

## APPENDIX B

### ASCERTAINING THE GEOGRAPHY OF THE CITIES OF THE PLAIN: 40 POINTS

1. Storytellers and writers in the ancient Near East did not invent fictitious geographies, but used what was known from personal experience, shared (cultural) experience, or “traditional” geographical wisdom, that is, actual geography, whether phenomenological or formulaic.
2. Whether or not ancient stories—together with their characters—are factual or fictitious, they were “layered over” real-world geography and topography, whether phenomenological or formulaic.
3. The writer of the Sodom story likely had personal knowledge of the geography he utilized; perhaps intimate awareness based on experience.
4. Genesis 13:1-12 is the only narrative passage among the Sodom tales marking out the location of the cities of the plain by employing geographical data points and directions in a conscientious attempt to place them in a real-world context shared by the readers.
5. The Genesis passage in question contains both specific and approximate geographical quantities: (a) Egypt; (b) the Negev; (c) Bethel/Ai; (d) the place of the altar to Yahweh (hill between Bethel and Ai, Genesis 12:8); and (e) the *kikkar* (Hebrew) of the Jordan.
6. Outside the Old Testament, among the Semitic cognates and Egyptian, *kikkar/kakkar/kakkarul/kerker* is never used as a geographical referent, but means only a “talent, a flat, circular weight of metal” or “circular, flat loaf of bread”; in Egyptian there is also the meaning “to draw a circle in the sand with a stick.”
7. *Kikkar* (disk, circle) in Old Testament Hebrew likewise refers (well over 50 times) to a talent of metal or a circular, flat loaf of bread; but these meanings never use the definite article, suggesting its general substantive, non-locative quality in such contexts.

8. The 13 rare geographical uses of *kikkar*, found exclusively in the Old Testament, 10 of which are in the Sodom tales, denote the disk-shaped southern Jordan Valley north of the Dead Sea (linguistically a phenomenological secondary referent—that is, from all angles the area looks like a disk, thus its name); of these 13 instances, 4 are constructed *kikkar hayarden* (disk of the Jordan, with the definite article), while the remaining 9 are *hakikkar* (the *kikkar*, with the definite article), suggesting a well-known geographical area (on a par with the Negev). There are many standard Hebrew terms (primary referents) for “plain” and “valley,” but these are explicitly avoided when referring to the geographical region known as the *kikkar* and *kikkar* of the Jordan.

9. The *kikkar* of the Jordan is confined to the area north of the Dead Sea because (a) *hayarden* (the Jordan) never refers to anything other than the fresh water system of the Jordan River proper and the valley through which it flows; and (b) *hayarden* is never extended to include any part of the Valley of Siddim (Valley of the Dead Sea), but ends at “the mouth of the Jordan below Pisgah” (another known geographical quantity, easily documentable; cf. Numbers 34:12; Deuteronomy 3:17,27; 4:47-49; Joshua 15:5; 18:19).

10. Thus, the *kikkar* of the Jordan can only refer to the disk-shaped alluvial plain north of the Dead Sea which was well-watered (a) like the garden of Yahweh (streams, rivers, springs), and (b) like Egypt (annual river inundations depositing new layers of water-laden silt; indeed, hydrologically speaking, the Jordan is a “Nile in miniature”).

11. The western Jordan Disk, the location of Jericho and little else, has reasonable perennial water resources plus the Jordan River and local wadis; the eastern Jordan Disk has far greater water resources than the western side, and sports numerous Bronze and Iron Age cities and towns, mainly along its eastern edge, just beyond the reach of the floodplain.

12. The text suggests that Lot viewed with his “unaided” physical eyes the entire Jordan Disk from the area east of Bethel/Ai (above and west-northwest of Jericho); the entire *kikkar* is, in fact, visible from the highland’s edge east of Bethel/Ai (which I have personally viewed on many occasions).

13. Lot traveled eastward from Bethel/Ai, pitching his tent toward Sodom, one of the cities of the eastern Jordan Disk, while Abram remained “in Canaan”; that is, Lot went east of the Jordan River beyond the formulaic Canaan boundary, remaining north of the Dead Sea all the while, no doubt traveling along the convenient east/west trade route that passed near Jericho, then crossed the river to the cities on the far side of the alluvial plain—the cities of the *kikkar*.

14. Sodom was one of the cities of the plain (*kikkar* = disk). No city south of the mouth of *hayarden* would have been considered as belonging to the Jordan Disk or the cities thereof (see point 9 above). Any placement of Sodom (or any of the other *kikkar* cities) south of the mouth of the Jordan would force an unnatural meaning on the term *kikkar* that it simply will not bear.

15. As the writer mentally works his way through the geography of the passage, the cities of the *kikkar* are perceived to have existed on the eastern Jordan Disk, north of the Dead Sea, the formulaic order of which (Sodom and Gomorrah, Admah and Zeboiim), with its two doublets, is reminiscent of ancient “map lists,” particularly those of ancient Egypt, indicating directionality (usually south-to-north for Transjordan routes).

16. The storyteller calculated or assumed that Sodom was the largest urban center on the eastern Jordan Disk as indicated by the fact that (a) it is the only *kikkar* city mentioned by itself; (b) it is always listed first when related cities are mentioned; and (c) the king of Sodom is the sole “spokesperson” for the *kikkar* cities coalition after the Kedorlaomer incident (Genesis 14:17-24).

17. The story of Abram and Lot, minimally, has roots in the Bronze Age (as viewed by most scholars) or, perhaps, in the early Iron Age (as suggested by some—a view in the extreme minority).

18. Biblical dating places Abram, Lot, and the Sodom tales—indeed, all the Genesis patriarchal narratives—squarely in the Middle Bronze Age, probably Middle Bronze II (an era of famines in Canaan when hordes of Semitic peoples migrated from the Levant to Lower Egypt; cf. Genesis 12:10; 26:1; 41:57ff).

19. Given a Middle Bronze Age date for Abram, Genesis 10 pushes the existence of the cities of the plain back well before the time of Abram, probably into the Early Bronze Age.

20. Sodom and the other cities of the Jordan Disk would, thus, have occupations dating from the Early Bronze Age into the Middle Bronze Age.

21. In Genesis 10, the mention of actual, known cities—such as Babylon, Erech (Uruk), Akkad, Nineveh, Sidon, Gerar, Gaza—and regions—such as Shinar, Assyria, Mizraim (Egypt), Caphtor—strongly suggests that Sodom, Gomorrah, Admah, and Zeboiim, in the same context, were also real cities in the true geographical sense.

22. Sodom, Gomorrah, Admah, and Zeboiim were known by the writer of Genesis 10 to mark the eastern extent of the Canaanite clans (Genesis 10:18-19), at the geographical and occupational “seat” of the Great Rift Valley, the best and most obvious natural boundary imaginable—real cities representing a real boundary.

23. The city of Sodom itself was fortified (Genesis 19:1).

24. Given a Middle Bronze Age date for Abram, archaeologically and geographically speaking, the largest fortified Bronze Age urban center on the eastern Jordan Disk would be a “most likely” candidate for biblical Sodom.

25. The presence of major Early Bronze Age, Intermediate Bronze Age, and Middle Bronze Age occupations at the “Sodom” urban center would make such a theory compelling.

26. An occupational hiatus of several centuries after a fiery Middle Bronze Age destruction would make that “Sodom” identification almost irresistible (in the time of Moses and Joshua the eastern Jordan Disk is called “the wasteland” below Pisgah—Numbers 21:20).

27. The presence of three or four nearby sites reflecting the “doublet” geographical configuration suggested in the text, and with the same occupational profile, would make the theory virtually irrefutable.

28. Given a Middle Bronze Age date for Abram, Tall el-Hammam satisfies every “Sodom” criterion embedded in Genesis 13:1-12 (points 20, 23-27).

29. Given virtually any other “date” for Abram, and if one assumes that the Sodom tales are etiological legends, the Bronze Age ruins of the eastern Jordan Disk would have provided geographical realism to the writer’s narrative.

30. Southern Dead Sea sites, such as Bab edh-Dhra and Numeira, satisfy not a single “cities of the plain” criterion set forth in the Genesis 13 narrative (summarized in points 20, 23-27 above) because (a) they were destroyed at the end of the Early Bronze Age centuries before the time of Abram and Lot (given a Middle Bronze Age date for Abram); and (b) they are entirely in the wrong place (whether or not the tales are factual or etiological, and regardless of date!).

31. There are no archaeological sites with an Early Bronze Age to Middle Bronze Age occupational profile in the Dead Sea Valley south of the mouth of the Jordan River. Period. (This is as one might expect from the biblical chronology itself.)

32. Whether or not the Sodom tales are fact or fancy, the storyteller’s urban landscape of the *kikkar* cities is real, and well-known to his readers.

33. Significant Early Bronze Age through Middle Bronze Age ruins would have been readily visible on the eastern Jordan Disk in antiquity, even after several of them were topped by smaller city/town occupations during Iron Age II (this is a reality at several eastern Jordan Disk sites including Tall el-Hammam and Tall Nimrin).

34. The writer penned his stories about the cities of the Jordan *kikkar* while ruins, more ancient still, dotted the eastern Jordan Disk, readily visible and well-known to anyone living in or near that region (whether he wrote during the Late Bronze Age or Iron Age!).

35. Had the author of Genesis 13:1-12 thought that southern Dead Sea sites like Bab edh-Dhra and Numeira were Sodom and Gomorrah, his clearly-written geography would have been constructed to incorporate the specificity of that location; it does not, by any stretch of the imagination.

36. The Sodom narrative carefully marks out a location for the cities of the *kikkar* north of the Dead Sea on the east bank of the Jordan River where, in fact, the ruins of significant Bronze and Iron Age cities exist. Such a high degree of correspondence between text and ground cannot be mere coincidence.

37. Given the extremely high degree of correspondence between the material evidence on the eastern Jordan Disk and a “literal” biblical chronology placing Abram in the Middle Bronze Age, one must ask whether or not such correspondence is actual or coincidental.

38. For the sake of argument, one is forced to admit that a “face-value” reading of the biblical text places the Patriarchal Period in the Middle Bronze Age, whereupon a remarkable level of correspondence exists between the Sodom tales and the material facts present on the eastern Jordan Disk; regardless of when the stories were codified—Late Bronze Age, Iron Age I, or Iron Age II.

39. If one assumes, for the sake of argument, that the Patriarchal Period either occurred much later—say, during the Late Bronze Age or early Iron Age—or such stories were predominantly works of pious fiction—say, seventh century BCE or later—then there is no historical correspondence between said narratives and the *kikkar*’s archaeological record, compelling one to conclude that the Sodom tales are probably etiological in nature, but rising from the existence of multiple Bronze Age ruins on the eastern Jordan Disk.

40. Given the fact that the geography unequivocally places the cities of the *kikkar* north of the Dead Sea and east of the Jordan River, one must conclude that, whether the Sodom tales are authentically Middle Bronze Age in origin and date, or are late Iron Age etiological compositions, they are layered over the physical geography of the eastern Jordan Disk where multiple Bronze Age ruins provided the storyteller’s readers with eloquent physical testimony of the destruction of a bygone civilization.

This chart adapted from Steven Collins, “40 Salient Points on the Geography of the Cities of the Kikkar,” in *Biblical Research Bulletin*, vol. 7, no. 1: 2-5. Used by permission.