

# Sodom—part 2

Anne Habermehl

According to Scripture, Sodom was destroyed at the time of Abraham about 1900 BC on the biblical timeline. In this paper it is argued that the standard secular timeline diverges drastically from the biblical timeline in this era, and that the destruction of the cities of the land of Sodom would have been near the beginning of the Early Bronze Age (3000 BC or possibly earlier). Archaeologists therefore need to look for these cities much earlier on the secular timeline than is commonly believed. In this second installment on Sodom, we look at some implications of placing Sodom's destruction this early in secular history. Arguments are also presented against Tall el-Hammam as Sodom.

No matter how good the arguments appear to be for locating the cities of Sodom in any given place, the ruins must date correctly. Otherwise, that location will be rejected. It is therefore necessary to determine what the 'correct' date for Sodom's destruction should be. We know that this event occurred when Abraham was 99 years old, a year before Isaac's birth (see Genesis 17:24 and 21:5). On the biblical timeline, this would be about BC 1900 BC.<sup>1</sup> The question is when this was on the secular standard timeline that is used by historians in the world at large.

## Divergence of the biblical and secular timelines

The secular world has its own timeline and its own methods of dating, that differ from the biblical ones. If we think about it, there is no reason why the biblical and secular timelines of history should coincide because they were developed in two very different ways. The biblical timeline back to creation was developed by narrative inspired by God. The secular timeline was developed by putting together Egyptian and prehistoric events back to evolution's big bang. Ultimately, when we go back far enough, this divergence of the two timelines is spectacular: the beginning of everything is less than 10,000 years ago on the biblical timeline, and is nearly 14 billion years ago on the secular timeline.<sup>2</sup>

The implications of this divergence of the biblical and secular timelines are enormous. It is the cause of much confusion in biblical archaeology, and leads to charges by secular historians that the biblical narratives are not true. I submit that if we do not understand how much the biblical and secular timelines diverge at the time of Abraham, we will not recognize the ruins of Sodom, even if they are sitting right under our noses.

## Dating of Sodom's destruction on the secular timeline

For arguments supporting the destruction of Sodom at the time of Abraham at around 3000 BC (secular), or even earlier, see appendix below. These arguments are based on

showing first, that Joseph had to have been the same person as Imhotep of Egyptian history, and then calculating how long Abraham would have lived before Joseph.

The placement of Abraham at the end of Early Bronze I is not a new idea to the readers of the *J. Creation*. Osgood<sup>3</sup> argued in a 1986 (*TJ*) article that Abraham had to have lived at least a thousand years earlier on the secular timeline. His thesis was based on well-argued archaeological data. What is interesting is that we have arrived at essentially the same place on the Egyptian timeline by two quite different means of looking at the subject.

This divergence of the two timelines is a large subject that cannot be covered here. However, we point out that the amount of divergence varies throughout ancient history. For instance, at the time of the Exodus the difference between the two timelines would have been about 350 years.<sup>4</sup>

## Era of the destruction of the country of Sodom

In ancient times in the Near East, lands were organized into city states. Cities controlled the territory immediately around them; on this surrounding land were unwalled villages, grazing animals, and growing crops. The whole lot constituted the city state, with a ruler over it. It was also not unusual for the king of one city to be the ruler over other nearby vassal cities.<sup>5,6</sup> It appears that the territory occupied by the cities of the plain was organized somewhat along these lines. According to Josephus,<sup>7</sup> five kings managed the affairs of the country of Sodom. In his description of the Dead Sea, he says that "the country of Sodom borders upon it".<sup>8</sup> He therefore distinguishes between the city and country of Sodom. From the biblical references to the cities, it would appear that the king of Sodom was the chief ruler over the others; this would be in keeping with his first mention in Genesis 14:2, and with the name of the kingdom having the same name as the city of Sodom. We see, in addition, that it is the king of Sodom who negotiates with Abraham over the "persons and the goods" (Genesis 14:21–24) after the recovery of these from the united kings of Mesopotamia. As a side note, Garfinkle<sup>9</sup> emphasizes that the availability

of people for labour was important in these early city states. In this the king of Sodom was consistent, because he wanted his people back, and never mind the loot.

There are indicators that the cities of the plain must have existed for an unknown period of time before their destruction. For one thing, there is the developed cohesive governing unit of the land of Sodom. Also the wickedness of the cities had clearly gone on for some time to have developed to a point that they were singled out for destruction by the Lord. The country of Sodom may well have existed even earlier than the Early Bronze Age, in what is called the Chalcolithic era.<sup>10</sup>

### Historical level of the Dead Sea

If we put the time of the cities’ destruction at around 3000 BC (secular) or earlier, the elevation of the Dead Sea was about 370 m below sea level, 55 m higher than it is today (see figure 1 for historical variations in the level of the Dead Sea on the secular timeline). The Dead Sea stayed high for over a thousand years on this timeline. After its level fell around 2000 BC (secular), it did not rise that high again. For those who apply the biblical timeline date of 1900 BC for the destruction of Sodom, the graph in figure 1 shows that the Dead Sea level was still as high as at any later time.

This high level of the Dead Sea at the time of the cities’ destruction has obvious implications for claims by some that the remains of the cities were under the southern end of the Dead Sea (as discussed in part 1). The cities cannot have ever been under water because at the time of the cities’ destruction, the Dead Sea was at its highest level in

historical times. This high level is also implicated in the next section on the Vale of Siddim.

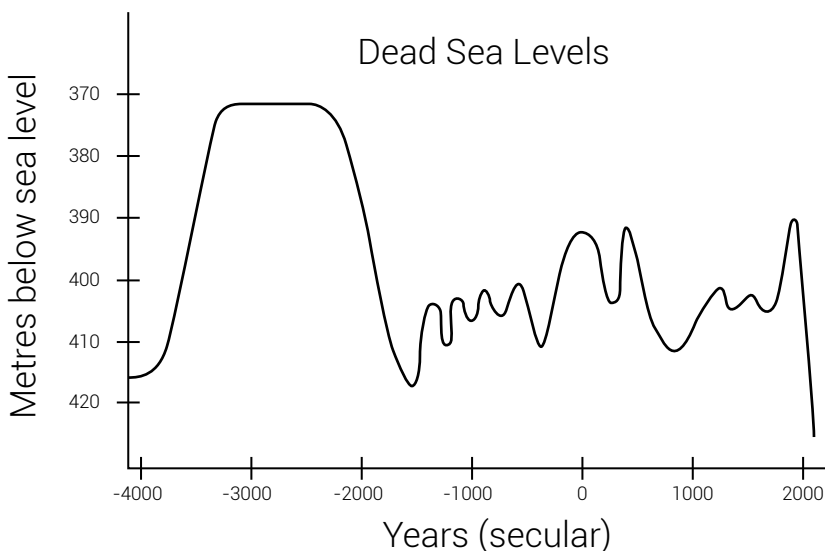
### Sodom and the Vale of Siddim

In an earlier incident, before the destruction of the cities, the united kings of northern Mesopotamia<sup>12</sup> defeated the Amorites<sup>13</sup> in the hills of En Gedi, and then appeared to be headed for Sodom next (Genesis 14:5–8). Certainly the five kings of the country of Sodom thought so, because they went out to meet their enemy, and joined battle in the Vale of Siddim, the same place where they had made an agreement 14 years earlier (Genesis 14:3–8). This means that Sodom was not located in this Vale of Siddim, as some sources state; for example, Easton<sup>14</sup> incorrectly defines Sodom as “a city in the Vale of Siddim” in his well-known dictionary. The progression of the Mesopotamian army campaign would seem to indicate that this valley was located somewhere between the En Gedi hills area on the west of the Dead Sea and Sodom at the north end of the Dead Sea.

The Vale (or Valley) of Siddim is called the Salt Sea in the KJV and NIV (Genesis 14:3). This has rather confused the issue, because the Dead Sea is also called the Salt Sea (for example, later on in Joshua 15:5). However Genesis 14:8 says that this battle was fought *in* this Vale of Siddim, and obviously nobody is claiming that the armies fought under water. An explanation often offered is that this valley was later filled in by the Dead Sea, which rose over time.<sup>15,16</sup> The problem with this explanation is that the Dead Sea was quite a bit higher back then (on either timeline), as we have shown above. We note that in addition to its

usual meaning as a body of water, the Hebrew word ‘sea’ can have varied meanings, including ‘basin’, according to Strong.<sup>17</sup> Therefore it is possible that the meaning of ‘basin of salt’ is intended for the Valley of Siddim.

Some would look for tar to locate this Vale of Siddim, because the kings of Sodom and Gomorrah fell into slime pits there (Genesis 14:10). However, there is oil shale throughout Israel, as shown in a US Geological Survey Scientific Investigations Report.<sup>18</sup> Four thousand years ago there could have been oil seeps in many places.



**Figure 1.** Graph of historical levels of the Dead Sea. In 3000 BC (secular timeline), at the time of the destruction of the land of Sodom, the level of the Dead Sea was about 55 m higher than it is today. (After Enzel *et al.*<sup>11</sup>).

### What about Jericho? A tale of power politics

As we have seen, Jericho would have been only a couple of miles from

Sodom and Gomorrah and Zoar. Why did Jericho not figure in the story of the destruction? Why did Lot not take shelter there when he left Zoar? Why did Lot's daughters think that there were no men available for them (Genesis 19:31)?

According to secular archaeologists, Jericho was essentially uninhabited for hundreds of years in the period before 3000 BC.<sup>19</sup> The often-stated claims that Jericho is the oldest continuously inhabited city on Earth are not totally true.<sup>20</sup> We suggest here that Jericho would have been uninhabited at the time of the destruction of the cities and that this explains why Jericho was not mentioned in the biblical story. Sodom may even have earlier destroyed Jericho because it was an enemy or posed a power threat. (Of course, we might wonder why Sodom did not merely conquer Jericho and include it as one of the cities of the plain.) In any case, the Sodom kingdom must have exerted considerable power in the area before its destruction, because it was in the crosshairs of the coalition of the four kings of northern Mesopotamia, as described in Genesis 14.

Jericho was reoccupied at the beginning of the Early Bronze Age II.<sup>21,22</sup> We might expect this, because the sudden demise of the nearby land of Sodom would have produced an instant power vacuum in the area. At this time extensive defensive walls were built of mud brick of an unusual sand dune yellow colour.<sup>23</sup> Of all the walled levels of Jericho, only this set of walls is made of yellow brick like this. Whether or not this yellow colour is due to large quantities of sulphur in the mud brick is not mentioned in the literature, and we can only speculate on this.

It needs to be pointed out that the secular history of Jericho's occupation is totally separate from the arguments that place Abraham and the destruction of Sodom at around 3000 BC. The two matters are independent, but they support each other.

### Was the destruction due to a natural geologic event?

The Bible says that "the Lord rained upon Sodom and upon Gomorrah brimstone and fire from the Lord out of heaven" (Genesis 19:24). This could be taken to mean that the destruction was a purely supernatural event.

Whether it was a miracle, or whether it was also a natural geological event, is a matter of discussion among scholars. Some form of earthquake is a favourite. For instance, geologist Austin claims that it was

an earthquake,<sup>24</sup> as do geologists Neev and Emery<sup>25</sup>. Professor of Biblical Studies Sarna<sup>26</sup> tells us that "we are most likely, then, dealing with a description of one of the last earthquakes that shaped the lower Jordan Valley area the earthquake was accompanied by lightning which ignited the natural gases and seepages of bitumen or asphalt ... causing a terrible conflagration." Geographer George Adam Smith<sup>27</sup> prefers an explanation that describes gas discharged by underground pressure or earthquake: "the gas explodes, carrying high into the air masses of oil which fall back in fiery rain ... ." Gnanaraj<sup>28</sup> surveys a number of ideas and chooses a massive sudden earthquake with lightning, and ignition of natural gases and asphalt.

Geological events certainly could have occurred north of the Dead Sea at the time of the destruction. There is a fault line that starts at the Dead Sea on the west side of the Jordan, and crosses over to the east side somewhat north of Jericho. As figure 2 shows, the cities would have been sitting practically on top of this fault.

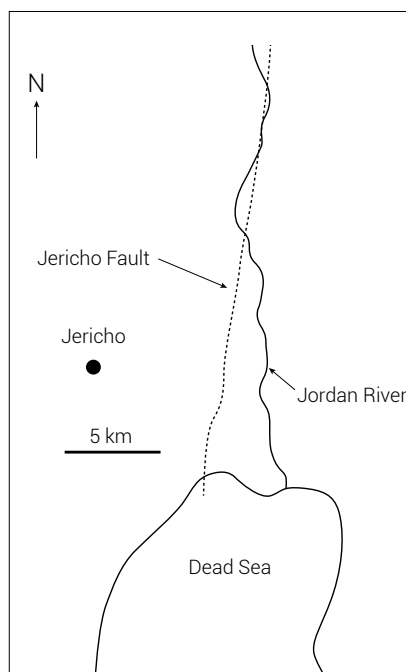
Scripture goes on to say that "he overthrew those cities, and all the plain, and all the inhabitants of the cities, and that which grew upon the ground" (Genesis 19:25). This could be taken to indicate an earthquake that literally overthrew the cities. However, 'overthrow' does not necessarily mean a literal knocking over, and cannot be used to claim that an earthquake had to have taken place. This same word is used in other places in the Bible where the overthrowing is not literal. See, for example: "I will overthrow the throne of kingdoms" (Haggai 2:22); "I will overthrow the chariots" (Haggai 2:22); "it (the land) as overthrown by strangers" (Isaiah 1:7); and, "the wicked are overthrown" (Proverbs 12:7).

Whatever kind of event it was, the destruction had to have occurred near the beginning of the Early Bronze Age period, according to the timeline presented here. This means that any archaeological claims about the location of the land of Sodom need to fit this timeline.

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### Why Tall el-Hammam is not Sodom

This large and important archaeological site north of the Dead Sea is located opposite Jericho on the east side of the Jordan River (see figure 6, part 1). Steven Collins believes that Sodom must be a large ruin



**Figure 2.** The Jericho fault (After Al-Zoubi *et al.*<sup>29</sup>).

somewhere north of the Dead Sea.<sup>30</sup> With no other evidences in hand he essentially leaped to a decision that Tall (or Tell) el-Hammam must be Sodom. He does not, however, offer any ideas as to which of the other ruin mounds in the area might be the other four cities.

Tall el-Hammam qualifies for three of the criteria listed in part 1: it is located in a place that Lot could have possibly seen from Bethel/Ai, at least on a clear day; it is on the edge of the plains of Jordan; and, it is north of the Dead Sea. So far, so good.

But there are multiple reasons why this site cannot be a viable location for Sodom. For one thing, it lies on the east side of the Jordan River, and therefore is not in Canaan. We might wonder how a site on the east side of the Jordan could be considered to be in Canaan. Gary Byers of Associates for Biblical Research, who supports el-Hammam as Sodom, and has been on digs there over most of the past 10 years, explains that the border of Canaan is actually the mountainous ridge that runs along the east side of the Jordan and the Dead Sea.<sup>31</sup> He overlooks the verses that we quoted in part 1, showing that the children of Israel had to cross the Jordan from east to west to get to the land of Canaan. Interestingly, Collins claims that Canaan never extended east of the Jordan.<sup>32</sup> It would appear that Collins does not understand that Sodom had to be in Canaan.

Another problem with the el-Hammam site is that it was rebuilt after its major destruction, and had an extensive Iron Age occupation later on.<sup>33</sup> This does not accord with the biblical verses cited in part 2 that describe Sodom as being a wasteland forever after its destruction.

The chronology of the el-Hammam site does not fit because there is no destruction around the 3000 BC or earlier secular date (equivalent to biblical 1900 BC) that we are looking for. There is occupation of this site continuously from the Chalcolithic to the Middle Bronze II period.<sup>34,35</sup> In fact, secular dating brings the major destruction of Tall el-Hammam so far forward that it is near to the time of the fall of Jericho in Joshua's time.<sup>36</sup> We might wonder whether, in fact, it was the children of Israel who destroyed el-Hammam, because God had told the people to conquer the cities in the territory east of the Jordan. They made this major military tour before camping at the Plains of Moab, just before crossing westward over the Jordan into the land of Canaan (Deuteronomy 2:26–3:17). This place where they camped, across from Jericho, was called Abelshittim (Numbers 33:49), the plains or meadows of Shittim ('the acacias'). It is suggested by many scholars that Shittim was the name of the nearby large Tall el-Hammam.<sup>37</sup>

The chronological problems with respect to Tall el-Hammam do not bother Collins, however. He devotes an entire paper to explaining why he does not consider biblical numbers and dates to be solid or reliable, and that it is not the

biblical intent for those numbers to be taken realistically.<sup>36</sup> According to him, the Bible must bow to archaeological information, and he interprets the Bible to fit his belief that el-Hammam was Sodom. (However, he claims that he takes a high view of Scripture!) If he does not consider biblical dates and numbers to be reliable, why should he consider anything else in the Bible reliable? We might even wonder why he would believe that the cities of the plain actually existed, or that their destruction ever took place at all.

In his writings, Collins talks a great deal about something called the "kikkar of the Jordan", which he claims is a circle of territory at the north end of the Dead Sea.<sup>38</sup> Examination of a topographical map of Israel does not show any circle, however.<sup>39</sup> 'Kikkar' is a Hebrew word that has widely varied meanings,<sup>40</sup> but within the context of referring to the plains of the Jordan, its meaning appears to be the low land along each side of the Jordan River. In I Kings 7:46 and II Chronicles 4:17 (which are essentially identical passages) the kikkar of the Jordan where Hiram cast bronze for Solomon was between Succoth and Zarethan, two places that were considerably north of the Dead Sea. Therefore the kikkar of the Jordan cannot be defined as only an area just north of the Dead Sea; it obviously extended along the Jordan a considerable distance northwards. As shown in part 1, the land of Sodom must have been a narrow strip of land that extended along the Jordan River, and would therefore have qualified as being in the "plain of Jordan" of Genesis 13:10–11.

One criterion missing from the list in part 1 is the size of Sodom. This omission is not an error. There is no biblical or other clue to support Collins' belief that Sodom was a large city. Indeed, the narrative in Genesis 19:4–11, where "all the people of every quarter" crowded around Lot's house, might make us wonder whether the city was not really all that large.

For these many reasons, it is therefore concluded that Tall el-Hammam cannot be the site of Sodom.<sup>41</sup>

### Miscellaneous timeline comments

The five cities of Bab Edh-Dhra, Numeira, Safi, Feifa and Khanazir include at least one, Numeira ('Gomorrah'), that was not old enough to have been in existence at the time of the Sodom destruction in 3000 BC. In any case, all five cities were destroyed around 2600–2300 BC on the secular timeline, long after Abraham.<sup>42</sup>

It has been commonly believed that the famous Ebla tablets contain mention of the destroyed cities of the plain. If so, this would be a problem, because the tablets date at most to 2500 BC (secular),<sup>43</sup> and the cities of the land of Sodom would no longer have been in existence at that time. However, it has been shown that the cities are not actually mentioned in the tablets, as first reported by Pettinato, whose early readings of the Ebla cuneiform have not been accepted

by later scholars.<sup>44–46</sup> There is therefore no timeline difficulty posed by the Ebla tablets for an early date for Sodom.

This highlights the importance of considering the divergence of the biblical and secular timelines in comparing the order of historical events and people. If we do not do this, we can arrive at incorrect conclusions.

### Summary

The destruction of the land of Sodom would have taken place around 3000 BC or earlier (secular), showing a divergence of at least 1,100 years between the biblical and secular timelines at this time. Among other things, this affects the culture of Sodom's era, who the united kings of Mesopotamia were, and the history of Jericho relative to the land of Sodom. Above all, it is a significant issue in dating any archaeological remains that are claimed to be Sodom. We have also seen why the level of the Dead Sea enters into this discussion, and why Tall el-Hammam cannot be Sodom.

## Appendix

### Support for Sodom's destruction near the end of the Early Bronze Age I<sup>47</sup>

The argument for this date of Sodom's destruction is based on where we put Abraham in time. Abraham's place hinges on recognizing Joseph as the famous Imhotep of Egyptian history. Imhotep was vizier to Djoser, whose reign began about 2670 BC.<sup>48</sup> If that is when Joseph lived on the secular timeline, this moves his great-grandfather Abraham back before that by a considerable period of time.

Some brief comparisons of Joseph and Imhotep<sup>49</sup>

- Joseph was promoted to vizier by pharaoh (Genesis 41:40–44); Imhotep was vizier for the third-dynasty pharaoh Djoser.<sup>50</sup>
- Their names are similar. 'Joseph' sounds like 'Hotep'. It is most likely that the Egyptians took Joseph's Hebrew name and phonetically pronounced it in Egyptian.
- A severe seven-year famine was associated with both Joseph (Genesis 41–47) and Imhotep (famine stela inscription at Elephantine<sup>51</sup>), who both assisted the pharaoh in coping with it.
- Both were famous for great wisdom. The pharaoh called Joseph discreet and wise (Genesis 41:39). Imhotep was considered greatest of all in genius.<sup>52</sup>
- Both were seers. Joseph predicted the future seven years of plenty and the future seven years of famine (Genesis 41:25–32). Imhotep was a highly regarded seer.<sup>53</sup>

Conclusion: The probability that Joseph and Imhotep were the same person is very high, given the number of strong similarities.

Why Joseph fits in the third dynasty

- The Saqqara pyramid was built by Djoser in the third dynasty. Pharaoh became wealthy at this time from grain sold during the famine, and from grain collected as taxes, a system that Joseph set up (Genesis 47:14, 26). This is how Djoser could afford this historically unprecedented building project.
- Pharaoh could conscript the large amount of manpower needed for the Saqqara pyramid because at the end of the seven-year famine pharaoh owned all the people. Joseph arranged this by supplying the people with grain to survive (Genesis 47:13–26).
- Manetho started a new dynasty with Djoser because of major events in his time, such as revolutionary changes in architecture and society. We would argue that Joseph/Imhotep was responsible for these changes.
- The lifespan of Joseph was 110 years (Genesis 50:26). It is hardly coincidental that this same age was considered ideal in Egypt right back to very early times.<sup>54</sup> We might expect that this was because the famous Imhotep of the third dynasty had lived this long.

Placing Abraham and the date of Sodom's destruction on the secular timeline

We first need to find a crossover date for Joseph and Imhotep. For that, we will calculate when construction of the Saqqara pyramid by Djoser probably began, because this project is known to have been overseen by Imhotep.<sup>55</sup> If we allow for a few years of this pharaoh's reign before Joseph was promoted, plus 14 years for the seven years each of plenty and famine, this would take us perhaps 20 years into the pharaoh's reign before the beginning of construction of this pyramid. (We are making an assumption on this, because it was at the end of the famine period that the people were literally owned by the pharaoh, and were therefore available to be conscripted to work for him. However, construction could have begun earlier.) Djoser began his reign in about 2670 BC (secular time) as noted above, making the start of the Saqqara pyramid around 2650 BC. This is the date that we can use for placing Imhotep and Joseph together on the secular timeline.

Joseph was made vizier by the pharaoh in 1715,<sup>56</sup> 182 years after Sodom's destruction in 1897 (which was one year before Isaac's birth).<sup>57</sup> If we count 20 years to the beginning of the Saqqara pyramid, this makes a round figure of about 200 years back to Sodom's destruction/Abraham. This would appear to land Abraham at 2850 BC (secular time). But this is in the middle of the murky period of the first and second

dynasties, and like all the rest of the Egyptian timeline, there is every reason to believe that these dynasties are stretched out and contain extra time.<sup>58</sup> This means that 200 years on the biblical timeline could represent quite a bit more time at this distant period in Egypt's history.

So how far back would Abraham go? A plausible time would be somewhere around 3000 BC, the beginning of the first dynasty. There is in fact a hint in ancient secular history to support this date.

According to Genesis 12:10–13, there was a powerful pharaoh in place in Egypt, that Abraham had to deal with, and whom Abraham feared. The first king of the first dynasty is generally believed to be King Aha.<sup>59</sup> In this king's time, the colonies of Egyptians who had been living in south Palestine abandoned their residences and returned to Egypt for unknown reasons, but then returned to Canaan later on during the first dynasty.<sup>60–62</sup> I suggest that the same severe famine in Canaan that drove Abraham to Egypt may have caused these Egyptians to return home at this time.

This is the reasoning behind putting Sodom's destruction around 3000 BC.

## References

1. This figure is based on 215 years as the length of time that the children of Israel lived in Egypt. The apostle Paul supports a stay of 215 years in Egypt when he says in Galatians 3:17 that God's covenant with Abraham (in Canaan) was 430 years before the giving of the law. For more information on this, see Jones, F.N., *The Chronology of the Old Testament*, 16<sup>th</sup> edn, Master Books, Green Forest, AR, pp. 53–55, 2007. Jones (who follows the Masoretic), shows that internal calculations of Scripture indicate 215 years in Egypt. The LXX translations of Exodus 12:40 clearly indicate 215 years in Egypt, saying that 430 years was the time of residence in the land of Egypt and the land of Canaan.
2. Weintraub, D.A., *How Old is the Universe?*, Princeton University Press, Princeton, NJ, p. 2, 2011.
3. Osgood, A.J.M., The times of Abraham, *J. Creation* 2(1):77–87, 1986; creation.com/the-times-of-abraham.
4. Habermehl, A., Revising the Egyptian chronology: Joseph as Imhotep, and Amenemhat IV as pharaoh of the Exodus; in: Horstemeyer, M. (Ed.), *Proceedings of the Seventh International Conference on Creationism*, Creation Science Fellowship, Pittsburgh, PA, 2013. This paper is posted online (with permission) at [creationsixdays.net/2013\\_ICC\\_Habermehl\\_Joseph.pdf](http://creationsixdays.net/2013_ICC_Habermehl_Joseph.pdf).
5. Garfinkle, S.J., Ancient Near Eastern city-states; in: Band, P.F. and Scheidel, W. (Eds.), *The Oxford Handbook of the State in the Ancient Near East and Mediterranean*, Oxford University Press, New York, pp. 94–118, 2013; p. 95.
6. Strange, J., The Palestinian city-states of the Bronze Age; in: Hansen, M.H. (Ed.), *A Comparative Study of Thirty City-State Cultures: An investigation conducted by the Copenhagen Polis Centre*, vol. 21, Kongelige Danske Videnskaberne Selskab (Royal Danish Academy of Sciences and Letters), Copenhagen, Denmark, pp. 67–76, 2000.
7. Josephus, F., The Antiquities of the Jews; in: *The Works of Josephus*, 1987 edn, trans. W. Whiston, Hendrickson Publishers, Peabody, MA, 1:9:171, 1736a.
8. Josephus, F., The Wars of the Jews; in: *The Works of Josephus*, 1987 edn, trans. W. Whiston, Hendrickson Publishers, Peabody, MA, 4:8:452–454, 1736b.
9. Garfinkle, ref. 5, p. 113.
10. 'Chalcolithic' (meaning 'copper-stone') is the secular name given to the period of history that precedes the Bronze Age. In the standard evolutionary view of world history it is believed that humans first smelted copper, and then later learned how to add tin to make bronze. In the Near East, the Chalcolithic era is generally defined as lasting from as early as 5000 BC to as late as 3300 BC, although sources vary on these dates (for example, see Bienkowski, P. and Millard, A. (Eds.), *Dictionary of the Ancient Near East*, University of Pennsylvania Press, Philadelphia, PA, p. 70, 2000).
11. Enzel, Y., Bookman, R. (Tor, K.), Sharon, D., Gvirtzman, H., Dayan, U., Ziv, B., and Stein, M., Late Holocene climates of the Near East deduced from the Dead Sea level variations and modern regional winter rainfall, *Quaternary Research* 60:263–273, 2003.
12. All four kings were most likely from northern Mesopotamia, as it is logical that they would have ruled over domains that were fairly near to each other in order to form this military coalition. Shinar was a territory between the Tigris and Euphrates rivers in northern Mesopotamia, as Habermehl discusses in a detailed paper on the location of the Tower of Babel (see Habermehl, A., Where in the world is the Tower of Babel? *Answers Research J.* 4:25–53, 2011, [answersingenesis.org/tower-of-babel/where-in-the-world-is-the-tower-of-babel/](http://answersingenesis.org/tower-of-babel/where-in-the-world-is-the-tower-of-babel/)). Elam was most likely the city state of Elammu, known to historians to have been on the west side of the Euphrates below Carchemish. (Grayson, A.K., *Assyrian and Babylonian Chronicles*, Eisenbrauns, Winona Lake, IN, p. 254, 2000. Reprinted from original edition of J.J. Augustin, Locust Valley, New York, and Glückstadt, Germany, p. 254, 1975.) This kingdom is commonly confused with the country later called Elam in the south of Iran. Elam was the oldest son of Shem (Genesis 10:22) and this northern Mesopotamia location is most likely where he settled after the Babel dispersion (Habermehl, unpublished). The other two kingdoms, Ellasar and the unnamed group of nations, would have been located somewhere in the vicinity of Shinar and Elam in the north.
13. The Amorites were sons of Amori, 4<sup>th</sup> son of Canaan (Genesis 10:15–16). Their original territory was in the area of En Gedi, according to Scripture (Genesis 14:7: Hazezontamar is En Gedi).
14. Easton, M.G., *Illustrated Bible Dictionary*, 3<sup>rd</sup> edn, Thomas Nelson, Edinburgh, Scotland, 1897.
15. Stevens, A. (Ed.), The cities of the plain—have their ruins been found? Excerpt from *Bentley's Miscellany*, *The National Magazine* 5:442–445, 1854.
16. Frumkin, A. and Eilitzur, Y., The rise and fall of the Dead Sea, *Biblical Archaeology Review* 27(6):42–50, 2001.
17. Strong J., *The Exhaustive Concordance of the Bible*, Abingdon Press, New York, and Nashville, TN, #3220, 1894.
18. Dyni, J.R., Geology and resources of some world oil-shale deposits, *U.S. Geological Survey Scientific Investigations Report 2005-5294*, 2006. See figure 10 on p. 19, deposit #5 at Nabi Musa at the north-west corner of the Dead Sea. This would be in the vicinity of the Vale of Siddim if Sodom was at the north end of the Dead Sea.
19. Zeuner, F.E., The Neolithic—Bronze Age gap on the Tell of Jericho, *Palestine Exploration Quarterly* 86(2):64–68, 1954.
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**Anne Habermehl** has been interested in creationism and biblical apologetics since her teens. She has published on topics such as the Egyptian timeline, the search for Noah’s Ark, the location of the Tower of Babel, the placement of the Ice Age in history, and who the Neandertals were. Born in Canada, she has a B.Sc. from the University of Waterloo (chemistry). She now lives in the US.