also claim to know their beliefs in a properly basic way. Certainly, they could *claim* such a thing, but what does that prove? Imagine that you were locked in a room with four color-blind people, all of whom claimed that there is no difference between red and green. Suppose you tried to convince them by showing them colored pictures of red and green objects and asking, “Can’t you see the difference?” Of course, they would see no difference at

36 John Hick, introduction to *The Existence of God*, ed. with an introduction by John Hick, Problems of Philosophy Series (New York: Macmillan, 1964), 13–14.

all and would dismiss your claim to see different colors as delusory. In terms of *showing* who's right, there would be a complete standoff. But would their denial of the difference between red and green or your inability to show them that you are right do anything either to render your belief false or to invalidate your experience? Obviously not!

In the same way, the person who has actually come to know God as a living reality in his life can know with assurance that his experience is no delusion, regardless of what the atheist or Taoist tells him.³⁷ Still, it remains the case that in such a situation, although the believer may *know* that his belief is true, both parties are at a complete loss to *show* the truth of his respective belief to the other party. How is one to break this deadlock? We should do whatever is feasible to find common ground, such as logic and empirical facts, by means of which we can show in a noncircular way whose view is correct. For that reason, arguments such as I have given above are important, for even if they are not the primary means by which we *know* that God exists, they may be the means by which we can *show* someone else that God exists. We may know that God exists in a properly basic way, and we may try to show that God exists by appeal to the common facts of science, ethics, and philosophy.

In summary, we've seen good reasons to believe God exists, but that conclusion is but the first step, albeit a crucial one. The Bible says, "Whoever would draw near to God must believe that he exists and that he rewards those who seek him" (Heb. 11:6 RSV). If we have come to believe that he exists, we must now seek him, with the confidence that if we do so with our whole heart, he will reward us with the personal knowledge of himself.

37 William Alston, "Religious Diversity and Perceptual Knowledge of God," *Faith and Philosophy* 5 (1988): 433–48.