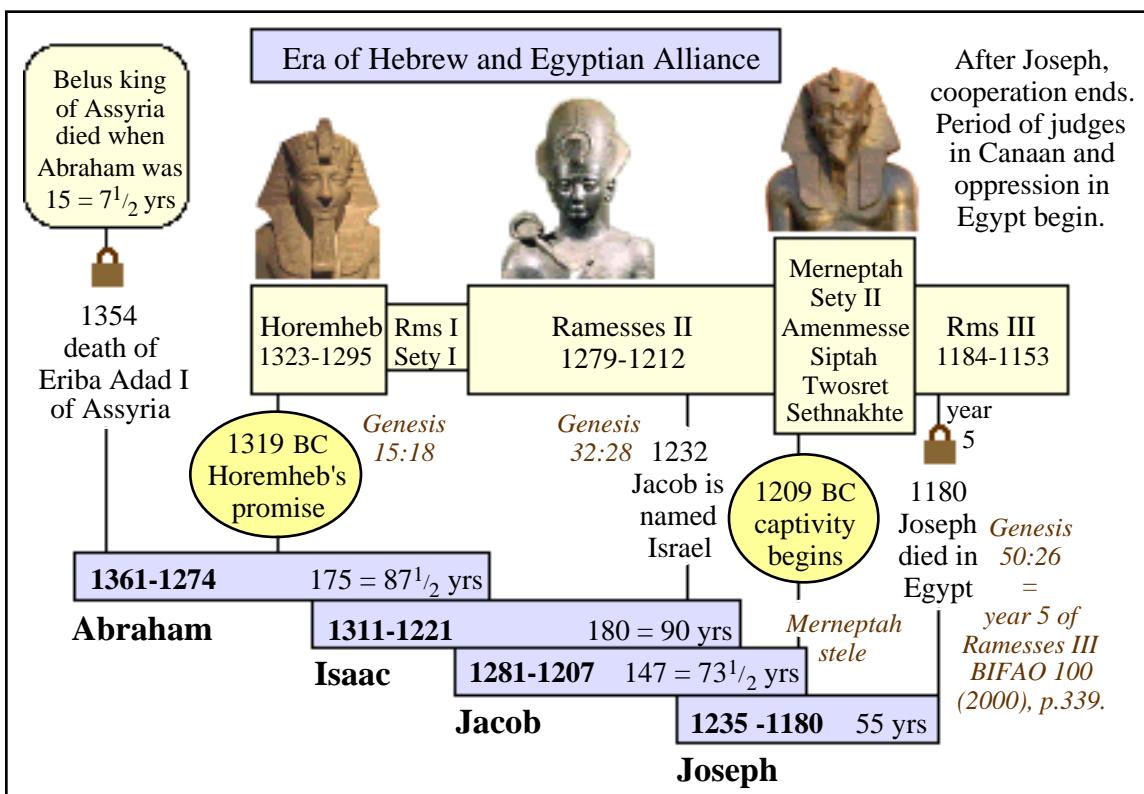


BEFORE THE EXODUS

HOW MATH AND SCIENCE ALIGN THE BIBLE TO HISTORY

© 2016

WILLIAM AUSTIN, PH.D.



The following are available as Kindle books on Amazon. BEFORE THE EXODUS was my attempt to clearly explain everything I'd been working on for ten years – the complete Hebrew chronology from Adam to the Exodus, demonstrating that the Hebrew patriarchs are actually a Kassite royal family, beginning with Kudur-Mabuk and his sons Rim-Sin, Warad-Sin and Sin-muballit (Adam, Cain, Abel and Seth). Adam's expulsion from the Garden of Eden was his expulsion from Hammurabi's Babylonian Empire, leading to a protracted war between Babylonia and the rebel Sealand to the south. The Book of Jasher and Book of Jubilees record much more of this era than the Pentateuch, making it possible to trace early Hebrew (Kassite) history while Abraham's ancestors were in Mesopotamia and Egypt (the Hyksos).

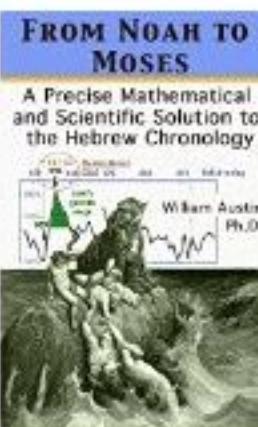
BEFORE THE EXODUS is 500 pages. It's long because I didn't want to leave anything out. But it's to prove a point, not for casual reading. Therefore, I wrote a deliberately condensed version, FROM NOAH TO MOSES, which is just 72 pages. That's readable in an hour or two. It's also completely free on Academia.edu as my paper "The Hebrew chronology from Noah to Moses." Buying the book gives me something for my effort. But I didn't do it for money, I did it because I wanted to understand the history behind the Bible... and I want others to understand too.



BEFORE THE EXODUS: How Math and Science Align the Bible to History

May 19, 2015 | Kindle eBook
by William Austin Ph.D.

\$8.00 Kindle Edition
Auto-delivered wirelessly
Sold by: Amazon Digital Services LLC



FROM NOAH TO MOSES: A Precise Mathematical and Scientific Solution to the Hebrew Chronology

Jan 5, 2016 | Kindle eBook
by William Austin Ph.D.

\$3.00 Kindle Edition
Auto-delivered wirelessly
Sold by: Amazon Digital Services LLC

Contents

List of figures	8	
Preface	11	
PART I	Linking Old Testament Stories to Known History . . .	13
Chapter 1	The Deluge and the Spherical Cow	14
Chapter 2	The Still-Standing Tower of Babel	26
Chapter 3	From Abraham to Joseph	36
Chapter 4	From Joseph to Moses	44
Chapter 5	Deciphering the Hebrew Calendar	62
Chapter 6	Egypt and Canaan in the Days of Moses	80
PART II	Separating Truth From Propaganda . . .	93
Chapter 7	Conflicting Accounts of the Exodus	94
Chapter 8	The Pharaoh is Deposed	111
Chapter 9	The Riddle of the Renaissance	126
Chapter 10	Moses at War	145
Chapter 11	The Hebrews and the Ramessides	162
PART III	The Historical Hebrews From Adam to Abraham . . .	180
Chapter 12	When Biblical History Began	181
Chapter 13	From Adam to Noah	196
Chapter 14	The Historical Flood	217
Chapter 15	Noah Becomes Ruler of Egypt	230
Chapter 16	From Noah to Eber	252
Chapter 17	From Jericho to Babel	269
Chapter 18	From Eber to Abraham	288
PART IV	The Historical Hebrews From Abraham to Joseph . . .	300
Chapter 19	Abraham's Journey	301
Chapter 20	Abraham and the Pharaoh	321
Chapter 21	Abraham and the Promised Land	336
Chapter 22	Abraham, Isaac and Jacob	353
Chapter 23	The Nation of Israel is Born	374
Chapter 24	Jacob and Joseph	396
Chapter 25	Joseph Becomes Ruler of Egypt	415
PART V	The Sojourn in Egypt and Exodus to Canaan . . .	437
Chapter 26	Joseph's Reign in Egypt	438
Chapter 27	From Joseph's Death to the Oppression	458
Chapter 28	The Historical Moses	471
Chapter 29	The Exodus and Period of Judges	483

PART III The Historical Hebrews From Adam to Abraham

Chapter 12	When Biblical History Began	181
	I Deciphering Babylonian King List A	
	II The Hebrews of Ur and Larsa	
	III The Historical Adam	
Chapter 13	From Adam to Noah	196
	I When and How Enoch Ascended to Heaven	
	II The Venus Tablet of Ammi-saduqa	
	III Mesopotamia in the Days of Noah	
	IV The Historical Noah	
Chapter 14	The Historical Flood	217
	I Political Evidence of a Catastrophic Flood	
	II The Cause of the Flood	
	III The Date of the Hyksos Invasion	
	IV The Cause of the Ten Plagues	
Chapter 15	Noah Becomes Ruler of Egypt	230
	I Opportunity Knocks on Noah's Door	
	II Noah Conquers Egypt	
	III The Chronology of the Hyksos Era	
	IV The Hebrew Kings of Egypt	
Chapter 16	From Noah to Eber	252
	I Noah Blesses Japheth	
	II The Rise of Nimrod	
	III The Cultural Identity of the Hebrews	
	IV The Radiocarbon Date of the Tower of Babel	
Chapter 17	From Jericho to Babel	269
	I The Radiocarbon Date of Jericho's Destruction	
	II The Historical Destruction of Jericho	
	III Eastward to Shinar	
	IV The Earth is Divided	
Chapter 18	From Eber to Abraham	288
	I Canaan and the Egyptian New Kingdom	
	II The Hebrews Return to Ur	
	III The Ravens Descend Upon Ur	

Before The Exodus

Chapter 12 When Biblical History Began

I. Deciphering Babylonian King List A

If presented in strict chronological order, this chapter should be placed at the beginning of the book, because it is the search for the Hebrew ancestors of Moses and Abraham in Mesopotamian cuneiform records. This chapter is not presented first because it is the solution to a puzzle that makes more sense after learning that Moses, Joseph and Abraham were a royal lineage, with a military under their command. The history of the Hebrews is a history of the rich and powerful, and this chapter presents the case that before Abraham arrived in Canaan, his ancestors had reigned as kings in Mesopotamia, not just as kings in general, *identifiable kings*: as in “this one is Adam, that’s his son Cain,” etc. That is an extraordinary claim that requires extraordinary evidence. “Exhibit A” of that evidence is the series of numbers on the tablet below.

1. THE BABYLONIAN KING LIST A. ¹	
COLUMN I: [Eleven names broken off, to be supplied from King List B. See below.]	COLUMN II: [About 13 names broken off.]
11 kings, Dynasty of Babylon.	
60 Iluma-ilu.	22
55 Itti-ili-nibi.	20 Nazi-maruttash.
36 Damki-ilishu.	17 Kadashman-tur gu.
15 Ishkibal.	+2 Kadashman-Buriash.
27 Shushshi, his brother (?)	6 Kudur-En-lil.
55 Gulkishar.	13 Shagarnkti-suriash.
50 Peshgal-daramash.	8 Bitiliash, his son.
28 A-a-dara-kalama.	14 En-lil-nadin-shum.
26 Akur-ul-anne.	14 Kadashman-Kharbe.
7 Melam-kurkura.	6 Adad-shum-iddin.
9 Ea-gamil.	30 Adad-shum-naṣir.
368 11 kings, Dynasty of Uru-azag.	15 Me-li-shi-pak.
16 Gandash.	17 Marduk-aplu-iddin., his son.
22 Agum, the former, his son.	1 Zamamu-shum-iddin.
22 Bitiliashi.	3 En-lil-nadin-akhi.
8 Ushshi, his son.	
A-du-me-tash.	756 years 9 mo. 36 kings.
Ur-zi-gur-mash.	Dyn.
	17 Marduk
	6

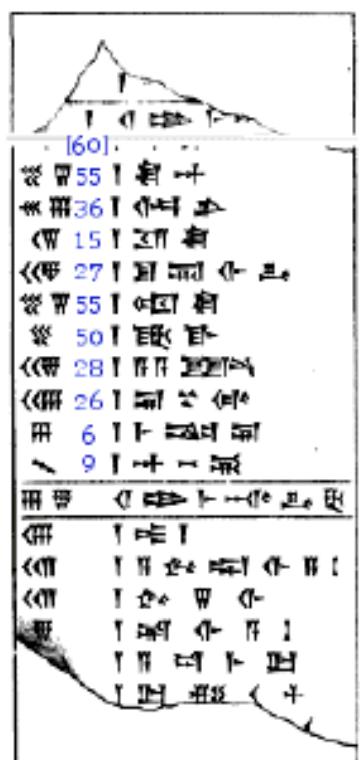


Figure 12-1: Column I of Babylonian King List A includes reigns recorded in half-years.

The story begins with my search for evidence of a culture in Mesopotamia that counted time in half-years, an identifying trait of the Hebrews. This search led me to a cuneiform tablet known as Babylonian King List A, now in the British Museum. The tablet contains an extensive list of Mesopotamian kings beginning in the early second millennium BC. Figure 12-1 shows the translation of the front of the tablet as published in *Cuneiform Parallels to the Old Testament* (R. W. Rogers, ed., 1912, p. 201). Notice that in column II, four kings had reigns of 3 years or less, and no king reigned longer than 30 years. Kings were warriors who led troops into battle, and thus short reigns were the norm. However in column I, Iluma-ilu reigned 60, followed by Itti-ili-nibi for 55, then Damki-ilishu for 36. This appears to be a list of Hebrew kings with their reigns in half-years. If so, their reigns would be more plausible: 30 years, $27\frac{1}{2}$ years, and 18 years.

The third column of figure 12-1 is a drawing of the original cuneiform tablet as published by Theo. G. Pinches in *Proceedings of the Society of Biblical Archaeology* (vol. 6, 1884, p. 193). I've included the drawing because it is not hard to translate the Babylonian numbers, and published sources sometimes have them wrong. Melam-kurkura reigned only 6 half-years according to the drawing of the tablet by Pinches, not 7 as published by Rogers. The difference between 6 and 7 is not critical, but an error of 60 vs. 70 would make any attempt to make sense of these reigns problematic. What I suspected is that since the Hebrews were the ruling class, or royalty, of the Ephraimites in Canaan, they were probably kings in Mesopotamia in earlier times. Therefore the kings whose reigns are seemingly recorded in half-years on Babylonian King List A are very likely the Hebrew patriarchs (Abraham's ancestors) in the Book of Genesis. Since the names have all been changed, it is a game of numbers: any proof that these are one and the same royalty will require matching the recorded lifetimes of the patriarchs to the reigns of Iluma-ilu through Eagamil.

Though they are recorded on Babylonian King List A, the dynasty of kings Iluma-ilu through Eagamil did not reign in the city of Babylon. They are generally called the Sealand Dynasty because they reigned farther to the south in the marshlands near the Persian Gulf. As explained in the quote below, the Sealand Dynasty was ultimately brought to an end by the rising power of the Kassite Dynasty in neighboring Babylon. Eagamil, the last king of the Sealand, was defeated and his kingdom claimed by Ulamburiash, a Kassite prince of Babylon.

Burnaburiash was succeeded by an unnamed king, perhaps a brother, and then by his own son Kashtiliash, the third Kassite king of this name; he entrusted to his younger brother Ulamburiash the task of crushing the south. Taking advantage of the absence of Ea-gamil on a campaign in Elamite territory, Ulamburiash 'conquered the Sealand and exercised dominion over the region'. An inscription on a macehead found at Babylon shows that he ruled in the south, presumably as his brother's vassal or vicegerent, with the title 'King of the Sealand'.

The Cambridge Ancient History, vol. 2-1, (1973), p. 442.

Proof that the kings of the Sealand recorded their reigns in half-years is found by aligning the reigns of the Sealand kings to the known reigns of Assyria's kings. The key to the proof is a tablet called the Synchronistic Chronicle. It was discovered in Assyria's capitol Ashur and is now in the Istanbul Archaeology Museum. The Synchronistic Chronicle pairs the kings of Assyria with contemporary kings to the south in Babylonia. As seen in figure 12-2, all but the first two kings of the Sealand Dynasty are matched to corresponding kings in Assyria. The tablet also contains a mystery king between Gulkishar and Peshgaldaramash. If this king has a long reign, it is unknown and problematic, but if it is a short reign, it is of little significance.

5. THE SYNCHRONISTIC CHRONICLE	
Istanbul, Assur 14616c; latest publication by E. F. Weidner, Die grosse Königsliste aus Assur, <i>AfO</i> , III (1926), 66-70 (copy: 70-71). Latest translation: Ebeling, <i>AOT</i> , 333-335.	
(i)	
	(destroyed)
Ad[asi, same (i.e., king of Assyria)]	[Damiqilishu, same (i.e., king of Babylon)]
Belbani, same	I[shk]ib[al, same]
Lubaia, same	Shush[i, same]
Sharma-Adad, same	Gulkisha[r, same]
LIK.KUD-Shamash, same	[. . .]en[. . . , same]
Bazaia, same	Pesh[gal]daramash, same
Lulla, same	Aiadarakalamma, same
Shininua, same	Ekurulanna, same
Sharma-Adad, same	Mela[m]kurra, same
Erishu ¹	Eagamil, G[and]ush, same

Source: James. B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (1955), pp. 272-3.

Figure 12-2: The Synchronistic Chronicle.

The mystery is likely solved by noticing that as recorded on Babylonian King List A, the total for 11 kings is listed as 368, but on Pinches' drawing of the tablet, the 11 individual reigns

only total to 367. This gives the mystery king a reign of 1, to bring the total back to 368. This 12th king may have briefly ruled the Sealand, but was not considered a legitimate king. Thus he is present on the Assyrian tablet, but omitted from the Babylonian tablet.

Separately, the reigns of all but one Assyrian king contemporary to the Sealand kings on the Synchronistic King List are known. All are given in the excerpt from the Assyrian King List quoted below. Adasi, no. 47, is the first king who must be paired. He is listed as the last of six kings whose reigns overlapped the 6-year reign of Ashur-dugal. Therefore, up to 6 years is possible, but Adasi's reign could also be very brief.

41. Ashur-dugal son of a nobody, not an occupant of a throne, 6 years he ruled.

Also the time of Ashur-dugal son of a nobody

42. - 47. Assur-apla-idi, Nasir-Sin, Sin-namir, Ibqi-Ishtar, Adad-salulu, Adasi,
6 kings, sons of a nobody . . . ruled.

48. Belu-bani, son of Adasi, 10 years he ruled.

49. Libaja son of Belu-bani, 17 years he ruled.

50. Sharma-Adad (I) son of Libaja, 12 years he ruled.

51. Ip?-tar-Sin son of Sharma-Adad, 12 years he ruled.

52. Bazaja son of Belu-bani, 28 years he ruled.

53. Lullaja son of a nobody, 6 years he ruled.

54. Kidin-Ninua son of Bazaja, 14 years he ruled.

55. Sharma-Adad (II) son of Kidin-Ninua, 3 years he ruled.

56. Erishu (III) son of Kidin-Ninua 13 years he ruled.

I. J. Gelb, "Two Assyrian King Lists," *Journal of Near Eastern Studies*, vol. 13, (1954), p. 225.

If the Sealand kings' reigns are recorded in half-years on Babylonian King List A, then the pairs of kings on the Synchronistic Chronicle: Adasi with Damiqilishu, Belbani with Ishkibal, etc., will align only after the recorded reigns of the Sealand kings are divided by two. The result of this test is shown in the figure below.

Figure 12-3 is a side-by-side scale drawing of the reigns of the 10 pairs of Assyrian and Sealand kings recorded on the Synchronistic Chronicle. When the 'bottleneck' pair at Sharma-Adad II and Melamkurra is aligned, all other pairs on are synchronized as well.

If the reigns of the Sealand kings had not first been divided by two, the right side of the figure would be twice the length that is shown, and alignment of all 10 pairs at the same time would be impossible. Thus, the suspicion that the reigns of the Sealand kings are recorded in half-years is proven correct, and a cultural signature of the Hebrews has been found in Mesopotamia.

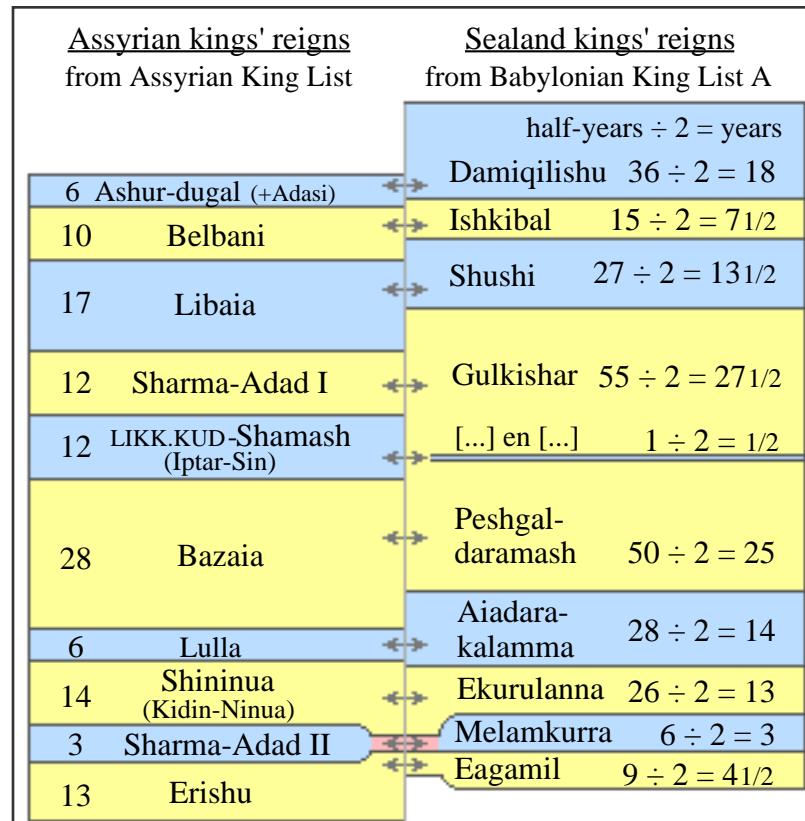


Figure 12-3: The Synchronistic Chronicle with reigns to scale.

II. The Hebrews of Ur and Larsa

Having established that there was a kingdom in Mesopotamia that counted time in half-years, the numbers can be set aside for a moment to focus on matching people and places. It has long been clear that Noah's flood and the Tower of Babel are records of Mesopotamian origin that traveled with Abraham to Canaan and ultimately into the Bible. Beyond that, the time and place of Abraham's birth has largely been a mystery. What is known is that Abraham started the journey out of his homeland from a location called "*Ur of the Chaldeans.*" (Genesis 11:32).

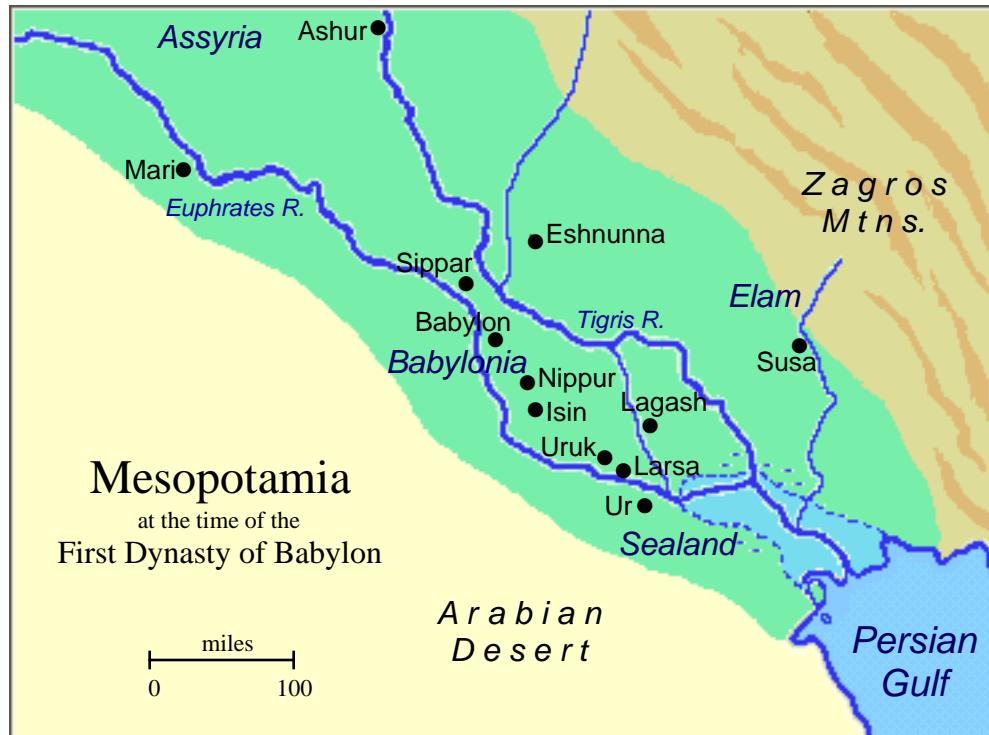


Figure 12-4: Cities of southern Mesopotamia.

A city named Ur is known to have existed in southern Mesopotamia, along the Euphrates River near the Persian Gulf (figure 12-4). Furthermore, while not naming the city of Ur, the Book of Jubilees locates a region called the Chaldees while describing land allotted to Noah's grandsons Arphaxad and Aram. The quote below is at first confusing, because presently, the Euphrates River flows into the Tigris River roughly 100 miles before the Tigris flows into the Persian Gulf. The Persian Gulf is gradually filling with silt from both rivers. This quote was written when open water extended much further north. The description makes sense if the sea extended nearer to Ur, and there was shoreline to the east of the Euphrates. Also, the Red Sea in the following quote has a broader definition that includes the Persian Gulf – i.e. all waters surrounding the Arabian Peninsula.

And for Arpachshad came forth the third portion, all the land of the region of the Chaldees to the east of the Euphrates, bordering on the Red Sea, and all the waters of the desert close to the tongue of the sea which looketh towards Egypt, all the land of Lebanon and Sanir and Amana to the border of the Euphrates. And for Aram there came forth the fourth portion, all the land of Mesopotamia between the Tigris and the Euphrates to the north of the Chaldees to the border of the mountains of Asshur and the land of Arara.

Book of Jubilees 9:4-5

The above description of the Chaldees bordering the sea, combined with the observation that the reigns of Sealand Dynasty kings are recorded in half-years on Babylonian King List A, leaves little doubt that Abraham's homeland was the known city of Ur in the southern marshes

near the Persian Gulf. The two cities that dominated this region were Ur and Larsa, and a kingdom of Larsa existed in the area around these two southern cities prior to the establishment of the Sealand Dynasty. Next consider the possibility that the Hebrew patriarchs of the Old Testament are the very same individuals as the kings of the Sealand Dynasty. If true, archaeological records from Mesopotamia must match claims in Hebrew records.

Below is a translation of a Mesopotamian record called the “Sargon Chronicle,” or, since it continues beyond Sargon, “The Chronicle of Early Kings.” Two tablets containing overlapping parts of this chronicle are now in the collection of the British Museum (B.M. 26472 = Tablet A; B.M. 96152 = Tablet B). The portion of the Sargon Chronicle of interest begins on the obverse of Tablet B, with Hammurabi on the throne in Babylon, and a king Rim-Sin in Abraham’s native city of Ur. Hammurabi defeats the king of Ur and carries the riches of Ur and neighboring Larsa away to Babylon. Then the chronicle skips ahead a generation to Hammurabi’s son, Samsu-iluna who battles and defeats a similarly named king Rim-Sin (II).

Sargon Chronicle

Tablet B: Obverse

Hammurapi, king of Babylon, set his troops in motion,
And marched against Rim-Sin, king of Ur.

Reverse

[Iluma]-ilu . . .
. he made . . .
He waged ware against him and . . .
Their dead bodies the sea . . .
Samsu-iluna again marched [against . . .]
Iluma-ilu advanced and the defeat [. he accomplished.]
Abishi, son of Samsu-iluna, to conquer Ilu-ma-ilu
And his heart moved him to dam the Tigris.
And he dammed the Tigris, but he caught not Iluma-ilu.

R. W. Rogers, *Cuneiform Parallels to the Old Testament*, (1912), pp. 205-6.

Since the Sargon Chronicle does not record the time interval between battles, it was at first unclear if there was only one Rim-Sin, or two. Most scholars now presume there were two: Rim-Sin I was defeated in the reign of Hammurabi, and in the next generation, Rim-Sin II rose up in rebellion against Hammurabi's son Samsu-iluna. On the reverse of Tablet B of the chronicle (later still), Samsu-iluna battles but does not defeat Iluma-ilu, the first of the 11 Sealand Dynasty kings recorded on Babylonian Kinglist A. Iluma-ilu's capitol city is not given, but the dead are floating in the sea. This is part of the evidence that placed his kingdom in the Sealand south of Babylon. In the Sargon Chronicle, Iluma-ilu survives the battle with Samsu-iluna and continues the fight into the next generation, as it is also recorded that Samsu-iluna's son, Abi-eshu, dammed the Tigris in an attempt to trap and conquer Iluma-ilu. Abi-eshu's plan failed to trap the rebel king, as it is recorded that "*he caught not Iluma-ilu.*"

Iluma-ilu is clearly the underdog struggling to establish an independent kingdom while fighting battles against two successive kings of Babylon to the north. Iluma-ilu survived and at some point was recognized as the founding king of the independent Sealand, a kingdom centered at Ur. Thus it is possible that the Sealand royal family somehow continues forward to Abraham, and furthermore, that Abraham's departure from Ur is a political move related to the fact that the Kassites eventually conquered the Sealand. Bearing that in mind, consider again Abraham's ancestor Enoch, of whom the *Book of Enoch* was written. In the Old Testament, the only detail given other than Enoch's age and place in Abraham's ancestry is that he "walked with God."

When Enoch had lived 65 years, he became the father of Methuselah. And after he became the father of Methuselah, Enoch walked with God 300 years and had other sons and daughters. Altogether Enoch lived 365 years. Enoch walked with God; then he was no more, because God took him away.

Genesis 5:21-24

The Book of Jasher has a much more detailed description of Enoch. Though couched in scriptural language, the account below reveals that Enoch spent part of his adult life in hiding.

And Enoch lived sixty-five years and he begat Methuselah; and Enoch walked with God after having begot Methuselah... And it was at the expiration of many years, whilst he was serving the Lord, and praying before him in his house, that an angel of the Lord called to him from Heaven, and he said, Here am I. And he said, Rise, go forth from thy house and from the place where thou dost hide thyself, and appear to the sons of men, ... And Enoch rose up according to the word of the Lord, and went forth from his house, from his place and from the chamber in which he was concealed...

Book of Jasher 3:1-5

Enoch came out of hiding when he was chosen by the people to be their king: "*they made Enoch king over them.*" Enoch was not a shepherd, nor was he the king of just one city. In total 130 lesser kings and princes swore allegiance to Enoch. He was the king of a "land". But he had been in hiding, which implies that someone else was in power and that Enoch was a rebel who rose up to challenge the ruling king.

And all the kings of the sons of men, both first and last, together with their princes and judges, came to Enoch when they heard of his wisdom, and they bowed down to him, and they also required of Enoch to reign over them, to which he consented. And they assembled in all, one hundred and thirty kings and princes, and they made Enoch king over them and they were all under his power and command.

Book of Jasher 3:9-10

Such a large rebel force requires a proportionately powerful adversary, someone who was ruling over Enoch's land as well as other neighboring land(s). The location of this conflict is the Sealand region, and the time can be estimated from the fact that Enoch is listed three generations before Noah in chapter 5 of the Book of Genesis: Enoch – Methuselah – Lamech – Noah. This makes it possible to narrow the search for both Enoch and his more powerful adversary.

In chapter 1, the chronology of the Old Testament from Noah forward was initially estimated by counting generations back to Noah and then aligning Noah's flood to an extraordinary growth surge, the 'ring 854 anomaly', recorded in the tree-rings of Anatolian junipers during the 1640's BC (1:III, figure 1-5). The conclusion of that chapter was that this growth surge was due to a period of exceptionally wet weather that occurred in the correct century, and in the correct location, to explain the legend of Noah's flood.

A worldwide flood as described in the Bible is scientifically prohibited, but a flood of unprecedented magnitude could evolve into such a legend. The assumption that the flood story had some factual basis, and that Noah was therefore an adult in the 1640's BC, has since proven to be a reliable starting point for estimating the lifetimes of all Hebrew patriarchs from Noah

through Moses (2:I, figure 2-1). Therefore, to estimate to within a few decades when Enoch lived, simply count back three generations from Noah in roughly the 1640's BC. Three generations would be approximately a century earlier, certainly within the 1700's BC. Enoch was probably an adult within the later half of the century (1750-1700 BC). Enoch was also the leader of a large rebel confederacy allied against a powerful ruling king. This is sufficient to place Enoch somewhere in the midst of the struggle to establish the Sealand Dynasty.

There are two suspects from the Sargon Chronicle who could fit the ruling king who oppressed Enoch's land. The first is Hammurabi (1792-1750 BC), who conquered much of Mesopotamia during his reign. If Hammurabi is too early for Enoch, the alternative is Hammurabi's son and successor, Samsu-iluna (1749-1712 BC). These two kings span the plausible lifetime of Enoch, and at that time, they were the only kings in southern Mesopotamia who could be the target of such a large rebellion. It is also known from the Sargon Chronicle that Hammurabi fought and defeated Rim-Sin I, and that Samsu-iluna fought battles against both Rim-Sin II and Iluma-ilu. That makes three prime suspects for the identity of Enoch: Rim-Sin I, Rim-Sin II, and Iluma-ilu. Unless another great conflict has gone unrecorded, Enoch should be a match to one of those three kings. In other words, the set of Hebrew patriarchs appears to be the set of Sealand kings; it's just a matter of finding one positive match.

The quote below provides a general outline of the historical setting. Mesopotamia was divided into smaller, locally governed kingdoms prior to Hammurabi. Hammurabi was not content to rule just the kingdom he inherited, and through a series of alliances and battles, transformed his own relatively small kingdom in the immediate vicinity of Babylon into a centrally governed nation. A major victory was Hammurabi's conquest of the kingdom of Larsa, including Abraham's native city of Ur. Hammurabi won control of these cities by turning against and defeating his former ally, Rim-Sin I.

Babylon was fairly limited prior to Hammurabi: at Hammurabi's accession (1792) Babylon controlled Dilbat, Sippar, Kish and Borsippa – all of them located in its immediate vicinity... the victories, after which Hammurabi's years 7–11 are named, were the result of wars waged by him not as an independent ruler but as an ally of the then more powerful kings, Shamshi Adad I of Assyria and Rim-Sin of Larsa. In other words, Hammurabi himself was initially no more than one of many kings who followed another, stronger overlord... but then his control spread very rapidly. A successful campaign to the east Tigris region was followed by the defeat of the great Rim-Sin of Larsa, which gave Hammurabi at one stroke control over Isin, Uruk, Ur and Nippur as well as the sizeable dominions of Larsa.

Amélie Kuhrt, *The Ancient Near East: c. 3,000 – 330 BC*, vol. 1, (1995), pp. 108-9.

Hammurabi's conquest of the kingdom of Larsa could explain why Enoch spent some of his adult life in hiding. Thus it is likely that Enoch was a contemporary of Hammurabi. However, once in the correct time and place, the murky picture in the Book of Genesis starts to come into focus. Therefore, set the search for Enoch aside for the moment. There is a bigger fish on another line.

III. The Historical Adam

Rim-Sin I is recorded on the Sargon Chronicle because he fought a battle with Hammurabi, however, the line of kings which included Rim-Sin I goes farther back. The quote below reveals that Rim-Sin I had succeeded his brother as king of Larsa, and their father was a king named Kudur-Mabuk, who overthrew the previous king of Larsa. Kudur-Mabuk may not have been a native of Larsa, as he placed his son Warad-Sin on the throne while he was still alive (and perhaps living elsewhere). Warad-Sin died after a brief reign. Since there is no record of his death, Kudur-Mabuk was presumably still alive when his second son, Rim-Sin I became king.

The last two independent rulers of Larsa, Warad-Sin (1834-1823) and Rim-Sin (1822-1763), were members of a new dynasty. The former was installed on the throne by his father, Kudur-

Mabuk, an Amorite chieftain (following the expulsion of Silli-Adad) the last ruler of the previous dynasty)... Rim-Sin, brother of Warad-Sin, is one of the best known of the early Mesopotamian kings, with the distinction of having the longest reign of all of them: he occupied his kingdom's throne for sixty years...

Trevor Bryce, *The Routledge Handbook of the People and Places of Ancient Western Asia*, (2009), p. 411.

Notice the exceptionally long reign of Rim-Sin I. His purported reign of 60 years is once again a red flag that this is likely a reign recorded in half-years. No historian seems to have caught on that Rim-Sin started a new 'year' every six months. The quote below makes note of the discovery that Rim-Sin started a 'year' in the fall, but rather than thinking, "Aha! He didn't reign for 60 years, he starts a year in both spring and fall." The conclusion was, "Hmm, why didn't he start the year in the spring?" Think outside the box. Perhaps it was a new 'year' in the fall, another new 'year' in the spring, etc. This was a culture very different than the Babylonians next door.

Rim-Sin was the last king of Larsa... there are several tablets dated in the reign of Rim-Sin, which give us some notice of the events in his reign... I may here remark that I suspect, from the dates on some of these tablets, that the year at the time commenced with the month Tisri at the autumnal equinox, instead of with the month Nisan at the vernal equinox: for in two instances on these early tablets the intercalary month is placed between Elul and Tisri.

G. Smith, "Early History of Babylonia", in *Transactions of the Society of Biblical Archaeology*, vol. 1, (1872), pp. 53-54.

Although common sense suggests that Rim-Sin's reign was recorded in half years, numerical evidence in support of that conclusion exists as well. One proof (there may be others) requires combining four records, as follows:

In the quote below, it is posited that Rim-Sin conquered Nisin (Isin) in the 7th year of Hammurabi, thus a setback for Hammurabi.

Another view has more recently been advanced by Langdon... who sees in the date formula for he seventh year of Hammurabi the overthrow of Nisin by Rim-Sin I.

Albert Tobias Clay, *Miscellaneous inscriptions in the Yale Babylonian Collection*, (1915), p. 36.

Separately, a boastful record of the conquest of Isin appears in the 14th *half-year* of Rim-Sin I.

The name of year 14 of Rim-Sin I commemorates a great battle against the coalition of Uruk, Isin and others. In this battle, Ir-ne-ne, king of Uruk, was defeated.

Douglas Frayne, *Old Babylonian Period (2003-1595 BC)*, (1990), p. 280.

The third record is a boast by Hammurabi that in his 31st year he had defeated Rim-Sin I and captured the land of Yamuthbalum (the kingdom of Larsa). Ironically, this quote is from an article arguing that Abraham (not his much earlier ancestor Enoch) was a contemporary of Hammurabi. Grossly overestimating the antiquity of Abraham is a direct consequence of the failure to recognize that Hebrews recorded time in half-years.

Hammurabi's colophon in which he mentions his victory over Eri-Aku, runs as follows: "Year 31: Year Hammurabi, the King, by command of Anu and Bel, established his advantage and captured the land of Yamuthbalum and King Rim-Sin."

Gabriel Oussani, "The XIVth Chapter of Genesis,"
in *The New York Review*, vol. 2, (1907), p. 235.

Next put the three records together. Aligning the 7th year of Hammurabi to the 14th half-year of Rim-Sin requires that Rim-Sin reigned into his 61st half-year.

If: 14th half-year of Rim-Sin I falls within the 7th year of Hammurabi,
then: 60th half-year of Rim-Sin I falls within the 30th year of Hammurabi,
and: at least a 61st half-year is required to reach the 31st year of Hammurabi.

Rim-Sin I's reign is commonly reported as 60 years, because his highest attested date is 60. However, if Rim-Sin I's conquest of Isin was in both the 7th year of Hammurabi and the 14th half-year of Rim-Sin, a 61st half-year is required to place the end of his reign within the 31st year of Hammurabi. Thus either Rim-Sin's 14th half-year does not match the 7th year of Hammurabi (the whole proof falls apart) or a 61st half-year has gone unattested. The discrepancy can be attributed to the randomness of archaeology; unattested years at the end of a reign are commonplace. However, a 61 is recorded where it matters most – on a king list recording his exact reign. The 'Larsa Dynastic List' is apparently a little-known tablet from Larsa in the Yale Babylonian collection. The translation in 1915 was accompanied by the discussion below. The number 61 was unexpected, so it was carefully checked.

No. 32. The Larsa Dynastic List

The discovery of the Larsa dynastic tablet at the ruins of Senkereb, the ancient city of Larsa, makes it possible to determine a number of very important historical and chronological questions in early Babylonian history...

The new dynastic list cannot leave any further doubt, even in the minds of those scholars who formerly argued for the identity of the two kings Warad-Sin and Rim-Sin, that they are not identical. The former ruled twelve years and the latter sixty-one... The additional wedge standing for the odd number is clearly seen on the obverse, the reading "61," is confirmed by the total.

Just what is the significance of the horizontal stroke through the two perpendicular wedges in the number before Hammurabi's name is not clear, unless perhaps to indicate a fraction of a year. In consequence of this, a question mark has been placed in connection with the twelve years in the transliteration; but that number corresponds to the twelve years between the thirty-first year, when he conquered Rim-Sin, and his forty-three years.

Albert Tobias Clay, *Miscellaneous inscriptions in the
Yale Babylonian Collection*, (1915), p. 30, 34-35.

In the second paragraph of the quote, the number 61 for the reign of Rim-Sin is confirmed. Then, in the third paragraph, Albert Clay expresses his puzzlement over "*two perpendicular wedges in the number before Hammurabi's name*," before proposing a sensible translation: the wedges denote a fraction. But he failed to see the significance. The city of Larsa had been ruled by Rim-Sin for the first half of the year, then by Hammurabi for the second half (only) of Hammurabi's 31st year. Hammurabi remained king of Larsa to the end of his life, corresponding to his 32nd through 43rd years as king of Babylon, for a total (in Larsa) of $\frac{1}{2} + 12$ years.

Hammurabi, king in Babylon	31 32 33 34 35 36 37 38 39 40 41 42 43
Hammurabi, king in Larsa	$\frac{1}{2}$ 1 2 3 4 5 6 7 8 9 10 11 12

The Larsa scribe split the 31st year of Hammurabi in half, and recorded the fractional half-year along with the integer 12. The record is exactly as required if the 61st half-year of Rim-Sin I is the first half of Hammurabi's 31st year, thus, as anticipated, the respective reigns of Rim-Sin I and Hammurabi align at two points:

event	Rim-Sin I	Hamurabi
Rim-Sin I's conquest of Isin	= 14th half-year	= 2nd half of 7th year
Hamurrabi's conquest Larsa	= 61st half-year	= 1st half of 31st year

Presuming that the reign of Rim-Sin I is recorded in half-years, as it appears to be, Kudur-Marbuk, Warad-Sin, Rim-Sin I, Rim-Sin II, Iluma-ilu and the rest of the Sealand Dynasty kings

are all part of the same cultural lot. They are *not* Amorites, the ethnic background of Hammurabi's royal family, because the Amorites recorded their reigns in whole years. They are foreign newcomers who can be traced back to a single man: Kudur-Marbuk.

The Hebrews can also be traced to a single man, Adam. The parallels are striking: Kudur-Mabuk is the founding king of a new royal line. He is not the son of his predecessor, and his place of origin is unknown. Adam is the founding father of what is very likely a Hebrew royal line. Adam's origins are equally unknown – he is said to have been made from dust. Kudur-Mabuk had two sons, Warad-Sin and Rim-Sin. Adam had two sons, Cain and Abel. Both of Kudur-Mabuk's sons grew to adulthood, but the life of Warad-Sin was cut short; his brother lived much longer. Both of Adam's sons grew to adulthood, but the life of Abel was cut short; his brother lived much longer.

Find any two people that have that much in common. It's not easy to do. And if you can find two different men with two sons each, with one son that died young and one that did not, are they also both from the same geographic location? And do they both record time in strange foreign units unknown anywhere else in the world? And are they both important enough that anyone would know of their existence more than three thousands years later? Kudur-Mabuk and Adam do not look like different men at all. They have an uncanny historical resemblance.

There is more. The phrase, "Am I my brother's keeper?" is from the story of Adams two sons. After they were grown, both attempted to please the Lord, but the Lord looked more favorably upon Abel. Overcome with jealousy, Cain killed Abel.

Adam lay with his wife Eve, and she became pregnant and gave birth to Cain... Later she gave birth to his brother Abel. Now Abel kept flocks, and Cain worked the soil. In the course of time Cain brought some of the fruits of the soil as an offering to the Lord. But Abel brought fat portions from some of the firstborn of his flock. The Lord looked with favor upon Abel and his offering. So Cain was very angry, and his face was downcast... And while they were in the field, Cain attacked his brother Abel and killed him.

Genesis 4:1-5

Cain somewhat inexplicably was not given the death penalty for this crime; he was only cursed by the Lord, and then given a mark to insure that he would *not* be killed.

Then the Lord said to Cain, "Where is your brother Abel?"
"I don't know," he replied, "Am I my brother's keeper?"
The Lord said, "What have you done? Listen! Your brother's blood cries out from the ground. Now you are under a curse... you will be a restless wanderer on the earth." ...
Then the Lord put a mark on Cain so that no one who found him would kill him."

Genesis 4:8-11, 15

If I were a theologian given the task of explaining the scriptural meaning of the above story, I would be at a loss; it makes no sense at all. But as a history detective tracking down the real man who became the legendary Adam, it makes perfect sense. Adam was king Kudur-Mabuk. Cain was his oldest son, Rim-Sin I. Abel was his second son, Warad-Sin. Kudur-Mabuk showed favoritism toward his son Warad-Sin by making him co-regent.

Warad-Sin appears not to have been completely independent of his father as king of Larsa. The influence of Kudur-mabuk can be seen most clearly in his many royal inscriptions. Most of Kudur-mabuk's inscriptions commemorate deeds he performed on behalf of Warad-Sin and himself.

Madeleine Fitzgerald, *The Rulers of Larsa*, (Ph.D. Dissertation, Yale, 2002), p. 131.

The story of Cain and Abel can be explained as follows: it is a true story from Hebrew history that has been modified by later priests. It was too sacred to throw away, too accurate to leave as is. The Lord is actually Kudur-Mabuk, who by favoring one son, Warad-Sin, so

infuriated the other, Rim-Sin, that Rim-Sin killed his brother.

Though Cain was guilty of murder, royalty comes with privileges. Adam doesn't kill Cain, because Cain is Adam's only surviving son. If Adam doesn't keep Cain alive, the bloodline ends. Instead, Adam puts a mark on Cain, such that it is clear that anyone who kills Cain will suffer the vengeance of the king. Normally a king's son would be safe inside the palace or protected by bodyguards, but the rest of the punishment explains the need for the mark, "*you will be a restless wanderer on the earth*". Cain was being forced to walk among the commoners!

If Cain was Rim-Sin, the punishment did not prevent him from succeeding Warad-Sin as the next king of Larsa. But there is more to the story; Warad-Sin and Rim-Sin also had another brother, Sin-muballit, who is not mentioned until the very end of Rim-Sin's reign. This third brother was trapped by the army of Hammurabi in a city to the north of Larsa, shortly before Hammurabi marched on Larsa itself and defeated Rim-Sin I.

Hammurabi declared war on Rim-Sin, justifying it as a pre-emptive act authorized by the gods. A long report found at Mari describes Hammurabi's declaration and his call to arms to his troops... The country of Yamutbal was in chaos: Rim-Sin remained in the south in Larsa, while he left the defense of the northern part to his brother Sin-muballit, who sought refuge in the city of Mashkan-shapir.

Marc Van De Miercoop, *King Hammurabi of Babylon: A Biography*, (2008), p. 34.

Sin-muballit was also the name of Hammurabi's father, which makes sense because Kudur-Mubak was originally allied with Hammurabi. This alliance was later broken, but one cannot go back and change the name. If Adam was Kudur-Mabuk, and his two sons Cain and Abel were Rim-Sin I and Warad-Sin, where does Kudur-Mabuk's lesser-known third son, Sin-muballit, fit into the picture? That would be Adam's lesser-known third son, Seth.

Adam lay with his wife again, and she gave birth to a son and named him Seth, saying,
"God has granted me another child in place of Abel, since Cain killed him."

Genesis 4:9-11, 15

Seth was born after Abel was killed. After Warad-Sin died, Rim-Sin I ruled for just over 30 years. Therefore if Sin-muballit was Seth, he could have been up to 30 years old by the end of Rim-Sin's reign, old enough to be placed in charge of part of the kingdom. If correct, Adam, and all three of his son's have been identified. But if correct, the fate of Adam's sons will match the fate of Kudur-Mabuk's sons. There are more records to be checked.

The following is a direct quote from Mari Text 26 385, a letter to Hammurabi's ally king Zimri-Lin of Mari, describing Hammarabi's army closing in on the third son, Sin-muballit.

Rim-Sin is not with the assembled army, and his soldiers are worried. They express their worries as follows: "Where will the enemy engage us?" Sin-muballit, the brother of Rim-Sin, three generals and [broken word] thousand troops are surrounded in the city Mashkan-shapir. The entire country is afraid of the attack and is ready to rebel. Three or four days from now, Mashkan-shapir will have fallen. It will not put up resistance.

Mari Text 26 385, in Marc Van De Miercoop, *ibid.*, p. 35.

Mashkan-shapir did fall with little resistance, but there is no record in the Mari letters of whether Sin-muballit was killed, captured or escaped. That record is found in the Book of Jasher, which reports that Adam's funeral was attended by two of his sons, and also by Enoch and his son Methuselah. Enoch's relationship to Adam is not stated, but the record places Enoch contemporary to Adam.

Adam died; nine hundred and thirty years old was he at his death, and his two sons, with Enoch and Methuselah his son, buried him with great pomp, as at the burial of kings, in the cave which God had told him.

Book of Jasher 3:14

Recall that Enoch will be chosen as rebel king. That does not occur until after Adam's funeral. First, he is present when Adam was buried "*with great pomp, as at the burial of kings*," meaning that Adam too was a king, or in the case of Kudur-Mabuk, the elderly father of the reigning king, Rim-Sin I. Adam's two sons aren't named, but Adam was alive when Abel died, therefore, unless he had more sons after Seth, the two sons at his funeral would be Cain and Seth: respectively Rim-Sin I and his brother Sin-muballit. Adam's age is recorded in lunar months. Adam died at $930 (29.5/365) = 75$ years old. The date of Adam's death is given as well, but not in the Book of Jasher. A record in the Book of Jubilees states that after Adam died, Cain was killed, "*in the same year.*"

Adam died, and all his sons buried him in the land of his creation, and he was the first to be buried in the earth. And he lacked seventy years of one thousand years... Cain was killed after him in the same year...

Book of Jubilees 4:29-31

Notice that Adam was buried "*in the land of his creation*," and in the Book of Jasher's record, Adam was buried "*in the cave which God had told him*." This makes it likely that Adam was buried in the mountains to the east of Mesopotamia. Any caves in the Tigris and Euphrates river basin would be silted full. In that case Adam was an immigrant from somewhere in the Zagros Mountains, to the east of the Tigris River, which would explain the use of a distinctly non-Mesopotamian calendar system.

If Adam is Kudur-Mabuk and Cain is Rim-Sin I, the record that Cain died shortly after Adam requires that Kudur-Mabuk was quietly co-regent until nearly the end of Rim-Sin I's reign. That's not what the history books say, but historians have presumed that Rim-Sin I had reigned 60 years. Certainly his father was dead! The timeline is much more compressed. If Adam was 75 years old after Rim-Sin had reigned just 30 years (in his 61st half-year), Adam would have been $75 - 30 = 45$ years old when Cain killed Abel. That is old enough to have had two adult sons, yet young enough that Adam, with the same wife, could still have a third son, Shem. In that regard, the match of Adam to Kudur-Mabuk fits like clockwork.

On a long time scale, the ages are a match. On a short time scale, if Cain is Rim-Sin I and Seth is Sin-muballit, Cain's death must match the death of Rim-Sin I sometime *after* Seth was surrounded by Hammurabi's army at Mashkan-shapir. The order of events here is critical. Adam's funeral was either before Seth was surrounded, or Adam died during the war, and somehow Seth and Cain arraigned a funeral amidst the fighting, or Adam was buried after the war had been lost and the royal family was in hiding.

To confirm that Adam was Kudur-Mabuk, one of these scenarios should fit the surviving records. Again it is possible to read a direct quote from a military report to king Zimri-Lin of Mari. Since Mashkan-shapir surrendered with little resistance, there was no battle to the last man. Seth could have escaped when he saw that support was faltering. Hammurabi then took the fight south, and laid siege to Rim-Sin's capitol city of Larsa. The siege began in the last month of the year, corresponding to the 30th year of Hammurabi and the 60th half-year of Rim-Sin I.

My Lord's army fares well. When my lord's troops reached Hammurabi he was very happy. As he had just conquered Mashkan-Shapir, the entire country of Yamutbal cried out to Hammurabi: "Long Live our Lord!" The army of Yamutbal has made peace with that of Hammurabi. Hammurabi took the head of his armies and laid siege to Larsa. In the last month of the year he started the siege.

Mari Text 26 383, in Marc Van De Miercoop, *ibid.*, p. 35.

Citing the Mari letters, Van De Miercoop reports that 40,000 troops fought to defend Larsa, but Hammurabi could call in more troops from outlying cities now under his control. Messengers sent by Rim-Sin seeking allies were captured. After six months, Larsa fell to Hammurabi. What became of Cain? This is Van De Miercoop's translation of a report from the day that Larsa fell:

After the reinforcements arrived, the Babylonian troops could enter Larsa and take over the walls. This morning the men entered. But Rim-Sin escaped alive.

Mari Text 27 156, in Marc Van De Miercoop, *ibid.*, p. 35.

Rim-Sin escaped alive. Now Cain could bury Adam in a cave. Or could he? This report is so important that I checked another source.

Zimri-Addu also wrote a report, 27 156, on the fall of the city, but the text is badly broken. All that remains is the information that in the last phase of the siege the citizens had run out of grain and that the Babylonians entered the city in the morning and brought King Rim-Sin out alive.

Wolfgang Heimpel, *Letters to the King of Mari: A New Translation*, (2003), p. 155.

What a difference a nuance of translation makes: Rim-Sin *escaped* alive vs. Rim-Sin *was brought out* alive. This is a critical distinction that is obviously not certain. However, Heimpel also explains the historical context of the translation. In the quote below, Zimri-Addu is the commander of troops from Mari that had been sent to join the army of Hammurabi as part of an alliance obligation. In return, Hammurabi was supposed to send Babylonian troops to Mari after the war in Larsa was won. The story continues:

Zimri-Addu added in 27 158 information that they brought Rim-Sin and his belongings to Babylon... Zimri-Addu had been instructed by Zimri-Lin to bring the Mariote and the Babylonian troops that had been promised by Hammu-Rabi to Mari as soon as Larsa fell. He quoted this instruction in 27 157, and, while he did not state that he was unable or felt unable to do so, this must have been the case... he wrote in 27 158 to report that the Babylonian army was taking down the defenses of Larsa... It appears that Hammu-Rabi was not ready or willing to send the Mariote troops home or to send a contingent of his own shock troops along.

Wolfgang Heimpel, *ibid.*, pp. 155-6.

For comparison, this is Van De Miercoop's synopsis of the same letters:

So, Rim-Sin was able to escape, but not for long. Another letter announces that he was captured and sent to Babylon together with members of his entourage. Hammurabi tore down the city walls of Larsa, but did not raze the city.

Marc Van De Miercoop, *King Hammurabi of Babylon: A Biography*, (2008), p. 35.

The timing here is critical, if Rim-Sin and his entourage escaped, and then were later caught, that provides a window of opportunity for Adam's funeral in his native land. This would make sense if Adam had died at any time during the siege. Soon after the funeral, Rim-Sin was captured by Hammurabi's spies and brought back to be executed. This would make it possible for Cain to die within the same half-year of Adam's funeral. Half-years of the king's reign are how time was recorded. The 61st half-year of Rim-Sin would be the time interval referred to as "*in the same year*" in Jubilees 4:31. If Rim-Sin did not escape as the city fell, Adam's funeral could only be before the siege, which began in the last month of the Babylonian year (Mari Text 26 383, above), which was still in Rim-Sin's 60th half year.

It boils down to a single word with two translations. In one case, it is possible that the record of Adam's death followed by Cain's death matches the record of the fall of Larsa exactly. In the other case there is a mismatch by a few months. Since it is possible that the records match, I'll presume that Van De Miercoop's translation is the more accurate: Rim-Sin I is Cain, and the royal family slipped away long enough to bury Adam in his native land, probably a cave in the nearby mountains. This could explain the reluctance by Hammurabi to send the Mari troops home, even after capturing and occupying the city of Larsa.

After Adam's funeral, Cain was captured and taken to Babylon. Zimri-Addu (the Mari army commander) wrote in his last letter from Larsa that Rim-Sin had been taken to Babylon – not

necessarily from Larsa, from wherever he had been caught. In that scenario, Rim-Sin's arrival in Babylon was recent and relevant news; it meant that the troops from Mari were likely to be sent home now. As for Cain's death in the same half-year as Adam's funeral, Rim-Sin will be executed. That is a given. But how?

This record is in the Book of Jubilees, but it only makes sense in the context of the Mari letter that also reports that Rim-Sin had been taken to Babylon. Hammurabi was not in Babylon. He was tearing down the defenses of Larsa. Therefore he could make a show of it – bring the former king of Larsa back to his stronghold; stake him to the ground, and crush him to death under a pile of stones from the defensive walls of his own city. That would explain the record of both when and *how* Cain died.

Cain was killed after him in the same year; for his house fell upon him and he died in the midst of his house, and he was killed by its stones...

Book of Jubilees 4:31

Can you see Hammurabi laughing? Can you see that Adam, Cain, Abel and Seth have all been identified? I have presented the evidence that leads me to that conclusion. The following dates are based upon the Babylonian Middle Chronology, in which the first year of Hammurabi is 1792 BC, and the fall of Larsa (31st year of Hammurabi) is 1762 BC.

Adam = Kudur-Mabuk, king of Larsa	(died 1762 BC, age 75)
Abel = Warad-Sin, son and 1st coregent of Kudur-Mabuk, (king 1798-1792, 6 years)	
Cain = Rim-Sin I, son and 2nd coregent of Kudur-Mabuk, (king 1792-1762, 30 $\frac{1}{2}$ years)	
Seth = Sin-muballit (of Larsa), 3rd son of Kudur-Mabuk (regional governor).	

One of the most comprehensive descriptions I have found of Kudur-Mabuk is by John Bright, in his recently published *History of Israel*. Bright, too, was searching in southern Mesopotamia for ethic and cultural ties to the Israelites.

The heritage of Ur III was taken over by a number of smaller rival states. Chief among these in Lower Mesopotamia were Isin and Larsa... the ruling house of Larsa was eventually overthrown when (c. 1770) Kudur-mabuk, prince of Yamutbal (a district in the East-Tigris region on the frontier of Elam where an Amorite tribe of that name had settled), pressed in and seized control of that city and set up his son Warad-sin as ruler there. Although Kudur-mabuk had an Elamite name (as did his father), he may have been a chieftain of Northwest-Semitic stock whose family had been in Elamite service (he is called "father of Yamutbal, father of Amurru"): the names of his sons, Warad-Sin and Rim-Sin, are, however, both Akkadian.

John Bright, *A History of Israel*, (2000), pp. 49-50.

From this description, it appears that Adam was a tribal chief of uncertain origin, since he ruled in a district with an Amorite name, yet his own name was Elamite, and his sons names were Akkadian. Unless the Elamite or Akkadian cultures can be shown to have recorded time in half-years, the names may simply have been chosen because the Hebrews were newcomers to Mesopotamia attempting to "fit in." The Amorite kings of Babylon definitely did not record time in half-years. Also the Hebrews likely did not have their own written language, since in the Book of Jubilees much is made of the fact that Enoch learned how to write. This could simply be because the Hebrews had recently arrived from a rural area. Enoch's father sent him to a school in urban Mesopotamia, where reading and writing had already been taught for thousands of years. Thus Enoch was the first *among Hebrews* who learnt writing and knowledge.

And he was the first among men that are born on earth who learnt writing and knowledge and wisdom and who wrote down the signs of heaven according to the order of their months in a book...

Book of Jubilees 4:17

Enoch attended Adam's funeral in the year that Larsa fell to Hammurabi, 1762 BC. Enoch's book was the first in a series of Hebrew records that eventually became the source material for the Old Testament. As for Adam, he was not made from dust; Kudur-Mabuk had a father. Enoch simply didn't record his family history earlier than Adam. Someone later came up with a creative story to explain the unknown. Adam died at age 930 lunar months = 75 years, which means that Adam was born in 1837 BC. It has been a long hard search, but I have found something well worth the effort: the beginning of Bible history itself.

Biblical history began with a warrior chieftain who likely came out of the hills to the east of the Tigris and conquered Larsa, then a small kingdom in southern Mesopotamia. His descendants will become a line of more powerful kings who shaped the course of Ancient Near East history for centuries. That story is just beginning.

Before The Exodus

Chapter 13

From Adam to the Flood

I. When and How Enoch Ascended to Heaven

The discovery that Adam and Cain match Kudur-Mabuk and Rim-Sin I, both contemporaries of the Babylonian conqueror-king Hammurabi, is like putting together a zipper, but it is not yet zipped up. If we move forward from Hammurabi, and forward from Adam and Cain, what comes together next? This story began with the discovery that Enoch was chosen as king of a rebel confederacy in approximately the time of Hammurabi. The identification of Rim-Sin I as Cain, leaves Rim-Sin II and Iluma-ilu (1st king of the Sealand) as possible candidates for Enoch. Both are rebels who fought Hammurabi's son Samsu-iluna in the Sargon Chronicle.

The account of Adam's funeral in the Book of Jasher provides the critical reference point. Since both Enoch and his son Methuselah were present at Adam's funeral, Enoch was already an adult, old enough to become king immediately after Hammurabi's conquest of Larsa and the subsequent capture and execution of Cain. Therefore, if Enoch was in line for the throne, he would best match to Rim-Sin II, the first rebel king to rise up against Samsu-iluna.

The simple verification of this match would seemingly be to check if Enoch is the son of Cain, and next in line for the throne. But, here the genealogy of the Book of Genesis is confusing. Cain does have a son named Enoch (Genesis 4:17), but he is not the Enoch who is three generations before Noah (Genesis 5:6-29). Furthermore, as shown in figure 13-1, in the genealogy as recorded in the Book of Genesis, Adam through Noah span 10 generations, which should correspond to roughly three centuries. Placing Adam contemporary to Hammurabi pushes Noah into the 1500's BC. That's too late for the flood in the 1640's. Something is seriously amiss.

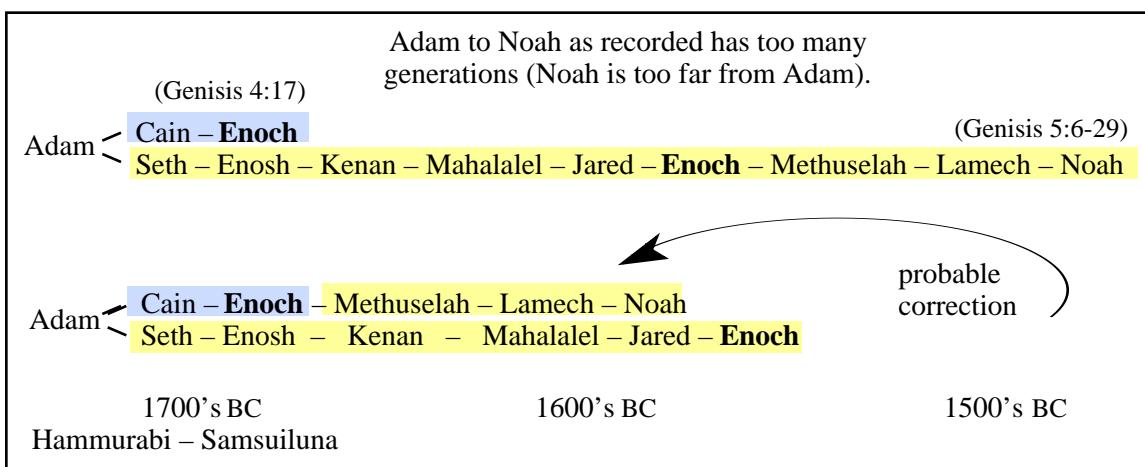


Figure 13-1: The genealogy from Adam to Noah as recorded, and a probable correction.

Since Adam died when he was only 75 years old (930 lunar months, Genesis 5:5), the Book of Jasher's record that Enoch and his son Methuselah attended Adam's funeral requires that Methuselah was no more than three to four generations removed from Adam. Presuming that the records were once correct, a simple explanation is that the two family lines have a "crossover error" at Enoch. The correct lineage from Adam to Methuselah must be much shorter, and can be made shorter by reversing the two Enoch's, such that Enoch the son of Cain is also the father of Methuselah. People make mistakes, and it appears that the Hebrews had their list of early

generations wrong, though the *narrative* in the Book of Jasher correctly recorded that Enoch and Methuselah attended Adam's funeral.

After the moving Methuselah to the Cain genealogy branch, Enoch and Methuselah can easily attend Adam's funeral, and the lineage from Adam to Noah contracts sufficiently to align Noah with the tree ring anomaly of the 1640's BC. Also after the switch, Enoch is next in line to be king following the death of his father, Cain. Therefore Enoch should be Rim-Sin II.

Next, this tentative equivalence of Enoch and Rim-Sin II can be put to the test. A very good test is made available by the fact that the Book of Jasher also gives the *exact reign* of Enoch. As with the lifetime of Adam, the record of Enoch's reign is recorded in lunar months.

And Enoch reigned over the sons of men two hundred and forty-three years, and he did justice and righteousness with all his people, and he led them in the ways of the Lord.

Book of Jasher 3:12

The reign of Enoch is sensible only if it is 243 lunar months, which is approximately 20 years. It is encouraging that 243 is not a rounded number, and therefore 20 years is likely reliable and definitely does not match the 30-year reign of Iluma-ilu (12:I, figure 12-1). This eliminates the only reasonable alternative and again points to Rim-Sin II as the best candidate for Enoch. Consequentially, Enoch's reign came to an end *upon Enoch's defeat in battle* against Hammurabi's son Samsu-iluna. Enoch's ignoble defeat in a battle with the king of Babylon doesn't make a hear-warming story for Hebrews. Bearing that in mind, be prepared for positive spin as the Hebrew authored Book of Jasher describes the end of Enoch's reign. What does this story actually say?

And in some time after, when the kings and princes and the sons of men were speaking to Enoch, and Enoch was teaching them the ways of God, behold an angel of the Lord then called unto Enoch from heaven, and wished to bring him up to heaven to make him reign there over the sons of God, as he had reigned over the sons of men upon earth. When at that time Enoch heard this he went and assembled all the inhabitants of the earth, and taught them wisdom and knowledge and gave them divine instructions, and he said to them, I have been required to ascend into heaven, I therefore do not know the day of my going.

Book of Jasher 3:22-24

Enoch's days on earth are clearly about to end. Next Enoch teaches his wisdom to the entire kingdom as a horse descends from heaven for his final journey. But he doesn't ride straight to heaven. Enoch first rides with thousands of other men following him on earth. They are repeatedly warned that *they may die*, if they follow.

And it was after this that he rose up and rode upon the horse; and he went forth and all the sons of men went after him, about eight hundred thousand men; and they went with him one day's journey. And the second day he said to them, Return home to your tents, why will you go? Perhaps you may die; and some of them went from him, and those that remained went with him six day's journey; and Enoch said to them every day, Return to your tents, lest you may die; but they were not willing to return, and they went with him. And on the sixth day some of the men remained and clung to him, and they said to him, We will go with thee to the place where thou goest; as the Lord liveth, death only shall separate us. And they urged so much to go with him, that he ceased speaking to them; and they went after him and would not return...

Book of Jasher 3:32-35

This I would interpret as Enoch riding off to the great final battle with Babylon's king Samsu-iluna. The record that this was a great risk to his soldiers is still preserved, but there is no record of the battle itself. The ride ends with Enoch ascended to heaven "*in a whirlwind, with*

horses and chariots of fire." After Enoch was gone, the remaining kings of the land took a census, counting by subtraction the number of men who did not return.

And when the kings returned they caused a census to be taken, in order to know the number of remaining men that went with Enoch; and it was upon the seventh day that Enoch ascended into heaven in a whirlwind, with horses and chariots of fire. And on the eighth day all the kings that had been with Enoch sent to bring back the number of men that were with Enoch, in that place from which he ascended into heaven.

Book of Jasher 3:36-37

Finally and sadly, there is a visit to the place where Enoch ascended to heaven, which is covered with "*stones of snow.*" It does not snow in southern Iraq... they are the white bloated bodies of the dead. And since Enoch could not be found among the stones of snow, that was considered proof that he had ascended to heaven.

And all those kings went to the place and they found the earth there filled with snow, and upon the snow were large stones of snow, and one said to the other, Come, let us break through the snow and see, perhaps the men that remained with Enoch are dead, and are now under the stones of snow, and they searched but could not find him, for he had ascended into heaven.

Book of Jasher 3:38

On the Sargon Chronicle, the fate of Rim-Sin II is unclear because most of the text is missing, but the outcome of the battle against Rim-Sin II is also recorded in a royal inscription from Samsu-iluna's reign.

Samsu-iluna, the capable king... He made ready his weapons in order to kill his enemies and set out an expedition to slaughter his foes. The year was not half over when he killed [the rebel king] Rim-Sin [II of Larsa], who had caused [southern Mesopotamia] to rebel, and who had been elevated to the kingship of Larsa.

William Hamblin, *Warfare in the Ancient Near East to 1600 BC*, (2006), pp. 179-80.

The above quote leaves no doubt that Rim-Sin II was killed in battle, though the year of his death is not recorded. The curious phrase in the above quote is "*elevated to the kingship,*" as opposed to simply inheriting the kingship. This suggests that there was some delay between the death of Rim-Sin I and the point when Rim-Sin II was recognized as king of a rebel confederacy. The delay could be time when Enoch was a king without a city and without allies, until the conquered southern cities united into a Sealand rebel army. This would be when the 130 kings and princes assembled and "*they made Enoch king over them ...and he made peace amongst them*" (Jasher 3:10-11).

The earliest possible date that Enoch could have been elevated to rebel king is late in the 31st year of Hammurabi, after the fall of Larsa and funeral of Adam. Splitting Enoch's 20-year reign into parts, the first 12 years would extent into Hammurabi's 43rd and final year, and the remaining 8 years would extend into Samsu-iluna's 8th year. Thus with no delay before being elevated to the Sealand kingship, Enoch could have been killed in Samsu-iluna's 8th year.

The quote below places that date of Rim-Sin II's death just two years later, in the 10th year of Samsu-iluna – *without* knowing the length of Rim-Sin's reign.

Marten Stol's (1976, 48-52) reconstruction of Rim Sin's activities suggested that the king of Larsa revolted during Samsu-iluna's eighth year and controlled most of the south by the end of the same year. Stol concluded that Rim-Sin was defeated in Larsa early in Samsuiluna's tenth year and most importantly that it took Samsu-iluna several more months after the fall of Larsa to defeat Rim-Sin completely.

Andrea Seri, *The House of Prisoners: Slavery and State in Uruk...* (2013), p. 32.

A delay of two years before Enoch was made Sealnd king is reasonable. However, when reading the footnotes, once again there is a failure to comprehend that Rim-Sin II's reign was recorded in half-years. The date of the rebellion was based on a gap in attestations of Samsuiluna as king in Larsa. There are no attestations for any part of his 9th year. Presumably the gap is filled by 3 different 'year names' for Rim-Sin II. Meaning that Rim-Sin II came to power in Larsa during part of Samsu-iluna's 8th year, remained in power throughout all of the 9th year, and was defeated and killed during Samsu-iluna's 10th year. During that year the people of Larsa again began listing Samsuiluna as king. However, of the three different Rim-Sin II 'year names' two seemingly fell in the same 12 month interval. "*Formulae 2 and 3 seem to designate the same year*" (Seri, *ibid.*, footnote 22, p. 35).

This can be explained if Rim-Sin II was recognized as king in Larsa in three consecutive half-years; the first and second halves of Samsu-iluna's 8th year, and the first half of Samsu-iluna's 9th year. It is the 9th year of Samsu-iluna (not the 10th) that was not yet half over when he killed Rim-Sin II. This scenario is supported by an otherwise inexplicable text found at Larsa that is dated the 1st day of Samsu-iluna's 10th year (Si 10/I/1).

The last Samusu-iluna text from Larsa is dated to Si 7/XII/20 (TCL 11 215) and his dating in Larsa was resumed at the beginning of Samsu-iluna's 10th year (e.g., YOS 12 314, Si 10/I/1...)

Andrea Seri, *ibid.* footnote 21, p. 35.

If Samsu-iluna is attested in Larsa on day 1 of his 10th year. Rim-Sin II is most likely already dead. This requires that he has been dead since the first half of the 9th year, and neither king is attested in the 2nd half of the 9th year. There may have been a third king in the interim, until Samsu-iluna re-established authority.

While knowing the exact year that Enoch died may not seem critical, this is breaking new ground, and if the exact date can be found, it should be found. The simplest scenario that fits the evidence is that Enoch is a match to Rim-Sin II. His 20-year reign as king of the rebel confederacy began one year after the death of his father, Rim-Sin I, and ended in the 1st half of the 9th year of Samsu-iluna. Therefore, Adam and Cain died in 1762 BC. Enoch became Sealnd king in 1761 BC and died in the summer of 1741 BC.

If the death of Enoch were the end of the story, there would be no Old Testament. The world as we know it would not be as we know it. But the world is as it is because the Hebrews would rise again. The war between Babylonia and the Sealand was not over. In the Sargon Chronicle, after his defeat of Rim-Sin II, Samsu-iluna "*marched and besieged*" the people of the Sealand. They were still fighting under yet another rebel leader. Later in the same chronicle, Samsu-iluna was at war once again, this time with the Sealand king Iluma-ilu. Neither Samsu-iluna nor his son Abi-eshush was able to kill or capture Iluma-ilu. Returning to the Book of Jasher, a familiar name is a match to Iluma-ilu. When Enoch did not return from the field of stones, the princes of the land chose his son, Methuselah, to be their next king.

And when Enoch had ascended into heaven, all the kings of the earth rose and took Methuselah his son and anointed him, and they caused him to reign over them in the place of his father.

Book of Jasher 4:2

The alignment of Cain and Enoch to Rim-Sin I and Rim-Sin II implies that Methuselah is Iluma-ilu, the next king to carry on the struggle for Sealand independence from Babylonian subjugation. It was not known that these three kings were father, son, and grandson, because so little was known about them. Presently, Methuselah is known for being the oldest man in the Bible. "*Altogether, Methuselah lived 969 years*" (Genesis 5:27). In truth, Isaac was considerably older. "*Isaac lived a hundred and eighty years*" (Genesis 35:28). In both cases the units are mistranslated, and common sense gives the sensible age. Isaac's lifetime is recorded in half

years; he died at $180 \div 2 = 90$ years old. Methusaleh's lifetime is recorded in lunar months; he died at $969 \times (29.5/365) = 78 \frac{1}{4}$ years old. Methuselah lived a full life, but not a remarkably long life. Methuselah should instead be recognized for who he really was, Iluma-ilu of the Sealand, who succeeded Rim-Sin II, carried on the fight against oppression by Hammurabi's son Samsu-iluna, and ultimately founded the Sealand Dynasty.

The zipper has started moving forward. Proof that Abraham's ancestors were once kings of the Sealand is in the numbers. The death of Enoch and his descendants must be separated in time step-by-step in tandem with the accession dates of kings of the Sealand Dynasty. When one Hebrew patriarch dies, another becomes king. If the numbers match, the identification of the Hebrew Patriarchs in the Book of Genesis as kings of the Sealand Dynasty is unequivocal. Though abstract, checking the numbers is a powerful test, because if Enoch is not Rim-Sin II, one would expect no correlation whatsoever.

The reign of Rim-Sin II ended in the 9th year of Samsu-iluna (1741 BC). The reign of Iluma-ilu is recorded as 60 half-years on Babylonian King List A, corresponding to 30 years. But the Sealand was not independent immediately upon Rim-Sin II's defeat, and thus recognition of the Sealand Dynasty as a political entity on Babylonian King List A (as opposed to within the Sealand itself) did not necessarily begin upon the death of Rim-Sin II. Proof that Methuselah was Iluma-ilu, requires leap-frogging one king further, to Methuselah's son Lamech, who should match, Itti-ili-nibi, the second king of the Sealand Dynasty. The anticipated identification of Enoch's descendants with the Sealand Dynasty kings and their reigns is summarized below. The question marks below Lamech reflect the fact that the short reigns of 18, $7\frac{1}{2}$ and $13\frac{1}{2}$ years could not be a father, son and grandson. Thus Lamech's son Noah and grandson Shem may have subsequently become kings, but cannot be the next two kings in succession after Lamech.

<u>Hebrew patriarch</u>	<u>corresponding Sealand king</u>	<u>reign on King List A $\div 2 =$ years</u>
Enoch	Rim-Sin II	n/a
Methuselah, son of Enoch	Iluma-ilu	60
Lamech, son of Methuselah	Itti-ili-nibi	55
?	Damiqilishu	36
?	Ishkibal	15
?	Shushi	27
?	Gulkishar	55

The Book of Jasher does not explicitly state that Lamech became a king. This must be presumed, because Abraham's ancestry is likely the royal line (hence it was important enough to record). If Lamech was a king, he would most likely have become king upon the death of Methuselah, then reigned for life. Therefore, the interval from Methuselah's death to Lamech's death should match the $27\frac{1}{2}$ year reign of Itti-ili-nibi. The interval from Methuselah's death to Lamech's death is not directly recorded in Hebrew records, but it can be *extracted* in two steps: First, subtract Methusaleh's age when Lamech was born from Methusaleh's age at death. This gives the *Lamech's age* when Methuselah died. Second, subtract Lamech's age when Methuselah died from Lamech's age at death. This gives the number of years that Lamech survived his father. Thus three numbers are required to find one, and the final answer should be $27\frac{1}{2}$ years, the reign of Itti-ili-nibi as recorded on Babylonian King List A(55 half-years).

Babylonian King List A had a mechanism to insure against copying errors. The scribe recorded each individual reign and also the total for the 11 kings of the Sealand Dynasty. That total was wrong, but by just a single half-year, and even that discrepancy has likely been accounted for. There is no such check-sum in the Old Testament, and if any of the three input numbers has a copying error, the output number is meaningless. Without the Book of Jasher it is impossible to make anything match, but of course, without the Book of Jasher, there was no reason to even suspect that Enoch and his descendants were kings. The Book of Jasher has the following records of Methuselah's age when Lamech was born, and the lifetime of Lamech.

Methuselah lived eighty-seven years and he begat Lamech... And all the days of Lamech were seven hundred and seventy years, and he died.

Book of Jasher 3:13, 5:20

Methuselah's age when Lamech was born cannot be recorded in lunar months, or he would have fathered a child while he was still a child. Age 87 makes sense only if recorded in half-years: $87 \div 2 = 43\frac{1}{2}$ years old. That is suspiciously old for the birth of a first son, but there is no guarantee that Lamech was a first son. He may have been the oldest surviving son when his father died. That would make him the next king, and the most likely person to be recorded for posterity. The pattern seems to be that the birth of a son was recorded to the nearest half-year, but lifetimes were recorded more precisely, in lunar months. Lamech's lifetime only makes sense if recorded in lunar months: $770 \times (29.5/365) = 62\frac{1}{4}$ years old.

Combined with Methuselah's lifetime, 969 lunar months = $78\frac{1}{4}$ years (Genesis 5:27). It is now possible to break Lamech's life into two parts as described in the two-step process above. Figure 13-2 illustrates the arithmetic required to determine Lamech's reign from the records in Genesis 5:27, Jasher 3:13 and Jasher 5:20.

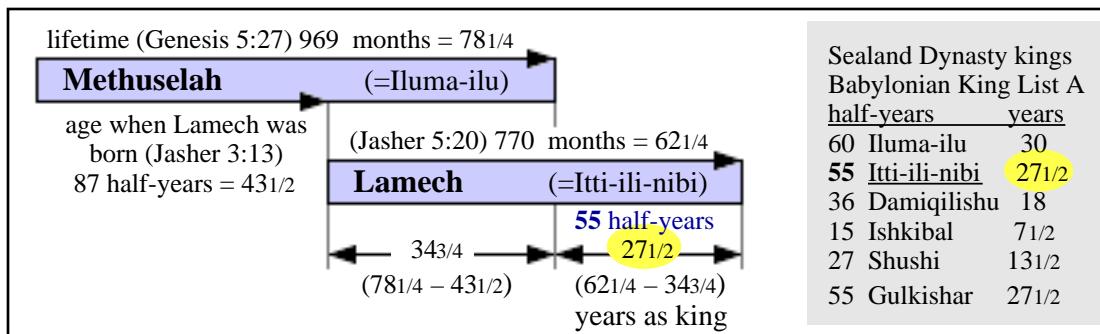


Figure 13-2: The match that identifies Methuselah and Lamech as Sealand Dynasty kings.

The first step is subtraction, to determine Lamech's age when Methuselah died: $78\frac{1}{4} - 43\frac{1}{2} = 34\frac{3}{4}$ years. During the first $34\frac{3}{4}$ years of his life Lamech would have been a prince. Then Methuselah died, and Lamech *could have* become king. If so, Lamech would have reigned from age $34\frac{3}{4}$ years until his own death at $62\frac{1}{4}$ years old. The difference is $62\frac{1}{4} - 34\frac{3}{4} = 27\frac{1}{2}$ years, corresponding to 55 half years. Thus if Lamech became a king upon Methusaleh's death, he would have been king for 55 half-years, which is *exactly* the reported reign of Itti-ili-nibi on Babylonian King List A.

The zipper is moving up. Methuselah's reign cannot be confirmed but Lamech's can. Methuselah is boxed in the middle, and must be a king as well. Thus Methusaleh and Lamech are identified respectively as Ilumu-ilu, and Itti-ili-nibi, the first two kings of the Sealand Dynasty. Knowing that Lamech became a king, it is possible to determine when Lamech succeeded Methuseleh, in Genesis 5:22 it is reported that Methuseleh was born 300 lunar months before Enoch ascended to heaven. This crucial piece of information is recorded as follows:

And after he became the father of Methuselah, Enoch walked with God 300 years and had other sons and daughters.

Genesis 5:22

In the above quote, 300 lunar months corresponds to the time interval from when Methuselah was born until Enoch was killed in the 9th year of Samsu-iluna (1741 BC). 300 is a suspiciously round number, but the best one can do is convert it and see if it is sensible: $300 \times (29.5/365) = 24\frac{1}{4}$ years. That's places Methuseleh's birth in $1741 + 24 = 1765$ BC. Methuselah would have been born 3 years before Adam's funeral in the 31st year of Hammurabi (1762 BC). Thus it is sensible; a 3-year-old child at the funeral of his 75-year-old great grandfather is commonplace. From that point go forward to Methuselah's death.

The total lifetime of Methuselah has already been discussed: 969 lunar months = $78\frac{1}{4}$ years. Thus Methuselah died in $1765 - 78 = 1687$ BC. This is the year in which the 30-year reign of Iluma-ilu ends (1717–1687 BC), and the $27\frac{1}{2}$ year reign of Iti-ili-nibi begins (1687–1660 BC). There is a sizeable gap from 1741 BC to 1717 BC. During this time Methuselah was king, but Sealand independence was not acknowledged on Babylonian King List A. In total Methuselah reigned from age 24 years old to his death at 78 years old, more than half a century in whole years. But only the last 30 years are credited on Babylonian King List A.

Adam	= Kudur-Mabuk, king of Larsa	(died 1762 BC, age 75)
Abel	= Warad-Sin, son and 1st coregent of Kudur-Mabuk, (king 1798–1792, 6 years)	
Cain	= Rim-Sin I, son and 2nd coregent of Kudur-Mabuk, (king 1792–1762, $30\frac{1}{2}$ years)	
Seth	= Sin-muballit (of Larsa), 3rd son of Kudur-Mabuk	(regional governor)
Enoch	= Rim-Sin II, rebel king of Sealand confederacy,	(king 1761–1741, 20 years)
Methuselah	= Iluma-ilu, 1st king of Sealand Dynasty,	(king 1717–1687, 30 years)
Lamech	= Iti-ili-nibi, 2nd king of Sealand Dynasty,	(king 1687–1660, $27\frac{1}{2}$ years)

Should doubt remain that seven Hebrew patriarchs have now been identified, there is more evidence to be presented. But as seems to happen when I begin looking a little closer, one connection leads to another and interesting side stories come to light. I have been purposely quoting only sources that follow the Babylonian Middle Chronology. There are alternative chronologies, but the discovery that the Sealand Dynasty is recorded in half-years should put those alternatives to rest. That story is next. It is intertwined with the story of Noah's flood.

II. The Venus Tablet of Ammi-saduqa

The Mesopotamian system of assigning kings' regnal years one-for-one with the calendar year is very accurate for counting forward and back, but anchoring such a floating chronology requires one firm connection to the BC calendar system. The Babylonian chronology is anchored via observations of the planet Venus on a tablet from the reign of Ammi-saduqa, the great-grandson of Samsu-iluna. As described below, the periodic nature of the planet Venus makes several widely spaced, but otherwise exact dates for the first year of Ammi-saduqa possible. When reading this quote, I immediately realized that the Babylonian Middle Chronology is the only possibility, and for a reason that needs to be shared. The explanation follows.

Since the movements of Venus are known, Ammi-saduqa's accession date can theoretically be deduced, but there are three dates that fit the data. That most frequently chosen is 1646 B.C.E.: This date produces the Middle Chronology... An earlier date of 1702 B.C.E., associated with the High Chronology, is favored by some scholars. This best fits independent evidence from the Babylonian lunar calendar and gives a good match to a pair of lunar eclipses that took place in the Ur III dynasty. Others argue the merits of the Low Chronology, with Ammi-saduqa's accession dated 1582 B.C.E., recent work on dendrochronology gives strong support to this. It is clear from the contradictory nature of these pieces of evidence that providing true calendar dates for the chronology of early Mesopotamia is fraught with difficulty.

Jane McIntosh, *Ancient Mesopotamia: New Perspectives*, (2005), p. 47.

Notice that one choice for the 1st year of Ammi-saduqa is 1646 BC. Ammi-saduqa was the great grandson of Samsu-iluna. Noah was the great grandson of Enoch. If Enoch fought Samsu-iluna, then three generations later, Noah and Ammi-saduqa should also be contemporaries; and in that case, 1646 BC has a special significance. The Babylonians used the same system of counting regnal years as the Assyrians. The year began in the spring and was assigned to the king in power on that day. Thus if a king died in the summer of 1647 BC, he is still credited with the full year 1647 BC, and the 1st year that counts toward his successor is 1646 BC. I suspected that a Babylonian king may have died in the summer of 1647 BC, since according to the Book of Genesis, almost everyone died. It was the year of Noah's flood!

As discussed in chapter 1, tree ring records show that 1647 BC was the third and most exceptional year of extraordinary growth in Anatolian junipers during the phenomenon called the ‘ring 854 anomaly.’ Some climate altering event led to seven consecutive years of incredibly wet weather, which for trees in arid Anatolia was good, but for crops in Mesopotamia may have been disastrous. Three years of flooded fields and failed crops could explain acts of desperation just prior to the worst year, 1647 BC. The Old Testament talks about the wickedness of man before the flood, but omits the underlying reason – starvation. In describing the lawlessness before God punished mankind with the flood, the Book of Jubilees alludes to cannibalism. People don’t eat each other because they are wicked; they eat each other when there is nothing else to eat.

And lawlessness increased on the earth and all flesh corrupted its way, alike men and cattle and beasts and birds and everything that walketh on the earth – all of them corrupted their ways and their orders, and they began to devour each other... And for all those who corrupted their ways and their thoughts before the flood, no man’s person was accepted save that of Noah alone...

Book of Jubilees 5:2, 19

It was not just Babylon with a new king in 1646 BC. Figure 13-3 is a composite timeline using Enoch, Methuselah and Lamech to align the reign of Ammi-saduqa to the Sealand kings Damiqilishu and Ishkibal, who pair respectively with Assyrian kings Adasi and Belbani on the Synchronistic Chronicle (12:I, figure 12-3). The alignment of Enoch’s death to the 9th year of Samsu-iluna at point A (1741 BC), positions all the subsequent alignments at points B, C, D, E and F. The net effect is that in order to match all 10 pairs of Assyrian and Sealand kings on the Synchronistic Chronicle, the 1st year of Ashur-dugal is restricted to 1645 BC ± 2 years. His reign is a very close match to the 1647 BC weather anomaly. On the Assyrian King List, Adasi is one of six kings who reigned within the 6-year reign of Ashur-dugal. The rise of seven kings in a short time interval is explained if central authority collapsed due to a catastrophic flood in 1647 BC. Then, in the aftermath, Ashur-dugal consolidated power.

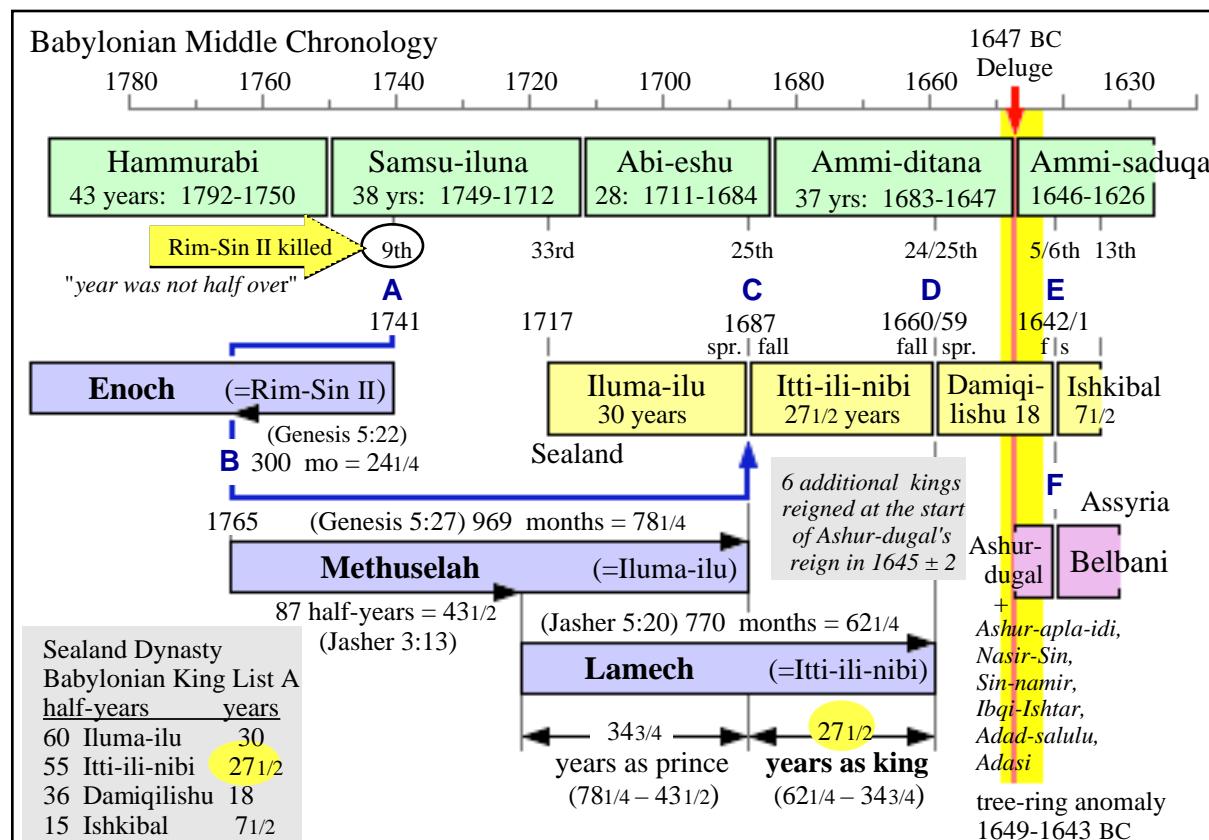


Figure 13-3: Alignment of Babylonian, Sealand and Assyrian kings to the Deluge of 1647 BC.

On the right of figure 13-3, seven kings in Assyria come to power in approximately the same year as Ammi-saduqa even if the BC calendar dates are stripped away. But if the year is 1646 BC (Babylonian Middle Chronology), there is also a reason for simultaneous political change across Mesopotamia, a widespread weather anomaly has created a political crisis. If the year is 1702 BC (High Chronology), there is no underlying reason for what appears to be simultaneous political turnover. Similarly, there is nothing special about 1582 BC (Low Chronology).

On the right of figure 13-4, I've made a very minor adjustment to the interpretation of the Assyrian King List, presuming that king nos. 42-47 reigned concurrently or in rapid succession during two years of crisis following the flood, 1646-45 BC, *and then* Assyrian king Ashur-dugal restored order and ruled for the next 6 years. The translation as given below has Ashur-dugal's accession come first.

In the time of Assur-dugal, a son of a nobody, Assur-apla-idi, Nasir-Sin, Sin-namir, Ipqi-Istar, Adad-salulu, Adasi, six kings, sons of nobodies, ruled at the beginning of his brief reign.

Jean-Jaques Glassner, *Mesopotamian Chronicles*, (2004), p. 139.

Since six years *is not* a brief reign, a better translation may be “*six kings, sons of nobodies, ruled briefly before his reign began.*” This would fit the scenario of political chaos caused by the flood, and add two more years to the chronology, which as explained below, is exactly what is needed to make loose ends connect. The result is a coupled exact chronology for the Sealand Dynasty and contemporary Assyrian kings. Neither of these chronologies had been known exactly before.

Sealand Dynasty (1717-1533 BC)			Synchronistic Chronicle pairings	Assyrian King List (contemporary kings)		
60	30	<u>1717-1687/</u>	1. Iluma-ilu	41. Ashur-dugal	6	1644-1639
55	27 1/2	/1687-1660	2. Itti-ili-nibi	→ 42.-47. Adasi, <i>et. al. crisis yrs</i> <u>1646-45</u>		
36	18	1659-1642	3. Damiqilishu	→ 48. Belu-bani	10	1638-1629
15	7 1/2	1641-1634/	4. Ishkibal	→ 49. Libaja	17	1628-1612
27	13 1/2	/1634-1621	5. Shushi	→ 50. Sharma-Adad I	12	1611-1600
55	27 1/2	1620-1593/	6. Gulkishar	→ 51. Ip-tar-Sin	12	1599-1588
-	1/2	/1593	7. [...]-jen[...]	→ 52. Bazaja	28	1587-1560
50	25	1592-1568	8. Peshgaldaramash	→ 53. Lullaja	6	1559-1554
28	14	1567-1554	9. Aiadarakalamma	→ 54. Kidin-Ninua	14	1553-1540
26	13	1553-1541	10. Ekurulanna	→ 55. Sharma-Adad II	3	<u>1539-1537</u>
6	3	<u>1540-1538</u>	11. Melamkurra	→ 56. Erishu	13	1536-1524
9	41 1/2	1537-1533	12. Eagamil			
$368 \div 2 = 184$ years			57. -71.	total of 143 + x years, from 1523 to 1381*		
Assyrian Low Chronology <i>*Conventional Chronology</i> (12 years higher) is ruled out				72. Eriba-Adad I	27	1380-1554
				73. Ashur-uballit I	36	1353-1318

Figure 13-4: Chronology of the Sealand Dynasty and contemporary Assyrian kings.

Evidence that the chronologies are accurate to within ± 3 years lies in the fact that the ‘bottleneck’ condition imposed by the Synchronistic Chronicle is satisfied: the 3-year reign of Sealand king Melamkurra and the 3-year reign of Assyrian king Sharma-Adad II are aligned just one year from dead center. Three years from dead center is a miss.

Also of possible interest to historians is the continuation of the Assyrian King List to no. 73, Ashur-uballit I, the founding king of the Assyrian Middle Empire. Ashur-uballit’s reign is listed in Amélie Kurht’s *The Ancient Near East* (vol. 1, 1995, p. 351) as either 1365-1330 BC (Assyrian Conventional Chronology) or 1353-1318 BC, (Assyrian Low Chronology). The higher

Conventional Chronology is now ruled out, since on the Assyrian King List, within the total for the reigns of nos. 57-71, two missing reigns at no. 65 and no. 66 ('x,' in the total, $143 + x$), would have to be negative.

In the chronology of figure 13-4, the two years of crisis assigned to king nos. 42-47 were inserted (guessed) such that 'x' farther down the list would be zero. This did not violate the bottleneck condition at king no. 55, and I suspect that the two missing reigns at king nos. 65 and 66 were deliberately left blank to denote $0 + 0$, meaning that both kings were killed or otherwise fell from power before the next calendar year began. This possibility seems likely, as the Babylonian number system had no numeral for zero, and, as shown in figure 13-5, the royal family at the time was infighting for the throne. In two cases the details given are sufficient to guess what happened in between: no. 64 reigned for just one month, before being deposed by his uncle, no. 65. Later, no. 66 was deposed by his own brother, no. 67. There is little love in this family, and much thirst for power. No. 65 and no. 66 could have each received the crown accompanied by a handshake and a stab in the back. Under those circumstances, $x = 0 + 0$, denoted by deliberately leaving both reigns blank, seems more likely than two unintentional omissions of non-zero values.

	<table border="0"> <tr><td>62. Enlil-nasir (I) son of Puzer-Ashur</td><td>13 years he ruled.</td></tr> <tr><td>63. Nur-ili son of Enlil-nasir (I)</td><td>12 years he ruled.</td></tr> <tr><td>64. Ashur-saduni son of Nur-ili</td><td>1 month (of days) [he ruled].</td></tr> </table>	62. Enlil-nasir (I) son of Puzer-Ashur	13 years he ruled.	63. Nur-ili son of Enlil-nasir (I)	12 years he ruled.	64. Ashur-saduni son of Nur-ili	1 month (of days) [he ruled].	<table border="0"> <tr><td>65. Ashur-rabi (I) son of Enlil-nasir (I) [Ashur-saduni from the throne] he deposed, the throne he seized, (and)</td><td>[x years he ruled].</td></tr> <tr><td>66. Ashur-nadin-ahhe (I) son of Ashur-Rabi (I)</td><td>[x years he ruled].</td></tr> <tr><td>67. Enlil-nasir (II), his brother, from the throne he de[posed him] (and)</td><td>6 years he ruled.</td></tr> <tr><td>68. Ashur-nirari (II) son of Enlil-nasir (I)</td><td>7 years he ruled.</td></tr> </table>	65. Ashur-rabi (I) son of Enlil-nasir (I) [Ashur-saduni from the throne] he deposed, the throne he seized, (and)	[x years he ruled].	66. Ashur-nadin-ahhe (I) son of Ashur-Rabi (I)	[x years he ruled].	67. Enlil-nasir (II), his brother, from the throne he de[posed him] (and)	6 years he ruled.	68. Ashur-nirari (II) son of Enlil-nasir (I)	7 years he ruled.
62. Enlil-nasir (I) son of Puzer-Ashur	13 years he ruled.															
63. Nur-ili son of Enlil-nasir (I)	12 years he ruled.															
64. Ashur-saduni son of Nur-ili	1 month (of days) [he ruled].															
65. Ashur-rabi (I) son of Enlil-nasir (I) [Ashur-saduni from the throne] he deposed, the throne he seized, (and)	[x years he ruled].															
66. Ashur-nadin-ahhe (I) son of Ashur-Rabi (I)	[x years he ruled].															
67. Enlil-nasir (II), his brother, from the throne he de[posed him] (and)	6 years he ruled.															
68. Ashur-nirari (II) son of Enlil-nasir (I)	7 years he ruled.															

Translation from J. I. Gelb, *Journal of Near Eastern Studies*, vol. 13, (1954), p. 226.
Discrepancies (relevant at no. 61): see J. A. Brinkman, *Orientalia*, vol. 42, (1973), p. 311 .

Figure 13-5: Detail of the chronological impasse in the Assyrian King List.

The total of the reigns for king nos. 57-71 is $143 + x$, as published in Jean-Jacques Glassner's *Mesopotamian Chronicles* (2004, pp. 139-141), or $153 + x$, as published in I. J. Gelb's "Two Assyrian King Lists" (*JNES*, vol. 13, 1954, pp. 225-7). The difference arises from the tablets being translated. There are actually three nearly complete copies of the Assyrian King List. Though copies of the same original, they don't entirely agree. The only discrepancy that affects the total for nos. 57-71 is at no. 61. Glassner's tablet says 14 years, one of Gelb's two tablets says 24 years, and the other is broken. Of the two readable tablets, only one can be correct, and $153 + x$ shatters the 'bottleneck' pairing of Melumkurra with Sharma-Adad II, as required by the Synchronistic Chronicle. Therefore $143 + x$ is all that remains. Starting from the *assumption* that Ashur-dugal's reign began in 1644 BC, the total for nos. 57-71 that spans the chronological gap is 143 years, and if the reigns of nos. 61, 65 and 66 are each set to the lowest possible value (14, 0 and 0), the Assyrian list is extended and *confirmed* up to 1644 BC.

As for the two years assigned to king nos. 42-47. It would be a break of convention to not designate two years in some way, thus the two years may belong elsewhere, but anywhere else would also be a guess. Nevertheless, until there is a reason and a method to check more

precisely, two chronologies for all practical purposes are solved. The Synchronistic Chronicle seamlessly bridges the Babylonian Middle Chronology to the Assyrian Low Chronology. Specifically, the Babylonian Middle Chronology is certain; alternative Venus tablet dates are more than 50 years wide of the mark.

III. Mesopotamia in the Days of Noah

I've presented the above numerical argument for historians to ponder, and as a means to check my initial presumption that the Middle Chronology must be correct. That presumption was not based on the numbers on three different copies of the Assyrian King List. I hadn't even seen them. It was based upon the coupling of a flood myth with the very real Hebrew patriarch Noah. Given the choices 1702 BC, 1646 BC or 1582 BC, Ammi-saduqa's reign must start in 1646 BC or else Noah, a contemporary of Ammi-saduqa, is pulled away from what was certainly a Deluge of unprecedented magnitude in 1647 BC.

Setting the numerical arguments aside, records of the myth itself provide evidence that 1647 BC marks the year of a Deluge. To review: the 'ring 854 anomaly' is not a direct record of a flood. It is a record of what must have been excessive rain in Anatolia that lasted seven years. Tree rings were of a size that would normally be a once in a century outlier, but it was *every year*, for seven years. Downstream in Mesopotamia, crops were probably destroyed by floods repeatedly in the interval 1649-1643 BC. In 1647 BC, tree rings hit the 9,000-year maximum. Literally nothing has come close in the history of civilization. It is not unreasonable to presume that a catastrophe of epic magnitude occurred in that year.

There are known Babylonian parallels to the Biblical flood story. The names of the central characters are different and the details vary, but I was most interested in the date. When were these stories written? The quote below, from 1910, reveals both the history of Babylonian flood epics, and a now discarded higher chronology for the reign of Ammi-saduqa. The lights came on when I read that name. Ammi-saduqa of Babylon is notable for two tablets recorded during his reign: the Venus tablet that anchors the Babylonian chronology, *and* the earliest known copy of a well-known Babylonian flood myth.

The Babylonian story of the Deluge as recorded by the Babylonian priest Berossus was known to Eusebius, the church historian, whose narrative of the Flood has been preserved for us by the Greek writers, Alexander Polyhistor and Abydenus. According to this story, the god Chronos revealed to Xisuthros in a dream that he was about to destroy all life by a deluge and directed Xisuthros to save himself, his family, and relatives by building a ship... This story remained without any corroboration till December 3, 1872, when George Smith read before the Society of Biblical Archaeology in London a translation of some Assyrian tablets found in the Library of Ashurbanipal in the palace at Nineveh which contained the story of the Flood... These tablets, dating from about 660. B.C., were known to be copies of older ones. Some old Babylonian fragments of the same story, now in the private collection of J. Pierpont Morgan, which add no new information of any value, do demonstrate the story as far back as the eleventh year of King Ammisaduga of Babylon, i.e. about 1973 B.C...

William R. Harper, *et al.*, *The Biblical World*, vol. 35, (1910), p. 282.

Though fragments of a tablet with the flood story can be traced to Ammi-saduqa, during his reign the story of all but one man's family surviving the flood could not have been presented as anything but a myth, as obviously the kingdom of Babylon survived. The coincidence with the 1647 BC tree ring anomaly can be explained as follows: there was a catastrophic flood in 1647 BC, Ammi-saduqa's father as well as kings in neighboring Assyria fell from power during the resultant political turmoil. This recent flood prompted interest in an old Mesopotamian flood myth, and therefore new copies of an ancient flood myth came into circulation during Ammi-saduqa's reign. One of those copies ended up in J. P. Morgan's private collection, another ended up in chapters 6-9 of the Book of Genesis.

Evidence that the flood led to political turnover in Assyria has already been presented, but there is also evidence of trouble in the Sealand. The growth anomaly begins in 1649 BC, which means that the first harvest to be washed away by floods would have been in the 35th year of Ammi-ditana's 37 year reign (1683-1647 BC). In both his 35th and 36th years, Ammi-ditana was at war with Damqilishu, the 3rd king of the now independent Sealand to the south. The war front went back and forth, and it seemed that the Babylonian Ammi-ditana had the upper hand as of the 36th year. Then he died his 37th year (the year of the Deluge, 1647 BC).

The political course of things in the last period of *Ammi-ditana's* reign seems to have been this: in his 34th year *Ammi-ditana* advanced towards the South and built a fortress on the canal of *Me-Enlil*, which, judging from its name, was not very far from Nippur; in the 35th year apparently *Damqi-ilishu* drove *Ammi-ditana* back and erected his own fortress, but in the 36th year *Ammi-ditana* conquered this fortress, and again extended his dominion over the South.

Hermann V. Hilprecht, *The Babylonian Expedition of the University of Pennsylvania*, vol. 6, (1906), p. 121.

One cannot presume that war was caused by poor weather. The Sealand and Babylon had been at war before, and the fortress built in the 34th year would have been in 1650 BC, the year before the first wide tree-ring. But the coincidence of the war extending into the 35th and 36th year, followed by Ammi-ditani's death in the 37th year, is supportive of crisis related to the onset of the weather anomaly. Damqilishu remained in power through the flood. He reigned from the 25th year of Ammi-ditani (1659 BC) into the later half of Ammi-saduqa's 5th year (winter of 1642/41 BC). This is interesting because Noah's grandfather Methuselah and father Lamech were the 1st and 2nd kings of the Sealand Dynasty; Damqilishu was the 3rd. Noah was in line for the throne, but Noah can't be Damqilishu because Noah lived much longer after the flood than Damqilishu.

**After the flood Noah lived 350 years. Altogether Noah lived 950 years, and then he died.
Genesis 9:28-29**

Both of the above records are in lunar months. After the flood Noah lived $350 \times (29.5/365) = 28\frac{1}{4}$ years. Altogether he lived $950 \times (29.5/365) = 76\frac{3}{4}$ years. Noah was middle aged at the time of the flood and he lived an additional 28 years. Damqilishu was king during the flood, age unknown, and he died just 5 years later. Damqilishu and Noah are two different people. Noah did not succeed his father as king. This break from the line of succession begs for an explanation, but unfortunately, reliable records concerning Noah are almost nonexistent.

The most likely scenario arises from the fact that the Sealand was a confederacy, united against Babylonian oppression, but not without internal rivalries. The city of Isin, located roughly halfway between Larsa and Babylon, was a provincial capitol with a king of its own when Rim-Sin I (Adam's son Cain) was king of neighboring Larsa. Amid the shifting alliances of kings seeking power, Rim-Sin I had conquered and plundered Isin, before Rim-Sin himself was defeated and executed by Hammurabi. Rim-Sin's conquest of Isin is celebrated in the date-lines recorded on several legal documents that survive from his reign. From these datelines we learn that the defeated king of Isin was also named Damqilishu (Damki-ilishu).

[excerpts from date-lines of Rim-Sin]

Year of the Capture of Isin

The year in which, with the sublime power of Anu, Enlil and Enki, the shepherd Rim-Sin took the city of Damki-ilishu, the population and the possessions of Isin.

The year in which Rim-Sin, the king, took the city of Damik-ilishu.

Years After the Capture of Isin

Year following that in which by the great weapon of Anu and Bel Rim-Sin the faithful shepherd seized Isin the city of royalty and the population as many as there were.

The thirteenth year after that in which Rim-Sin, the good shepherd, had taken Isin.

Edward Chiera, *Legal and administrative documents from Nippur*,
(1914), vol. 8, nos. 1-2, pp. 74-77.

Rim-Sin I has been identified as Cain, in the 2nd generation of Hebrews from Adam. Noah was in the 6th generation (figure 13-1), and Abraham was in the 16th generation. The Bible's portrayal of Abraham as a shepherd can surely be traced to Rim-Sin, who used the word *figuratively* to describe himself as king. Abraham certainly didn't sink to the lowly rank of a shepherd of sheep; he too was a shepherd of *people*. Rim-Sin's defeat of king Damiqilishu of Isin and probable oppression of that city's population surely fostered resentment that lingered generations later, making it unlikely that a Hebrew descendent of Cain would later choose the name Damiqilishu. Thus it is likely that Noah's father Lamech was killed by a descendant of the earlier king Damiqilishu of Isin, and that explains why the 3rd king of the Sealand is named Damiqilishu, and chronologically is not a match to Noah. The Sealand confederacy remained intact, but the kingship had been seized by a different royal family. Noah would not inherit the throne. He would have to *win it back*.

Further Hebrew history during this critical time period can be traced by via an important account that begins with the birth of Enosh (with an 's'), a grandson of Seth, the third son of Adam. Once again, counting generations is an approximate but uncomplicated method to keep track of time. Seth was a brother of Cain (Rim-Sin I), but Seth was born after Cain had killed Abel; therefore Seth was young enough to be similar in age to Enoch (Rim-Sin II). Seth's son Enosh would then be similar in age to Enoch's son Methuseleh (Iluma-ilu). That gives a rough estimate of where Enosh fits within Babylonian history.

And Seth lived one hundred and five years, and he begat a son; and Seth called the name of his son Enosh, saying, Because in that time the sons of men began to multiply, and to afflict their souls and hearts by transgressing and rebelling against God.

Book of Jasher 2:2

Enosh was born when Seth was $105 \div 2 = 52\frac{1}{2}$ years old, which could push him yet another generation forward, similar in age to Noah's father Lamech. Still he is not on the same generation with Noah. This makes it very unlikely that the following description of a flood is the Deluge of 1647 BC. Rather, it is a record of an earlier flood of the Gihon River, which is in the Sealand, but is not the Euphrates River that runs past Ur.

And it was in the days of Enosh that the sons of men continued to rebel and transgress against God, to increase the anger of the Lord against the sons of men... And the Lord caused the waters of the river Gihon to overwhelm them, and he destroyed and consumed them, and he destroyed the third part of the earth...

Book of Jasher 2:3-6

The Euphrates River is called the Euphrates elsewhere in the Book of Jasher (e.g. Jasher 13:18, 22:27). The Tigris River was not far away, but the mention that the flood destroyed "*the third part of the earth*" suggests a third river, and there is one, a crossover canal now called the Shatt al-Hayy, which diverts water out of the Tigris and connects to the Euphrates a few miles south of Ur. A flood from this canal would directly impact the Sealand, but the canal would not flood independently of the Tigris. Why was only a third part of the earth destroyed, rather than two-thirds or all?

The answer is found in the fact that flood of the River Gihon was followed by crop failures. The resultant famine was blamed on a sin committed earlier by Adam. When compared with the

Sargon Chronicle, this puzzling combination: the flood of a canal that should not flood on its own, followed by famine, makes perfect political sense. The flood and ensuing famine were both man-made, by controlling the flow of water into the canal. Water was being used as a weapon of war.

Samsu-iluna's son and successor Abi-eshu' again made an energetic effort to get rid of the rival in the South. We learn from the chronicle that he planned the damming up of the Tigris. He indeed achieved the latter work, but he did not capture Ilima-ilum. The statement concerning the damming up of the Tigris is born out by the date: "year in which Abi-eshu', the king, after in the great power of Marduk, he had dammed up the Tigris, — — —." The Tigris, or more correctly that part of the Tigris in question, is undoubtedly the Shatt-el-Hai, the influx of which at Kut-el-Amara Abi-eshu' seems to have diverted. Thus depriving the land on the banks of the river of the life-giving power, the water.

Hermann V. Hilprecht, *The Babylonian Expedition of the University of Pennsylvania*, vol. 6, (1906), p. 120.

I would interpret the flood of the River Gihon as a deliberate military strategy to flush Iluma-ilu out of his military stronghold, by damming the Tigris itself, and diverting an overflow of water into the canal. That didn't work. Iluma-ilu remained in power, but it proves that Babylon's king controlled the inlet to the canal. So, having gained control of the water supply to the heart of enemy territory, the next strategy is to permanently cut-off the canal, diverting all water the other way. This would starve the enemy through man-made famine. That is what came next in the Book of Jasher's account, after the flood of the River Gihon.

And in those days there was neither sowing nor reaping in the earth; and there was no food for the sons of men and the famine was very great in those days. And the seed which they sowed in those days in the ground became thorns, thistles and briers; for from the days of Adam was this declaration concerning the earth, of the curse of God, which he cursed the earth, on account of the sin which Adam sinned before the Lord.

Book of Jasher 2:7-8

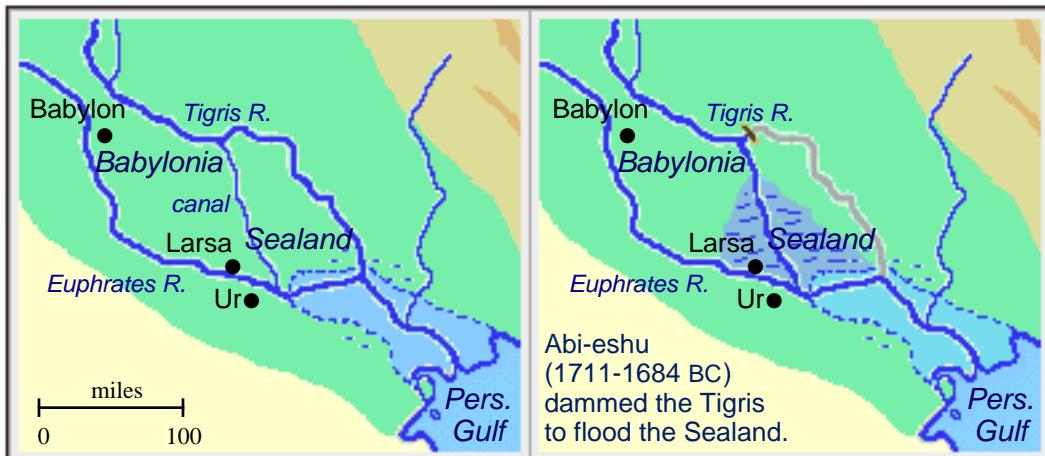


Figure 13-6: The flood of the River Gihon was a deliberate act of war by Abi-eshu.

The famine would continue so long as Abi-eshu could hold his ground at the diversion point of the Tigris. This would immediately become a high priority military target for the Sealand, and therefore it is not surprising that Abi-eshu built a fort called the "*the great gate of the Tigris*."

No claims of victories are made in the date formulas of Abi-eshu'... Once he attempted to catch Iluma ilu, and "his heart moved him to dam the Tigris. So he dammed the Tigris, but he caught not Iluma-ilu." Thereupon he erected a fort, named for himself, at the "great gate of the Tigris" ...

Albert Olmstead, *The Babylonian Empire*, (1919), p. 97.

So long as this fortress held, there would be “*neither sowing nor reaping in the earth*” in the Sealand. They didn’t even bother to plant seed, because they knew that without a military victory, the crops could not be watered. The famine is blamed on a sin by Adam, because it is the result of the war with Babylon. That war began when Adam rebelled against Hammurabi.

The exact date of the flood is not recorded in either the Book of Jasher or the Sargon Chronicle, but just following the Book of Jasher, the flood of the River Gihon was during the adult life of Enosh. If, as estimated above, Enosh was similar in age to Noah’s father Lamech, it is plausible that Noah’s grandfather Methuselah was still alive and king during the famine, and Noah was either a child or soon to be born. That Methuselah was still alive is confirmed, because Methuselah has been identified as Sealand king Iluma-ilu, who in the Sargon chronicle is the enemy Abi-eshu had sought to capture by damming the Tigris. The records match.

Noah is a good fit as well, in the Book of Jubilees, Noah was born during a time when the ground was ‘cursed,’ which would plausibly be during the same man-made famine.

Lamech took himself a wife, and her name was Betenos... and she bare him a son and he called his name Noah, saying “This one will comfort me for my trouble, and for all my work, and for the ground which the Lord has cursed.”

Book of Jubilees 4:28

The flood of the River Gihon is a confirmation that Methuselah, Lamech and Noah have been properly located in time. It is not just numbers on Babylonian King List A that match to lifetimes of Hebrew patriarchs, the *history* is a match; the *geography* is a match. Adam’s grandson Enosh had a son named Cainan (Kenan of the figure 13-1). In the passage below, Cainan is said to have “reigned over all the sons of men” but he is not specifically called a king. Since Enosh was similar in age to Lamech, his son Cainan would be similar in age to Noah. Thus Cainan likely took on a leadership role while Damiqilishu, presumably of Isin, was king of the Sealand.

And Enosh lived ninety years and he begat Cainan; And Cainan grew up and he was forty years old, and he became wise and had knowledge and skill in all wisdom, and he reigned over all the sons of men... And Cainan reigned over the whole earth...

Book of Jasher 2:10-11, 14

Cainan’s reported age when he began to reign is suspiciously young. But as long as he wasn’t very old, he had to have ruled during the lifetime of Noah. The historical flood in 1647 BC would have occurred while both Cainan and Noah were alive. Nothing about Cainan and the flood appears in the Old Testament, while in the Book of Jasher there is a brief mention. Cainan is said to have written about the forthcoming flood on tablets of stone, which he then put in his treasures.

And Cainan knew by his wisdom that God would destroy the sons of men for having sinned upon earth, and that the Lord would in the latter days bring upon them the waters of the flood. And in those days Cainan wrote upon tablets of stone, what was to take place in time to come, and he put them in his treasures.

Book of Jasher 2:12-13

The word treasures implies that Cainan had some sort of palace, presumably in Larsa or Ur. Damiqilishu, presumably upriver in Isin, died in the 5th year of Ammi-saduqa. The next king of the Sealand was Ishkibal. Other than a name on Babylonian king lists, the archaeological record is silent at this point. Ishkibal could have been a king in Isin or Larsa or elsewhere. War between the Sealand and Babylon flared up again in the 9th year of Ammi-saduqa. This intermittent war was now in the fifth generation since Hammurabi. Though the Sealand king who fought Ammi-saduqa is not recorded, alignment of the Babylonian and Sealand Chronologies (figure 13-3) requires that Ishkibal’s reign extended into Ammi-saduqa’s 13th year. Ishkibal is perhaps not remembered because he was not a successful king. The quote below only tells one side of the

story. In his 9th year Ammi-saduqa boasted of defeating a nameless opponent, and in his 10th year he built a fortress on the Persian Gulf at the mouth of the Euphrates River. This means that by the 10th year of Babylonian king Ammi-saduqa, king Ishkibal of the Sealand had lost control of the entire length of the Euphrates. The Sealand kingdom, if it existed at all, was reduced to fraction of its former territory.

Ammi-zaduga received from his father, who died in the year after his success over *Damq-ilishu*, the dominion over Southern Babylonia. We see this clearly from the date of the first year, in which he refers to *Enlil* who makes great his dominion, and from the formula of the second year, in which he calls himself the humble shepherd of *Anum* and *Enlil*. But perhaps, in the later year he lost the southern part of his dominion. In his inscription the judge, *Gimil-Marduk*, calls *Ammi-zaduga* simply king of Babylon, a sure sign that he did not rule over Shumer. In his 9th year, however, *Ammi-zaduga* broke, as he asserts, the oppression of his land and in the 10th year he built a fortress at the mouth of the Euphrates, which proves that in this year his power extended as far south as the Persian Gulf.

Hermann V. Hilprecht, *The Babylonian Expedition of the University of Pennsylvania*, vol. 6, (1906), p. 122.

Ammi-saduqa's ability to build a fortress on the Persian Gulf in his 10th year indicates that he had conquered Sealand territory to the sea itself. The mouth of the Euphrates was downriver from Larsa and Ur (figure 13-6), which makes it likely that he had seized both cities and was building a fort to cut off a counterattack from the sea. I stumbled upon this report while trying to determine which Sealand king was Noah. Did Noah just lose the war? What kind of hero is that? A check of the numbers confirmed he had not. Noah outlived Ammi-saduqa, so he wasn't king Ishkibal, who lost Larsa and Ur. But the Sealand had been conquered again during Noah's lifetime, and a new hero has to rise up. That could explain how Noah became famous. The above quote continues...

From the formulas of the following years we do not receive the impression that *Ammi-zaduga* maintained this powerful position.

Hermann V. Hilprecht, *ibid.* p. 122.

For the moment, the Sealand is oppressed, and Ammi-saduqa has gained the upper hand. But the Sealand will rise again. Now consider this small window of opportunity. The real flood was in 1647 BC, prior to Ammi-saduqa's 1st year in 1646 BC, but the tablet containing a Babylonian flood myth (without Noah) wasn't written until his 11th year, "*fragments of the same story, now in the private collection of J. Pierpont Morgan.. demonstrate the story as far back as the eleventh year of King Ammisaduga*" (*The Biblical World*, vol. 35, 1910, p. 282). The earliest Babylonian tablet recording a flood myth was written just months after Ammi-saduqa had conquered the Sealand and built a fort on the sea itself. And with that chronological match another light bulb came on. What happened to the palace treasury where Cainan had left a record in stone of the upcoming flood?

It is possible that Ammi-saduqa's flood tablet wasn't a Babylonian flood myth at all – it was the *Hebrew flood myth!* By conquering the Sealand to the mouth of the Euphrates, Cainan's palace treasury, wherever it was, was free to be emptied and hauled to Babylon. Ammi-saduqa's scribe could unpack the boxes of Hebrew books and copy whatever he found interesting. Noah would not be recorded in Ammi-saduqa's version of the flood myth because the Hebrews hadn't yet rewritten their own myth to include Noah. A Babylonian scribe had copied the original version of the Hebrew myth, after the *real flood* revived interest in the myth, but before the *real Noah* was famous.

This is perhaps a glimpse of the Old Testament in its formative years. There was a flood myth in Hebrew folklore, and then a real flood. Then Noah became king and threw off the most recent oppression by Babylonia. Then Noah became mythical and was written into the flood myth, and then the whole story was written into what became the Book of Genesis. This is both

what I was searching for, and more than I had expected to find. It is as if I've gone back in time to the days of Adam, and as I walk forward through Mesopotamian history, I can see the story of the Bible coming together.

IV. The Historical Noah

The final question for this chapter is the identity of Noah. He is not reported to have been a king, but his father Lamech was a king, his grandfather Methuselah founded the Sealand Dynasty. It is hard to imagine that Noah could be enshrined in a Hebrew flood myth if he was anything less than a king of that dynasty. The quick test is to check for a Sealand king who died when Noah died. And the quick way to calculate when Noah died is to count forward from the flood in 1647 BC. “*After the flood Noah lived 350 years*” (Genesis 9:28). Thus $350 \times (29.5/365) = 28\frac{1}{4}$ years after the flood in 1647 BC. This puts the death of Noah in $1647 - 28 = 1619$ BC. Counting from the spring, Noah would have died in the summer of 1619 BC, and the reign of his successor would begin in the second half of that year. By the Sealand Chronology presented in figure 13-4, the dates of death of the next four kings after Lamech are as follows:

years	reign			
18	1659– 1642	Damiqilishu	died winter of 1642/41	(probably not a Hebrew)
7½	1641– 1634/	Ishkibal	died summer of 1634	?
13½	/1634– 1621	Shushi	died winter of 1621/20	?
27½	1620– 1593/	Gulkishar	died summer of 1593	?

Ishkibal is the next unidentified king, but his death is not even close to the summer of 1619 BC. The only plausible match to Noah is Shushi, who was the Sealand king when Ammisaduqa died in 1626 BC. This makes it possible that Noah was Shushi, but the match is inexact, a miss by 3 half-years. The Sealand chronology is anchored to a Venus observation that is exact to the year, thus the match of Shushi to Noah shouldn't misalign by 3 half-years. What's wrong?

There are clues that the problem is due to rounding off in Hebrew records: accurate records should not look like rounded off numbers. The Old Testament gives Noah's age as exactly 600 lunar months when the flood began.

Noah was six hundred years old when the flood waters came upon the earth.

Genesis 7:6

The Book of Jasher gives Noah's age at the time of the flood as *in his* 600th month, which is technically a month earlier than *age* 600 months, in the Book of Genesis.

in the six hundredth year of the life of Noah, the waters of the flood were upon the earth.

Jasher 6:13

Though the Book of Jasher is in exact agreement with *in* the 600th month, when the Book of Genesis repeats Noah's age, but he's now younger!

In the six hundredth year of Noah's life... the floodgates of the heavens were opened.

Genesis 7:11

The subtle contradiction could easily be an error in translation, but fact that the Book of Genesis gives Noah's age twice, the first occurrence subtly different than the second, is evidence that two versions of the flood story were merged into one. That is part of the Bible's *later* history, but is not of a concern in identifying Noah. A one-month discrepancy is inconsequential, except to make one wonder if the round number 600 is taken from the myth, and not the actual life of Noah, whose age at death is reported as 950 lunar months (Genesis 9:29). In that case, should 350 be trusted, or was it falsely determined by subtraction: $950 - 600$ (*from myth*) = 350?

When in doubt, step back and try a different approach. A more reliable but also more complicated approach to the problem is to notice that Shushi was the third king to reign after the

death of Noah's father Lamech, thus if Noah was Shushi, he would have outlived his father by: 18 (Damiqilishu) + $7\frac{1}{2}$ (Ishkibal) + $13\frac{1}{2}$ (Shushi) = 39 years. Then, proof that Noah was Shushi parallels the earlier proof that Lamech was Sealand king Itti-ili-nibi (figure 13-2). Exact calendar dates need not be relied upon at all, just determine by subtraction how long Noah remained alive after Lamech had died. If Noah lived for another 39 years after Lamech had died, that's a match to the death of Shushi.

Noah's lifetime is $950 \times (29.5/365) = 76\frac{3}{4}$ years. This age is reported in Genesis 9:29 and confirmed in the Book of Jubilees, where it is recorded in duplicate. In the Jubilee number system, 19 jubilees + 2 weeks + 5 translates to $(19 \times 49) + (2 \times 7) + 5 = 950$.

And Noah slept with his fathers...Nine hundred and fifty years he completed in hid life, nineteen jubilees and two weeks and five years.

Book of Jubilees 10:16-17

Lamech's lifetime is given in Jasher 5:20 as $770 \times (29.5/365) = 62\frac{1}{4}$ years old. This age was already used in the proof that Lamech was an exact match to the $27\frac{1}{2}$ year reign of Itti-ili-nibi, and thus can be considered reliable. Just one more number is needed to complete the test: a link between the two lifetimes, Lamech's age when Noah was born. This time, there is trouble:

When Lamech had lived 182 years, he had a son. He named him Noah, and said, "He will comfort us in the labor and painful toil of our hands caused by the ground the Lord has cursed."

Genesis 5:28-29

In the above passage "*the ground the Lord has cursed*" is the same reference to famine found in the Book of Jubilees 4:28, and attributed to Abi-eshu's control of the Sealand water supply. However, Lamech could not have had a son at age 182 half-years (91 years old); that's unreasonably old in general, and Lamech in particular, was already dead. Nor could Lamech reasonably have fathered Noah at age 182 lunar months (14 years old). Lamech's age is so wrong that there is no doubt it is wrong. Which at least spares the trouble of following a false lead. In this case, the wrong answer appears to have been copied from a similar record in the Book of Jasher, which also gives Lamech's age as more than 180 at the time of Noah's birth, and similarly makes reference to crop failures.

And Lamech was one hundred and eighty years old when he took Ashmua, the daughter of Elishaa the son of Enoch his uncle, and she conceived. And at that time the sons of men sowed the ground, and a little food was produced, yet the sons of men did not turn from their evil ways, and they trespassed and rebelled against God. And the wife of Lamech conceived and bare him a son at that time, at the revolution of the year. And Methuselah called his name Noah... and Lamech his father called his name Menachem, saying, This one shall comfort us in our works and miserable toil in the earth, which God had cursed.

Book of Jasher 4:11-14

This record does not say that Lamech married Ashmuah. He took *Ashmuah* and she conceived, which apparently then made her his wife. Noah was born roughly six months later "*at the revolution of the year*," meaning the end of the half-year. If the age is recorded in lunar months, any number close to 180 is too low. If one had to guess a correction, 80 [half-years], instead of 180 [lunar months], is a plausible copying error, but there is a form of check-sum in the above record. Methuselah was still alive when Noah was born, and picked the name for his grandson. Lamech was born when Methuelah was $43\frac{1}{2}$ years old (figure 13-2). So if Lamech was $80 \div 2 = 40$ years old when Noah was born, Noah's grandfather Methusaleh would have been $43\frac{1}{2} + 40 = 83\frac{1}{2}$ when Noah was born. Methusaleh died at age $78\frac{1}{4}$ years old (figure 13-2). Thus he would have been *dead for 5 years*, when he chose a name for his grandson. Therefore 80 instead of 180 is not the answer either.

Lamech's age when Noah was born is simply wrong beyond repair. Another source is needed. There are books from later authors that have ages recorded, but if the Book of Jasher has the error, and it is identical in the Book of Genesis, that's a deeply rooted error. As one goes forward in time, the correct age is not going to appear in later Jewish or Christian sources. If they are different, they are likely just wrong in a different way. Only an earlier source will be free of error.

The Book of Jubilees also contains the record that Noah died at age 950 lunar months, and that he was born when the ground was cursed. The Book of Jubilees is not a paragraph-by-paragraph parallel to the Book of Jasher and Old Testament, which appear to be early and later drafts of the same script. The format of the Book of Jubilees is very different, in part, it was written to make a point that the Exodus reached Canaan at the end of the 50th jubilee, counted from the creation of Adam. However, the author was unaware that the source material was sometimes recorded in lunar months, sometimes in half-years, so exactly 50 boxes is not as meaningful as the author thought. It is also likely that the author took liberties before Noah to make the total come out right.

Nevertheless, counted back from the flight of Moses to Midian, the date of the flood on the Jubilees calendar is 1643 BC, just four years later than tree-ring evidence of a probable flood in 1647 BC (5:I, figure 5-2). Moses is the 5th generation prior to king David; Noah is the 22nd generation. Thus it is 17 steps from Moses back to Noah, and 17 numbers must be exactly recorded to count back from Moses to Noah. A discrepancy of just four years over those 17 generations is a minor error, like someone might make with a checkbook tally. That may be all that's wrong with the Jubilees calendar, a very minor error in the total of a column of numbers. Other than that, the Jubilees calendar appears to be compiled from accurate records of the genealogy of Moses. It may have been written soon after the Exodus, where its narrative cuts off, and then made its way via Arabia to Ethiopia, where a reverence for Moses and his ancestors had continued since the days when Moses ruled in Cush.

Lamech's age when Noah was born is not given explicitly in the Book of Jubilees. It must be found by comparing two calendar dates. Below is the Jubilees calendar date of the birth of Lamech.

And in the fourteenth jubilee Methuselah took unto himself a wife, Edna the daughter of Azrial, the daughter of his father's brother, in the third week, in the first year of this week, and he begat a son and called his name Lamech.

Book of Jubilees 4:27

As previously explained (chap. 5:I), in the above record: the “*fourteenth jubilee*” is ‘box 14’; the “*third week*” is ‘row 3’; the ‘*first year*’ is a ‘unit’ of time, which is actually a half-year. Each box contains 7 rows of 7 units each. Methuselah took a wife in box 14, row 3, unit 1. It is not clear how much time passed before Lamech was born. The absence of a later date (and the eagerness of a young husband) implies that the child was also born in box 14, row 3. Next, compare this calendar date for Lamech's birth with the calendar date for the birth of Lamech's son Noah.

And in the fifteenth jubilee in the third week Lamech took to himself a wife, and her name was Betenos the daughter of Baraki'il, the daughter of his father's brother, and in this week she bare him a son and he called his name Noah...

Book of Jubilees 4:28

The jubilee has increased by 1, that's one box of 7 x 7 half-years. Not much else has changed. Similarly, there is ambiguity in the record of Noah's birth. Lamech took a wife in box 15, row 3, and had a child within the same row. The Book of Jasher reports that Noah was born at the “*revolution of the year*.” That would be unit 2 or later within row 3; nearly the whole row is still open. At best we can say, Noah was born approximately one box later than Lamech. The time elapsed was row 3 of one box to row 3 of the next box. If it was from the middle of row 3,

to the middle of the next row 3, it was exactly 49 half-years. If it was from the early in one row 3 to late in the next row 3, two points within the same row are not more than 6 half-years apart. Thus Noah was born when Lamech was age $49 \div 2 = 24\frac{1}{2}$ years old with an uncertainty of ± 3 years. Finally, we have a number that is not obviously wrong for Lamech's age when Noah was born, and can proceed with the test.

Lamech's age when Noah was born: (Jubilees 4:27-28), 49 half-years = $24\frac{1}{2} \pm 3$ years

Lamech's age at death: (Jasher 5:20), 770 lunar months = $62\frac{1}{4}$ years

Noah's age at death: (Genesis 9:29), 950 lunar months = $76\frac{3}{4}$ years

The question was, is Noah the Sealand king Shushi? The test involves determining how long Noah survived his father Lamech. That part of the problem can now be answered. Figure 13-7 shows how the three numbers above are reduced to one. The first step is to subtract Lamech's age when Noah was born from Lamech's age at death: $62\frac{1}{4} - 24\frac{1}{2} = 37\frac{3}{4}$ years. Thus Noah was $37\frac{3}{4}$ years old when Lamech died, with an uncertainty of ± 3 years. Then subtract Noah's age when Lamech died, from Noah's age at death: $76\frac{3}{4} - 37\frac{3}{4} = 39$ years. Noah survived his father by 39 years, again with an uncertainty of ± 3 years. That's the last piece of the larger puzzle. Does it fit? Do you remember the test?

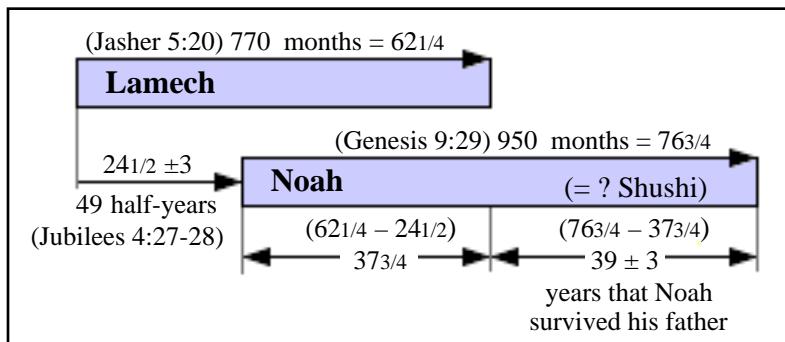


Figure 13-7: Years that Noah survived his father.

Next consider figure 13-8, this is the big picture that begins with the Book of Jasher's record that both Enoch and Methuselah were admittedly kings (Jasher 3:10 and 4:2, respectively). I didn't show it first because it was best explained in smaller pieces. The Book of Jasher does not claim that Lamech and Noah were also kings, but it would be remarkable, especially in the case of Noah, if such a heroic figure, descended from royalty, were anything less. The full proof of this hypothesis required six numbers, labeled A through F on the diagram. Three are from the Book of Genesis; two from the Book of Jasher; and one from the Book of Jubilees. The starting point is the identification of Enoch as king Rim-Sin II of Larsa, who was defeated in 1741 BC by the Babylonian king Samsu-iluna. From that point, A, B and C take one step-by-step to the birth of Enoch's son Methuselah, then to the birth of Methuselah's son Lamech, then to the birth of Lamech's son Noah. From those respective points, D, E and F measure to the death of Methuselah, in the fall of 1687, and to the death of Lamech, $27\frac{1}{2}$ years later, and to the death of Noah, 39 years later.

In the lower left of the figure are the reigns recorded on Babylonian King List A for the first six kings of the Sealand. The $27\frac{1}{2}$ year interval from the death of the 1st Sealand king to the death of 2nd king matches the $27\frac{1}{2}$ year interval from the death of Methuselah to the death of Lamech. The 39 year interval from the death of the 2nd Sealand king to the death of 5th king, matches the 39 year interval from the death of Lamech to the death of Noah. Granted there was a ± 3 year uncertainty in that 39 year interval, but an uncertainty is not the same as a discrepancy. It could be true that Noah is Shushi, and as part of the larger picture, he certainly fits the role of the 5th king of the Sealand Dynasty. Thus Noah is yet another piece of the puzzle to snap into place.

This means that the Book of Jasher was telling the truth, albeit a limited version of the truth, about Enoch and Methusaleh being kings. Adam, Abel, Cain, Enoch, Methusaleh, Lamech and

Noah were all kings, and their exact identities are now known. Noah is the Sealand king Shushi, who came to the throne in the 13th year of Ammi-saduqa. Noah was 63 years old when he became king and he reigned until his death $13\frac{1}{2}$ years later. Two intervening kings had reigned since the death of his father Lamech. Damiqilishu was likely a king of Isin who deposed Lamech in an internal Sealand rivalry. Ishkibal is yet to be identified.

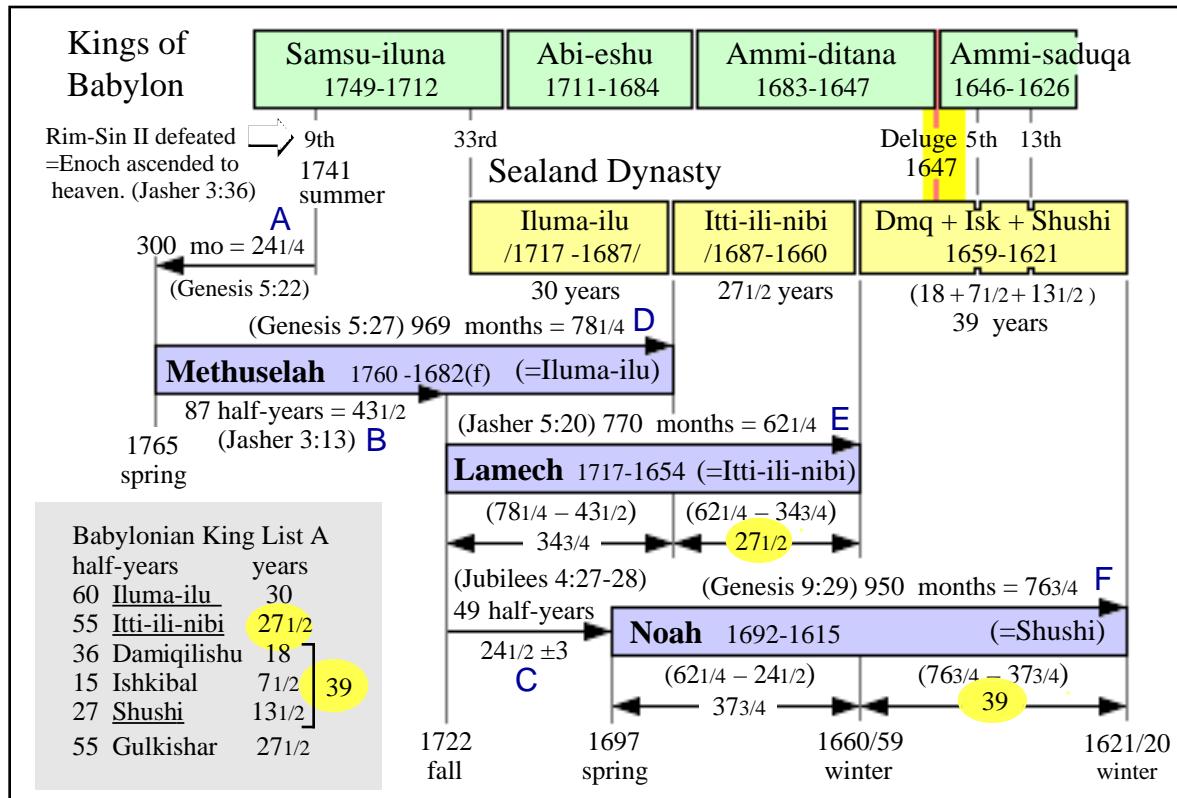


Figure 13-8: Noah died in the year that Shushi was succeeded by Gulkishar.

The flood in 1647 BC was during the reign of Damiqilishu, while Noah was alive, but was not king. In the year of the flood, Noah would have turned 50 years old. His age is consistent with the record in Genesis that Noah's three sons and their wives entered the ark, though no mention is made of any grandchildren until after the flood.

And Noah and his sons and his wife and his sons' wives entered the ark to escape the waters of the flood.

Genesis 7:7

Again, there is no ark; no pairs of animals walking toward Noah. The story of a worldwide flood is a myth. But I presume that the story of Noah and his family surviving a real flood has been woven into that myth. Thus the story of Noah and the ark that I learned as a child was just that, a story for children. The truth is much more complicated, but it is reality. Story time is over for me. Understanding reality is both more difficult, and more rewarding.

Before The Exodus

Chapter 14

The Historical Flood

I. Political Evidence of a Catastrophic Flood

The historical flood lies at the heart of my quest to uncover the true role of the Hebrews in Ancient Near East history. Rather than a supernatural event, Noah's flood appears to be a real natural disaster of great political significance. The proposed year of the flood, 1647 BC, was at first tentative, identified via tree ring records as the most probable date of a catastrophic flood that could match the lifetime of Noah (chap. 1:III). But connections have since come to light, placing three political changes of power in close proximity to 1647 BC.

- 1) The accession of Ammi-saduqa in Babylon,
- 2) The reign of six lesser kings within the reign of Ashur-dugal in Assyria,
- 3) The rise to power of the Hyksos Dynasty in Egypt.

Ammi-saduqa's reign is the most firmly established; the Venus tablet from his reign places his 1st regnal year in 1646 BC. Ashur-dugal's first year is 1645 BC ± 2, based on a bridge from the Venus tablet via the Sealand Chronology (chap. 13:II). The six kings who reigned during or possibly prior to his reign suggest a breakdown of central authority in Assyria during a time of crisis caused by the flood. The Hyksos have long been a mystery. They were Asiatic kings of Egypt. Their rise to power in c.1650 BC is again a political transition, suspiciously close to the likely date of a catastrophic flood. The flood didn't strike Egypt directly. If the Hyksos invaded at the same time as the flood, they were likely fleeing the disaster in Mesopotamia.

Around 1650 BC, the rule of northern Egypt passed from the Thirteenth Dynasty, the heirs of the house of Ammenemes, to the Hyksos, a group of princes of Palestinian origin. They exercised their control from the city of Avaris (Tell el-Daba) in the Eastern Nile delta, a place gradually settled by Levantines since the middle of the Twelfth Dynasty. Having apparently displaced the previous elite, they rapidly extended their dominion and ruled there with full pharaonic titles for something over a century.

Aidan Dodson, *Monarchs of the Nile*, (2000), p. 71.

Though Dodson calls the Hyksos "*princes of Palestinian origin*" this a vague term for immigrants from the east. Little is known about the Hyksos except that they rose to power at Avaris and ruled as foreign occupiers of Egypt during the Second Intermediate Period. Then they were defeated and driven out of Egypt by the founding pharaoh of the New Kingdom, Ahmose (c.1550-1525 BC). In Manetho's account, the Hyksos are identified as the founders of the city of Jerusalem, suggesting a link to the Hebrews. This was after the Hyksos had ruled in Egypt. The native land of the Hyksos prior to their arrival in Egypt is not recorded. The Hyksos are simply from "*the eastern parts*."

A portion of Manetho's Hyksos account was quoted in discussing the term 'Shepherd kings' in chapter 2:II. The point of that discussion was to clarify that Bar Hebraeus applied the term to four pharaohs: Sety I, Ramesses II, Merneptah and Sety II, all of the 19th Dynasty. Unlike Bar Hebraeus, Manetho uses the term 'Shepherd kings' in reference to six kings who clearly match the 15th Dynasty foreign rulers who subjugated Egypt beginning in c.1650 BC. His description of how the Hyksos came to power begins as follows:

[Manetho says] There was a king of ours whose name was Timaus. Under him it came to pass, I know not how, that God was averse to us, and there came, after a surprising manner, men of ignoble birth out of the eastern parts, and had boldness enough to make

an expedition into our country, and with ease subdued it by force, yet without our hazarding a battle with them. So when they had gotten those that governed us under their power, they afterwards burnt down our cities, and demolished the temples of the gods, and used all the inhabitants after a most barbarous manner; nay, some they slew, and led their children and their wives into slavery.

Josephus, *Against Apion I*, chap. 14, (74-76).

There is nothing in the above description to suggest that Egypt had been conquered by immigrants from as far away as Ur and Larsa, the Sealand Dynasty home of Noah's ancestors, but if the flood of 1647 BC had devastated the homeland of Noah and the future Hebrews, the timing makes sense. In that scenario, the Hyksos were Mesopotamian refugees from the flood, who invaded Egypt in a desperate bid to survive. This is difficult to prove except by chronological coincidence, but it does explain why Manetho would associate the future builders of Jerusalem with the Hyksos conquerors of Egypt.

II. The Cause of the Flood

The political transitions that appear to match the flood presume that there really was a flood. If the flood was real, and natural, it should have a natural cause. The cause of a catastrophic flood has to be catastrophic in itself. The mid-17th century BC date of the flood suggests an answer: a massive volcanic eruption. Greenland ice cores record several strong eruption signals in the 17th century BC. The GRIP ice core has five eruption signals in less than a century. Three of those eruptions, in 1672 BC, 1647 BC and 1605 BC, are also prominent in the NGRIP core, drilled farther north in Greenland

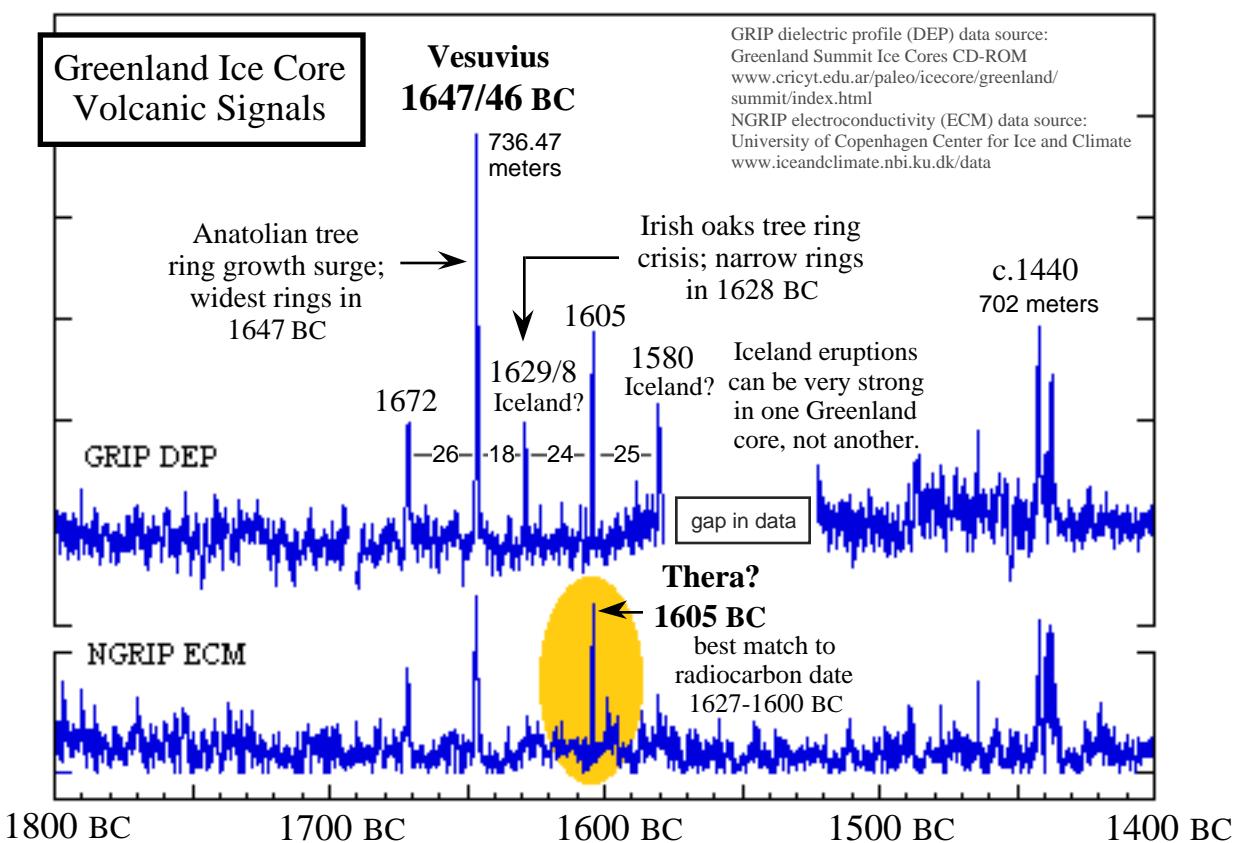


Figure 14-1: Major volcanic eruptions recorded in Greenland ice cores. Vesuvius and Thera are geographically most likely to cause a catastrophic Mesopotamian flood.

As discussed in chapter 5, ice core data is recorded vs. depth, and does not include the year count. The year count can be determined by visual inspection of the layers of frosty (winter) and clear (summer) ice, or by tracking the rise and fall of snowfall acidity, which also varies with the

seasons and is easily measured as rising and falling electrical conductivity. Ice core year counts have been revised, and the uncertainty reduced, as additional cores have been drilled and compared. The count used to assign dates to peaks on figure 14-1 is the Greenland Ice Core Chronology 2005 (GICC05). This calibration gave the date $1642 \text{ BC} \pm 5$ for the onset of the largest 17th century BC eruption signal. Acidity reached a maximum one year later. In the following quote, note that this signal (reference horizon) is attributed to the eruption of the volcano Thera, but Thera is followed by a question mark.

Table 4. GICC05 Dates and Depths for Selected Reference Horizons...

Thera (?): GRIP Depth, 736.47 m, Age 3640 b2k*, Maximum Counting Error, 5 years.

*GRIP tephra shows that the Thera eruption commenced in 3641 b2k (1642 B.C.). The ECM signal peaks in the annual layer 3640 b2k (1641 B.C.).

B. M. Vinther, et al., *Journal of Geophysical Research*, vol. 111, (2006), D13102.

Figure 14-2 is a detail of the GRIP ice core acidity record in the mid-17th century BC. If the ice core signal of $1642 \text{ BC} \pm 5$ aligns to the wide tree rings of the 1640's BC, the eruption is best assigned to the exact year 1647 BC. A lesser eruption, 18 years later, then corresponds to the narrow rings in Irish oaks commencing in 1628 BC (1:III, figure 1-5).

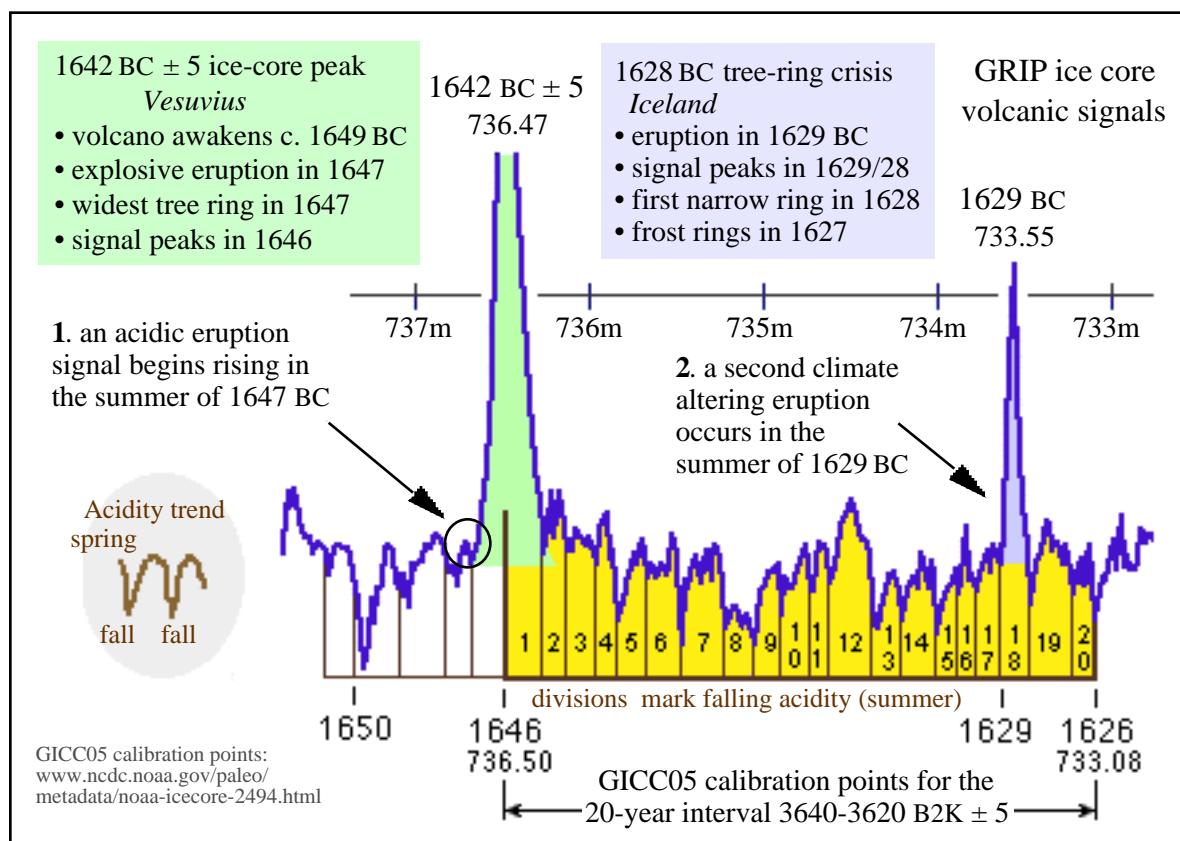


Figure 14-2: Detail of two GRIP ice core eruption signals in the mid-17th century BC.

The location of the volcanoes responsible for each eruption signal are not recorded in the ice, but a general area can be guessed. The 1629/8 BC eruption does not appear in the more northerly NGRIP core, and therefore was most likely in Iceland or possibly Alaska. A volcanic plume spreads wider as it travels, making volcanoes farther from Greenland more likely to appear in several or all Greenland cores. Furthermore the 1629/8 BC eruption must explain extremely narrow tree rings observed in Irish oaks (chapter 1:III). A volcano in the far north would most severely impact trees in Ireland, causing shorter and colder summers, resulting in narrow tree rings. The wide tree rings of 1647 BC are due to a very different effect on the weather, and are better explained by a more southerly eruption.

The eruption in 1647 BC is the right year for Noah's flood, and tree rings confirm exceptionally wet weather (1:III, figure 1-6). But was Noah's flood really caused by a volcano? Yes, according to Hebrew records, though they certainly did not understand what they had witnessed. In the Book of Jasher, a description of a distant and violent eruption is embedded within the story of Noah loading animals on the ark. An earlier myth and an accurate historical record appear to have been interwoven.

And on that day, the Lord caused the whole earth to shake, and the sun darkened, and the foundations of the world raged, and the whole earth was moved violently, and the lightning flashed, and the thunder roared, and all the fountains of the earth were broken up, such as was not known to the inhabitants before; and God did this mighty act, in order to terrify the sons of men, that there would be no more evil upon earth... and at the end of seven days, in the six hundredth year of the life of Noah, the waters of the flood were upon the earth.

Book of Jasher 6:11-13

Notice that there is no mention of rain in the above account. There are earth tremors; there is a thunderous roar; the sun is darkened, and then a seven-day delay before the waters of the flood were upon the earth. That delay is because the sun was darkened by clouds of ash, not rain clouds. It seldom rains in Mesopotamia during the summer months. The rains began farther to the north. It took seven days for the first torrents of rain in the mountains of Anatolia to come raging downstream toward the Persian Gulf. The Sealand was the in the way, and would suffer continuous flooding throughout the year 1647 BC.

Two volcanic eruptions in southern Europe are particularly well situated to explain flooding in Mesopotamia: Vesuvius, in Italy, or Thera, in the Aegean Sea. As explained in the quote below, Vesuvius and Thera are both known to have erupted explosively in approximately the 17th century BC, as did the Alaskan volcano Aniakchak, and an earlier eruption of Mount St. Helens. Any of these four eruptions are candidates for climate disturbances, and all have essentially indistinguishable radiocarbon (^{14}C) dates.

“Vesuvius/Avellino, one possible source of seventeenth century BC climatic disturbances”

The eruption of Vesuvius in AD 79 (as described by Pliny) is the archetype of explosive ‘plinian’ eruptions which can cause recurrent local destruction and which may affect global climate through aerosol emissions... Here we use materials from two plinian eruptions of Vesuvius, the AD 79 and the preceding Avellino event, to test the ^{14}C methods that often provide these ages. Our ^{14}C ages for charred samples and corrected soil reservoirs buried by the Avellino eruption averaged 3360 ± 40 BP (1617-1703 cal BC)... Furthermore, a re-evaluation of the ^{14}C data for the Mount St Helens Y and Aniakchak II eruptions suggests that these major plinian eruptions may also have occurred in the seventeenth century BC. The ^{14}C ages for these eruptions are identical, within uncertainties, to that of the ‘Minoan’ eruption of Thera (Santorini), which has often been correlated with mid-seventeenth century BC disturbances recorded in tree-ring and ice-core layers.

J. S. Vogel, W. Cornell, D. E. Nelson and J. R. Southon, *Nature*, 344, (1990), p. 534.

Of these four volcanoes, Thera is of greatest interest to historians, and therefore is the most extensively studied and debated. However, a great Mesopotamian flood in the 17th century BC could plausibly be explained by an eruption at the location of either Thera or Vesuvius. Abnormal weather in Mesopotamia is less likely explained by the more distant and more northerly Mount St. Helens and Aniakchak.

A mechanism for causing a flood must also exist. Volcanic eruptions alter the weather through the injection of ash and volcanic gases above the level of ordinary rain clouds. The most persistent of these pollutants, called aerosol in the above quote, lowers temperatures by blocking sunlight over a wide region of the upper atmosphere. Cooling the entire earth evenly doesn't favor rain in any one area, but if the cooling was concentrated at the latitude of southern Europe,

lower altitude crosswinds circulating moisture into the region would result in rain every time a moisture-laden cloud passed under the higher veil of volcanic aerosol. Furthermore, Anatolia, where the widest tree rings are observed, lies at the headwaters of the Mesopotamian watershed, thus flooding downstream in Assyria, Babylonia and the Sealand (bordering the Persian Gulf) would be expected. This provides an initially historical explanation for what would later become a mythical account of Noah's flood.

In figures 14-1 and 14-2 the largest eruption signal is labeled Vesuvius and dated 1647/46 BC (the signal is broader than one year). This is my conclusion, based on the two best eruption candidates, Vesuvius and Thera, and a 2006 report by a team of scientists led by Walter Friedrich, who found an olive branch entombed by the eruption of Thera (Santorini). Radiocarbon analysis of this ideal sample showed that the olive had died within the interval 1627–1600 BC. Thus Thera did not erupt in 1647 BC.

“Santorini Eruption Radiocarbon Dated to 1627–1600 B.C.”

We have found a branch from an olive tree that was buried alive in tephra on Santorini, with branches of the crown partly preserved in life position... we determined the calibrated age range of the outermost ring to 1621–1605 B.C. (1s, 68% confidence) or 1627–1600 B.C. (2s, 95% confidence). Even when we take into account an uncertainty of 50% in the ring count, potentially caused by growth irregularities of olive, these limits are increased by only a decade.

Walter L. Friedrich, et. al., *Science*, vol. 312, (2006), p. 548.

This olive branch radiocarbon date for Thera has been contested and widely debated, but the debate focuses primarily upon whether the olive was alive or dead at the time that it was buried in the ash of Thera. If the olive was alive and died due to Thera's eruption, and that eruption is clearly recorded in ice cores, then the best match is an eruption signal at 1605 BC in the GRIP and NGRIP cores (figure 14-1). It is also possible that Thera did not leave a strong eruption signal in Greenland ice cores, in which case Thera's eruption signal could be lost in the noise of seasonal acidity fluctuations. Thus it remains possible that Thera erupted years or even decades after the olive tree died, *but Thera did not erupt before the olive died* in 1627–1600 BC. This leaves Vesuvius, not Thera, as the eruption most likely responsible for the 1647 BC tree-ring anomaly.

The means of determining the date 1647 BC for the tree-ring anomaly was presented in chapter 1. To review, upon seeing a photo of the wide rings in an Anatolian juniper, I remembered another photo from tree-ring scientist Mike Baillie's book *Exodus to Arthur*, (1999, p. 55). Baillie's photo, when I found it, had the following caption: “*Cross section of a single bog oak from Sentry Hill, N. Ireland, showing a distinct band of seven narrow rings beginning in 1628 BC.*” I checked that photo against the Cornell photo to see if the 7 wide tree-rings in 17th century Anatolian junipers line up with any especially wide rings in a 17th century oak from Northern Ireland, and they do (1:III, figure 1-5). Radiocarbon had already narrowed the start date of the Anatolian ‘ring 854 anomaly’ to 1650 BC +4/-7. This was confirmed. Ring 854 was in exactly 1649 BC, and ring 856, the third and by far the widest ring, grew in 1647 BC. This gave the most probable year of the flood. From the Book of Jasher, one can conclude that the flood arrived just seven days after the distant and thunderous eruption of a volcano, which by process of elimination, must have been Vesuvius. One remaining question is, why did the wide tree rings start two years before the widest ring? That can be explained if the volcano awakened and began simmering two years before it exploded. Evidence that this is what happened is found in a Cornell University study of the wood from the wide rings in Anatolian junipers. A spike of the rare element hafnium appears in ring 854 (1649 BC). This could best be explained as volcanic in origin.

Hf spikes in ring 854, with concentrations partially above detection in the following rings, indicating a sudden influx of this element into the growth environment around the time that ring 854 was formed... Given the rareness of Hf, its mode of formation, and the sudden,

short term increase, a volcanic origin seems a likely possibility...

C. L. Pearson, et al, *Journal of Archaeological Science*, vol. 36. (2009), p. 1211.

The Cornell study also discovered “*unusual elements such as selenium (Se) and yttrium (Y) from ring 855 onwards*” as well as “*increases of the rare earth elements (REE) in rings 856 and 857*” (C. L. Pearson, et al, *ibid.*, p. 1209). This gives the impression that the simmering volcano vented a caustic brew for several years that changed on a regular basis. Then, in 1647 BC it violently exploded. Nothing different arrived later than ring 856. These chemical oddities leave no doubt that the Cornell team had proven their trees grew downwind of an active volcano. They suspected that Halfnium arrived from Thera, but provided no proof that the same element could not come from Vesuvius. Presuming that the olive branch date for Thera is not wrong, Vesuvius is still 1647 BC, with Thera possibly later in the same century. These two separate eruptions, rather than one volcano erupting twice, may explain ancient legends from the Mediterranean region. In these legends, the noise from two eruptions is explained as a fight between distant gods, and the first rain of ash, which was blood red, is thought to be the blood of one of the combatants. In the legends, there is a lull in the fight between the gods, and then the fight resumes. The second round of the fight would be the second eruption.

All these tales present a two-round fight between superior beings with heavy parallels in terms of theological descriptions among the Greek, the Hurrian-Hittite, and the Canaanite versions. Initially the supreme lord of the gods is portrayed as a tyrant... the tyrant is castrated and dethroned by another deity. The castration of a god would have explained the noise linked to the first phase eruption. It would also have explained the “blood” of the god falling as red ash over land, streams, lakes and sea... In the narratives there is then a lull during which a new challenge is produced to face the usurper. Noteworthy is the mention in one of the Canaanite versions that agriculture failed at this point in time... Finally the gods battle it out until a winner is declared in what amounts to a retelling of the second phase of Santorini’s eruption.

Siro Trevisanato, *The Plagues of Egypt*, (2005), pp. 78-79.

The key passage in the above quote is what happened during the lull in the Canaanite version of the legend... agriculture failed. The land had been poisoned by toxic volcanic ash. The culprit in this case is sulfur from the first eruption. Concurrent with the Hf spike, there was a long-term increase in sulfur (S), and other changes consistent with the soil becoming acidic through sulfur contamination.

The distinct increase in S concentrations... indicates a large influx of S to the forest system, while increased Ca, Mn, and Sr may indicate mobilization of these elements in response to that increased acidity... the most logical source of sulfuric deposition would be volcanic...

C. L. Pearson, et. al., *Journal of Archaeological Science*, vol. 36. (2009), p. 1210.

Sulfur was also detected in a stalagmite from Turkey, concurrent with a vegetation kill. That was another new discovery. A stalagmite in a cave can record when vegetation above ground has died. Once again the volcano is presumed to be Thera, but the date corresponds to Vesuvius.

A distinct S-sulfate peak... indicates that increased S levels had been available for mobilization from the surface to the subsurface for several decades. The S peak detected in the Sofular stalagmite could thus be related to the environmental acidity increases following the eruption. The question remains about the timing of the Santorini eruption. The broad sulfate peak immediately follows a distinctive, short-lived peak in $\delta^{13}\text{C}$... A preliminary interpretation is that the $\delta^{13}\text{C}$ peak may be due to vegetative stress following the eruption.

Silvia Frisia, et al., “The use of stalagmite geochemistry to detect past volcanic eruptions and their environmental impacts,” *PAGES News*, vol. 16, (2008), p. 26.

This leads to another question. How toxic was the ash from the first eruption? I can only answer that Canaan is more than a thousand miles from Vesuvius. The legend from Canaan that agriculture failed was likely only a hint of how widespread and devastating the problem was.

III. The Date of the Hyksos Invasion

This isn't just a story about tree rings and a volcano. It is a story about a catastrophic natural disaster that changed the course of history. I have been quoting Manetho, via Josephus, from the 1736 translation, *The Complete Works of Josephus*, by William Whiston. When possible, I quote sources that I've found online, such that the reader can easily find and check what I've quoted. But I also purchased a more recent translation of Manetho, by W. G. Waddell. This copy was not available online. A comparison of the two translations describing the Hyksos invasion, revealed a jaw-dropping surprise: where Whiston wrote "*God was averse to us,*" Waddell has the more specific phrase: "*a blast from God smote us*".

The word 'blast' is not how one would describe an invasion. Perhaps a 'hoard' or 'mass', but not a 'blast', and certainly not a blast 'from God'. But based on the approximate date of the Hyksos invasion, I recognized immediately what Manetho had recorded. The "*blast from God*" was the actual thunderous roar and shock wave that was heard and felt in Egypt, when a distant volcano explosively erupted. Note that rather than Vesuvius, Thera's eruption is listed as 1645 BC in the following quote, despite that possibility being ruled out by the olive branch radiocarbon date. The AD 79 eruption of Vesuvius is listed as another example of a volcano that caused an atmospheric blast wave: Vesuvius could do the same in 1647 BC.

Depending on the viscosity of the magma, the pressure and the gas content, extreme violent explosive eruptions may also induce atmospheric blast waves – known as “volcanic blasts”
{Santorini => 1645 B.C.; Mt. Vesuvius => A.D. 79; Krakatau => 1883... }

Peter O. K. Krehl, *History of Shock Waves, Explosions and Impacts*, (2013), p. 62.

The distance from Vesuvius to the Nile delta is roughly 1,200 miles. The sound of Krakatau was heard as far as 3,000 miles away (Timothy M. Kusky, *Volcanoes*, 2008, p. 36). Therefore it is not unreasonable that Egyptians even far inland remembered the day that they heard a thunderous "*blast from God.*" Below is the more recent translation of Manetho's account of the Hyksos invasion. After a blast from God smote the Egyptians, invaders of an obscure race from the east came streaming in. These invaders were called the Hyksos. Their first king was named Salitas.

Tutimaeus. In his reign, for what cause I know not, a blast from God smote us; and unexpectedly, from the regions of the East, invaders of obscure race marched in confidence of victory against our land. By main force they easily seized it without striking a blow; and having overpowered the rulers of the land, they then burned our cities ruthlessly, razed to the ground the temples of the gods, and treated all the natives with a cruel hostility, massacring some and leading into slavery the wives and children of some others. Finally, they appointed as king one of their number whose name was Salitis. He had his seat at Memphis, levying tribute from Upper and Lower Egypt, and always leaving garrisons behind in the most advantageous positions.

Aegyptiaca, Fr. 42, in W. G. Waddell, *Manetho: with an English translation*, (1964), pp. 79-81.

Salitas would be a Sealand (ancestral Hebrew) king, most likely another member of the Sealand Dynasty royal family that included Noah's ancestors Enoch, Methuselah and Lamech (13:IV, figure 13-8). The explosive 17th century BC eruption of Vesuvius can explain both the blast heard in Egypt, and the motivation for Mesopotamian refugees to invade Egypt. The blast is the eruption, then darkened skies caused by the eruption led to incessant rains in Anatolia causing trees to have the widest tree-rings in 9,000 years. Downstream, rain-swollen tributaries of the Tigris and Euphrates converged to produce the historical equivalent of Noah's flood. The Sealand home of the Hebrews was hardest hit. “*The waters flooded the earth for 150 days*” (Genesis 7:24).

Thousands would have been homeless and the harvest that would have fed them through the winter was washed away. It is then quite plausible that the homeless and destitute in the Sealand made a fateful decision: "Migrate to Egypt. We will die here if we don't."

IV. The Cause of the Ten Plagues

Much has been written about the similarities of the plagues described in the Book of Exodus and the anticipated catastrophic effects of a Thera's eruption. That in fact was the point of Trevisanato's research. He makes a very strong case that legends involving blood in bodies of water are not unique to the biblical story of the Lord turning the waters of Egypt into blood. In the biblical account Moses dramatically raises his staff and strikes the water, turning the Nile into blood.

Moses did just as the Lord had commanded. He raised his staff in the presence of Pharaoh and his officials and struck the water of the Nile, and all the water was changed into blood. The fish in the Nile died, and the river smelled so bad that the Egyptians could not drink its water. Blood was everywhere in Egypt.

Exodus 7:20-21

That is the Hebrew version of how the Hebrew god "Lord" turned the Nile to blood. Across the Mediterranean in Lycia, there is a legend of how the much lesser known god Marsyas turned the much smaller Marsyas River into blood.

The river god Marsyas (having the same name as the river) was said to have challenged Apollon, Leto's son, to a contest to see who was the best flute player. Apollon won and exacted as a prize the life of Marsyas by having the river god skinned alive. This torture bloodied the waters of the river... In the eyes of the modern reader, in fact, Apollon's action is meaningless. In the eyes of the people at the time of the eruption, however, Apollon's skinning of Marsyas made sense: ... strange noises followed by blood. How else could they have explained it?

Siro Trevisanato, *The Plagues of Egypt*, (2005), p. 86.

The flute playing contest and perhaps screams of torture were an explanation for the thunderous noises before the river turned to blood. In a legend from the island of Rhodes, the water turned sulfurous. Iron is the chemical that gives blood its characteristic red color. Sulfur is the second ingredient in the chemical compound that was falling from the sky.

Long ago, according to Strabo, the Telchines ruled Rhodes. They were experts in metallurgy... Then at some point in time, these mythical early inhabitants of the Island were said to have mixed the sulfur of the infernal river Styx with the waters of the streams of the Island. Rhodes was left devastated. The gods punished their crime by sending a flood which swept away the Telchines, their land, and cities.

Siro Trevisanato, *ibid.*, p. 85.

This legend from Rhodes makes it clear that it was the first eruption that polluted the rivers and streams with sulfur. That's the eruption of Vesuvius. The flood that swept over Rhodes corresponds to the second eruption. That's a tsunami that swept across the Mediterranean Sea when Thera erupted, then collapsed into the sea. It's also significant that all waters and streams on Rhodes were polluted, not just one as in the Marsyas legend. In the Book of Exodus, even water in ponds and pots was polluted. This is because the poison was falling from the sky. If the container did not have a lid on it, the water inside was poisoned.

The Lord said to Moses, "Tell Aaron, 'Take your staff and stretch out your hand over the waters of Egypt – over the streams and canals, over the ponds and all the reservoirs – and they will turn to blood.' Blood will be everywhere in Egypt, even in vessels of wood and stone."

Exodus 7:19

What is the poison? Vaporized rock rich in iron and sulfur: the mineral iron sulfide, or pyrite, is the simplest compound containing both iron and sulfur. A pure crystalline sample of pyrite is shown in the center of the figure 14-3. When exposed to water pyrite reacts and turns red like the sample on the left. The water looks like the picture on the right. It's not as thick as blood, but it is the color of blood, because iron combined with oxygen, taken from the water, is the chemical combination that makes blood red. The image on the right is toxic drainage from an iron mine near Redding California.



Figure 14-3: The chemical effect of mixing iron sulfide with water.

Coming straight out of the volcano, the poison would not have been red, and it would not have been large shiny crystals. It would have been a microscopically fine powder called tephra. Ash is the common word to describe volcanic tephra, though it doesn't come from a furnace. In the biblical account, since it was written by people who did not understand volcanoes, the ash did come from a furnace. Moses threw it up into the sky.

Then the Lord said to Moses and Aaron, "Take handfuls of soot from a brick kiln, and have Moses toss it into the air while Pharaoh watches. The ashes will spread like fine dust over the whole land of Egypt, causing festering boils to break out on people and animals throughout the land."

Exodus 9:8-9

Iron sulfide must dissolve and react in water to turn red. In the process the sulfur turns into sulfuric acid; that's car battery acid. If you had this dust on your skin or especially in your clothing, sweat mixed with the dust would make acid that eats at the flesh. That explains the festering boils on people and animals. If one were to pop the cap off of a car battery and pour it into a garden pond, frogs would jump out of the pond because they can; fish would die because they cannot escape. That's what happened in the biblical account. The fish died and the frogs hopelessly wandered in search of water that was pure. Finding none, they died as they dried out.

Then the Lord said to Moses, "Go to Pharaoh and say to him, 'This is what the Lord says: Let my people go, so that they may worship me. If you refuse to let them go, I will plague your whole country with frogs... The frogs will go up on you and your people and all of your officials.'"

Exodus 8:4

The plague of frogs provides very strong evidence that the plagues are historical rather than fictional. If I were free to choose a plague to threaten the Pharaoh with, I would not choose frogs. Frogs are more of a joke than a threat. I would threaten the pharaoh with a plague of scorpions or a plague of snakes. They're scary. But scorpions and snakes do not climb out of the Nile when it is polluted with battery acid. Frogs do. Therefore the plagues are proven historical because they are consistent with the legend of sulfur polluting the rivers of Rhodes. These separate but similar stories of polluted waters are not independent descriptions of fiction; they are corroborative descriptions of fact.

There was no threat to specifically plague Egypt with frogs. Egypt is simply the one place where written records survive from a tragedy that was much broader in scope. Another record of

the devastation wrought by Vesuvius is recorded in the form of an Egyptian poem, the *Admonitions of Ipuwer*, on Papyrus Leiden 344. Since the poem does not name the king, only context and writing style give clues to the date of authorship. The estimate of eighteenth to nineteenth century BC in the following quote is too high, but the tragedy recorded is undoubtedly the sulfur poisoning also recorded in legends from Rhodes and Canaan.

As related on a papyrus scroll now in the National Museum of Antiquities in Leiden Holland, a scribe named Ipuwer tells of a cataclysmic period that befell Egypt in the eighteenth or nineteenth century B.C.E. Ipuwer wrote about plague throughout the land and blood everywhere, fire, ruin, unbearable noise, and darkness, many of his comments hint at distant volcanism and paralleling the later accounts in Exodus.

J. Z. deBoer and D.T. Sanders, *Volcanoes in Human History*, (2012), p. 69.

A complete translation of Papyrus Leiden 344, with extensive commentary, was published by Egyptologist Alan Gardiner under the title *The Admonitions of an Egyptian Sage*, (1909). Gardiner's translation and line numbers will be used below, but the title *Admonitions of Ipuwer* or simply 'Ipuwer poem,' more specifically identifies the text. Much has been written and argued about whether the Ipuwer poem was a confirmation of the biblical plagues or unrelated. The obvious link is found in line 2:10, stating that the river is blood. A river of blood is not something that has happened frequently in human history.

Forsooth, the river is blood, and (yet) men drink of it. Men shrink from(?) (tasting?) human beings, and thirst after water.

Admonitions of Ipuwer 2:10

In his translation, Egyptologist Alan Gardiner is less certain if line 2:10 also contains a reference to cannibalism. Do men shrink from tasting human beings? However, frequent descriptions of violence, death, and hunger, even among princes, leave no doubt that Egypt was in a desperate food crisis:

Forsooth, (men's) hearts are violent. Plague is throughout the land. Blood is everywhere. Death is not lacking (2:5). Forsooth, princes are hungry and in distress (5:2). A man strikes his brother (the son) of his mother. What is to be done? (5:10). Men sit over the bushes until the benighted (traveller) comes, in order to plunder his burden... He is belabored with blows of the stick, and slain wrongfully (5:12). O that the earth would cease from noise, and tumult be no more! (6:1)

The Admonitions of Ipuwer

In the context of violent death, “*the river is blood*” could simply be an exaggerated reference to the blood of people being killed, but that would not explain why Egyptians were also thirsty for water (line 2:10). Egyptians, with a river flowing through their land, should never thirst for water. Only a poisoned river could explain thirst. The author also pleads for the earth to cease from noise (line 6:1), as if that would make the troubles go away. What is the source of noise on a rural road where a robber is hiding in with bushes?

Noise is either a metaphor for chaos, or the literal noise of the still rumbling and billowing volcano. The literal sound of the volcano is consistent with an otherwise puzzling reference to fire in the sky. “*The fire is mounted up on high. Its burning goes forth against the enemies of the land.*” (Ipuwer 7:1). This fire doesn't make literal sense. How can a fire mounted high burn forth against ones enemies? The description must be of some source of light that was interpreted as a good sign. From Egypt, the volcano itself was well below the horizon. The observed light would have been lightning dancing within clouds of ash that drifted toward Egypt. Similar flashes of lightning were recorded in the Book of Jasher's record of the ash clouds from Vesuvius that darkened the sky in Mesopotamia prior to the flood: “*and the sun darkened... the foundations of the world raged... and the lightning flashed, and the thunder roared*” (Jasher 6:11).

The tale of misery in Egypt is consistent with ash from the eruption having both poisoned the water and destroyed crops in the fields. The Ipuwer poem includes description of men eating food once considered suitable only for birds and swine; the granary has been robbed, and the keeper lies stretched out upon ground. This sadly is not a metaphor for anything. It happened.

Forsooth, [men eat] herbs, and wash them with water. No fruit(?) nor herbs are found (for) the birds is taken away from the mouths of swine hunger (6:2). Forsooth, grain has perished on every side. (People) are stripped of clothes, spices(?) and oil. Everybody says: there is none. The storehouse is ruined. It's keeper is stretched on the ground (6:3).

The Admonitions of Ipuwer

The very long Ipuwer poem is largely a description of lawlessness and invasion associated with the unexplained catastrophe. It does not include all of the plagues in the Book of Exodus, but if one starts with the underlying premise that the initial catastrophe was the poisoning of the *entire Mediterranean region* with iron sulfide from Vesuvius, the lawlessness by both foreigners and desperate Egyptians make sense. One can also jump back and forth between the two accounts and both make predictable sense. For example, the Book of Exodus records that all rivers and ponds in Egypt turned to blood. Fish died in the water and frogs came out of the water and eventually died on land. The people of Egypt dug wells beside the river, in a search of drinkable water. That's one cause, iron sulfide falling from the sky, leading to four observable consequences.

The fish in the Nile died, and the river smelled so bad that the Egyptians could not drink its water. Blood was everywhere in Egypt... And all the Egyptians dug along the Nile to get drinking water, because they could not drink the water of the river. Seven days passed after the Lord struck the Nile... The frogs died in the houses, in the courtyards and in the fields. They were piled into heaps, and the land reeked of them.

Exodus 7:21-25, 8:13-14

Note that seven days passed between the poisoning of the river and the plague of frogs. The fish died in the river immediately, because they couldn't breathe. The frogs could get out of the water, but they died a week later of starvation and dehydration. Live frogs in houses weren't really a plague. It was the stench when they died that brought misery. There are also winners in such a tragedy. Crocodiles have thick skin that can withstand the acid. Suddenly the backwaters of the Nile were clogged with dead fish and the occasional dead human. "*Forsooth, crocodiles are glutted(?) with what they have captured.*" (Ipuwer 2:12).

The biblical authors could not present fattened crocodiles as a plague, so they left that part out of their story. Gardiner couldn't figure out why the crocodiles were fattened.

In this extremely difficult passage Sethe proposes, with great ingenuity, to understand as follows. The crocodiles have more than enough to feed upon; men commit suicide by casting themselves into the river as their prey.

Alan Gardiner, *The Admonitions of an Egyptian Sage*, (1909). p. 29.

Suicide by crocodile is ingenious, but doubtful. Dead humans may have been part of the menu, but all of the fish in the Nile were dead. Sethe and Gardiner hadn't read the rest of the story in the Book of Exodus. Switching back to the Book of Exodus, one can easily imagine what comes next. Dead fish are a breeding ground for gnats and flies. It will take more than a week for the eggs to hatch and the maggots to mature. Gnats will come first, because they are smaller and mature faster; larger flies will come later. The sequence is as predictable as setting an oven timer: poisoned water – dead fish – dead frogs – swarms of gnats – swarms of flies.

Then the Lord said to Moses, "Tell Aaron, 'Stretch out your staff and strike the dust of the ground.' and throughout the land of Egypt the dust will become gnats." They did this, and when Aaron stretched out his hand with his staff and struck the dust on the ground, gnats came upon men and animals. All the dust throughout the land of Egypt became gnats.

Exodus 8:16-17

Next come the flies, but in the Book of Exodus, this natural phenomenon is also presented as a supernatural plague controlled by the Lord. Each plague is contingent upon whether the pharaoh does or does not let the Israelites go free to worship the Lord with Moses.

Then the Lord said to Moses, "Get up early in the morning and confront Pharaoh as he goes to the water and say to him, 'This is what the Lord says: Let my people go, so they may worship me. If you do not let my people go, I will send swarms of flies on you and your officials, on your people and your people and into your houses. The houses of the Egyptians will be full of flies... But on that day I will deal differently with the land of Goshen, where my people live; no swarms of flies will be there, so that you will know that I, the Lord, am in this land. I will make a distinction between my people and your people. This miraculous sign will appear tomorrow.'"

And the Lord did this. Dense swarms of flies poured into the pharaoh's palace and into the houses of his officials, and throughout Egypt the land was ruined by the flies.

Exodus 8:16-17

Words are written for a reason. I'm writing in the hope that I can make people care less about the Old Testament and more about each other. The priests who wrote the above words had a reason for writing as well. From what I see in the passage above, they were trying to earn a living by misrepresenting natural events as miracles performed by their particular deity, called Yahweh (Lord). Unlike other gods that the Israelites could choose from, the Lord was extremely powerful and showed favoritism to Israelites, while caring not at all about equally human Egyptians.

The final proof that the river of blood was gray iron sulfide reacting with water to make red iron oxide plus sulfuric acid, is that the chemical reaction itself is described in the Bible... as if it were a miracle. I don't see a miracle. I see the oxidation of iron. It's happening in your lungs as you read this.

Then the Lord said, "If they do not believe you or pay attention to the first sign, they may believe the second. But if they do not believe these two signs or listen to you, take some water from the Nile and pour it on the dry ground. The water you take from the river will become blood on the ground."

Exodus 4:9

The reaction should work because, at least until the Nile flooded or the wind blew the ash away, it would be possible to pour a bucket of relatively clear water on the ground anywhere that was dry, and watch the wet spot slowly turn red. I haven't tried this. It is not easy to grind iron sulfide as fine as volcanic ash, but extremely fine powder is required to make the reaction fast. Size matters for the speed of chemical reactions involving solids. That's the difference between charcoal and gunpowder. I suspect it still took hours, not seconds, for the ground to turn red, but somebody noticed it was a neat trick.

In summary, there is no question that the plagues recorded in the Book of Exodus are a retelling of the plagues that befell Egypt when a volcano erupted in the 17th century BC. The evidence that the plagues are descriptions of a chain of events ultimately caused by toxic volcanic ash from is indisputable. It's chemistry. It's biology. It's cause and effect. However, attempts to determine the date of the Exodus based on scientific evidence are misguided. The stories in the Book of Exodus are a retelling of past events by a much later author. They are not a

truthful account. Moses wasn't there. The Israelites weren't there. There were no slaves hoping to escape to Canaan. In fact, the poisoning of Egyptian waters by ash from Vesuvius, which became the story of Moses confronting the pharaoh and turning the Nile to blood, was in the same year as the deluge caused by Vesuvius, which became the story of Noah's flood.

Before The Exodus

Chapter 15

Noah Becomes Ruler of Egypt

I. Opportunity Knocks On Noah's Door

The 1647 BC eruption of Vesuvius was during the lifetime of Noah and produced a Mesopotamian flood that later evolved into a myth with Noah as the central character. But who was the real Noah? From a realist's perspective, it can be presumed that Noah's prominent role in the Bible is because Noah accomplished something in his life that was a proud moment in Hebrew history. But what we find in the surviving record is a children's story, not the truth. This suggests that Noah's true accomplishment was later erased when priests writing scripture made a decision to present the Hebrews as humble shepherds. "Noah the mighty king" would not be a good story to teach to the Israelites. "Noah who saved the animals from the flood" would have to suffice.

That's all the Israelites were supposed to learn, but there is more to be learned, because through the course of the previous chapters it has been established that Adam through Noah were a line of kings in the region south of Babylon called 'Chaldea' in Genesis 11:31, or the 'Sealand', by most historians. Figure 15-1 summarizes the results of chapters 12 and 13.

Hebrew patriarch	Historical identity	reign	half-years	years
<i>Kings of Larsa</i>				
Adam	Kudur-Mabuk	(died 1762)		
Abel, son of Adam	Warad-Sin	1798-1793	12	6
Cain, son of Adam	Rim-Sin I	1792-1762/	61	30 1/2
Enoch, [son of Cain]	Rim-Sin II	1761-1741/	(243 mos.)	20
<i>Sealand Dynasty (1717-1533)</i>				
Methuselah, son of Enoch	1. Iluma-ilu	/1717-1687/	60	30
Lamech, son of Methuselah	2. Itti-ili-nibi	/1687-1660	55	27 1/2
? (probably not related)	3. Damiqilishu	1659-1642	36	18
?	4. Ishkibal	1641-1634/	15	7 1/2
Noah, son of Lamech	5. Shushi	/1634-1621	27	13 1/2
?	6. Gulkishar	1620-1593/	55	27 1/2
Kassite conquest of the Sealand 1533				

Figure 15-1: Seven Hebrew patriarchs identified as Mesopotamian kings.

To review an important discovery concerning Noah's place in history (chap. 13:III). Upon Noah's birth, his father Lamech made the curious claim, "*He will comfort us in the labor and painful toil of our hands caused by the ground the Lord has cursed*" (Genesis 5:29). This reference to cursed ground can be traced to a famine that followed a flood reported in the Book of Jasher, "*And the Lord caused the waters of the river Gihon to overwhelm them... and he destroyed the third part of the earth*" (Jasher 2:6). After this flood, the Hebrews not only stopped harvesting crops from their land, they stopped planting. "*And in those days there was neither sowing nor reaping in the earth; and there was no food...*" (Jasher 2:7). The fact that the Hebrews stopped planting shows that this was not a natural famine, where one might hope the rains will come. Agriculture in the Sealand was dependent on irrigation. Both the flood and the famine are consistent with the ongoing war between the Sealand and neighboring Babylonia. In c.1700 BC, Babylonian king Abi-eshu was at war with Sealand king Iluma-ilu. Records from his reign report that Abi-eshu first dammed the Tigris, in a failed attempt to catch Iluma-ilu, and then built a fortress called "The Great Gate of the Tigris." The damming of the Tigris was

literally an attempt to flush out the rebel Iluma-ilu, by flooding the irrigation canal called the “*river Gihon*” in Jasher 2:6. The river Gihon matches the Shatt al-Hayy canal, which diverts water out of the Tigris River south of Babylon, and flows into the Euphrates River south of Abraham’s home city of Ur.

Abi-eshu’s fortress called the Great Gate of the Tigris is evidence that the Sealand had lost control of the canal inlet, and thus could not control the irrigation supply. The destruction of a “*third part of the earth*” was the land impacted by this third waterway, in addition to the Tigris and Euphrates Rivers on either side. All cropland that could be irrigated by the canal, could also be flooded by overflowing the same canal. Later, by turning the water off, all of the same cropland became useless.

This match to known history at the time that Noah was born is important, because it serves as a confirmation that a parallel attempt to align the exact lifetimes of Methuselah, Lamech and Noah to the reigns of Sealand kings (figure 15-1) has not gone astray. Step-by-step and king-by-king, the Hebrews patriarchs have been aligned to Mesopotamian kings of Larsa and the Sealand. Noah is one piece of a larger puzzle that has been solved, and Noah fits exactly as Shushi, the 5th king of the Sealand. Copying errors and minor uncertainties in the Hebrew records (of which there were many) became irrelevant when Noah snapped into place. Noah’s identity is not in doubt; Noah’s lifetime is not in doubt; only what Noah achieved during that lifetime is a mystery.

Noah lived during a turning point in history when momentous political change was forced upon the world by the cataclysmic eruption of Vesuvius in 1647 BC. Noah was born 50 years earlier in 1697 BC (chap 13:IV). He would not become king of the Sealand until late in life, when he was age 63 in 1634 BC. When Noah was 50 years old, Sealand (Hyksos) refugees from the 1647 BC flood poured into the Nile delta. Since the flood would have left the people of the Sealand without flood for the winter, time was of the essence, and it can be safely assumed that the Hyksos invasion was within the same year as the volcanic eruption and flood.

Next come two plausible scenarios: the Hyksos invasion was either 1) a spontaneous, desperate search for a new place to live, or 2) a purposeful march to a destination chosen in advance. In Manetho’s report, the invaders “*marched in confidence of victory*.” Did they know that although it was far away, Egypt was vulnerable, and worth the long journey? Specifically, was the Hyksos invasion planned and the destination selected by Noah? The evidence is circumstantial. Noah was famous for something, and it was not for filling an ark with animals. Noah lived at the time that Egypt was conquered by Hyksos invaders who were likely from Noah’s native land. What role did Noah play?

If Noah was a part of the Hyksos invasion, since his ancestors were kings in Mesopotamia, it is likely that he or members of his family also became Hyksos kings in Egypt. How does one prove or disprove that the Hyksos kings were Hebrews? The Hebrews unusual tradition of recording time in half-years was the giveaway that the kings of the Sealand Dynasty were Hebrews. After translation to whole years, the Sealand kings’ reigns recorded on Babylonian King List A synchronize with both the Assyrian King List and Babylonian Chronology (chap. 13:II), which insures that the reigns are either exact, or very nearly so. Manetho’s records for the reigns of the Hyksos kings are far less reliable. Surviving copies of Manetho’s Hyksos account vary significantly, in both numbers and the record of where the Hyksos had originated. In the most detailed account, preserved by Josephus, the Hyksos were from the East, or perhaps Arabia. In other much briefer accounts, they are from Phoenicia.

The total for six Hyksos kings is listed as 284 years in the copy by Africanus, below. In the copy by Josephus the total is 254 years. In either case, the reigns are implausibly high. Reigns of 40 to 60 years should be extremely rare, not five out of six! The reigns of the Hyksos kings are thus *undoubtedly* wrong, and *very likely* recorded in half-years. The ancestors of the Hebrews are then immediately prime suspects for the Hyksos. Manetho’s claim that the Hyksos later founded Jerusalem adds weight to that hypothesis, though it would be the Jebusites who ruled Jerusalem, distant cousins of the Hebrews though Noah’s grandson Canaan (chap. 7:I).

Manetho's Aegyptiacia, Fr. 43 (from Syncellus). According to Africanus. The Fifteenth Dynasty consisted of Shepherd Kings. There were six foreign kings from Phoenicia, who seized Memphis: in the Sethroite nome they founded a town, from which as a base they subdued Egypt. The first of these kings, Saïtes, reigned for 19 years: the Saïte nome is called after him.

2. Bnon, for 44 years.
 3. Pachnan [Apachnan], for 61 years.
 4. Staan, for 50 years.
 5. Archles, for 49 years.
 6. Aphophis, (Aphobis), for 61 years.
- Total, 284 years.

Manetho with an English translation by W.G. Waddell, (1964), p. 91.

Thus from their reigns alone, the evidence is very strong that Noah's royal family conquered Egypt. But does Noah play a prominent role? I suspect yes, because Noah missed his chance to become king, yet he became king later. Specifically, Noah's father, grandfather, great-grandfather etc. had been kings, but in 1660 BC, Noah's father Lamech died and Noah did not succeed his father as king. Yet Noah became king Shushi of the Sealand in 1634 BC. So there is some more complicated story to explain Noah's life from 1660 BC to 1634 BC, and the Hyksos invasion is a more complicated story that unfolded during that interval.

In 1660 BC the Sealand kingship passed to Damiqilishi, who was probably a descendent of an earlier king of Isin with that name, meaning that Noah's hereditary claim to the throne had been usurped. This could have happened in two ways: Damiqilishu could have killed Noah's father, and taken the throne, or as often happens, one of Noah's own relatives could have had his eyes on the throne and allied with Damiqilishu, perhaps in a power-sharing agreement involving the assassination of Lamech. For whatever the reason, Noah was a crown prince who did not become king, and it is probable that he even had to flee the country, because the typical thing to do after overthrowing the king is to kill his sons, to prevent loyalists from rallying behind the son to regain their own positions of power.

This is admittedly speculative, but so are some interpretations of the Book of Genesis that I've heard from the pulpit. Fair is fair. Where could Noah go into exile to save his life? Recall that the poem *Admonitions of Ipuwer* describes Egypt during the plagues that were really caused by the eruption of Vesuvius during the lifetime of Noah, long before Moses. The following is a significant passage from the Ipuwer poem, describing a foreign tribe that had become more numerous than Egyptians in the Nile delta. As in chapter 14, quotes below are from Alan Gardiner's 1909 translation.

Forsooth, the Desert is throughout the Land. The nomes are laid waste. A foreign tribe from abroad has come to Egypt.

Forsooth, people come(?). There are no Egyptians anywhere.

Admonitions of Ipuwer 3:1-2

Desert throughout the land is a description of the vegetation kill caused by toxic ash from the Vesuvius eruption. This vegetation kill would have been all throughout Canaan as well as Egypt, therefore refugees from many tribes could be expected to come to Egypt in hopes of finding food. But one tribe (singular) is specifically noted. A few lines later in the poem, there is a seemingly satirical comment that the (far away) king will be "glad indeed" to learn that owing to the crisis, there will be no revenue for the king.

To what purpose is a treasure-house without its revenues? Glad indeed is the heart of the king when Truth comes to him. Lo, every foreign country [comes?]! That is our water! That is our happiness! What shall we do in respect thereof? All is ruin!

Admonitions of Ipuwer 3:11

Since line 3:11 implies that the king in Thebes does not yet know what has happened in the Nile delta, the poem is describing events literally within days after the 1647 BC eruption. Most of the poem focuses on lawlessness, hunger, the wealthy being no better off than the poor, and the disintegration of institutions of government. All of this is consistent with the impossible task of maintaining order in a world suddenly critically short of food. However, in line 4:5, there is also a specific description of where the Asiatic foreigners have primarily settled... in the marshlands, where there are now trodden roads (the land has been made accessible) and the Asiatics are seemingly quite at home.

Forsooth, the Marshlands in their entirety are not hidden. Lower Egypt can boast of trodden roads... The Asiatics are skilled in the crafts of the Marshlands.

Admonitions of Ipuwer 4:5

Accompanying this translation, Gardiner adds the following commentary:

The Marshlands of the Delta, hitherto barely accessible to the Egyptians themselves, are now opened up and overrun by Asiatics, who have made themselves masters in the crafts of those regions.

Alan Gardiner, *The Admonitions of an Egyptian Sage*, (1909), p. 38.

This comment perhaps explains why the Asiatics were allowed to settle in Egypt prior to the crisis. They weren't taking land that the Egyptians had considered inhabitable. And yet now the Egyptians are impressed by how the Asiatics have transformed the marshlands. Did these Asiatics adapt quickly to an inhospitable landscape, or were they natives of another marshland, and moved to Egypt specifically because they were *already* masters of the crafts of the marshlands? The later seems far more probable.

If the Asiatics living in the marshlands of the Nile were already adapted to life in the marshes before arriving in Egypt, there is one clear choice for where they came from. To the east, in Asia, the only significant marshland between Egypt and India was the Sealand home of the Hebrews. Since the Asiatics had built roads in marshlands even before the king of Egypt knew that there was a crisis in the north, they could not have arrived from the Sealand in response to the crisis caused by the eruption. They were relative newcomers, or the roads they had built would no longer be newsworthy, but they had established a sizeable population in the marshlands of the Nile delta *prior* to the eruption. The timing makes sense, since there is a plausible reason for people from the Sealand to have migrated and settled in Egypt just a few decades earlier. They were probably refugees from the protracted Sealand famine that began shortly before Noah was born, when Babylonian king Abi-eshu closed "The Great Gate of the Tigris," cutting off water to the Sealand's principal irrigation canal.

The presence of a Sealand immigrant population in Egypt since the childhood of Noah means that when Noah needed to flee after his father was deposed or assassinated, there was already a place for him to go, Egypt. It also means that the Hebrews witnessed the plagues upon Egypt firsthand, prior to the Hyksos invasion. Thus the Hyksos invasion wasn't the initial arrival of Hebrews from the Sealand in Egypt, it was a second and larger surge of immigrants fleeing from the flood. The first immigrants had arrived decades earlier, fleeing from war and famine.

On the day of the Vesuvius eruption, the earth shook violently and the skies went dark in Mesopotamia, but Noah was definitely not in the Sealand loading an ark. And it is not a stretch of the imagination to suppose that Noah was an heir to the throne living in exile in Egypt among the population of Sealand immigrants. On the same day that a thunderous roar was heard in Mesopotamia, the blast from God was palpable in Egypt. One week later, a summer of continuous flooding began in the Sealand.

Within weeks, the first travelers from Mesopotamia may have brought news to Noah of the growing crisis in the Sealand. With both their homes and their crops destroyed, tens of thousands who were already homeless also faced starvation in the coming winter. Egypt had land that

extended far beyond the impact of the eruption, and granaries that had not been washed away by a flood. There was now food in Egypt that could help feed the homeless and hungry of the Sealand. Yes, it was somebody else's food, but when faced with starvation, such subtle distinctions can be ignored. Noah had lost his chance to succeed his father as king in the Sealand, but the opportunity to become a great leader of his people had just come knocking.

Thus a convergence of circumstantial evidence provides a *sensible* and chronologically coherent explanation of how Noah became a hero to the Hebrews. The question is, do all the pieces really fit as neatly as described? If they do, Noah is the natural choice for the Hyksos conqueror of Egypt. A credibility test is found in the introduction to the 1909 translation of the Ipuwer poem. Though the text does not give any direct indication of the date, Alan Gardiner had deduced who the Asiatics in the marshlands were. By process of elimination, they most likely were the Hyksos. His only alternative, several dynasties earlier, doesn't account for references to volcanism, which Gardiner translated without comprehending the significance.

The text tells both of civil war and of an Asiatic occupation of the Delta. There are two periods which might possibly answer the requirements of the case: the one is the dark age that separates the sixth from the eleventh dynasty: the other is the Hyksos period. Sethe inclines to the view that it is the invasion of the Hyksos to which our papyrus alludes. Much may be said in favor of this alternative. Though the tombs of Siut give us a glimpse of the internal disruption of Egypt during the ninth and tenth dynasties, the monuments are silent upon the subject of Asiatic aggression at that date.

Alan Gardiner, *The Admonitions of an Egyptian Sage*, (1909), p. 18.

In Manetho's account of the Hyksos invasion, the Egyptian government was overwhelmed and overthrown without any particular decisive battle. A leader named either Saïtis or Salitis (below) was the first Hyksos king. However, there was no specific Hyksos king leading the invasion. Salitis was chosen as king *after* the Egyptian government had fallen. He became king in Memphis, which was the traditional Egyptian capitol, but then built a new capitol at Avaris, because the site was more strategically located for defense of the border.

At length they made one of themselves king, whose name was Salitis; he also lived at Memphis, and made both the upper and lower regions pay tribute, and left garrisons in places that were the most proper for them. He chiefly aimed to secure the eastern parts, as fore-seeing that the Assyrians, who had then the greatest power, would be desirous of that kingdom, and invade them; and as he found in the Saite Nomos, [Sethroite,] a city very proper for this purpose, and which lay upon the Bubastic channel, but with regard to a certain theologic notion was called Avaris, this he rebuilt, and made very strong by the walls he built about it, and by a most numerous garrison of two hundred and forty thousand armed men whom he put into it to keep it.

Josephus, *Against Apion I*, chap. 14, (77-79).

If Noah was already in Egypt prior to the invasion, this is entirely consistent with Manetho's account. Generally, an invasion in ancient times was led by a king. The king organizes an army for the long march. The army attacks, plunders, and demands tribute to prevent further attacks, then they and their king go home. The Hyksos invasion was very different. It was an army of refugees, without a king, and in search of a home. After they had secured a place to live, they made Salitis their king. If Salitis was Noah in exile, Noah didn't need to lead an invasion or even return to the Sealand, where he was a wanted man. His role was to send messengers back to the Sealand. "Do not despair. Pack whatever you have left. Bring your weapons, and you will have a new home and food on your plate before winter!"

The Sealand immigrants simply overwhelmed the already suffering Egyptians of the Nile delta and marched into the marshland where Noah was waiting to organize his newly recruited army. Pressing south from the marshlands, they drove the Egyptians back, staking claims to Egyptian lands and setting up fortresses to hold their ground. When the city of Memphis was

captured the new masters of the land gave Noah a new title: ‘King of Egypt.’ By conquering Egypt, and demanding tribute from the Egyptians, Noah gained far more power and wealth than he could ever have dreamed of as king of the Sealand. The year was 1647 BC. But did the above scenario really happen?

II. Noah Conquers Egypt

The above section is entirely a circumstantial case that the first Hyksos king, Salitas could be Noah. Sometimes circumstantial evidence is convincing, but to claim that Noah conquered Egypt simply because he’s the right man for the part, is sure to be met with skepticism. The evidence is not entirely circumstantial. I presented that case first, because it is again a larger picture into which the final piece of the puzzle must fit. Noah’s name was not really Noah. Either names have become unrecognizable through multiple translations, or, and this seems likely – the names of Hebrew kings were deliberately changed to prevent later Israelites from doing what I’m doing – figuring out that the Hebrew patriarchs were kings, not humble shepherds. The wealthy and powerful played humble when it was to their advantage.

In chapter 13, Noah’s age at death has been shown to match the 5th Sealand king, Shushi (figure 13-8). Since it is reasonable to presume that Noah became a king, and there is no second choice, Noah’s real name was “Shushi.” In Manetho’s record of the Hyksos invasion, the first Hyksos king is called Salitis, not Shushi. Therefore, if it was actually Noah who Manetho was describing, the name Salitis must be badly corrupted through copying errors. In general, Manetho’s names for kings are unrecognizable as often as not. So the lack of a match is not conclusive. A more reliable way to learn the name of an Egyptian king is find an artifact that was made while the king was alive. Very few statues or buildings survive from the Hyksos era, but the names of most Hyksos kings have been found on scarab seals. Egyptologist Nicolas Grimal thinks he knows out which Hyksos name matches Manetho’s king Salitis. It’s not hard to guess. It’s the one most commonly found, and when translated, it’s the only Hyksos name that starts with an ‘S’.

The founder of the first Hyksos dynasty, Manetho’s Fifteenth Dynasty, was a man named Salitis, who was probably the same person as the Sheshi mentioned on several seals found at Kerma, suggesting that perhaps the Nubians allied themselves with the Hyksos against the Thebans from the very beginning of the Hyksos period.

Nicolas Grimal, *A History of Ancient Egypt*, (1994), p. 185.

There’s the final piece of the puzzle. Noah’s real name is “Shushi” when translated from Babylonian cuneiform, or “Sheshi” when translated from Egyptian hieroglyph. It could have been coincidence, if there were no supporting evidence. But the supporting evidence is a strong circumstantial case that only needed physical evidence as confirmation. *Got him!* Noah was the founding king of the Hyksos Dynasty in Egypt. Figure 15-2 is a scarab of Sheshi from the collection of the Walters Art Museum in Baltimore. It is tempting to envision Noah in a boat surrounded by the flood, but actually the central oval is a cartouche, indicating that the name inside is that of a king, and the swirling border design is found on scarabs both before and after the Hyksos era.

Figure 15-2: Scarab of Hyksos king Sheshi.



Though some of the details that I've filled in to the life of Noah may be wrong and can never be checked, the match at the end shows that Noah was indeed famous because he is a Hebrew ancestor of Abraham who conquered Egypt in the year of a devastating eruption. This means that rather than reading children's stories about Noah loading animals on an ark, it is now possible to learn about the real Noah, by reading the real history of Sheshi and the Hyksos.

The final stage of the Hyksos rise to power may have been violent, but their gradual infiltration seems to have been much more widely accepted by the Egyptian population at the time than the later nationalistic texts of the Egyptian New Kingdom suggest... Egyptians and Asiatics were apparently able to live together without difficulty. The Hyksos Kings themselves were great builders and artisans, leaving behind them temples, statues, reliefs and scarabs, and even encouraging the continued dissemination of Egyptian literature... In terms of religion, culture and philosophy, the Hyksos rulers created a legacy from which the New Kingdom pharaohs would eventually draw inspiration.

Nicolas Grimal, *ibid.* p. 186.

Despite an extensive archaeological record within Egypt, the origin of the Hyksos was simply not clear from the evidence in Egypt. This can in part be explained by the fact that the Hebrews did not have a written language of their own. They had learned Babylonian and then learned Egyptian, one after the other. The Hebrew language of the Old Testament is a modification of Phoenician, which was not invented until roughly the time of Moses. The Hebrews had written records, but they must have translated them as they traveled and learned new languages. In that sense, Moses may have written parts of the Old Testament, to be presented to the Israelites in *their* language, not his! Similarly the Hebrews adopted whatever religion was popular where they were living at the moment. When Grimal says that the Hyksos “continued to worship the Syro-Palestinian goddess” it should be kept in mind that they may well have *started* to worship that goddess after arriving in Egypt!

The Hyksos introduced a method of government which was to prove equally successful for all the later invaders who applied it to Egypt: instead of attempting to impose their own governmental structures on the country, they immersed themselves in the existing Egyptian political system... they transcribed their names in the hieroglyphic saystem of writing, adopted the traditional royal titulature, and copied Middle Kingdom sculptural styles. In the sphere of religion, as in the political arena, they instituted an official Egyptian-style cult based on Seth of Avaris, the enemy of Osiris... Seth was assimilated with Baal-Reshef and with the Hittite god Teshub. The Hyksos also continued to worship the Syro-Palestinian goddess Anat-Astarte, but they nevertheless showed no signs of neglecting the traditional Egyptian gods, and kings continued to hold the title ‘son of Ra’.

Nicolas Grimal, *ibid.* p. 186.

I have on several occasions defended Manetho, and I'm going to do it again. I think he properly recorded the origin of the Hyksos when he called them Shepherd-kings, but the term has been roundly dismissed by Egyptologists as a mistake.

Manetho calls the foreign rulers “Hyksos,” which he explains as meaning “shepherd kings.” This term, however, is to be correctly explained as made up of the Egyptian words *hk3 h3wt*, “ruler of foreign lands.” The latter phrase is found on a few scarabs of the Second Intermediate Period bearing the names of foreign rulers. The term is also probably to be restored in the Turin Canon for the six principal rulers of the Hyksos period.

John Van Seters, *The Hyksos* (2010), p. 187.

I am quoting John Van Seters because he explains the reasoning that seems to be widely accepted. I respectfully reject this reasoning. The definition of the Egyptian word *hk3 h3swt* is irrelevant, because it is not directly linked to the kings that Manetho called *Hyksos*. Even if miscopied, Manetho defined the all-important syllable ‘sos’. He said it means “shepherd”. One

cannot presume that both Manetho's spelling and his definition were miscopied.

This whole nation was styled Hycsos, that is, Shepherd-kings: for the first syllable Hyc, according to the sacred dialect, denotes a king, as is Sos a shepherd; but this according to the ordinary dialect; and of these is compounded Hycsos: but some say that these people were Arabians.

Josephus, *Against Apion I*, chap. 14, (82).

Notice that Manetho calls the Hyksos either 'Shepherd-kings' or 'Arabians'. The 15th Dynasty kings may have called themselves Shepherd-kings, while the Egyptians called them Arabians. Migrants from the Sealand would have crossed the Arabian Desert en route to Egypt. Therefore, even though they hadn't lived there, it would appear to Egyptians that immigrants were arriving from Arabia. I do not see any error in Manetho's statement. There is apparently no archaeological confirmation of the word 'sos' = 'shepherd', leading to an assumption that the word was wrong. That's understandable, but the archaeological confirmation is found in Mesopotamia.

As discussed earlier (chap. 13:III), in year-names from his reign, Rim-Sin I used the term 'shepherd' to describe himself as king. This choice of metaphor is perhaps linked to the 'mountains of Ararat' in the myth of the worldwide flood (Genesis 8:4). Rim-Sin and his father Kudur-Mabuk (Cain and Adam) did not have a long history in southern Mesopotamia. Their ancestors may have been shepherds in the mountainous headwaters of the Tigris River, closer to the mountains of Ararat, where the myth most likely originated. Though adopted well to city life as kings in Mesopotamia, the Hebrews still took pride in their mountain heritage, and called themselves *shepherds of men*. Also, the Book of Jubilees reports that Noah was buried "*on mount Lubar, in the land of Ararat*" (Jubilees 10:15). This demonstrates that the Hebrews' mountain heritage had not been forgotten, even after Noah had conquered Egypt.

Below are two further references in which Rim-Sin calls himself a shepherd. These inscriptions are associated with Rim-Sin's alternate name, Eri-Aku, which paid homage to a local Mesopotamian moon-god. Again the Hebrew religion is that of the culture where Hebrews kings are in power at the moment.

Eri-Aku is Sumerian, and signifies 'the servant of the moon-god'; the Semitic equivalent is Rim-Sin, as Eri-Aku was called by his Semitic contemporaries. Besides his own inscriptions, numerous contracts exist dated in his reign. In one of his inscriptions, Eri-Aku calls himself 'the shepherd of the lands of Nippur, the executor of the holy tree of Eridu, the shepherd of Ur, king of Larsa, king of Sumer and Akkad,' the last title asserting his supremacy in Babylonia.

Rev. Archibald. H. Sayce, "Archaeological Commentary on Genesis" in
The Expository Times, vol. 8, (1897), p. 461.

Finally, in an inscription from a brick found at Ur, Rim-Sin (Eri-Aku) calls himself the "legitimate shepherd," which emphasizes the equivalence of the word 'shepherd' and 'king'.

I am Eri-Aku, the valiant hero, appointed by Bel; the legitimate shepherd (i.e. ruler), the fosterer of Ur, the King of Larsa, the King of Shumer and Akkad; the son of Kudur-mabuk, the father (i.e. prince) of Emutbala (a district in Elam)..."

Henry S. Roberston, *Voices of the Past, From Assyria and Babylonia*, (1900), pp. 131-132.

If, rather than dismissing Manetho's claim, a search had been made through the archaeological record for kings who called themselves shepherds, it seems that the search would have led directly to the origin of the Hyksos *more than a century ago*. And since the origin is Abraham's native city of Ur, the link of the Hyksos to the Hebrews was also readily apparent. The relative ease by which the Hyksos Shepherd-kings of Egypt can be traced to the self-proclaimed shepherd king Rim-Sin of Ur and Larsa leads to an interesting question. How could

Oxford University professor Archibald H. Sayce write an article (2nd quote above) including discussion of an inscription in which Rim-Sin called himself “the Shepherd of Ur,” and yet Sayce did not see the link to the Hyksos and to the Hebrew patriarch Abraham, who was also a native of Ur?

This failure to connect the dots cannot be because Sayce was unfamiliar with Manetho’s report that the Hyksos were called Shepherd-kings, because six years later, Sayce wrote an article titled “The Hyksos in Egypt.” In that article, Sayce opens with a statement that thankfully, the Jewish historian Josephus had copied Manetho’s Hyksos account, but Josephus was wrong to identify the Hyksos with his own people (Jews/Semitic Canaanites/Hebrews). On the next page, Sayce presents what appears to be very strong evidence contradicting his own opening statement.

Josephus identified the Hyksos with his own people, and it is to this fortunate mistake that we owe the preservation of Manetho’s account...

The Hyksos names are all Semitic, and what is more, west Semitic. They point to Canaan as the land from which the bearers of them had come. Khian is the Syrian Khay-anu mentioned in Assyrian inscriptions. Shesha is the Sheshai of Judg. 1:10, while Jacob-el carries its origin upon its face.

Archibald. H. Sayce, “The Hyksos in Egypt,”
in *The Biblical World*, vol. 21, (1903). pp. 349-350

It should have been obvious to Sayce, and to every learned person who read his articles, that the Hyksos are one and the same as the later Hebrews who gave us the Old Testament. The problem is, the Hyksos were pharaohs of Egypt, not humble shepherds like it teaches in the Old Testament.

Another important Hyksos Pharaoh was Khian or Khayyan, the Iannas of Manetho, the lower part of whose black granite statue, discovered by Dr. Naville at Bubastis, is now in the British Museum. Khian’s empire extended far beyond the limits of Egypt. A lion bearing his name has been found in Babylonia, and the lid of an alabaster vase, with his cartouches upon it, has been disinterred by Dr. Evans among the foundations of the palace of Knossos in Crete.

Archibald. H. Sayce, *ibid.*, p. 350

Sayce was the Reverend Archibald H. Sayce. He was emotionally invested in seeing history in a manner that conforms to his religious beliefs. The possibility that a royal family smart enough to rule much of the known world, was also smart enough to later write religious fiction when it served their purposes, seems to have been blocked out of his otherwise brilliant mind. Sayce had somehow denied the obvious. The Hyksos pharaohs *were* Hebrews. With the help of science to reconstruct ancient chronology, it is also now clear that the Hyksos kings of Egypt were *specifically* Noah and the ancestors of Abraham. The big gap in the Old Testament between Noah and Abraham is the Hyksos era. Why is there a big gap in Hebrew history between Noah and Abraham? What could they say? The Hyksos kings of Egypt were not herding sheep.

III. The Chronology of the Hyksos Era

I’ve proposed that the Hyksos Dynasty began with Noah’s conquest of Egypt in 1647 BC, but were Noah’s descendants really the Hyksos pharaohs of Egypt? That topic will be the subject of section IV. This section is a detailed and necessary diversion into the chronology of the Hyksos era. Without a reliable chronology for comparison, the Hebrew records cannot be fully understood. Thus two questions must now be addressed: first, when did the Hyksos era end? Second, how much can be known about each individual reign?

Consider first Manetho’s record of the Hyksos era as quoted by Josephus. In that account, Manetho lists six Hyksos kings and their reigns, beginning with Salitis, the equivalent of Sheshi.

Thither Salitis came in summer time, partly to gather his corn, and pay his soldiers their wages, and partly to exercise his armed men, and thereby to terrify foreigners. When this man had reigned thirteen years, after him reigned another, whose name was Beon, for forty-four years; after him reigned another, called Apachnas, thirty-six years and seven months; after him Apophis reigned sixty-one years, and then Janins fifty years and one month; after all these reigned Assis forty-nine years and two months. And these six were the first rulers among them, who were all along making war with the Egyptians, and were very desirous gradually to destroy them to the very roots.

Josephus, *Against Apion I*, chap. 14, (79-81).

In section I of this chapter the same list was quoted, but from a different copy of Manetho, that of the 9th century AD historian Syncellus, who gave the total as 284 half-years = 142 years. The total for the same six reigns as recorded by the 1st century AD historian Josephus (above) is $13 + 44 + 36 \frac{7}{12} + 61 + 50 \frac{1}{12} + 49 \frac{2}{12} = 253 \frac{10}{12}$. If recorded in half-years, there should not be a record of 36 years and 7 months. But, for example, if 36 years and 7 months is a miscopied 36 years and 3 months (or a similarly minor change), the total is 254 half-years = 127 years.

Manetho composed his history of Egypt in the 3rd century BC. Josephus is the earliest and most complete copy of Manetho's Hyksos account, and thus likely to have the fewest copying errors. However, there is an even earlier Hyksos king list than that of Manetho, by roughly a thousand years. It is found on an Egyptian papyrus from the reign of Ramesses II, called the Turin Canon. The papyrus is in very poor condition, only a small fraction of the original remains. Fortunately, the total for the Hyksos Dynasty is legible. According to the quote below, the Turin Canon assigns the Hyksos Dynasty a total of just 108 years. This record is certainly not in half-years, and yet it is still lower than the total given by Manetho as quoted by either Josephus or Syncellus.

The five (possibly six) main Hyksos rulers identified by Manetho are allocated a span of 108 years in the Turin papyrus, the lengths of their individual reigns being uncertain. Unfortunately, most of the Turin papyrus is damaged, and the figure given for Sheshi, the nominal founder, may be 13 or 23 years, likewise his successor Yakubher, may have reigned for either 8 or 18 years.

Peter A. Clayton, *Chronicle of the Pharaohs*, (2006), p. 94.

The Hyksos dynasty began in 1647 BC exactly. That date is fixed by a tree-ring date for the Vesuvius eruption, as determined in chapter 14. There are now three tentative end dates for the Hyksos dynasty. Of these, the most likely to be accurate is the earliest record, the Turin Canon. But is there any way to check?

<i>end date of the Hyksos era</i>	
Turin Canon	1647 – 108 = 1539 BC
Manetho (via Josephus)	1647 – 127 = 1520 BC
Manetho (via Syncellus)	1647 – 142 = 1505 BC

There is a way to check. The end of the Hyksos era was the beginning of the Egyptian New Kingdom, when pharaohs Tuthmosis III of the 18th Dynasty and Ramesses II of the 19th Dynasty each built great empires. The new era began with pharaoh Ahmose. His predecessor Kamose was a vassal king in Thebes who had to send tribute to the Hyksos. Kamose rebelled and went to war against the Hyksos. He was ultimately killed in battle and his son (or brother) Ahmose inherited the war. Ahmose fought his way north, besieged the Hyksos capitol Avaris and eventually forcing the Asiatics out of Egypt. A record of the final stage of the war was found in the tomb of a naval officer also named Ahmose (in the quote below, pharaoh Ahmose is called 'Amosis'). Unfortunately, the tomb inscription does not give the date of any of the battles.

The task of driving the Hyksos from Egypt undoubtedly gave Amosis more trouble than might be thought from the proud boasts made on the great Kamose stele. It probably lasted several years; it has been suggested that it was not until his fifteenth year that Amosis reduced Avaris and drove the Hyksos from their Delta strongholds. A late date is defended by some on grounds of general plausibility... No indications are given in Ahmose's simple and laconic biography... Of the fall of Avaris – that great moment of fulfilled ambition for the Theban king – all he has to say is: 'They sacked Avaris; I brought plunder from there: one man and three women – total, four heads. His Majesty gave them to me as slaves. This brief account is the only surviving record of the final defeat of the Hyksos on Egyptian soil.

The Cambridge Ancient History, vol. 2-1. (1973), p. 294.

The exact date of the Hyksos defeat at Avaris is uncertain, but it was within the reign of Ahmose, likely close to his 15th year. If that target date aligns to one of the three choices: 1539, 1520, or 1505 BC, the best match is the best choice for the exact year that the Hyksos era came to an end. Unfortunately, there is no direct record of when Ahmose reigned as pharaoh either, so we must keep moving forward in time, in search of a record that can be assigned a BC calendar date.

The next piece of evidence to be considered is an extensive inscription at the Karnak temple complex in Thebes known as 'The Annals of Tuthmosis III'. The inscription provides a record of Tuthmosis III's military conquests resulting in the expansion of the New Kingdom Empire into Canaan. The conquest that marked a turning point in Egypt's fortunes was a decisive victory over the allied kings of Kadesh and Mitanni, at the Battle of Megiddo.

The conquests recorded in the Annals involved the most serious military projects undertaken by any Egyptian king – projects so successfully carried out by Tuthmose III that he is regarded as unquestionably the greatest military leader of ancient Egypt. Thutmose I had been able to march to the Euphrates without meeting any serious resistance... Then the kingdom and city of Kadesh, on the upper Orontes, quietly organized a formidable revolt, which united all Egypt's Asiatic enemies from Sharuhem on the south to the Euphrates on the north... Early in the year 23, Thutmose III met and overthrew the allied Syrians at Megiddo, which he besieged and captured...

James Henry Breasted, *Ancient Records of Egypt*, vol. 2, (1906), pp. 166-7.

By good fortune to scholars of history, the scribe who recorded this victory included the exact date of the battle, along with the observation that it was also "*the day of the feast of the new moon.*" The description of the battle itself is almost comical, with the allied kings fleeing from the approaching Egyptian army, leaving their gold and silver chariots outside the closed city gates of Megiddo, and helplessly waiting to be pulled over the wall to safety.

Year 23, first (month) of the third season (ninth month), on the twenty-first day of the feast of the new moon... his majesty went forth in a chariot of electrum, arrayed in his weapons of war... The southern wing of this army of his majesty was on a hill south of the [brook of] Kina, the northern wing was at the northwest of Megiddo, while his majesty was in the center... when they saw his majesty prevailing against them they fled headlong to Megiddo in fear, abandoning their horses and their chariots of gold and silver. The people hauled them (up)... the people of this city having closed (it) against them [and lowered] clothing to pull them up into this city.

Annals of Tuthmosis III, trans. by J. H. Breasted, *idid.*, §430, p. 184.

The Egyptian calendar date of the battle, III Shemu, day 21, coincides with a new moon only once every 25 years. That's a lunar date. A lunar date provides a series of rungs on a chronological ladder, each 25 years higher, with nothing in between. Figure 15-3 shows two published chronologies for the first five pharaohs of the New Kingdom. They differ primarily because 1504 BC and 1479 BC are two possible lunar dates for the first year of Tuthmosis III. All other choices have been tried and ruled out, but 1504 BC vs. 1479 BC have been too close to call. However, that's in part because the exact chronology of the Hyksos Dynasty was still an open

question.

In the case of Ahmose and the defeat of the Hyksos, getting the lunar date of Tuthmosis III right is like putting your feet on the right rung of the ladder. Then there are about 5 years of fine-tuning at eye level, in deciding exactly where to position the 15th year of Ahmose. Now check the numbers: in the high chronology example with year 1 of Ahmose in 1570 BC, his 15th year is 1556 BC. That's analogous to cutting a window at eye level, but there is nothing behind it. The three choices for the end of the Hyksos era are lower, at 1539, 1520, or 1505 BC. It's the *wrong* lunar date; no amount of fine-tuning will fix it. Step down a rung and try cutting the window lower.

Beginning of Egyptian New Kingdom (18th Dynasty)			
	high	low	
1. Ahmose	1570-1546	1552-1526	Hyksos expelled in year 12~15
2. Amenhotep I	1551-1524	1526-1506	
3. Tuthmosis I	1524-1518	1506-1493	
4. Tuthmosis II	1518-1504	1493-1479	
5. Tuthmosis III	1504-1450	1479-1425	Fixed ± 25 years by lunar date

high: Peter A. Clayton, *Chronicle of the Pharaohs*, (2006), p. 98.
low: Nicolas Grimal, *A History of Ancient Egypt*, (1994), p. 392.

Figure 15-3: Representative high and low chronologies for the early 18th Dynasty.

In the low chronology example with year 1 of Ahmose in 1552 BC, his 15th year is 1538 BC. This time the date 1539 BC is just a small adjustment away. Either the reign of Ahmose started a little earlier than 1552 BC or the victory at Avaris was a little earlier than his 15th year, or the Turin Canon, which actually says 108 years and (x) months, extends into the year 1538 BC. That's the simplest solution: presume Grimal's chronology is correct; the 15th year of Ahmose is correct, and the Turin Canon has enough missing months to reach 1538 BC. Extending further in both directions, the tree-ring date 1647 BC is exactly correct for the start of the Hyksos Dynasty, and the lunar date 1479 BC is exactly correct for the first year of Tuthmosis III. Two secure chronological anchors have been tied together. The 'knot' at 1538 BC is not quite as certain, but the possible error is small and of little consequence. Everything fits if the Hyksos Dynasty lasts 108 years + (x) months, spanning late 1647 BC to early 1538 BC.

Manetho's list		Hyksos kings (1647-1538 BC)		
Josephus (Syncellus)	CAH sequence	years	BC reign	
1. Salitis (Saïtes)	Sheshi	13 (or 23)	1647-1634	
2. Beon (Bnon)	Yakubher	8 (or 18)	1634-1626	
3. Apachnan (Pachnan)	Khyan	?	ca.1626-1590	
4. Apophis (Staan)	Apophis I (Auserre)	40	ca.1590-1550	
5. Iannas (Archles)	Apophis II (Aqengenre)	≥11	ca.1550-1539	
6. Assis (Aphophis)	Khamudy (Asehre)	short	ends 1538	

total: 108 years + x months

Manetho's list: *Manetho with an English translation* by W. G. Waddell, (1964), pp. 83 and 91.
CAH sequence: *The Cambridge Ancient History*, vol. 2-1, (1973), pp. 54-63.

Figure 15-4: Chronology of the six Hyksos kings.

The next challenge is assigning individual reigns to the Hyksos kings. Published sources vary widely, but if confined within the limits 1647-1538 BC, there is much less uncertainty. Figure 15-4 gives the six Hyksos king names as listed by Manetho on the left, and the corresponding names listed in the *The Cambridge Ancient History* (CAH) in the center. There are significant differences between the names supposedly recorded by Manetho, as listed by Josephus vs. Syncellus, and even greater differences when compared to the actual names of Hyksos kings

found in the archaeological record. In line 1, the archaeologically confirmed name, Sheshi, starts with an ‘S’, and otherwise bears little resemblance to Salitis (Saïtes). In line 2, nothing matches. In line 3, all names end with ‘-an’. In line 4, Apophis is Apophis, the only direct match. In line 5, the name Aqenenre bears some resemblance to Archles, and in line 6, the name Asehre bears some resemblance to Assis. This is enough to conclude that the CAH sequence agrees with Manetho as best as can be achieved, and that Manetho’s names need no longer be considered.

To build a chronology for the six kings, it is best to start from the bottom. The sixth and last Hyksos king, Khamudi (Khamudy), is the only legible name on the Turin Canon. His reign is believed to have been brief, based on his near absence from the archaeological record.

At the end of the dynasty belongs a ruler whom the redactors of Manetho call Aseth, Assis, or Arkhles, and who is probably the King Asehre, named on a small obelisk from San el-Hagar, not far from the site of ancient Avaris. This is the only monument preserved from the reign of Asehre, which was evidently extremely short – perhaps not more than a year or two. The obelisk does not bear Asehre’s personal name, but we may logically suppose him to have been the ‘Khamudy’, who is listed as the last king of the Fifteenth Dynasty on the Turin Canon.

The Cambridge Ancient History, vol. 2-1, (1973), p. 63.

Since Khamudi’s reign will never be exactly known, on line 6 of figure 15-4, he is assigned a reign of approximately one year, ending in 1538 BC. Next consider Apophis I (Auserre) and Apophis II (Aqenenre) of lines 4 and 5 respectively. From two stelae by Kamose it is known that the war to drive the Hyksos out of Egypt included a campaign by Kamose against Apophis I, who by then would have been late in his reign. The war must then have continued throughout the entire reign of Apophis II, such that the dynasty could end in the reign of Khamudi.

Ahmose was a young boy at his succession, and the kingdom was held together by the queen mother, Ahhotep. Unique epithets are given to her: ‘one who cares for Egypt; she has looked after her soldiers...’.... The final phase of the war was in the eleventh regnal year of an unknown king, sometimes identified as Ahmose, sometimes as Khamudi. The evidence consists of fragmentary notes on the verso of the Rhind Mathematical Papyrus. The recto was copied in year 33 of Aauserre Apepi, thus in a region where events were dated by the regnal years of Hyksos kings... On the verso are some notes: ‘Regnal year 11, second month of *shemu* –Heliopolis was entered; first month of *akhet*, day 23 – this southern prince broke into Tjaru. Day 25 – it was heard tell that Tjaru had been entered.’ Tjaru is probably to be identified as the fortress site of Tell el-Habua, and in this author’s view – the ‘southern prince’ is to be identified with Ahmose, while the year 11 belongs to Khamudi, whose name, without regnal years, is given in the Turin Canon.

The Oxford History of Ancient Egypt, (2003), p. 200.

In the quote above, the 11th year of a Hyksos opponent of Ahmose is assigned to Khamudi, this contradicts the 1-2 year estimate of Khamudi’s reign given in the prior (CAH) quote. The conflict can be resolved by assigning the 11th year instead to Apophis II. Specifically, the notes on the Rhind Mathematical Papyrus report that the enemy had entered Heliopolis, a major city of the Nile delta, but no direct attacks on the more northerly Avaris are recorded. Thus there is still time for Apophis II to be killed in or soon after his 11th regnal year. He would then be succeeded by Khamudi while the war was ongoing. If the war was near its end, the 11th year of Apophis II could be as late as 1539 BC. His death, followed by a brief reign of Khamudi, could lead to the fall of Avaris in 1538 BC. This is a fast war scenario. A prolonged war scenario may be a few years longer, but it is more difficult to assign numbers to.

Thus on figure 15-4, assigning Apophis II a reign of 11 years, ca.1150-1139 BC, and one additional year to Khamudi, assumes that the war progressed rapidly after Heliopolis was entered. A combined total of 12 years for the reigns of the last two Hyksos kings is plausible, but a few years added to one or the other reign cannot be ruled out. That gets through the most

difficult part of the chronology. On line 4 there is little doubt of the reign of Apophis I.

According to the Turin Canon the fourth of the great Hyksos rulers reigned for forty or more years. This is far and away the longest reign of the Fifteenth Dynasty and can be assigned only to King Auserre, the first of the Hyksos sovereigns to adopt the Egyptian personal name, Apophis. The thirty-third regnal year of this king is recorded on the title-page of the Rhind Mathematical Papyrus, a document apparently copied at Thebes from a Middle Kingdom original at a time when the Thban rulers still acknowledged the sovereignty of their Asiatic overlords.

The Cambridge Ancient History, vol. 2-1, (1973), p. 62.

Thus in line 4, Apophis I is assigned a reign of 40 years, ca.1550-1590 BC. In line 3, there is no known record of Khyan's reign. The Turin Canon is illegible, and no artifacts have been found bearing even a single a year date. Therefore, skip up to line 1 and work back down. The Cambridge Ancient History provides the following justification for the identification of Sheshi as the first Hyksos king.

In the Manethonian 'Salitis'... It is not unlikely that he is also to be equated with a king Mayebre Sheshi, whose seals and seal impressions, of early Hyksos types, are both numerous and widely distributed, examples of the later being found as far south as the Middle Kingdom trading Post at Kerma, near the Third Cartaract of the Nile... In the Turin Canon (column X, 15) the first Hyksos ruler of the Fifteenth Dynasty is ascribed a reign of [1]3 (or[2]3?) years, which is of nogreat variance with the nineteen years assigned to Salitas by Manetho.

The Cambridge Ancient History, vol. 2-1, (1973), p. 59.

The above record confirms Clayton's report (*Chronicle of the Pharaohs*, p. 94), that on the Turin Canon, Sheshi's reign can be read as either 13 years or 23 years. Noah became king Sheshi of Egypt in 1647 BC, the year of the flood, but he went back to the Sealand in 1634 BC when the reign of Shushi begins (1634-1620 BC, figure 15-1). Thus Noah's reign in Egypt would be 1647-1634 = 13 years, which gives the requisite exact match to one of the only two possibilities on the Turin Canon. Let me repeat that: *Noah's reign in Egypt can be checked to the year and does exactly match the Turin Canon*. Thus the identification of Noah as Sheshi grows even stronger, as does the evidence that the Turin Canon, though now in tatters, was originally correct.

Next, the reign of the second Hyksos king, Yakubher, must begin in 1634 BC. The Cambridge Ancient History also provides the following justification for the identification of Yakubher as the second Hyksos king.

Another early and evidently powerful Hyksos ruler, known to us chiefly from scarabs, was Meruserre Yak-Baal or Yakeb-Baal, whose Semitic personal name was transcribed into Egyptian as 'Yakubher'... the two kings seem to have been closely associated in time and in the geographic areas that they controlled. Though it is difficult to equate him with the king whom manetho calls Bnon, or Beon, there is some probability that Yakhuber was Mayebre's immediate successor... if so, he would have occupied the throne of Egypt, according to the Turin Canan, for more than 8 (or 18?) years.

The Cambridge Ancient History, vol. 2-1, (1973), pp. 59-60.

Without any external means to check, all that can be concluded about Yakubher's reign is that it was at least 8 years. Anything more is guessing. Therefore, on figure 15-4, if there were space to elaborate, the reigns of the six Hyksos kings are as follows:

1. Sheshi	1647-1634 BC	
2. Yakubher	1634-c.1626 BC	8 years or more, if extended later
3. Khyan	ca.1626-1590 BC	36 years or less from either end
4. Apophis I	ca.1590-1550 BC	40 years, possibly shifted earlier
5. Apophis II	ca.1550-1539 BC	11 years or more, if extended earlier
6. Khamudi	c.1539-1538 BC	

The next question is, given that Noah has been identified as king no. 1, Sheshi, can king no. 2 through king no 6. also be identified as five descendants of Noah? Let's check.

IV. The Hebrew Kings of Egypt

With the reigns of the Hyksos era pinned down, let's focus on individuals. Noah is undoubtedly king no. 1, Sheshi, who founded the Hyksos Dynasty. Therefore king no. 3, Khyan (Khian), should be a descendant of Noah. The archaeological evidence, described in the earlier quote (sect. II) by Sayce, shows that artifacts bearing Khyan's name were found well beyond the borders of Egypt: east to Babylonia and north to the Mediterranean island of Crete. Egyptologists are divided on whether this means there was a Hyksos empire that stretched across such a vast area, or if it was just a quirk of fate that relatively small artifacts were transported well beyond the boundaries of Hyksos Egypt. If there was a vast Hebrew empire that included Egypt, Babylonia and islands in the Mediterranean. That part of Hebrew history has been completely erased from the Old Testament. The Israelites were shown only this simple list of the descendants of Noah's son Shem.

The sons of Noah who came out of the ark were Shem, Ham and Japheth...

The sons of Shem: Elam, Asshur, Arphaxad, Lud and Aram...

Arphaxad was the father of Shelah,
and Shelah the father of Eber.

Two sons were born to Eber:

One was named Peleg, because in his time the earth was divided;
his brother was named Joktan

Genesis 9:18, 22-25

The Book of Genesis is Hebrew history as it was taught to the Israelites. The only hint that the Hebrews may have been pharaohs of Egypt during the Hyksos era is that the record presented to the Israelites is mute. The single snippet of history that survives is the phrase, "*in his time the earth was divided*," during the lifetime of Peleg. It is an indication that some political restructuring had occurred. The corresponding record in Jasher gives a little more detail about what happened in the days of Peleg, and especially during the lifetime of his brother Joktan (Yoktan).

These are the generations of Shem; Shem begat Arpachshad and Arpachshad begat Shelach, and Shelach begat Eber and to Eber were born two children, the name of one was Peleg, for in his days the sons of men were divided, and in the latter days, the earth was divided. And the name of the second was Yoktan, meaning that in his day the lives of the sons of men were diminished and lessened.

Book of Jasher 7:19-20

In the record concerning Peleg, there are two significant omissions from the Old Testament compared to the Book of Jasher. In Jasher's account, first *men were divided*, and later, *the earth was divided*. It was a two-step process. Then, during his younger brother Joktan's life (implying that Joktan lived longer) the lives of the Hebrews were *diminished and lessened*. It's fairly easy to guess what is happening: the glory days of the Hyksos era are over. But an explanation of why life was not so good requires another source. That record was discovered by Bar Hebraeus.

After Eber came Peleg his son He was one hundred and thirty years when he begot Reu; all the days of his life were three hundred and forty-three years. And in the one hundred and first year of his life Panopis, the first king of Egypt reigned sixty-eight years.

Bar Hebraeus, *Chronography*, 1:22-23

The ages recorded by Hebraeus do not make sense as either half-years or lunar months, and are best ignored. It is also ambiguous whether Panopis became the first king of Egypt during

Peleg's life, or during the life of Peleg's son Reu. But the exact year is irrelevant. Panopis was the *first* king of Egypt. Therein lies the change that caused the lives of the Hebrews to be "*diminished and lessened.*" The Egyptian king Panopis, of course would be Ahmose, who had defeated the Hyksos and driven them out of Egypt.

The Hyksos kings were no longer rulers of Egypt. Thus the days of collecting tribute from subjugated Egyptians are over. How Hebraeus discovered that Egypt's first king rose to power at this time is unknown. He had access to a library with records from Babylonia and Syria. That appears to explain where he came up with historical gems that earlier historians such as Josephus and Eusebius had missed.

Which each chronological coincidence, the picture becomes clearer. It appears that the ‘silent six’, namely six generations of Hebrew patriarchs beginning with Noah and his oldest son Shem, are a probable match to the six kings of the Hykos era recorded by Manetho and (at one time) on the Turin Canon. There is no guarantee that the six Hyksos kings were all successions from father to son, but without a means to be certain, the best one can do is test the simplest assumption.

One again it is the numbers, not names, that will either confirm or refute an initially speculative hypothesis: Are the six generations of Hebrew patriarchs an exact match to the six Hyksos kings of Egypt: Noah = Sheshi; Shem = Yakubher; Arphaxad = Khyan, etc? A definitive ‘yes’ will be elusive at this late date. A ‘no’ would be definitive if the numbers clash. If one simply cannot fit the six generations of Hebrew patriarchs beginning with Noah into the interval from 1647 to 1538 BC, the hypothesis is ruled out.

Starting at the beginning, Noah has been identified as both Sheshi (1647–1634 BC), the 1st Hyksos king, and Shushi (1634–1620 BC), the 5th Sealand king. His reign in Egypt of has been shown to exactly match the 13 years recorded on the Turin Canon for Sheshi. That’s 1 of 6. There are five more to check.

After Noah, it is impossible to test exact reign lengths, because neither the Hebrew records nor the Turin Canon are sufficiently precise. However, the birth dates of Noah through Peleg can be compared with the reigns of the six Hyksos kings, to see how the generations fit. Noah was born in 1697 BC (13:IV, figure 13-8). The flood was 50 years later, in 1647 BC, and Shem’s son Arphaxad was born two half-years after the flood (Jubilees 7:18). Thus Noah’s grandson Arphaxad was born in 1646 BC, when Noah was 51 years old. This is sensible, because it implies that Noah was in his mid 20’s when Shem was born, and Shem was in his mid 20’s when Arphaxad was born.

The corresponding Old Testament record adds something that is not sensible. Arphaxad is reported to have been born “*when Shem was 100 years old*” (Genesis 11:10). In half-years, Shem would have been $100 \div 2 = 50$ years old. This is not too old for Shem to have a son, but it is too old for Shem to have a father, Noah, who is only 51 years old! Shem’s reported age simply doesn’t fit, and must be discarded. Similarly, a series of ages recorded in the Book of Genesis are impossible in half-years: Arphaxad had his first son at age 35 half-years, Shelah at 30 half-years, and Eber at 34 half-years (Genesis 11: 12-16). Since whole years are never used in records of the lives of Hebrew patriarchs, these reported ages must be dismissed as corrupted beyond recovery.

In the Book of Jubilees it is much more difficult to extract the ages, but after the effort is made, the results are sensible (5:I, figure 5-3). When anchored at Moses, the Jubilees calendar date of the flood was found to be 1643 BC, which is likely a four-year undercount, either all at once or in smaller steps. In the figure below, the column ‘best BC date (+0/-4)’ has been corrected to match the flood to exactly 1647 BC and presumes that this four-year correction *is needed* forward through Peleg, but if not, drop as much as four years lower.

box:row:unit	Jubilees date	Event (Jubilees 5:23, 7:18, and 8:1-8)	best BC date (+0/-4)
27:5:6	1643/	The flood began	1647
flood + 2	1642/	Arphaxad is born to Shem	1646
29:1:3	/1610	Shelah is born to Arphaxad	at age 32 1/2
30:2:4	1581/	Kainan born to Shelah	1614
31:5:5	/1546	Eber born to Kainan	" 28 1/2 1585
32:7:6	/1514	Peleg born to Eber	" 35 1/2 1550
			32 1518

Figure 15-5: Birth dates of Hebrew patriarchs during the Hyksos era.

Figure 15-5 also presumes there are no copying errors, which can introduce large errors, even if the original record was accurate. This can only be checked by inspection of the ages for each father when the next generation is born. Since all are reasonable, the recorded dates of birth are at least free of significant errors, and may be exact. The Book of Jubilees also includes Kainan,

who is absent from both the Book of Jasher and the Masoretic text version of the Old Testament, yet he appears in the Septuagint version of the Old Testament (1:II, figure 1-3). The absence of Kainan in some sources is curious, because it is difficult to skip a generation when copying a record that is redundant. “*Shelah... became the father of Eber. And after he became the father of Eber, Shelah... had other sons and daughters*” (Genesis 11:14-15).

If Shelah was really the father of Kainan, and Kainan the father of Eber, it takes four deletions to omit Kainan entirely from the text. There are two ways to explain this, either the quadruple redundant format of the Book of Genesis was invented after Kainan was accidentally dropped, from a simple list of names, or Kainan was deliberately cut from the list, probably by a priest who for some reason didn’t want to claim him. The longer record in Jubilees suggests that this is actually what happened. From the text below, it appears that Kainan was a curious fellow who learned to read and write from his father, and later learned some form of astrology from “the Watchers” (*i.e.* sky-watchers) who had left ancient inscriptions of their knowledge of the heavens. This inquisitiveness was considered a sin.

In the twenty-ninth jubilee, in the first week, in the beginning thereof Arphaxad took to himself a wife... and she bare him a son in the third year in this week, and he called his name Kainam. And the son grew, and his father taught him writing, and he went to seek for himself a place where he might seize for himself a city. And he found a writing which former (generations) had carved on the rock, and he read what was thereon, and he transcribed it and sinned owing to it; for it contained the teaching of the Watchers in accordance with which they used to observe the omens of the sun and moon and stars in all the signs of heaven.

Book of Jubilees 8:1-3



Figure 15-6: The Urkish Lion.

Historically, the most important claim in the above record is that Kainan sought a place where he might “*seize for himself a city*.” This indicates that Kainan was a king seeking to expand his empire. Bar Hebraeus gives a similar account of Kainan learning (inventing) astrology, and further names a city, Harran, which Kainan had “*built*”. Since the city is older than the Hyksos era, Harran could have been “*seized*” by Kainan, and then rebuilt to his liking. Harran was strategically situated along the trade route from the northern Mediterranean region to Mesopotamia. Since c. 2000 BC, the area surrounding Harran had been home to the Hurrians, a culture with their own unique written language. Figure 15:6 is an inscribed Hurrian artwork known as the Urkish lion, now in the Louvre Museum. It consists of a crouching lion on copper tablet, which rests on an inscribed stone tablet. This small statue and the stone it rests upon were deliberately buried in the foundation of a Hurrian temple in the city of Urkish, about 100 miles east of Harran. If larger versions of this statue once stood outside Hurrian temples, the claim that Kainan learned to read what former generations had carved on a rock, could be literally true.

Eusebius doth not reckon this Kainan and his years in his table of years; neither doth the Hebrew Book, and our Syrian Book doth not. But Luke mentioneth him in the Gospel. And according to what is said, it was he who invented Chaldayutha (*i.e.* Astrology and the Art of Magic). His sons worshipped him as a god, and set up an image of him; thence began the worship of idols. And he built the city of Harran in the name of Haran his son.

Bar Hebraeus, Chronography, 1:20

Harran is also the city where Abraham temporarily settled prior to completing his journey from Mesopotamia to Canaan (Genesis 11:31). It was likely a secondary Hyksos capitol founded by Kainan, and remained a Hebrew governed city into the lifetime of Abraham. This indicates a substantial gain in Hyksos territory. In fact, if Kainan conquered Harran, the Hyksos empire

extended even beyond that of the New Kingdom empire conquered by Tuthmosis III. The difference is that Tuthmosis III left a detailed record of his victories, carved on a temple wall that has survived into modern times. For the Hyksos era, Egyptologists consider themselves lucky when they find a scarab.

The absence of Kainan from the Masoretic text of the Old Testament is explained by Bar Hebraeus without knowing it. In the religion that later Hebrews taught to the Israelites, the worship of kings as gods was prohibited. Therefore their own ancestor Kainan was heretical in a manner that was impossible to explain away. The Book of Jubilees removed the most offensive part, not mentioning that Kainan's sons worshipped Kainan as a god. In the Book of Jasher, there was no attempt to change the story; Kainan was simply deleted, “*Arpachshad begot Shelach, and Shelach begat Eber*” (Jasher 7:19). Any source copied from Jasher would omit Kainan, but accurate copies of the genealogy still existed. The Septuagint must have been corrected, and perhaps from that record, the Gospel of Luke gives the genealogy correctly from son to father, “*Eber, the son of Shelah, the son of Cainan, the son of Arphaxad*” (Luke 3:35-36).

Thus from secondary sources we learn that Kainan does belong in the list of generations from Noah to Peleg, and that Kainan was definitely a later Hyksos king, extending the reach of the empire established by Noah.

Now consider the hypothesis that Noah and his descendants match one-to-one to the six Hyksos kings Sheshi through Khamudi. Figure 15-7 lists the seven Hebrew generations from Noah through Peleg on the left, along with their dates of birth as determined by counting, via the Jubilees calendar, from the flood in 1647 BC. In the center are the six Hyksos kings of the Fifteenth Dynasty, with their reigns on the right. The start date of the Hyksos Dynasty is also counted from the flood in 1647 BC, thus the two chronologies are aligned at line 1, the start of the Hyksos era. The question is, do they remain aligned on lines 2 through 6?

Hebrew patriarchs & Book of Jubilees DOB		Hyksos kings (1647-1538 BC)		
	CAH sequence	years	BC reign	
1. Noah	b. 1697	1. Sheshi	13	1647-1634
2. Shem	?	2. Yakubher	8 or more	1634-1626
3. Arphaxad	b. 1646	3. Khyan	36 or less	ca.1626-1590
4. Kainan	b. 1614	4. Apophis I	40	ca.1590-1550
5. Shelah	b. 1585	5. Apophis II	≥11	ca.1550-1539
6. Eber	b. 1550	6. Khamudy	short	ends 1538
Peleg	b. 1518	[after Hyksos expulsion]		

Figure 15-7: Birth dates of Hebrew patriarchs and reigns of Hyksos kings.

In figure 15-7, line no. 1 is considered a given. Noah is a match to Sheshi. He was born in 1697 BC, and became king of Egypt in 1647 BC, when he was 50 years old. On line no. 2, Shem's birth date is unknown, but by the time Noah was 63 years old and departed to rule as king Shushin in the Sealand, Shem would have certainly been a middle-aged adult, capable of ruling as Yakubher in Egypt. On line no. 3, Arphaxad was born in 1646 BC. If Arphaxad was Khyan, and king from 1626 to 1590 BC exactly, he would have been king for 36 years, from age 20 years to age 56 years old. These are the outside limits of Khyan's indefinite reign. Arphaxad could not have become king at an earlier age or reigned to a later age. There are no chronological contradictions: Shem could be Yakubher and Arphaxad could be Khyan. That's 3 of 6.

Proceed to line no. 4. Kainan was born in 1614 BC, Apophis I became king in 1590 BC at the latest, and ruled for 40 years. If Kainan was Apophis I, he became king at age 24 at the latest, and ruled for 40 years. Kainan would have become king in his early 20's and reigned into his early 60's. Kainan could be Apophis I. That's 4 of 6.

Proceed to line no. 5. Shelah was born in 1585 BC. Apophis II became king in 1550 BC at the latest, and ruled for 11 years or more. If Shelah was Apophis II, he became king at age 35 at the latest, and died relatively young in his 40's. But there was a reason for him to die young. He was

at war with Ahmose and losing the war. Shelah could be Apophis II. Again, there is no chronological contradiction: That's 5 of 6.

Proceed to line no. 6. Eber was born in 1550 BC. Khamudi became king in 1539 BC at the latest. There's a problem. Eber, if he is Khamudi would become king at not more than 11 years old. Is this a chronological contradiction? It would be, if Egyptologists had found records of six accomplished adult Hyksos pharaohs, but Khamudi, the last Hyksos king on the Turin Canon, is barely attested, if at. No Khamudi scarabs have been found, though they are relatively commonplace for earlier Hyksos kings, and only a single small obelisk with the name 'Asehre', that doesn't seem to match any other king, has been assigned to Khamudi. Thus two peculiarities, Eber is too young to rule, and Khamudi is conspicuously under-represented in the archaeological record, could actually explain each other.

A child king is the most likely to remain unattested in the archaeological record, because he would not have achieved anything that would be associated with his name. There is also a reason for the Hyksos to have a child king. Their adult king Shelah was killed during the war with Ahmose. It is possible, and appears likely, that Shelah died when the war was nearly lost, and Eber reigned only briefly after his father was killed. Having a child king only makes a bad situation worse. By the time of the final surrender of Avaris, Eber would still have been only 12 years old. In Manetho's record, the Hyksos were ultimately defeated after a long war with two successive kings of Thebes. The war ended when the Hyksos negotiated a peaceful surrender and left Egypt. Then the Hyksos moved to Judea (Canaan) and built the city of Jerusalem.

After these, he says, "That the kings of Thebais and the other parts of Egypt made an insurrection against the shepherds, and that there a terrible and long war was made between them... Thummoris the son of Alisphragmuthosis made an attempt to take them by force and by siege, with four hundred and eighty thousand men to lie round about them, but that, upon his despair of taking the place by that siege, they came to a composition with them, that they should leave Egypt, and go, without any harm to be done to them... after this composition was made, they went away... through the wilderness, for Syria; but... as they were in fear of the Assyrians, who then had the dominion over Asia, they built a city in that country which is now called Judea, and that large enough to contain this great number of men, and called it Jerusalem."

Josephus, *Against Apion I*, chap. 14, (85-90).

In the above account, the Theban kings Kamos and Ahmose have been morphed into the unrecognizable names Alisphragmuthosis and Thummoris, and the numbers are unrealistically high. However, it does make sense that the Hyksos would broker a deal to relocate rather than fight to the bitter end. Recall the claim in Bar Hebraeus' Chronography that Kainan "*built the city of Harran*," This is a record that Kainan, on line 4 of figure 5-7 (Apophis I), had conquered a key city on the trade route from the northern Mediterranean to Babylon. Thus the Hyksos empire was far more extensive than Egypt alone. They could move and start over on land that they already controlled.

However, there is a problem with Manetho's claim that Assyria had dominion over Asia when Jerusalem was built. This was not the case at the end of the Hyksos era. In an alternate record of Jerusalem's construction, Bar Hebraeus reports that Jerusalem was built by Melchisedek, the Canaanite, during the lifetime of Abraham, after Belus the Assyrian had conquered the whole of Asia, and his son Ninus succeeded him. This is a better match to Manetho's claim that Assyria had dominion over Asia when Jerusalem was built.

Belus, the Assyrian, rebelled against the Chaldeans... and conquered them, and he reigned over Assyria and Babhil, and over the whole of Asia... And when Abraham was fifteen years of age... Belus died, and a second king rose up in Assyria, viz. His son Ninus, who reigned for fifty-two years, and built Nineveh. After that city Rehoboth and Rasan and Kalnai... And Jerusalem was also built by Melchisedek, the Canaanite.

Bar Hebraeus, *Chronography* 1:36-38

In Genesis 14:18, Melchisedek was the king of Salem (Jerusalem) whom Abraham met with in person. It appears that Manetho has clipped out several centuries between the Hyksos expulsion and the construction of Jerusalem by Melchisedek, the Canaanite. Having equated the Canaanites with the Hyksos and the Hebrews. The source of confusion is explained by the Table of Nations. Canaan was a grandson of Noah through Noah's son Ham (Gen. 10:6), while Abraham and the Hebrews were descended from Noah through Noah's son Shem. To Manetho, an Egyptian, there may have been little distinction between various branches of Noah's family tree. The Hyksos left Egypt, and that same ethnic group later built Jerusalem. But Manetho does not accurately record where the Hyksos settled *immediately* after departing Egypt.

In short, though Manetho's record is inaccurate, his association of the Hyksos with the later Hebrews remains valid. Both chronologically and because Noah's descendants are recorded as a Table of Nations, there is reason to believe that Noah through Eber were the six kings of the Hyksos Dynasty. There is also a reason to believe that Eber was the first king of the remaining Hyksos territory after their expulsion from Egypt, though they did not immediately settle in Jerusalem. The special role of Eber is a found in the Book of Genesis. Without explanation, Eber is singled out in the following passage as an ancestor of significance.

Sons were also born to Shem, whose older brother was Japheth; Shem was the ancestor of all the sons of Eber.

Genesis 10:21

Eber's significance can be explained as follows: the fall of the Hyksos marked a new era in the history of Abraham's ancestors. Their capitol was no longer Avaris, and the royal family was no longer called Shepherd-kings; they became known as the 'Ebers' after Eber, their first king. The name stuck, though the Ebers are better known now as the 'Hebrews'.

After Shelah came Eber his son...And it is said that the Hebrews derive their name from him.

Bar Hebraeus, *Chronography*, 1:21

Once again, Bar Hebraeus must have discovered this key historical detail amid records that had escaped the attention of other ancient historians. For the record, Hebraeus did get it wrong that Ahmose (Panopis) became the first king of Egypt during the life of Peleg (estimated lifetime 1515-1440 BC, chap. 5:II). Hebraeus seems to have built parallel chronologies backward from Abraham, and by Peleg he was misaligned by a few decades. The reign of Ahmose was 1552-1526 BC, and, by the Jubilees calendar (figure 5-5), Peleg was born in 1518 BC. Since dates of birth recorded on the Jubilees calendar are typically three generations per century, which is plausible, I conclude that the Jubilees calendar is reliable and that Hebraeus placed the reign of Ahmose (Panopis) a generation too low. He missed, but he was close enough to draw attention to the actual link between Ahmose and Peleg's father Eber.

Finally, the actual destination of the Hyksos immediately after departing Avaris may be Jericho. Egyptologist K.S.B. Ryholt believes he has discovered three scarab seals from Canaan, belonging to a Hyksos king with throne name 'Hotipibre'. Two were discovered at Jericho. Of those, one is in a private collection and the second is designated Israel Museum no. 33.1256. A third Hotipibre seal (Berlin Mus. 370/73) is of unknown origin. No Hyksos king named Hotipibre has been attested in Egypt, and all three seals contain errors revealing that the craftsmen who made the seals did not comprehend the Egyptian words being copied. This is exactly what would be expected if a Hyksos king newly arrived from Egypt had employed local craftsmen in Jericho to replicate his Egyptian seal.

Three seals are inscribed with the prenomen Hotepibre... one of the seals (private coll. Jerusalem) can be positively dated to the Fifteenth Dynasty by its use of uraei flanking the inscription (otherwise attested only for Khayan), the grooved legs, and the semicircular head. The seal is inscribed either with a garbled writing of the title *s3-re ntr-nfr* or, though this

seems less likely, an otherwise unattested title... conflations and other errors reveal the inability of the craftsmen who produced the seals to understand the titles they were cutting. The seal is here attributed to Khamudi since there is some evidence to suggest that the first three kings of the Fifteenth Dynasty did not adopt prenomen, and Khamudi thus remains the only candidate for this prenomen. ... Like the seal discussed above, the Israel Museum seal also contains a puzzling title *nb-nfr*... which would also suggest a date in the Fifteenth Dynasty. It is noteworthy too that both these two seals were found at Jericho, although this in itself does not provide a dating criterion.

K.S.B. Ryholt, *The Political situation in Egypt During the Second Intermediate Period*, (1997), pp. 51-52.

It should be noted that Hotepibre is not the only Egyptian king whose scarabs have been found at Jericho. Scarabs from Egyptian pharaohs both before and after the Hyksos era have also been discovered there. As an urban center in close proximity to Egypt, these scarabs can be attributed to travelers and merchants bringing small Egyptian artifacts to Canaan. Hotepibre is unique because his scarabs have not been found in even greater numbers in Egypt, and they appear to be manufactured by non-Egyptian craftsman. Ryholt's hypothesis that Hotepibre could be the prenomen (throne name) of the last Hyksos king, Khamudi, contradicts The Cambridge Ancient History (vol. 2-1, p. 63), which assigns an obelisk in Egypt with the prenomen 'Asehre' to Khamudi. If Ryholt is correct, Khamudi was never attested in Egypt at all, which is even more likely for a child king who reigned as the Hyksos were in the final stages of being defeated. There are better things to do during a war than carve obelisks for a child king.

In summary, the hypothesis that the Hebrew patriarchs were the Hyksos Dynasty kings of Egypt has been tested and passed every available test. Noah is chronologically a match to king Sheshi in Egypt. The lineage of his oldest son Shem through Eber includes Kainan, who Bar Hebraeus reports had built the city of Harran, consistent with a Hyksos king extending his empire. Beginning with Noah and Sheshi, the birth dates of each successive Hebrew generation sensibly match the reigns of each successive Hyksos king. The sixth generation Eber fits chronologically to the sixth Hyksos king Khamudi, who is both the final king of the Hyksos at Avaris, and the first king of the Hebrews at Jericho. Since Kainan's conquest of Haran attests to a Hyksos empire extending into and beyond Canaan, I find no reason to doubt Manetho's claim that the Hyksos Dynasty ended with a negotiated surrender, after which the Hyksos were allowed to peacefully depart from Avaris – though they settled next in Jericho, not Jerusalem. I also conclude that Ryholt's identification of Hotepibre/Khamudi scarabs from Jericho, which are crudely engraved as if by non-Egyptian craftsmen, are physical evidence that verifies Manetho's claim.

In conclusion: Abraham's ancestors have been shown to be kings of Mesopotamia from Adam through Noah, and pharaohs of Egypt from Noah through Eber. Centuries later, the authors of the Old Testament tried to erase their royal heritage, and teach the Israelites that the Hebrew patriarchs were mere shepherds. However, individuals who build cities are kings, not shepherds, and even the heavily edited Book of Genesis admits that Adam's son Cain built a city, "*Cain was then building a city*" (Genesis 4:17). The challenge has only been to identify the right kings. The Hyksos were certainly part of the family tree of royals that began with Adam. But that's not the entire story, or the end of the story. During the Hyksos era, the tree began to branch. The branching of the Hebrew monarchy will be the subject of the next chapter.

Before The Exodus

Chapter 16

From Noah to Eber

I. Noah Blesses Japheth

The underlying principle that allows astrology and palm-reading to be professions is the pretence of expertise. The ‘expert’ can look at something that has no meaning whatsoever, such as the positions of the stars and planets at a given instant, or the lines in a person’s palm, and then speak with authority, as if there is hidden meaning that only an ‘expert’ can interpret. There are two possibilities: the expert is lying, or the expert truly believes that he or she can extract meaning where there is none. For such professions to live on, and they do, it doesn’t matter if the expert is lying or truly believes. It only matters that the interpretation is convincing to a paying audience. The ‘expert’ then earns a living by making something out of nothing.

Biblical name	Historical identity	reign	years
<i>Kings of Larsa</i>			
Adam	Kudur-Mabuk	(died 1762)	
Abel, son of Adam	Warad-Sin	1798-1793	6
Cain, son of Adam	Rim-Sin I	1792-1762/	30 1/2
Enoch, [son of Cain]	Rim-Sin II	1761-1741/	20
<i>Sealand Dynasty (1717-1533)</i>			
Methuselah, son of Enoch	1. Iluma-ilu	/1717-1687/	30
Lamech, son of Methuselah (usurper, Noah in exile)	2. Itti-ili-nibi	/1687-1660	27 1/2
Ham (installed by Noah)	3. Damiqilishu	1659-1642	18
Noah, son of Lamech	4. Ishkibal	1641-1634/	7 1/2
Japheth, son of Noah	5. Shushi	/1634-1621	13 1/2
for remaining 60 years: other descendants of Noah through Japheth	6. Gulkishar	1620-1593/	27 1/2
	7. [...]en[...]	/1593	1/2
	8. Peshgaldaramash	1592-1568	25
	9. Aiadarakalamma	1567-1554	14
	10. Ekurulanna	1553-1541	13
	11. Melamkurra	1540-1538	3
	12. Eagamil	1537-1533/	4 1/2

1538 BC Noah's descendants through Shem (Hyksos) are expelled from Egypt.
1533 BC " " " Japheth fall from power in Mesopotamia.

Figure 16-1: The later Sealand kings were Noah’s descendants through Japheth.

I bring this up, of course, because there are experts who claim that every word of the Bible has *religious* meaning. The Bible is sufficiently confusing that one can earn a living by interpreting the hidden religious meanings. However, I’ve never heard the following passage from the Book of Genesis interpreted. Apparently the story of Noah being drunk and naked is too hard for even theological experts to turn into a meaningful sermon.

Noah, a man of the soil, proceeded to plant a vineyard. When he drank some of its wine, he became drunk and lay uncovered inside his tent. Ham, the father of Canaan, saw his father’s nakedness and told his two brothers outside. But Shem and Japheth took a garment and laid it across their shoulders; then they walked in backward and covered their father’s nakedness. Their faces were turned the other way so that they would not see their father’s nakedness.

Genesis 9:20-23

Ham saw Noah naked in his tent and walked out. Shem and Japheth heard the news, walked in and covered Noah with a garment. Was the meaning obvious? There's more. Since Ham didn't cover up Noah's nakedness, but his brothers Shem and Japheth did, Noah was later furious at Ham and cursed Ham's son Canaan. Now does it make sense?

When Noah awoke from his wine and found out what his youngest son had done to him, he said,

"Cursed be Canaan!
The lowest of slaves will he be to his brothers."

He also said,

"Blessed be the Lord, the God of Shem!
May Canaan be the slave of Shem.
May God extend the territory of Japheth;
may Japheth live in the tents of Shem
and may Canaan be his slave.

Genesis 9:24-27

Did you catch the line "*May god extend the territory of Japheth*"? Does it help to know that Noah was a powerful pharaoh in Egypt, yet during his lifetime he stepped aside and put his son Shem on the throne in Egypt, then returned to rule in the Sealand – and thereafter he extended the territory of Japheth?

Now it's my turn to interpret scripture. This is the story of a father who ruled such a vast empire that he divided it among his three sons while he was still alive. But one son, Ham, was a disappointment. Ham ruled poorly in the territory he was given responsibility to govern, so much so, that Noah had to step aside as king in Egypt, and with the help of his other two sons, remove Ham as king of the Sealand. That means that Ham was deposed or killed, and then Noah ruled in his place, as Shushi, the 5th Sealand king. Noah had to leave Egypt in the hands of Shem while he cleaned up the mess that Ham had made of the Sealand.

After Shem and Japheth covered up Noah's nakedness (put Noah back in power), the reason that Noah did not curse Ham is because Ham was dead. The curse was upon Ham's son Canaan. He shall not receive his father Ham's territory. That territory will be given to Japheth, whose armed forces will live in tents furnished by Shem. As ruler of Egypt, Shem collects tribute from the Egyptians, thus Shem is the source of revenue to pay Japheth's military budget – taxes imposed on Egyptians will pay for tents, and the salary of soldiers inside those tents, who will extend Japheth's territory in Mesopotamia.

So the question to the reader is, which is correct?

- A: the above is a false explanation for a meaningless Bible story,
- B: the above explanation fails to grasp the true religious meaning of the story,
- C: Noah's curse, in Genesis 9:24-27, truly is the story of Noah divvying up governmental authority and responsibility among his sons.

Choice 'C' is the basis of the Sealand Dynasty chronology shown in figure 16-1. Noah's youngest son Ham is identified as the 4th Sealand king, Ishkibal. The 3rd Sealand king, Damiqilishu (of the Sealand royalty of Isin), is a usurper, who probably killed Noah's father Lamech (of the Sealand royalty of Larsa/Ur). It was Noah's exile in Egypt during the reign of Damiqilishu that provided the opportunity for Noah to rise to power in Egypt following the eruption of Vesuvius (chap. 15:I). Within a few years after the flood, Noah had became powerful enough, through collecting tribute in Egypt, to overthrow Damiqilishu and put his own son Ham (Ishkibal) on the Sealand throne. However it was Ishkibal, who was in power when the flood tablet of Babylonian king Ammi-saduqa was written. As explained earlier (chap. 13:III), this tablet was written shortly after Ammi-saduqa had built a fort on the Persian Gulf at the mouth of the Euphrates River, which makes it almost certain that Ishkibal had lost a sizeable amount of territory to Ammi-saduqa, and much of the Sealand was under Babylonian occupation.

Now picture the political situation. Noah is reigning as king of Egypt, but his own homeland has been conquered because Ishkibal was too incompetent to defend the kingdom handed to him on a silver platter. This explains what at first seemed implausible: though Noah's lifetime was chronologically a match to Sealand king Shushi, he had to reign first as king Sheshi in Egypt, *and then* return to Mesopotamia and reign as Ishkibal's successor, king Shushi in the Sealand. Now it makes sense; after reigning for 13 years as king in Egypt, Noah went back and conquered the Sealand again. This time he stayed in the Sealand and ruled it himself, trusting Egypt to his oldest son Shem.

Noah returned to the Sealand in 1634 BC. There he reigned as Shushi, the Sealand Dynasty's 5th king, until 1621 BC, when Noah died at age 76. Shushi was succeeded by the 6th Sealand king Gulkishar, who could be either Noah's son Japheth, if Japheth was still alive, or Japheth's oldest son. Since Japheth would have been about 25 years younger than Noah, and Gulkishar reigned $27\frac{1}{2}$ years (1619-1593 BC), it is very likely that Japheth is Gulkishar and that the remaining kings of the Sealand Dynasty are among those named in the Book of Genesis as descendants of Japheth. The Sealand Dynasty ended in 1533 BC, after several kings with very short reigns. Short reigns are most likely succession by brothers or uncles, not father to son, thus only two generations beyond Gulkishar are required to span the remaining 60 years. In Genesis 9, only sons and grandsons beyond Japheth are named, followed by the statement, "from these the maritime peoples spread out".

The sons of Japheth:

Gomer, Magog, Madai, Javan, Tubal, Meshech and Tiras

The sons of Gomer:

Askenaz, Riphath and Togarmah.

The sons of Javan:

Elishah, Tarshish, the Kittim and the Roanin.

(From these the maritime peoples spread out into their territories
by their clans within their nations, each with its own language.)

Genesis 10:2-5

In the Book of Jasher, the grandchildren of Japheth are named for each of his seven sons, not just Gomer and Javan, but as above, none beyond grandchildren are named. After naming the sons of Tiras, the record ends differently – with a head count:

And the sons of Tiras were Benib, Gera, Lupirion and Gilak; these are the sons of Japheth according to their families, and their numbers in those days were about four hundred and sixty men.

Book of Jasher 7:9

It appears that the last king of the Sealand was no later than a grandson of Japheth, and at that point a record was taken of the royals who were adults at the time. After that, the kingdom fractured into clans of "*maritime peoples*".

Unlike the linear descent of Shem's genealogy through Eber, Japheth's genealogy does not single out a particular route to the most probable last king. Therefore it is not possible to identify individual kings beyond the 6th Sealand king, Gulkishar, who succeeded Shushi (Noah). Nevertheless, it is highly probable that Japheth is Gulkishar, and that the later kings of the Sealand followed the line of succession among the sons and grandsons of Japheth (figure 16-1).

Next consider the political balance of power during the reign of Gulkishar and his descendants in the Sealand. The Sealand had since its inception been at war with Babylon to the north. Hammurabi's royal family was known as the 1st Dynasty of Babylon, or the Amorite Dynasty. The Sealand Dynasty is the 2nd dynasty on several Babylonian king lists, King List A is the most complete. But placing the Sealand on a Babylonian king list doesn't completely make sense, unless at some point the Sealand Dynasty won the war and thereafter ruled in Babylon. The fall of Babylon in 1595 BC is shrouded in mystery. The city was conquered by the Hittite

king Mursilis I, but then he apparently withdrew, rather than seizing the territory and placing a Hittite vassal king on the throne.

The end of the First Dynasty of Babylon came with the reign of Samsu-Ditana (1625-1595 BC). Babylonia was now so impotent that when in 1595 BC a Hittite King Mursilis I, marched down the Euphrates to make a sudden raid on the capitol, there was no effective resistance... Since nothing more is heard of the royal family, they were presumably killed. The Motive for the raid is unknown, but since Mursilis withdrew with no attempt at permanent occupation, it may have been no more than a looting expedition...

H. W. F. Saggs, *Babylonians*, (2000), p. 114.

Why Mursilis withdrew after what was seemingly a total victory has been a mystery. What is known is that the Sealand king Gulkishar then claimed the city, since his name appears on a boundary stone listing Gulkishar as the king of Babylon.

The most powerful kingdom within reach of Babylon was now the Sealand to the south, and this may have seized the capitol in the confusion after the Hittite attack. Favoring this view is an inscription on a *kuurru*, a so-called ‘boundary stone’... which names Gulkishar, a king of the Sealand Dynasty at about this time, as a king of Babylon.

H. W. F. Saggs, *ibid.*, p. 114.

After the fall of Babylon the archaeological record is silent until the rise of the Kassite Dynasty in Babylon, which is the third dynasty on Babylonian King List A, but little is confidently known about when the Kassites took over, or exactly who they were.

One feature of Kassite Babylonia that remains problematic is describing the ‘foreignness’ of the Kassites. Their names are distinctive, totally different than Babylonian ones, and reveal the existence of a specific Kassite pantheon. They obviously spoke a different language (at least initially), some preserved their traditional tribal structure and, in legal texts, they are sometimes defined as ‘Kassite’ to distinguish them from Babylonians...The Kassite Dynasty was one of the most stable regimes ever known here, and its political unification of the country proved to be an enduring achievement. It represents one of the important turning points of Babylonian history, and further discoveries and studies should help to confirm that impression and fill out the sadly fragmentary picture.

Amélie Kuhrt, *The Ancient Near East*, vol. 1, (1995), pp. 338, 348.

It is now possible to fill in some missing pieces of the puzzle. The Kassites are unlikely to have come to power until after the Hyksos era, because the fall of Babylon was when the Hyksos Hebrews were growing stronger in Egypt. The Hyksos Hebrews were another branch of the Sealand royal family. Combine that with the fact that Noah had promised the tents of Shem to expand the territory of Japheth, “*May God extend the territory of Japheth; may Japheth live in the tents of Shem*” (Genesis 9:27). This means that the Sealand king Gulkishar (Noah’s son Japheth) had the military support of the Hyksos (the tents of Shem) at his disposal. The days of Amorite rule in Babylon were numbered, and the power of the Hyksos was the growing threat.

The curious attack and withdrawal by the Hittite king Mursilis is now easily explained. It wasn’t his war. Mursilis played the role of a mercenary or vassal king sent by the Hyksos to do a dirty job. A vassal king has been subjugated and follows orders. If the Hittite king had merely been hired, an incentive would be required. But with revenue collected from subjugated Egyptians that was now possible. The letter from the Hyksos king may have said something like this: March to Babylon and overthrow the Amorite royal family. Execute them. Then take what you like from the palace. Gulkishar will meet you there with a wagon of Egyptian gold as your payment. Then go home. The road will be clear so long as you leave quickly.

The Hebrews in Egypt could use the wealth collected as tribute from Egypt to conquer an ever growing territory. The first three Hyksos kings were Sheshi (1647-1634), Yakubher (1634-c.1626), and Khyan (ca.1626-1590), corresponding respectively to Noah, Shem, and Arphaxad

(chap. 15:III). When Mursilis sacked Babylon in 1595 BC, Shem was certainly dead, but his name is used figuratively to represent the power of the Hyksos under Khyan.

Figure 16-2 is the lion of Khyan, a statue bearing the cartouche of Hyksos pharaoh Khyan. It was discovered hidden inside a wall in Baghdad. Presumably it had been looted from an archaeological site in Iraq, not Egypt. It is a small item, but bearing a pharaoh's name. That's not something that an artist is likely to carve if just making lions to sell for household trinkets. How it found its way to ancient Babylonia is the mystery. I can offer two possible explanations. The lion is a paperweight that once sat on the desk inside the tent of an Egyptian military officer. It could have arrived with Hyksos military officers accompanying Mursilis, or perhaps with the military escort that guarded the caravan of Hyksos gold that Gulkishar used to pay Mursilis. The statue is mentioned in the following quote, as evidence of a growing Hyksos empire during the reign of Khyan.



Figure 16-2: The lion of Khyan

King Khyan ... was probably the third 'Ruler of Foreign Countries' named in column x of the Turin Canon, where a few illegible traces are all that remain of his undoubtedly fairly long reign. In contrast with the first two rulers of the Fifteenth Dynasty, he is known to us from monuments widely distributed throughout the near east: a piece of granite torus moulding from Gebelein in Upper Egypt, a fragmentary granite statue from Bubastis in the Delta, an alabaster jar-lid discovered in the foundation of the palace at Cnossus, a scarab and seal-impression in Palestine, and a granite lion built into a wall in Bagdad... Khyan concocted for himself the Horus name, 'Embracer-of-Regions', suggestive of world-wide domination. Though we cannot conclude from this fact and from the few and, for the most part, insignificant monuments mentioned above that he was the head of a great Near Eastern Empire, it would appear that in his day trade relations existed between Egypt, Mesopotamia, and the Mediterranean Islands.

The Cambridge Ancient History, vol. 2-1, (1973), p. 62.

I do not see the lion as a trade item. I see it as evidence that Khyan was the commander-in-chief who orchestrated the fall of Babylon. If the lion of Khyan did arrive in ancient Iraq as part of a Hyksos military intervention, after Babylon's fall, the Hyksos returned to Egypt. No monuments or scarabs of Hyksos kings have been found in Babylon. But ruling by lining the streets with foreign monuments wasn't the Hebrew way. They adopted the familiar customs of the locals. Gulkishar certainly became king of Babylon because of his family ties to the Hyksos, but then he ruled as a fellow Babylonian.

The exact family relation is that Shem's son Arphaxad (Khyan), hired a mercenary army to install his uncle Japheth (Gulkishar) as the new king in Babylon. By the Sealand chronology (figure 16-1), Japheth's father Noah had died in 1621 BC, 26 years prior to the sack of Babylon in 1595 BC. Gulkishar reigned $27\frac{1}{2}$ years ending in 1593 BC. Japheth, who did not become king until after Noah had lived a full life, would have been late in his own life by then. If he hadn't been late in life, it would look suspicious that he died less than 2 years after becoming king in Babylon. But it may be that overthrowing the Amorite Dynasty and sitting on Hammurabi's throne in Babylon was on Gulkishar's bucket list, and that dream was fulfilled with a little help from his nephew Khyan.

In summary, the royal family of Adam had vastly expanded in territorial possession and branched out after Noah, with Shem's lineage ruling as the Hyksos Dynasty in Egypt, and Japheth's lineage ruling as the Sealand Dynasty in Mesopotamia. Since literally the days of Adam, the Sealand had been at war with Hammurabi and his descendants, the Amorite kings of Babylon. Just two years before Japheth's death, that war ended with the sack of Babylon and conquest of Babylonia by the Sealand. The Hittite king Mursilis was either a mercenary or a vassal king of the Hyksos pharaoh Khyan, following orders that had arrived from Avaris. When

Babylon's defenses had fallen and Hammurabi's last living heirs were dead, the keys to the city of Babylon were handed over to king Gulkishar of the Sealand.

At this point the archaeological record goes dark. Little or nothing is known of the final kings of the Sealand, or who controlled Babylon after Gulkishar. But it is likely that Sealand kings reigned in Babylon so long as the Hyksos were in power in Egypt. The wealth of the Hyksos gave the Sealand control of Mesopotamia. This hypothesis is borne out by the fact that the Sealand Dynasty ended in 1533 BC, just five years after the expulsion of the Hyksos from Egypt in 1538 BC (figure 16-1). When tribute from Egypt stopped flowing to the Hyksos, the Sealand suffered as well.

Now here is the interesting ending: the story doesn't end here. The next dynasty to rule in Babylonia was the Kassites. Though historians have been at a loss to figure out who the Kassites were or how the Kassites rose to power in Babylonia, the answer has always been in plain sight. It's the next story about Noah and his three sons in the Book of Genesis.

II. The Rise of Nimrod

After Noah had cursed Canaan the son of Ham, and expanded the territory of Japheth, the next story in the Book of Genesis is that of Ham's descendants, the third branch of the Hebrew royal family. Ham's grandson Nimrod is said to have established a kingdom centered at Babylon, and then built more cities throughout Mesopotamia.

The sons of Ham: Cush, Mizraim, Put and Canaan... Cush was the father of Nimrod, who grew to be a mighty warrior on the earth. He was a mighty hunter before the Lord; that is why it is said, "Like Nimrod, a mighty hunter before the Lord." The first centers of his kingdom were Babylon, Ereck, Akkad and Calneh, in Shinar. From that land he went to Assyria, where he built Nineveh, Rehoboth Ir, Calah and Resen, which is between Nineveh and Calah; that is the great city.

Genesis 10:6-10

It was perhaps once easy to dismiss claims that Noah's descendants built cities as fables connected to the myth that Noah's family repopulated the earth following the flood. But now it is clear that Noah's descendants were kings with enormous wealth and power during the Hyksos era. According to the above genealogy, Nimrod was a great grandson of Noah, and he founded the kingdom of Shinar, which was a vast kingdom including the major cities in the heart of Babylonia. What does this mean?

What Genesis 10:10 records is that Noah's royal family didn't really lose control of Babylonia when the Sealand Dynasty came to an end. Rule over Babylon and the surrounding kingdom was just transferred from one branch of the royal family to another! The last two kings of the Sealand Dynasty, Melamkurra and Eagamil, reigned $7\frac{1}{2}$ years in total, 1540-1533 BC. They were probably both grandsons of Noah's son Japheth. Nimrod was a grandson of Noah's son Ham. He lived at the same time as the Sealand Dynasty ended, and Nimrod founded the kingdom of Shinar. Therefore, the chronological continuity is inescapable. Noah's great grandson Nimrod was the founding king of the Kassite Dynasty.

Genesis 10:10 has always held the answer to a longstanding question about the founding date of the Kassite Dynasty. The dynasty is estimated to have ended in or very near 1155 BC. The end date is connected to the well-established Assyrian chronology, with only a few years of uncertainty, but the start date is more problematic. As explained in the quote below, the archaeological evidence from Babylon supports c.1530 BC, but the record on Babylonian King List A appears to require a much earlier starting date.

The 576 years and 36 kings recorded for the Kassite Dynasty in the Babylonian King List A must include – if close to accurate – rulers long before they controlled Babylon proper... Kassites ruled from Babylon, at least as a ceremonial and religious center, from approximately 1530 B.C.E. until 1155 B.C.E.

Bill T. Arnold, *Who Where the Babylonians?* (2005), p. 126.

The problem is that 576 years before 1155 BC is $1155 + 576 = 1731$ BC, and that's far too early compared to the evidence of Kassites in Babylon starting in c.1530 BC. Bear this in mind. Arnold came up with the date c.1530 without looking at the date 1533 BC for the end of the Sealand Dynasty in figure 16-1. That chronology is ultimately based on reading the reigns of Babylonian King List A and then sending tendrils out to the Venus tablet, tree-rings, ice-cores, lunar dates, and the solar eclipse that anchors the Assyrian chronology. Arnold has date 1530 BC, based on his own set of tendrils, and then he looks at Babylonian King List A, and does the above calculation and gets 1731 BC. It doesn't even come close. What's going on?

As a first guess, if it's possibly related to the Hebrews and the numbers don't add up, the problem is a failure to understand that their records are in half-years. But in this case it's more complicated. Repeating the calculation with $576 \div 2 = 288$ years, gives $1155 + 288 = 1443$ BC, and that's wrong in the opposite direction, far too late for the start of the dynasty. This tells me that the number 576 itself is questionable. If I could look at the tablet with a magnifying glass, I would, but the best that I can do is read what others have published and *try to imagine* what their eyes saw. Figure 16-3 shows what I've found.

On the left of the figure is a drawing of the relevant second column of the tablet, as published by Theo. G Pinches; on the right is a translation by R. W. Rogers. The tablet is drawn as if it is clearly legible, but in two places, Rogers didn't translate a number the same as it appears in the drawing. These must be numbers that are difficult to read. Pinches read the last three reigns as 13 – 1 – 3. Rogers read 17 – 1 – 3. As can be seen by looking at the other 17 near the top of the list, the cuneiform '7' and '3' can be confused if the bottom of the symbol is hard to read.

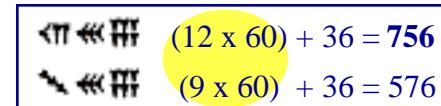
Babylonian King List A (Kassite Dynasty)	
	Theo. G. Pinches, <i>Proceedings of the Society of Biblical Archaeology</i> , vol. 6, (1884), p. 193.
22	R.W. Rogers, <i>Cuneiform Parallels to the Old Testament</i> , (1912), p. 201.
26	22
17	26 Nazi-maruttash.
2	17 Kadashman-tur gu.
6	+2 Kadashman-Buriash.
13	6 Kudur-En-lil.
8	13 Shagarkti-suriash.
6	8 Bitiliash, his son.
30	1½ En-lil-nadin-shum.
15	1½ Kadashman-Kharbe.
13(?)	6 Adad-shum-iddin.
1	30 Adad-shum-naṣir.
3	15 Me-li-shi-pak.
9(?)	17 Marduk-aplu-iddin., his son.
36	1 Zamamu-shum-iddin.
9 mo.	3 En-lil-nadin-akhi.
36 kings	<hr/>
	756 years 0 mo. 36 kings.
	Dyn. . . .
	
	$(12 \times 60) + 36 = 756$
	$(9 \times 60) + 36 = 576$

Figure 16-3: The total for the reigns of the Kassite Dynasty is 756 half-years.

The second disagreement is in reading the total at the end of the list of 36 Kassite kings. The total can't be checked against the individual reigns, because about half of the list is missing. The total is a large number, and large numbers in Babylonian are written with multiples of 60. The inset box in the lower right of the figure is what I imagine led Rogers to publish the higher total:

where Pinches saw $(9 \times 60) + 36 = 576$, Rogers saw $(12 \times 360) + 36 = 756$.

The difference is in reading the symbol in the lower left. A ‘9’ is three short indentations of the stylus; a ‘12’ is three larger indentations. The two cannot be confused unless the writing is partially illegible. But sometimes this was the case. Given a choice between a blurry number that could be either 576 or 756, obviously, if 576 is too large, 756 is enormously too large, and Rogers is the only person who published such an unreasonably high number for the total length of the Kassite Dynasty. Nobody quotes him. But Google digitized his book.

Rogers’ book is also the only source I’ve found that gives a total for the Kassite Dynasty *that makes sense*. It’s 756 half-years, corresponding to $756 \div 2 = 378$ years. Now count up from the dynasty’s end: $1155 + 378 = 1533$ BC. That’s three years away from Arnold’s 1530 BC estimate, and in exact agreement with end of the reign of the last Sealand king, Eagamil (1537-1533 BC). Thus the Kassite Dynasty is a continuation of the Sealand Dynasty, under a new line of Hebrew kings. Not only does a seamless transition from the Sealand Dynasty to the Kassite Dynasty make sense, it is recorded that way on the Synchronistic Chronicle.

Figure 16-3 (above) is the portion of Babylonian King List A where the Kassite Dynasty ends. On the right of figure 16-4 (below), is the portion where the first six kings of the Kassite dynasty are listed, immediately after the totals for the Sealand Dynasty. Only the middle of the Kassite Dynasty is missing. To the left on figure 16-4 is the corresponding portion of the Synchronistic Chronicle, beginning with the last two Sealand kings, Melamkurra and Eagamil. Despite some significant differences in spelling, it is clear that Mela[m]kurra is Melam-kurkura and Tazzigurrumash is Ur-zi-gur-mash, and that all kings in between appear on both lists. This means that the last Sealand king Eagamil was followed by the first Sealand king Gandash. The transition, likely end to end, occurred sometime during the reign of Assyrian king Erishu, 1536-1524 BC. That Gandash follows after Eagamil on the Synchronistic Chronicle is not a new discovery on my part. The translation was first published in 1926. The question was, could the Synchronistic Chronicle be trusted?

The Synchronistic Chronicle (Assur 14616c)			Babylonian King List A
3	Sharma-Adad, same	Mela[m]kurra, same	7 Melam-kurkura.
13	Erishu ¹ 1536-1524	Eagamil, G[and]ush, same	9 Ea-gamil. 4 1/2 1537-1533/
6	Shamshi-Adad, same	[Ag]um, the former, his son, same	368 11 kings, Dynasty of Uru-azag.
same	same	Kashtil[a]shu, same	16 Gandash. 8 /1533-1524/
same	same	Abirattash, same	22 Agum, the former, his son. —
same	same	Kashtil[ashu, same]	22 Bitiliashi. —
same	same	Tazzigurrumash, same	8 Ushshi, his son. 52 ÷ 2 = 26
same	same	Harba[shipa]k, same	· · · A-du-me-tash.
same	same	Tiptakzi, same	· · · Ur-zi-gur-mash.
same	same	Agu[m], same	· · · · · · · · · · · ·
16	[Ishme]-Dagan, same	error* Burnab[uri]ash, same	sources:
16	[Shamshi]-Adad, same	...	Sync. Chron: J. B. Pritchard, <i>Ancient Near Eastern Texts Relating to the Old Testament</i> (1955), p. 273.
26	[Ashurnira]ri, same	Kashtil[ashu, same]	BKLA: R. W. Rogers, <i>Cuneiform Parallels to the Old Testament</i> , (1912) , p. 201.
14	[Puzur-Ashur], same	Ula[mb]uri[ash, same]	*In the Synchronistic History (Grayson, ABC 21), Puzur-Ashur and Burnaburiash fixed a boundary.

Figure 16-4: The Kassite Dynasty begins where the Sealand Dynasty ends in the reign of Erishu.

Babylonian King List A had seriously contradicted the Synchronistic King List, but now that contradiction can be attributed to a failure to understand that the Kassite Dynasty reigns are recorded in half-years. When converted to half-years, Babylonian King List A strongly supports placing Gandash immediately after Eagamil, with the transition from the Sealand Dynasty to the Kassite Dynasty in 1533 BC. Taking that chronological benchmark as a given, the correlation to the Hebrew records is clear. Since Nimrod defeated the sons of Japheth and became king of Babylon in the fourth generation after Noah, Nimrod founded the Kassite Dynasty. There is no

other way to interpret it.

The Kassite Dynasty king list now becomes another Hebrew record, and a source of more chronological information. Consider what it contains line for line: The exact reign for Gandash (Nimrod) would be $16 \div 2 = 8$ years, /1533-1525/ BC, where the slash ‘/’ represents beginning or ending in mid-year. Such precision will soon become irrelevant, but where reigns are recorded on Babylonian King List A, the chronology is can be determined to the half-year. The next reigns will be $22 \div 2 = 11$ years for Agum, the son of Gandash, then $22 \div 2 = 11$ years for Bitiliashi, and $8 \div 2 = 4$ years for Ushshi, the son of Bitiliashi. These last two names are much different on the Synchronistic King List, and I will later switch to those spellings and follow the longer list. But for the present discussion, the spellings next to the numbers are preferable.

Now there is problem: the reigns of Agum + Bitiliashi + Ushshi, total $(11 + 11 + 4) = 26$ years on their own, plus there are four more whose reigns are unrecorded. All seven of these kings are listed as contemporaries of Shamshi-Adad, who on the Assyrian King List, reigned *just 6 years*. Since things were fitting so well so far, the solution appears to be that the second and longer reigning Shamshi-Adad farther down the list actually ‘owns’ several of those pairings, though he is inexplicably assigned none. It seems possible that the scribe confused two kings of the same name.

However, it is not possible to align any of the kings above Burnaburiash with the later Shamshi-Adad, unless Burnaburiash is also moved lower. This appears to be the crux of the problem. The chronicle writer had in his mind that Ishme-Dagan belonged with Burnaburiash, and pushed all other connections up to make that pairing connect. It’s mathematically impossible, so it’s an error. Ishme-Dagan should align with the last part of Agum’s reign and all of Bitiliashu. Perhaps Bitiliashu was confused with Burnaburiash. A confirmation that Burnaburiash was misaligned is found in the similarly named ‘Synchronistic History’, a narrative of Assyrian and Babylonian history which states, “*Puzur-Ashur, king of Assyria, and Burnaburiash, king of Karduniash, took an oath and fixed this boundary line*” (A. K. Grayson, *Assyrian and Babylonian Chronicles*, 2000, Chron. 21, lines 5'-7'). Karduniash is the Kassite name for Babylonia. So by that record, Burnaburiash should be moved down and aligned with Puzur-Ashur III. This gives the stack of kings above Burnaburiash several more decades of chronological space, and therefore resolves the mathematical contradiction.

Thus there is a serious error in the Synchronistic Chronicle, but the error is understood, and does not involve the record that Eagamil was succeeded by Gandash during the reign of Erishu. That part of the tablet is correct. The relevance toward understanding the Bible is immense: Noah’s great grandson Nimrod is Gandash, the founding king of the Kassite Dynasty. This means that the royal family that started with Adam now includes 36 more kings. In total Adam and his descendants reigned as kings in Mesopotamia for *more than 600 years*.

III. The Cultural Identity of the Hebrews

At this point it is possible to confidently assign a cultural identity to the Hebrews themselves. They were Kassites before they were Hebrews. That was actually evident as early as Enoch, when the death of Enoch was aligned to the 9th year of Babylonian king Samsuiluna (13:II, figure 13-3). However, a thread of continuity from Enoch to the Kassite Dynasty now completes the picture.

The significance of Enoch’s death in Samsuiluna’s 9th year is that Enoch was Rim-Sin II, and his ascension to heaven was his defeat in a great battle against Samsuiluna. Though the Chronicle of Early Kings records that Samsuiluna defeated Rim-Sin (II) in battle, the exact year of that defeat is not recorded. Previous attempts to determine the year, based on counting Rim-Sin’s year-names, have mistakenly counted half-years as years, giving the impression that Samsuiluna faced two enemies in rapid succession: first an army of Kassites who he defeated, followed by an uprising led by Rim-Sin II, who he also defeated. In reality, it was one victory over one uprising: an army of Kassites led by Rim-Sin II. The evidence (based on counting year names) that placed the defeat of Rim-Sin II in the 9th year of Samsuiluna was presented earlier

(chap. 13:I). An independent record of a military victory over the Kassites in Samsuiluna's 9th year is described in the quote below.

The Kassites... appear for the first time in the ninth year-name of Samsuiluna, where it is said that the king 'tore out the roots of the Kassite army [at] Kirkalla'. There is no further information about this event, but since Kirkalla, a town in the vicinity of Kish, is known for its military field holders, it is possible that the year-name refers to the suppression of an uprising of mercenary forces who had been settled in the area...

Gwendolyn Leick, *The Babylonian World*, (2009), p. 216.

The army that Samsuiluna defeated is described as Kassite, not just the leader, who is never named. But the assumption that the battle was fought in Kirkalla (north of Babylon) because the enemy was a rogue element of the Babylonian army who had been settled in that area has it backwards. The battle was fought at Kirkalla because Enoch sought out the place where the Babylonian army was settled. As described in chapter 3 of the Book of Jasher, Enoch rode with his men for seven days before meeting the enemy.

And it was after this that he rose up and rode upon the horse; and he went forth and all the sons of men went after him...And on the sixth day some of the men remained and clung to him, and they said to him, We will go with thee to the place where thou goest; as the Lord liveth, death only shall separate us. And they urged so much to go with him, that he ceased speaking to them; and they went after him and would not return... and it was upon the seventh day that Enoch ascended into heaven in a whirlwind, with horses and chariots of fire.

Book of Jasher 3:32-36

Enoch and his men were riding for seven days because they were trying to challenge the main Babylonian army and overthrow the government. And they rode on horseback, or in chariots, both mentioned in the above account, because they were Kassites. The Kassites introduced the horse and chariot to Mesopotamian warfare. The Book of Jasher describes history in the making.

This mobile vehicle, in build quite unlike the cumbersome solid-wheeled Sumerian chariot drawn by onagers which it superceded, is everywhere in the Near East associated with the newcomers – Kassites, Hittites, Hurrians – who during the early years of the second millennium B.C. were establishing their rule over the kingdoms of Western Asia.

P. J. Ucko, *The Domestication and Exploitation of Plants and Animals*, (2007), p. 473.

By process of elimination, if Enoch and his men had horses and chariots in the early second millennium BC, they were either Kassites or Hittites or Hurrians. The Kassites are first mentioned in Mesopotamia during the reign of Hammurabi (see quote below). This makes it possible that Kudur-Mabuk, who was initially allied with Hammurabi, was the first Kassite king in Mesopotamia. The breakdown of this alliance led to a failed rebellion by Rim-Sin I, Kudur-Mabuk's son. Rim-Sin I was defeated and killed in the 31st year of Hammurabi, 1762 BC. Kudur-Mabuk and Rim-Sin I were the historical Adam and Cain (figure 16-1). Later, Adam's grandson Enoch (Rim-Sin II) was attempting a Kassite conquest of Babylon in the 9th year of Samsuiluna, 1741 BC, and he too was defeated and killed. Success would not come until the Hyksos era, when the Hittites (possibly related) and Hyksos (definitely related) helped Noah's son Japheth become king of Babylon in 1595 BC.

Though Japheth was the Sealand king Gulkishar, he was a descendant of Adam, and thus a Kassite. The Kassite immigrant population in Babylonia, which had been growing in number and political power, had their first Kassite king. The Sealand Dynasty is a name chosen by later historians, but the Kassites were in power in Larsa since Kudur-Mabuk, and as of 1595 BC, in Babylon too. It wasn't called a Kassite Dynasty until Nimrod, on another branch of Adam's royal family, came to power in 1533 BC.

The name Kassite comes from the Akkadian word *kassu*, though the Kassites own word for themselves was *galzu*. The earliest references to them occur during the Old Babylonian period, in the reign of Hammurabi (1792–1750). Texts from Sippar, which lies north of Babylon, refer to both individuals and groups of Kassites hiring themselves out as farm laborers or soldiers... By the time of Babylon's fall to the Hittites c.1595 and the abrupt termination of the dynasty of Hammurabi, a group of Kassites was becoming a major political force within Babylonia. They established a dynasty which... became the supreme power throughout Babylonia. The dynasty retained this position almost without interruption until the final years of the Late Bronze Age.

Trevor Bryce, *The Routledge Handbook of Peoples and Places of Ancient Western Asia*, (2009) p. 375.

The Book of Genesis is thus a remnant of the royal archives of the Kassites during their rise to power in Babylonia. An even more detailed record of the transition from the Sealand Dynasty of Japheth to the Kassite Dynasty of Nimrod is recorded in the Book of Jasher. According to Noah's curse (Genesis 9:24-27), Ham's descendants, which would include Nimrod, were not supposed to inherit any territory. It was all intended for Japheth. This curse followed the strange story of Noah being drunk and naked in his tent. Shem and Japheth covered his nakedness with garment that they had carried laid across their shoulders. In the Book of Jasher there is a much longer story about a seemingly related "garment of skin" that can be traced all the way back to Adam.

And Cush the son of Ham, the son of Noah, took a wife in those days in his old age, and she bare a son, and they called his name Nimrod... and the child grew up, and his father loved him exceedingly, for he was the son of his old age. And the garments of skin which God made for Adam and his wife, when they went out of the garden, were given to Cush. For after the death of Adam and his wife, the garments were given to Enoch... and when Enoch was taken up to God, he gave them to Methuselah, his son. And at the death of Methuselah, Noah took them and brought them to the ark, and they were with him until he went out of the ark. And in their going out, Ham stole those garments from Noah his father, and he took them and hid them from his brothers. And when Ham begat his first born Cush, he gave him the garments in secret, and they were with Cush many days.

Book of Jasher 7:23-28

The above quote can be read in more familiar word as follows: After the death of Adam, the *crown* was passed to Enoch. When Enoch ascended to heaven, the *crown* was passed to Methuselah. After Methuselah, the story of Noah and the ark has been substituted for Lamech, but the crown did eventually pass to Noah. Before he died, Ham stole the crown and passed it to his oldest son Cush, who kept the crown "*in secret*". This means that Cush wanted to rule the Sealand, but as the son of the cursed Ham, he wasn't allowed to.

The crown is figurative. Early Kassite kings were tribal chieftains who took pride in their skill as hunters, "*Nimrod, the mighty hunter before the Lord*" (Genesis 10:9). They probably wore a ceremonial robe made of wild animal skins, but the meaning is the same. Noah's son Ham had reigned as the Sealand king Ishkibal, before he was stripped of that authority by Noah, with the help of Shem and Japheth. The garment carried on their shoulders by Shem and Japheth was a new ceremonial robe for Noah (Genesis 9:23). Their brother Ham had refused to surrender the original royal garments worn by Adam, leaving Noah figuratively naked.

The Book of Jasher tells the rest of the story. The plural form, 'garments of skin', can be explained by looking at the typical king or priest in formal attire. The ceremonial robe includes accessories. Adam was a tribal chieftain; his garments of skin may have included accessories like a leopard skin sash and boar's tooth necklace. These garments were passed down through the generations. Noah's curse meant that Cush was shut out of the line of accession, even if he literally had in his possession the ceremonial robe and accessories that his father Ham had worn.

More importantly, Cush also didn't have the financial support of the Hyksos, Shem's branch of the royal family. Cush continued to keep the royal garments in hiding. It was not until Cush's son Nimrod became an adult that Nimrod put on the garments and was proclaimed a king.

And Cush also concealed them from his sons and brothers, and when Cush had begotten Nimrod, he gave him those garments through his love for him, and Nimrod grew up, and when he was twenty years old he put on those garments. And Nimrod became strong when he put on the garments... and he rose up from amongst his brethren, and he fought the battles of his brethren against all their enemies round about. And the Lord delivered all the enemies of his brethren in his hands, and God prospered him from time to time in his battles, and he reigned upon earth.

Book of Jasher 7:29-30

The Book of Jasher's story of the garments of skin ends with Nimrod's rise to power following a successful war by the sons of Cush (Kassite Dynasty) against the children of Japheth (Sealand Dynasty). Thus the following account is a record of the Kassite Dynasty's founding king Gandash overthrowing the last Sealand Dynasty king Eagamil in 1533 BC. The third branch of the Hebrew royal family, the Hyksos, had been expelled from Egypt just five years earlier.

And when Nimrod was forty years old, at that time there was a war between his brethren and the children of Japheth, so that they were in the power of their enemies. And Nimrod went forth at that time, and he assembled all the sons of Cush and their families, about four hundred and sixty men, and he hired also from some of his friends and acquaintances about eighty men, and he gave them their hire, and he went with them to battle... And all the men that went were about five hundred, and they fought against their enemies, and they destroyed them, and subdued them, and Nimrod placed standing officers over them in their respective places. And he took some of their children as security, and they were all servants to Nimrod and to his brethren, and Nimrod and all the people that were with him turned homeward.

Book of Jasher 7:34-38

At roughly 540 men, the size of Nimrod's army is surprisingly modest, suggesting a military coup rather than a conflict of nations. This was a family feud that didn't involve the Babylonian population as a whole. The account of the battle includes a familiar Egyptian tactic – taking hostages from the children of the defeated enemy, in order to insure against future rebellion. Nimrod also paid for the assistance of about 80 “friends and acquaintances” who may have been foreign mercenaries, not unlike the Hittites hired earlier to help conquer Babylon. The account ends with Nimrod being crowned king.

And when Nimrod had joyfully returned from battle, after having conquered his enemies, all his brethren, together with those who knew him before, assembled to make him king over them, and they placed the regal crown upon his head.

Book of Jasher 7:39

After describing Nimrod's victory, the Book of Jasher describes the leadership of Ham's branch of the royal family planning the construction of a new city with a strong tower.

And all the princes of Nimrod and his great men took counsel together; Phut, Mitzraim, Cush and Canaan with their families, and they said to each other, Come let us build ourselves a city and in it a strong tower, and its top reaching heaven, and we will make ourselves famed, so that we may reign upon the whole world... and they went to seek an extensive piece of ground to build the city and the tower, and they sought in the whole earth and they found none like one valley at the east of the land of Shinar, about two days' walk, and they journeyed there and they dwelt there. And they began to make bricks and burn fires to build the city and the tower that they had imagined to complete.

Book of Jasher 9:21-24

The capitol of Kassite Babylonia was no longer Babylon. The new capitol is known to historians as Dur-Kurigalzu, and located at Aqar Quf, near Bagdad. In chapter 2, the Tower of Babel in Genesis 11 was identified as the still-standing ziggurat at Aqar Quf. The location, “*between Asshur and Babylon in the land of Shinar*” is given in Jubilees 10:26, leaving little doubt that the tower had been found. That conclusion is unchanged. But add to that a further discovery, the Tower of Babel was built by Noah’s great grandson Nimrod.

IV. The Radiocarbon Date of the Tower of Babel

It may be better to say that the Tower of Babel was started by Noah’s great grandson Nimrod, because the tower is a step pyramid with a 1st stage foundation and smaller but taller 2nd stage. Also mentioned in chapter 2, a radiocarbon date for reed matting removed from the 2nd stage of the ziggurat has been reported as $1450 \text{ BC} \pm 70$ (sample BM-1477, in *Radiocarbon*, vol. 24, no. 3, 1982, p. 248). With only an approximate Old Testament chronology by counting generations, that radiocarbon date could not be checked closely. Now it can, and there’s a new puzzle to be solved. Even at the upper limit of the reported uncertainty, 1520 BC, the radiocarbon date is not old enough to match Nimod’s conquest of the Sealand Dynasty in 1533 BC. There are now two arrows pointing exactly to 1533 BC, (counting down from the 9th year of Samuiluna, or up from the end of the Kassite Dynasty), therefore it’s unlikely to be the wrong date for Nimrod’s founding of the Kassite Dynasty and subsequent construction of the city and tower of Babel. The date of construction at Aqar Quf should match 1533 BC. Since the radiocarbon date is not old enough, the possible explanation is that the sample was taken from too high up on the ziggurat, not from the foundation that was built first.

The story gets more interesting. At least two other samples from the ziggurat at Aqar Quf have been radiocarbon dated, but the dates have very high reported uncertainty, so I didn’t initially bother to follow up on the report. Like the other, they are samples of reed matting used in the construction of the ziggurat. The samples, from two unspecified locations in the ziggurat, are reported to have *uncalibrated* radiocarbon ages of 3220 ± 110 and 3330 ± 140 years respectively, (samples CU-141 and CU-75 in *Radiocarbon*, vol. 33, no. 1, 1991, p. 73). Radiocarbon calibration will be explained below, but in comparison, the uncalibrated age of sample BM-1477 from the 2nd stage of the same ziggurat is reported as 3110 ± 35 , meaning that samples CU-141 and CU-75 are successively older. They’re probably from lower down on the ziggurat. That’s good. The reported uncertainty of measurement, ± 110 years and worse, is not good. But let’s have a look.

Uncalibrated ages are nominally counted from 1950, when the science of radiocarbon dating was in its infancy. The uncalibrated age can be off by as much as 10 percent, and is now only a convenient number scale for reporting the concentration of radiocarbon measured in the sample; an age makes more sense in the mind than an infinitesimal percentage. The uncalibrated age (measured concentration) is then compared with the radiocarbon concentration in tree-rings of known age, to find the best match to the BC calendar. Since, this calibration is a process of comparison that involves making a judgment call, scientists generally report both the uncalibrated age and their method of determining the best match to the BC calendar. Computer programs have been written to use a formula to generate the best match, but there is more than one way to write the formula. When all three uncalibrated ages are entered into the same online radiocarbon calibration program CalPal (www.calpal-online.de), the following ages and uncertainties are obtained:

Sample	location in ziggurat	^{14}C -age (YR BP)	Calendric Age
BM-1477	2nd stage	3110 ± 35	$1378 \text{ BC} \pm 44$
CU-141	unspecified	3220 ± 110	$1509 \text{ BC} \pm 122$
CU-75	unspecified	3330 ± 140	$1647 \text{ BC} \pm 166$ (older than 1480 BC)

The oldest sample has age 1647 BC, which was a surprise. Also the CalPal age for the sample from the 2nd stage of the ziggurat is now 1378 BC \pm 44, rather than 1450 BC \pm 70 as originally published in 1982. This is not alarming, because tree-ring records for comparison were incomplete in 1982. Comparison with a better record has given a lower and less uncertain date. 1647 BC is alarming, for a ziggurat that should not have been built before 1533 BC. This made me wonder what the computer program was thinking, but computers don't think; they just follow instructions. So I wondered what had the computer *been told to do?*

Figure 16-5 (below) demonstrates what happens behind the scenes in the CalPal program. The figure shows a radiocarbon tree-ring curve for 1800-1100 BC, published in 1993 by Stuiver and Becker. This curve is widely used for calibration. At one time there were no tree-ring chronologies, now the problem is deciding which to choose. The CalPal computer program uses a more recent Hungarian tree-ring chronology completed in 2007. Differences should be minor.

On the left of the figure 'Radiocarbon Age' is really a number scale where larger numbers mean less radiocarbon was found in the sample. If you could imagine a pen drawing a wiggling line in the upper right, and then that line drifting down after it was drawn, that is exactly what happens to the concentration of radiocarbon in tree rings. Radiocarbon is radioactive carbon-14 (C-14 or ^{14}C) produced in the upper atmosphere, not in the tree. Newer wood contains more radiocarbon; older wood contains less radiocarbon. The radioactivity 'built into the wood' by the growing tree is fading away, but there is also a record of the fluctuating concentration in the atmosphere as the tree was growing.

Sample BM-1477 had a ^{14}C -age (uncalibrated) corresponding to 3110 \pm 35 'years before present' (YR BP). Following that line across, tree rings that have the same amount of ^{14}C are those in the center of the circle, at about 1390 BC. CalPal gives the range 1378 BC \pm 44. This could be because the Hungarian trees are a little different, or because of how the uncertainty was averaged in. It's a disagreement of 12 years with an uncertainty of 44, not a contradiction.

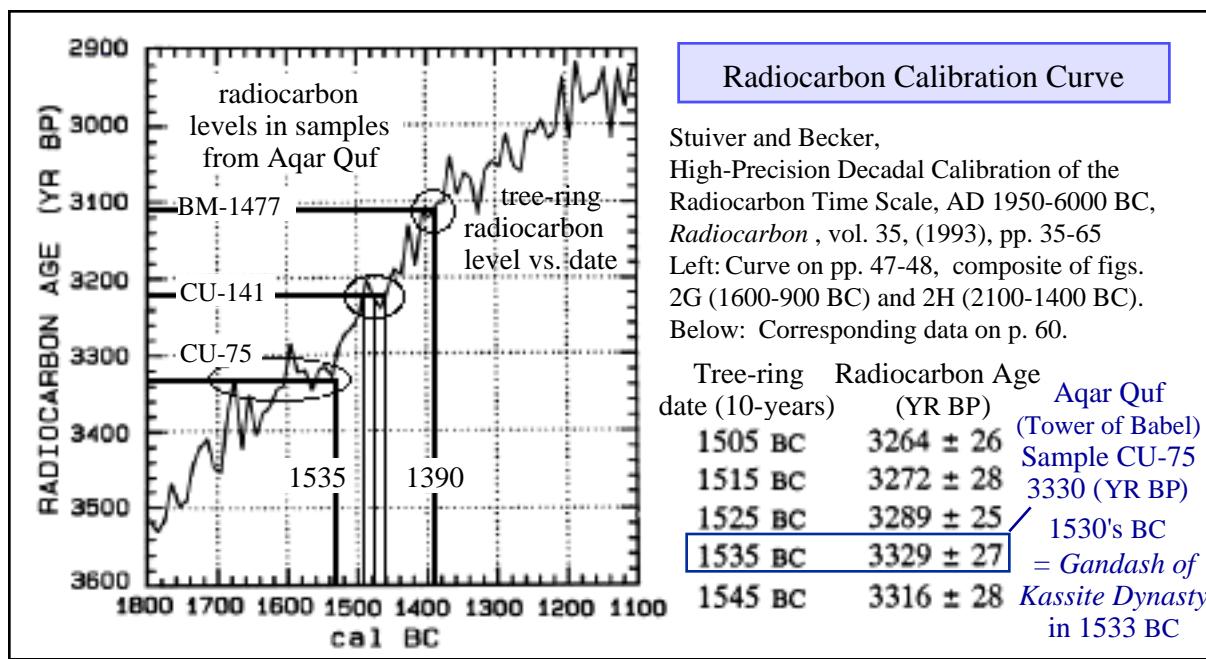


Figure 16-5: Sample CU-75, from Aqur Quf, matches the founding of the Kassite Dynasty.

Next consider sample CU-141, with an uncalibrated ^{14}C -age of 3220 (YR BP). The reported uncertainty is ± 110 , which means that a circle three times as large should be drawn. But, the interesting part is what's inside the oval. Due to the fluctuating concentration of radiocarbon in the atmosphere, even if 3220 is exactly right, the BC year cannot be determined exactly. Trees from roughly 1490, 1475 and 1460 BC, all have the same radiocarbon concentration. Since the reported uncertainty was large, CalPal drew a large circle and reported 1509 BC \pm 122. The computer program takes the uncalibrated ^{14}C -age and reported uncertainty, looks at the graph,

and generates the outer limits of where a match is possible. One thing the computer program cannot do is say, “Aha! There’s the real date.” To do that, one has to consider more than numbers. These three samples came from a ziggurat that was built at the capitol city of the Kassite Dynasty. That was not taken into consideration by the computer program.

Next, sample CU-75 has an uncalibrated ^{14}C -age of 3330 (YR BP). This is the most interesting case of all. Even if 3330 is exactly correct, there are *five* possible matches: at roughly 1670, 1600, 1570, 1560 and 1535 BC. In this case, radiocarbon cannot tell the difference between 1670 BC and 1535 BC, but additional evidence can. Babylonian King List A places the start of the Kassite Dynasty in 1533 BC. The first Kassite Dynasty king was Gandash. Hebrew records claim that Noah’s great grandson Nimrod built the Tower of Babel when he founded the kingdom of Shinar in a location that matches the ziggurat of Aqr Quf.

All the pieces fit together if Nimrod is Gandash, the founding king of the Kassite Dynasty and Gandash started construction of the ziggurat at Aqr Quf in 1533 BC. If sample CU-75 came from very early in the tower’s construction, the reeds that were used to make the matting between layers of brick had grown in the 1530’s BC. Stuiver and Becker measured 10-year averages for their tree-ring curve. In their data table version of the calibration curve (what the computer uses), the average for tree-rings from the 1530’s BC has ^{14}C -age 1329 ± 27 (YR BP) and is labeled 1535 BC. Sample CU-75 has ^{14}C -age 1330 ± 140 (YR BP). They are indistinguishable. The reeds and the trees could have been breathing the same atmosphere. Therefore, of the five choices that could be a match, the 1530’s BC is certainly the real date for sample CU-75.

The computer followed instructions, took an average, and reported a wide range of uncertainty because so many dates were possible, but when considered individually, one choice is clearly the best match. Sample CU-75 has exactly the concentration of radiocarbon that is expected for the founding of a new Babylonian capitol in 1533 BC. It’s another puzzle piece that fits. Noah’s great-grandson Nimrod (Gandash) founded the Kassite Dynasty and built the Tower of Babel at Aqr Quf.

This date is of historical significance in itself, and is a starting point for tracing further forward through the early years of the Kassite Dynasty. The new discovery for the history books is that Gandash (1533-1525 BC) should be given credit for founding a new Babylonian capitol and building the 1st stage of the ziggurat at Aqr Quf. The site has been known as ‘Dur-Kurigalzu’ because it was given that name by the later Kassite king Kurigalzu I. The following statement is accurate, but fails to recognize that the “*older settlement*” already included a palace and ziggurat constructed by Gandash.

Kassite rulers established a new capital on a hill approximately nineteen miles west of modern Bagdad at the point where the Tigris and Euphrates run closest together. Toward the end of the fifteenth or beginning of the fourteenth century B.C.E., King Kurigalzu I expanded an older settlement at the site and named it Dur-Kurigalzu (“Fort of Kurigalzu”), leaving Babylon to be the ceremonial and religious capitol... The site, which has never been thoroughly excavated, is dominated by a ziggurat, worn to its core, revealing fascinating details of its construction of reed-matting and bitumen between mud-brick layers.

Bill T. Arnold, *Who were the Babylonians?* (2005), p. 65.

The radiocarbon date (c.1390 BC) for sample BM-1477 is a good match to the only vaguely known reign of Kurigalzu I, thus he is probably responsible for construction or renovation of the 2nd stage of the ziggurat. For the initial construction, the Book of Jubilees also gives a record of how long it took to build the tower and the date when the Lord “overthrew it upon the earth.”

And they built it: forty and three years were they building it... And the Lord sent a mighty wind against the tower and overthrew it upon the earth... In the fourth week in the first year in the beginning thereof in the four and thirtieth jubilee...

Book of Jubilees 10:21, 26

The claim that a wind overthrew the Tower is not physically possible. It was built primarily of brick. Bar Hebraeus claimed that Nimrod died in the tower, which suggests that the Tower was destroyed during a war. “*And forty years after the Tower was finished, God sent a wind and the Tower was overturned, and Nimrod died in it*” (Chronography 1:27). To say that the Tower was overthrown, is just as someone might say that the Kremlin was overthrown, or the White House was overthrown. The Tower represents a government that was overthrown. It is also probable that the new government restored Babylon as the capitol, since the Book of Genesis records that the people of Babel were scattered and construction of the city of Babel ceased.

So the Lord scattered them from there over all the earth, and they stopped building the city, that is why it is called Babel, because the lord confused the language of the whole world.

Genesis 11:8

The confusion of the tongues is an unrelated myth, but there is political content in the above statement. Nimrod had built Babel as the capitol of the Kassite Dynasty. The Kassite Dynasty continued, but the king in Babel was killed and the city’s residents were scattered. This is a civil war between two branches of the Kassite Dynasty’s royal family, each with their own capitol. The king and his supporters at Babel (Aqar Quf) have been overthrown, at least until Kurigalzu I rebuilds Nimrod’s capitol and tower.

The Jubilees calendar date of the civil war is recorded in the second quote above: 1st year in the 4th week of the 34th jubilee, or box 34, row 4, unit 1 (chap. 5:I). If the Jubilees calendar is exact, the year that the tower was overthrown is 1478 BC. This date is counted from Moses, and could be up to four years higher (1480 BC ± 2), but the accuracy is sufficient for a rough check against the chronology of the early kings of the Kassite Dynasty. The lengths of the reigns of the first four kings are known from Babylonian King List A (figure 16-4), and the BC dates can be counted from the start of the dynasty in 1533 BC, as shown in figure 16-6, below.

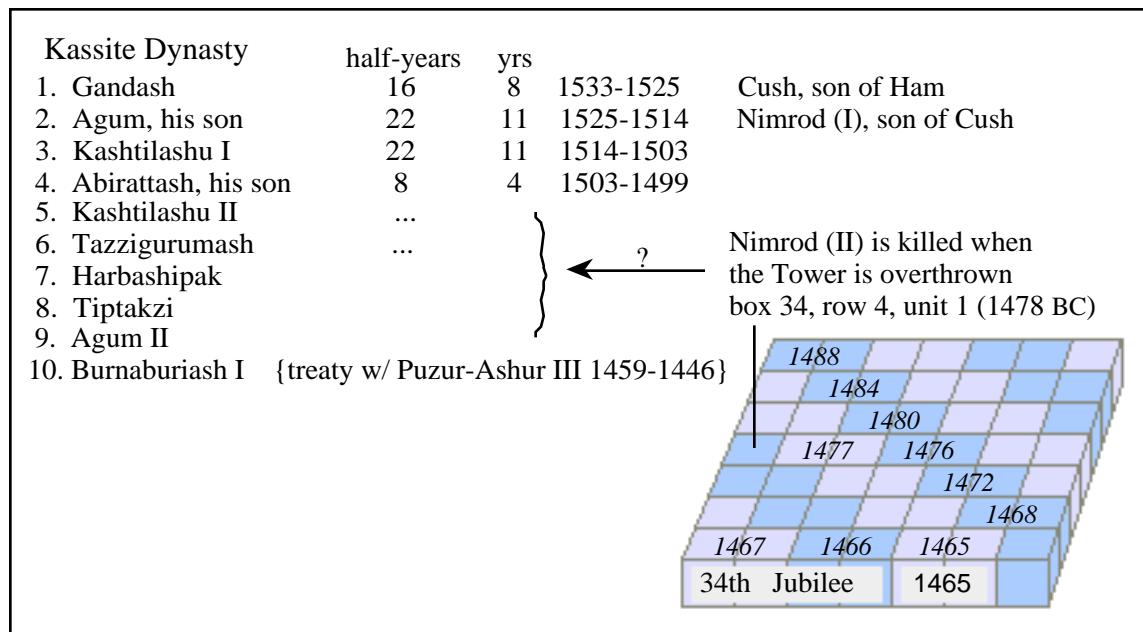


Figure 16-6: A Kassite king was overthrown and died in the tower in 1478 BC.

Since the Nimrod who built the tower is Gandash, the king who died in the Tower (according to Hebraeus) died too late (according to the Jubilees calendar) to be the original Nimrod. Thus Gandash is Nimrod I, and an unidentified king, Nimrod II, was overthrown and died in the tower. Nimrod II can be any among the 5th through 9th kings of the Kassite Dynasty. He cannot be the 10th king Burnaburiash I, because Burnaburiash must be alive to sign a treaty with Puzur-Ashur III in 1459 BC or later.

There were three branches of Adam's royal family, and Abraham is on Shem's branch, not the branch that built the Tower of Babel. The existence of Abraham clearly shows that Shem's branch did not die out, but Abraham's place in the royal family has much to do with who controlled Babylonia over the next few generations. Nimrod's rise to power did not establish a lasting dynasty at Babel. Who was next in power? The early Kassite Dynasty is a mystery, but Hebrew records have not previously been recognized as part of that history. The trail is not yet lost, and will continue in the next chapter.

Before The Exodus

Chapter 17

From Jericho to Babel

I. The Radiocarbon Date of Jericho's Destruction

One of the most controversial topics concerning the reliability of the Old Testament has been the one miracle story that was easiest to check: as the Exodus came to a close, Moses had died and Joshua led the Israelites across the Jordan River toward the highlands of Canaan to the west. On the road ahead the Israelites faced the formidable walled city of Jericho. In the story as I remember it from childhood, God performed a miracle, and the walls of Jericho came tumbling down. The teacher had a felt board, and first there was a picture with the big strong walls and men blowing trumpets. Then she took that picture down and put up the picture with all the walls tumbled down on the ground.

This was somehow a good thing. It's not a good thing if you lived in Jericho. The Sunday school teacher didn't seem to understand that what happened after the walls came tumbling down was absolutely contrary to the cherished Christian value that I still deeply believe: *Love thy neighbor*. There wasn't much love for the neighbors in Jericho.

When the trumpets sounded, the people shouted, and at the sound of the trumpet, when the people gave a loud shout, the wall collapsed; so every man charged straight in, and they took the city. They devoted the city to the Lord, and destroyed with the sword every living thing in it – men and women, young and old, cattle sheep and donkeys.

Joshua 6:20-21

I find it exasperating that fundamentalist Christians will insist that the miraculous collapse of the walls of Jericho is historically accurate, because it's in the Bible, but they don't seem to grasp the more important question. Do you, as a Christian, want this story to be true? What is important to Christians, defending the Bible, or defending what is good and right? This is a story of murder and greed. It was written to teach behaviors that are wrong: "*They destroyed with the sword... men and women, young and old.*" That's the murder. The greed comes next.

Then they burned the whole city and everything in it, but they put the silver and gold and the articles of bronze and iron into the treasury of the Lord's house.

Joshua 6:24

Throughout ancient history, kings and priests claimed to be conquering neighboring lands for the glorification of their gods. The name of the god is interchangeable. In this case the supernatural being is known in modern times as "Lord." A supernatural being without a physical body, does not need priests to build a house and collect silver and gold. The priests built the house and are collecting silver and gold *for themselves*. Period. They are greedy, dishonest, and manipulative. They don't do the murdering and stealing themselves. That is too dangerous and inefficient. They write stories that teach others to do the murdering and stealing, and then bring the gold and silver to the Lord's house. The above story was written to teach the Israelites how to plunder a city and turn over the valuables to the priests. It's not a true story. It's an invention to manipulate behavior. But it was invented to match what the Israelites were familiar with.

Much of the confusion about the date of the Exodus has come from not recognizing that the Levites had incorporated real events into the Exodus that had actually happened much earlier. The walls of Jericho tumbled and the city was burned, never to rise again. This is not disputed. Since Joshua 6:20 reports that the walls fell when the Levites sounded their trumpets, and Joshua 6:24 reports that the Israelites burned the whole city and everything in it, arguments between

scholars have focused on determining the date of the tumbled walls and burned ruins in order to determine the date of the Exodus. In 1985, Ian Wilson wrote *The Exodus Enigma*, in which he tried to make sense of the archaeological findings:

Between 1907 and 1909 Professors Ernst Sellin and Karl Watzinger directed a German-Austrian excavation at the site, and were the first to claim they discovered the famous walls of Jericho – two concentric mud brick rings of fortification, the outer one of which they concluded, ‘fell about 1200 BC and therefore must be the city wall which Joshua destroyed’.

Ian Wilson, *The Exodus Enigma*, (1985), p. 34.

So it was settled by the German-Austrian excavation more than century ago – the Exodus was in about 1200 BC. Not necessarily. I didn’t finish the quote.

In the 1930’s along came a British Expedition under the leadership of Professor John Garstang... Noting that the stones of the outer wall had fallen outwards and those of the inner wall inwards, and also that the walls appeared to have been cracked by some extraneous force, Garstang concluded that what had caused them to tumble was an earthquake – not uncommon in the rift valley where Jericho is situated – and it was this which gave Joshua’s Israelites their apparently heaven-sent opportunity to make their dramatic capture. In Garstang’s judgement, all this occurred about 1400 BC; although on the basis of the same evidence Jesuit Father Hugues Vincent argued for an alternative date of 1250 to 1200 BC.

Ian Wilson, *ibid.*, p. 35.

Now there was a debate on whether the Exodus was in about 1200 BC or in about 1400 BC, but no debate about whether Joshua was actually responsible for Jericho’s destruction. The simmering debate led to more archaeological research, which is a good thing. That’s how the truth is literally uncovered. But Kathleen Kenyan was not digging at Jericho to prove her theory of the Exodus. She was digging to understand the past, whatever the result might be.

Then in 1952 there arrived at Jericho the formidable British archaeologist Dr. Kathleen Kenyon (later Dame Kathleen). With the benefit of joint British American and Canadian sponsorship, she spent six years at the site, cutting a deep slice into the mound in order to be able to study all the different levels right back to c. 9000 BC, by which she established Jericho as probably the oldest township in the world.

Ian Wilson, *ibid.*, p. 35.

Kenyon’s discoveries were an eye-opener Walls or buildings at Jericho had collapsed and then been rebuilt seventeen times over a period of seven hundred years. The double wall that Garstang thought had fallen in 1400 BC had fallen in 2300 BC. Then the city was left undefended and occupied only by nomads for centuries. Another wall was built in about 1900 BC. This new level of occupation, called stratum IV, grew into a city, and the walls were built higher with impressive castle-like fortifications. But ultimately, these walls too came tumbling down, and stratum IV was burned and left abandoned. Stratum IV was the last walled city of Jericho. And it was destroyed earlier than anybody’s favorite date for the Exodus. Kathleen Kenyan concluded that stratum IV at Jericho was probably a Hyksos city, destroyed by the Egyptians as the Hyksos were first driven out of Egypt, and then driven out of Canaan altogether.

Historically... in about the mid-sixteenth century BC the Egyptians succeeded in expelling the Hyksos who had taken over control of Egypt. Following up their advantage, the Egyptians launched an attack against some of the places to which the Hyksos had fled in Canaan, in turn pacifying the country to such an extent that it essentially became a province of a new Egyptian empire. All this happened between c. 1550 and 1450 BC...

Ian Wilson, *ibid.*, p. 37.

Kenyon's Hyksos expulsion hypothesis ruled out both sides of the 1200 BC vs. 1400 BC Exodus debate, but 1400 BC wasn't ruled out by as much. After Wilson's book was published, Biblical archaeologist Bryant Wood, a specialist in Canaanite pottery, challenged Kenyon's evidence and reasoning, arguing that the date of Jericho's destruction could still be as late as 1400 BC, and thus it wasn't the Egyptians pursuing the Hyksos in Canaan. The Biblical claim that Jericho was destroyed by the Israelites could still be true.

Garstang... dated the end of his "City IV" to 1400 B.C., but Jericho's later excavator, Kathleen Kenyon, raised this date to 1550 B.C. ... Proponents of an early date have pointed to evidence uncovered by Kenyon that nonetheless supports an occupation ca. 1400 B.C. More significant, however, has been the recent reaffirmation of Garstang's dating of City IV's demise to ca. 1400 B.C. by Bryant Wood, calling into question Kenyon's dating. Wood presents convincing evidence that Kenyon's methodology in dating was flawed, using as it did imported pottery types from tombs for its typology...

D. M. Howard, *An Introduction to the Old Testament Historical Books*, (2007), p. 97.

The argument that Kathleen Kenyon was wrong because she couldn't figure out the dates on pottery is an argument that can be made because pottery is difficult to date. Pottery is a way to be creative, and styles change over time just as clothing styles and automobile styles change. Given a hundred old movies from the 1920's to the present, it would probably be possible to put them in very nearly the correct order just by comparing clothing styles and automobile styles, but it's much harder to know the exact year that cat-eyed glasses went out of style. A pottery chronology is simply not as fixed in time as a radiocarbon date.

When Kathleen Kenyon was excavating at Jericho, radiocarbon had just been discovered as a means to determine the date of ancient artifacts. By 1990, when Bryant Wood challenged Kenyon's findings, the race was on to complete a high precision tree-ring chronology to calibrate archaeological samples as far back as the dawn of ancient civilizations. The race was a tie, possibly because Minze Stuiver was working on all three chronologies, and was the guest editor of the 1993 special edition of *Radiocarbon* that published the calibration curves.

Radiocarbon, vol. 35. no.1 , 1993

ARTICLES

High-Precision Bidecadal Calibration of the Radiocarbon Time Scale, AD 1950-500 BC

and 2500-6000 BC

Minze Stuiver and Gordon W. Pearson 1

High-Precision Bidecadal Calibration of the Radiocarbon Time Scale, 500-2500 BC

Gordon W. Pearson and Minze Stuiver 25

High-Precision Decadal Calibration of the Radiocarbon Time Scale, AD 1950-6000 BC

Minze Stuiver and Bernd Becker 35

With the publication of this special 'Calibration' issue of Radiocarbon, it became possible to take a fleck of charcoal from the burn layer in City IV of Jericho, and determine when the tree that it was once a part of had been alive. But that would still leave some doubt, because trees could be built into homes long before the fire. So in addition to charred wood, the search was on for cereal grains (food) that had been charred by the fire. Grain is usually eaten within a year or two after it is harvested, and six separate charred samples from the burn layer were obtained and tested.

Within two years of 1993 Calibration issue of Radiocarbon, the Jericho radiocarbon results were in. All six grain samples were of indistinguishable age, meaning that as expected, they were all harvested within a year or so of the fire. Charcoal samples from scraps of burned wood were decades to a century older, also as expected for building materials or kitchen firewood that was consumed in one great fire. The fire was definitely not in or near 1400 BC. This is the part of the

report where the authors, Bruins and Van der Plicht, explain that Bryant Wood's pottery chronology placing the destruction of Jericho (Tell es-Sultan) in c. 1400 BC was proven wrong.

The ^{14}C dates do not support a low 15th century BC chronology for the end of the MBA as Bimson (1978) proposed. Further, the fortified Bronze Age city at Tell es-Sultan was not destroyed by *ca.* 1400 BC, as Wood (1990) suggested. The archaeological dating of Jericho's destruction by Watzinger (1926) and Kenyon (1957) falls within the preliminary calibrated ranges.

Hendrik J. Bruins and Johannes Van der Plicht, *Radiocarbon*, vol. 37, no. 2, (1995), p. 218.

In *The Exodus Enigma*, Ian Wilson quoted Ernst Sellin and Carl Watzinger as having jointly reached the conclusion that the walls of Jericho, “*fell about 1200 BC and therefore must be the city wall which Joshua destroyed.*” That factual statement omits an important detail brought to light by Bruins and Van der Plicht. Watzinger later revised his conclusion upward to the seventeenth century BC!

A second set of problems with the story in Joshua 6 comes from the archaeological excavations in Jericho. Ernst Sellin and Carl Watzinger, who excavated Jericho from 1907 to 1909, concluded that their diggings supported the biblical account of the capture of Jericho. But at the time that Sellin and Watzinger worked, the method of dating archaeological remains in Palestine was mostly guesswork. When dating the remains found during excavation became more exact, Watzinger revised his conclusions and admitted that the walls he and Sellin found dated to the seventeenth century BC and earlier – three to five hundred years before the Israelites emerged in Canaan.

Leslie J. Hoppe, *New Light from Old Stories: The Hebrew Scriptures for Today's World*, (2005), p. 82.

Carl Watzinger and Kathleen Kenyon had in fact reached nearly the same date for Jericho's destruction. Watzinger favored the Egyptian Second Intermediate Period, including the Hyksos Dynasty. Kenyon placed the destruction early in the Egyptian New Kingdom, which began with the expulsion of the Hyksos by pharaoh Ahmose of the 18th Dynasty. The cut-off date between the Second Intermediate Period and New Kingdom was dependant upon the still uncertain Egyptian chronology. Bruins and Van der Plicht used the latest available estimate, 1539 BC, to conclude that neither Watzinger nor Kenyon's predictions could be ruled out.

The archaeological dating of Jericho's destruction ... is not based on firm chronological evidence, but apparently on assumed association with the beginning of the XVIIIth Dynasty in Egypt. This date in the floating Egyptian chronology has gradually shifted from *ca.* 1580 BC (Breasted 1906), used by Kenyon, to the current low chronology of 1539 BC (Kitchen 1987; Ward 1992).

Bruins and Van der Plicht, *Radiocarbon*, vol. 37, no. 2, (1995), p. 218.

The date 1539 BC published by Kitchen and Ward is also the date derived by the hypothesis that the Hyksos Dynasty began with Noah's conquest of Egypt following the catastrophe of the Vesuvius eruption in 1647 BC (15:III, figure 15-4). Counting forward '108 years + x months,' as recorded on the Turin Canon, gives $1647 - 108 = 1539$ BC (or 1538 BC, if x is sufficiently large).

The next quote is where the scientific test results are presented. Since calibration is critical to the conclusion, the authors report the uncalibrated radiocarbon age for the burn layer at Jericho, 3306 ± 7 (YR BP), and the method of calibration, comparison with the 1993 tree-ring curve of Stuiver and Becker, using a computer program called OxCal. The Oxcal program generated two possible calendar dates: 1601-1566 BC or 1561-1524 BC. The first range supports Watzinger's prediction. The second range supports Kenyon's prediction. Either of these two choices were equally probable.

The age of the short-lived cereal samples is likely to be within a few years of the destruction date of the last MBA city at Tell es-Sultan. The weighted average of the cereal grains is much more precise in ^{14}C years 3306 ± 7 BP, than in historical years, due to wiggles in the calibration curves. Calibration with the 1993 decadal curve of Stuiver and Becker, using the OxCal computer calibration program, results in $1-\sigma$ ranges of equal probability, 1601-1566 cal BC and 1561-1524 cal BC.

Bruins and Van der Plicht, *ibid.*, pp. 218-19.

The computer program OxCal is not required, because figure 17-1 shows the 1993 tree-ring curve of Stuiver and Becker. Your eyes are now capable of performing the OxCal computation. The circle near the top of the figure represents Wood's pottery chronology prediction that Jericho had burned in about 1400 BC. The horizontal line labeled 'Jericho grain' is the concentration of radiocarbon measured in grain samples that grew shortly before the fire. These samples were physically charred by the fire, which then prevented the samples from rotting.

Imagine a lake and a mountain. The challenge was, radiocarbon levels are higher up the mountain closer to the present. Read the dates across the bottom axis and then draw a circle above the year that Jericho burned. The line labeled Jericho grain does not pass through the circle for Wood's prediction, which means that the concentration of radiocarbon in the samples is far lower than the concentration of radiocarbon in trees that grew in c. 1400 BC. All plants have the same level of radiocarbon if they grew in the same year. The Jericho grain did not grow in c.1400 BC. The pottery chronology was wrong.

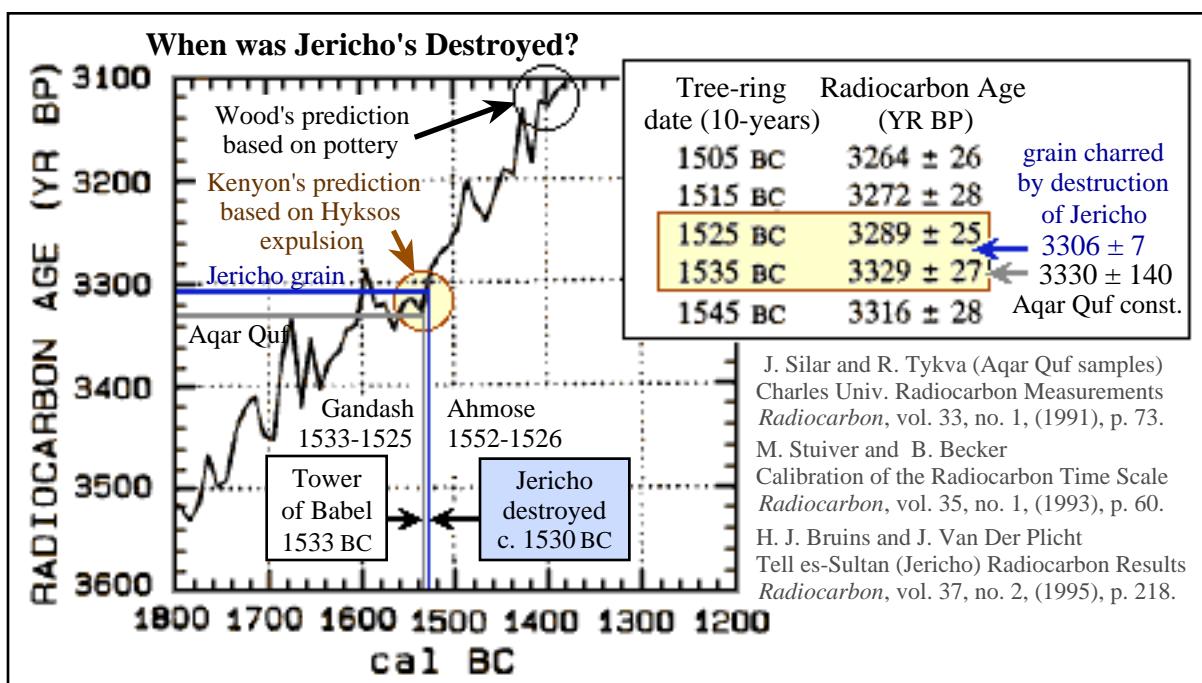


Figure 17-1: The walls of Jericho fell no later than the reign of pharaoh Ahmose.

That's how radiocarbon science works. There is no longer a question, or a hope, or a prayer. There is an answer: 1400 BC is wrong. That's not when Jericho was destroyed. This may be why some people prefer to dismiss scientific evidence that contradicts the Bible without attempting to learn or understand how conclusions are made. Hopes and prayers that have not been ruled out, can make people happier than knowing the truth.

II. The Historical Destruction of Jericho

The elimination of Wood's hypothesis is not the end of the story. There is still a question of what really happened at Jericho when the city was destroyed. Watzinger's hypothesis was not

correlated to any particular event, just sometime during the Second Intermediate Period. Kenyon's hypothesis was associated with the Hyksos expulsion, and the radiocarbon date within the lower circle is *remarkably close* to the 1538 BC Hyksos expulsion. It is also remarkably close to construction of the historical Tower of Babel, the ziggurat of Aqar Quf, which was built soon after Gandash founded the Kassite Dynasty in 1533 BC. Those two events are intimately related to records in the Old Testament, but not to the record of Joshua and the Exodus. They are related to the troubled times and internal strife in the Hebrew royal family after Shem's branch of the royal family, the Hyksos, lost their source of revenue, collecting tribute from subjugated Egyptians.

Somebody burned the city of Jericho as part of a conquest of whoever had relied on that city's walls for protection. There was no desire to move in and take over the city; the goal was to make the city useless as a defensive stronghold. The question is who was on the outside of the walls and who was on the inside. The Old Testament reports that it was Joshua and the Israelites on the outside.

Then they burned the whole city and everything in it... At that time Joshua pronounced this solemn oath: "Cursed before the Lord is the man who undertaketh to rebuild this city, Jericho: At the cost of his firstborn son will he lay its foundation; at the cost of his youngest son will he set up its gates." So the Lord was with Joshua, and his fame spread throughout the land.

Joshua 6:24-27

Due to the steep rise of the calibration curve immediately after c.1530 BC, any later date is unequivocally ruled out. The emergence of Israelite settlements in Canaan is c.1200 BC, approximately when Israelites are mentioned on Merneptah's victory stele. Thus, Exodus or not, the Israelites were not around when Jericho was destroyed. Furthermore, by the Jubilees calendar, the Exodus began in 1092 BC (chap. 5:I). There is no historical contradiction, because the Exodus *was not* the arrival of all Israelites in Canaan. The Exodus date was moved back to "sell the story" that the Israelites had all arrived together with Moses.

Presuming that Joshua is a historical individual who succeeded Moses at the end of the Exodus, Joshua arrived in Jericho at least four hundred years after the city had been destroyed. If it had been rebuilt to some minor extent, perhaps he killed those inhabitants, but the entire story appears to be propaganda in which a local hero (Joshua) is given credit for a spectacular victory (the destruction of the fortress at Jericho) that actually happened centuries earlier.

The challenge in the Old Testament is to ignore the boldly proclaimed propaganda and find the inadvertent gems of truth in the parts of the originally historical record that weren't changed. The c. 1530 BC radiocarbon date for the destruction of *the fortress* at Jericho is hovering over the reign of both Ahmose, the founding pharaoh of the Egyptian New Kingdom, and Gandash (1533-1525 BC), the founding king of the Babylonian Kassite Dynasty. Gandash is the historical Nimrod (Noah – Ham – Cush – Nimrod) who built the Tower of Babel and founded the kingdom of Shinar (chap. 16:III). The following record of the tower's construction still retains a very important historical clue about what happened at Jericho.

As men moved eastward, they found a plain in Shinar and settled there. They said to each other "Come, let's make bricks and bake them thoroughly." They used bricks instead of stone, and tar for mortar. Then they said, "Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves and not be scattered over the face of the whole earth.

Genesis 11:2-4

To put the above record in context, in Babylonia, Ham's branch of the Hebrew royal family had won a civil war, defeating Jepheth's branch in 1533 BC, and establishing a new Babylonian capitol at Aqar Quf (Babel, in the land of Shinar). At the same time, Shem's branch of the royal family, the Hyksos, had been expelled from Egypt by Ahmose just five or six years earlier, in

1539/8 BC. They were trying to make a new start under Eber in Canaan. Or did they stay in Canaan? The above Tower of Babel account begins with the statement “*as men moved eastward*” to Shinar. Who was moving to Shinar? Where had they been before arriving in Shinar?

The conclusion of chapter 15 is that Shem’s branch of Noah’s family tree were kings of the Hyksos, and in chapter 16, descendants of Shem’s brother Japheth are identified as kings of the Sealand dynasty, until descendants of Noah’s third son, Ham, seized the throne and founded the Kassite dynasty. Noah and all of his descendants were thus ethnic Kassites, but the literal The Kassite dynasty was founded in 1533 BC by Noah’s great grandson Nimrod (Noah – Ham – Cush – Nimrod). Manetho reported that following their expulsion from Egypt, the Hyksos built the city of Jerusalem, but Manetho had it wrong. He had lost track of the Hyksos after they left Egypt, and picked up the story with the construction of Jerusalem by Canaanites, who like the Hyksos were ethnic Kassites. Canaanites were presumably descended from Ham’s son Canaan (Gen. 10:6). Noah’s family was branching and conquering land throughout the ancient Near East.

The Hyksos (Shem’s branch) lead to Abraham and the Hebrews. But the Hyksos did not simply move from Egypt to Jerusalem. At some point Shem’s descendants had to return from Egypt to Mesopotamia, because Abraham’s childhood home was Ur of the Chaldees, in the Sealand of Mesopotamia. Notice in the above account of the construction of the tower of Babel in Shinar, “*They used bricks instead of stone, and tar for mortar.*” This would not be a novel form of construction to Ham’s branch or to Japheth’s branch of Noah’s family tree, who had lived since childhood in Mesopotamia. There is little but mud for construction material in Mesopotamia, and tar, which oozed from the ground in what later became the oil-fields of Iraq. Building with mud bricks and tar was only something *different* to the Hyksos, Shem’s branch of the family tree, who were accustomed to the stone and mortar used as construction material in Egypt and Canaan.

The time at which Abraham’s branch of the royal family returned to Mesopotamia is alluded to in Bar Hebraeus’ report that Abraham’s ancestor Eber did not approve of construction of the tower in Shinar.

And the speech of them (i.e. the builders of the Tower) was divided into seventy languages. And the land of Shinar was called ‘Babhel’ that is to say, ‘Confusion’...But the pious Jacob and John of Yathreb think that Hebrew was the first (i.e. oldest) language—the Hebrew which was preserved with Eber, for he was a righteous man and did not agree to the building of the Tower.

Bar Hebraeus, *Chronography*, 1:27

If Eber did not agree to the building of the tower, firstly, it means that he was alive at the time. Eber’s date of birth, by the Jubilees calendar, is 1550 BC, counted forward from the flood in 1647 BC (15:IV, figure 15-5). This means that Eber was just 17 years old when the Kassite dynasty was founded in 1533 BC. Construction of the tower began soon thereafter. Second, and more significant for Kenyon’s hypothesis that Jericho was destroyed by Ahmose, despite his youth, Eber was the head of Shem’s branch of the Hebrew royal family. His reason to be upset about the tower may be presented as being righteous, but it was more likely jealousy. Nimrod was building a spectacular new tower; Eber had just lost his kingdom in Egypt, and was now watching another branch of the royal family build a palace and new capitol city... that is, if Eber was close enough to watch.

Eber was the last Hyksos king Khamudi, not yet 12 years old when Ahmose forced the Hyksos to surrender and evacuate from Avaris (chap. 15:IV). The Book of Jubilees records that the tower was under construction for “*forty and three years*” (Jubilees 10:21), which is $43 \div 2 = 21\frac{1}{2}$ years, corresponding to Eber’s life from roughly age 17 to his late 30’s. Eber was king, but king of what land? The kingdom that he expected to inherit was Egypt. That land had been lost to Ahmose.

The lineage from Eber to Abraham is: Eber – Peleg – Reu – Serug – Nahor – Terah – Abraham. According to Bar Hebraeus, the rise of Assyria as a dominant power in Asia was

during the lifetime of Terah.

After Nahor came Terah his son... And in the fifth year of Terah a fifth king rose up in Babhil, Arpazadh; he reigned eighteen years, and then the kingdom of Babhil came to an end for seven years, until Belus, the Assyrian, rebelled against the Chaldeans. And he made war upon them and upon the Medes and conquered them, and he reigned over Assyria and Babhil, and over the whole of Asia...

Bar Hebraeus, *Chronography*, 1:36

This record is valuable both for chronology and to understand what is happening to the Hebrews. Babel (Babwil) is the capitol of Shinar, or Kassite Babylon, which had been ruled by Noah's descendants. The rise of Assyria can be traced to the fall of Mitanni, As explained in the quote below, Assyria during its early history was subjugated by its more powerful neighbor Mitanni, and remained so until Mitanni was conquered by the Hittites in about 1350 BC.

The Assyrian empire was weak at first. Its kings were effectively subject to the kings of its northwestern neighbor Mitanni, but they acquired independence when the latter empire was overthrown by the Hittites around 1350 BC. This ushered in a new period in Mesopotamia's history, in which the region was governed by two medium-sized states, Assyria and Babylon, in a more or less stable balance of power...

Lukas de Blois, *An Introduction to the Ancient World*, (1997), p. 24.

Though de Blois describes the relationship between Assyria and Babylon as more or less stable, Hebraeus describes a much less stable relationship, with Assyria conquering and subjugating Babylon, at least temporarily. Now the big picture is becoming clearer. By the Jubilees calendar (5:I, figure 15-1), Eber was a child when the Hyksos were expelled from Avaris in 1539/8 BC, but Abraham was a child in c. 1350 BC, when Mitanni was conquered by the Hittites, liberating Assyria, which then rose up and conquered Babylon. The Jubilees calendar and the historical record are in agreement. Abraham's branch of the Hebrew royal family is being pushed around by the winds of political change. Noah conquered Egypt, then Shem through Eber ruled in Egypt as the Hyksos, until pharaoh Ahmose threw off Hyksos oppression and drove Shem's branch out of Egypt and ultimately *back to Mesopotamia*. There, Eber watched the Tower of Babel being built by Nimrod of Ham's branch. From Eber through Abraham, the former Hyksos were back in Mesopotamia, but as secondary royals in a land ruled by Ham's branch of the royal family. During the lifetime of Terah and his son Abraham, Assyria grew stronger and pushed south into Babylon. Then out of Mesopotamia came Abraham, the former Hyksos were on the move again.

That's the big picture, a preview of coming events. The unresolved question to for the moment is who was on the inside vs. the outside when the walls of Jericho were toppled. Kathleen Kenyon, who spent six years excavating at Jericho, expressed doubt that the biblical account could have simply been invented to describe the scene at Jericho, because after centuries of weathering, the site would not even be recognizable as a destroyed city.

I find it difficult to believe that the early Israelites would have recognized the mound as a ruin, the product of human activity. It would not have taken many decades of rain and wind to have reduced the destroyed mud brick buildings to the mound of earth we see today, and there would be no need to explain it.

Kathleen Kenyon, *Digging Up Jericho*, (1957), p. 263.

The foundation of a formidable wall would remain recognizable for much longer than crumbled buildings. But still, the story of Joshua's conquest specifically emphasizes that, "*they burned the whole city, and everything in it*" (Joshua 6:24). Centuries later, why would Hebrew priests imagine that Jericho had been burned? That's easy. Hebrew priests weren't imagining what happened at Jericho; they were reading what happened in their own royal archives from the

Hyksos era. The Levite priests who fabricated the story of Joshua's conquest of Jericho were descended from Abraham, who was descended from the Hyksos. The Hyksos were at Jericho when the walls were toppled and the city was burned. But from which side of the walls were they watching?

If the Hyksos had retreated to Jericho following their expulsion from Avaris, a crushing defeat at Jericho could have been the final straw that sent them packing back to Mesopotamia. This would explain why one possible radiocarbon date for the destruction of Jericho is c.1530 BC. The alternative is 60 to 70 years earlier.

The earlier date for the destruction of Jericho would require that Jericho was already a burned out ruin when the Hyksos arrived in Canaan *but did not* settle in Jericho. This presents a problem. Recall that two scarabs of a Hyksos king named 'Hotepibre' were discovered in Jericho (chap. 15:IV). Since this name has never been found on Hyksos scarabs in Egypt, Egyptologist K. S. B. Ryholt attributed the Hotepibre scarabs to the last Hyksos king of Egypt, who is named Khamudi on the Turin Canon, though no monuments or scarabs of Khamudi have been found in Egypt. Ryholt's explanation is that Khamudi is a personal name and Hotepibre is the throne name of the same king. Khamudi = Hotepibre reigned in Egypt only long enough to make the king list, then the Hyksos were driven out of Egypt by pharaoh Ahmose, and Hotepibre, still using his Egyptian throne name, reigned over the Hyksos in Canaan.

On figure 17-1, the two possible radiocarbon dates for the destruction of Jericho (c.1600 BC or c. 1530 BC), straddle the Hyksos expulsion date (c. 1538 BC). The above explanation for the Hotepibre scarabs being found only in Canaan would be true whether Jericho was destroyed before or after the expelled Hyksos arrived in Canaan. But if Jericho had been destroyed before the Hyksos arrived in Canaan, the discovery of two Hotepibre scarabs specifically in Jericho would require that they were dropped in Jericho by passers-by who were just kicking stones. There are not thousands of Hotepibre scarabs dropped by passers-by at archaeological sites throughout Canaan. Only one other Hotepibre scarab has been discovered anywhere, and its origin is unknown. Thus at least two of the three known Hotepibre scarabs are from Jericho, possibly all three. Why would the Hyksos in Canaan particularly have holes in their pockets when clambering over the ruins of Jericho? They wouldn't. They must have been living in Jericho (and elsewhere in Canaan) before Jericho became a ruin.

By that reasoning, pharaoh Ahmose defeated the Hyksos first at Avaris, and later pushed the Hyksos back in Canaan. If he could defeat and destroy their fortified cities in Canaan, Ahmose, not the Hyksos, could rule over and collect tribute from all of Canaan. That would be the military goal. The fortified walls of Jericho stood in the way. There is no direct record that Ahmose pursued the Hyksos to Jericho, but there is direct evidence that Jericho was at one time a Hyksos city, because there is one exceptional grave at Jericho that is unlike those of the local Canaanites. The Jericho grave is similar to others that have been attributed to a foreign ruling class that was moving into the Levant (Canaan and its vicinity). In particular, the unusual grave at Jericho was lined with mud-brick instead of the usual stone, which is exactly like graves that were commonplace in the Hyksos capitol at Avaris.

Reference has already been made to a particular burial custom which appeared in the Levant at the start of the Middle Bronze Age – the so-called stone-lined grave. This type of grave is completely alien to the local Canaanite burial practice, arguing for a small number of people of foreign origin within the population. Furthermore, graves of this type tend to be exceptional in terms of the grave goods, suggesting that the interred were elite members of society... Interestingly, at Jericho a single example was found built out of mud-brick rather than stone... This is highly significant, for at Avaris (Tell ed-Daba), the Hyksos capitol, the standard grave type was of precisely the Jericho type – a stone lined grave translated into mud-brick.

Jonathan N. Tubb, *Canaanites*, (1998), pp. 63-64.

This single Hyksos style grave at Jericho requires that an upper-class Hyksos lived and was buried at Jericho. There is also evidence that another fortified city, Tell el-Ajjul, in southern Palestine, was a Hyksos city. As the above quote continues, Jonathan Tubb is connecting the dots: the Hyksos have horses like the Hurrians. An elite warrior class with horse is popping up in Egypt and Palestine. Who are they?

Of even greater importance is the presence at Avaris of horse-burials in the same type of grave. Warrior burials in association with equids were also found at Tell el-Ajjul in southern Palestine, a site thought to be under direct Hyksos control at the time. Altogether, therefore, there seems to be a relationship between a particular (and quite distinctive) grave type, elite burials (often associated with equids and Hurrians) on the one hand, and Hyksos on the other. It seems entirely possible, therefore, that the people buried in the stone-lined graves were a non-Semitic ruling elite, perhaps related to the later Hurrians who infiltrated the Levant...

Jonathan N. Tubb, *ibid.*, p. 64.

An explanation that ties all the clues together is that the Hurrians are the ethnic stock from which the Kassites branched off and moved into Babylonia, then the Hyksos branched off from the Kassites, and these branches are branches of the Hebrew royal family descended from Adam “*a non-Semitic ruling elite*” Bingo! The Hyksos military conquests can be tracked by their military encampments, which featured a rectangular enclosure with ample space for their horses. They definitely ruled more than just at Avaris.

On the physical side, we know a good deal about the Hyksos. Some of their fortified camps have survived in Egypt and Asia, great rectangular enclosures of beaten earth. The rectangle at Tell el-Yahudiyyeh in the southern Delta is 400 yards on a side, with an embankment 15 to 20 yards high; that at Hazor in north Galilee is about 500 by 1,000 yards; and a magnificent camp at Qatna in northern Syria is about 1,000 yards on a side. Many smaller ones have been identified in Palestine and Syria...

John A. Wilson, *The Culture of Ancient Egypt*, (1951) p. 161.

Missing from the above list is the one city that would clarify what happened at Jericho. Did the Hyksos definitely rule at Jericho? Wilson didn’t itemize all the many smaller Hyksos sites, but the Unger’s Bible dictionary has the answer. Yes, Jericho had a Hyksos horse enclosure.

HYK’SOS... Archaeological excavations have uncovered many Hyksos remains. They introduced the horse and chariot into Egypt, as well as the composite bow... The Hyksos erected large earthen enclosures for their horses. This type of construction can be seen at Jericho, Shechem, Lachish and Tell el-Ajjul.

Merril F. Unger, *The New Unger’s Bible Dictionary*, (2009)

From the archaeological evidence of Hyksos scarabs, a Hyksos tomb, and a Hyksos horse enclosure, Jericho was definitely a Hyksos city prior to its destruction. And from the radiocarbon evidence, Jericho was destroyed in c. 1530 BC, during the reign of Ahmose, who had driven the Hyksos out of Egypt. The evidence fits the hypothesis by Kathleen Kenyon. After driving the Hyksos out of Avaris, Ahmose went on the offensive in Canaan. There he surrounded and besieged the Hyksos at Jericho, and ultimately destroyed the city.

The toppling of the walls of Jericho doesn’t require a miracle. It only requires an army to besiege the city until it surrenders, and then, having entered and taken control, undermine and push or pull down the walls. The army of Ahmose could have easily done this. After plundering everything of value, the Egyptians burned Jericho to the ground. They had no interest in living in Jericho. They simply wanted to insure that it would never be used as a Hyksos stronghold again. There is also an account in the Book of Jubilees of what likely happened when Jericho surrendered. It does not describe the location, but the story is immediately prior to the record of building the Tower of Babel.

And in the third week of this jubilee the unclean demons began to lead astray the children of the sons of Noah; and to make to err and destroy them. And the sons of Noah came to Noah their father, and they told him concerning the demons which were, leading astray and blinding and slaying his sons' sons.

Book of Jubilees 10:1

Noah is actually long dead. The author of the Book of Jubilees has confused lunar months with half-years and thinks that Noah lived for centuries, so he keeps writing Noah into the story. The important record is the bad news being reported to Noah. The unclean demons are an enemy that is blinding and slaying the Hyksos. This account is dated the third week of "*this jubilee*." If the story is properly placed, it's after the birth of Eber's son Peleg (Jubilees 8:8) in c.1515 BC (5:1, figure 5-3). But the leader of the unclean demons is Mastema, who is equated with Satan, and fits the role of the Egyptian pharaoh Ahmose. Mastema offers a true devil's bargain:

And the chief of the spirits, Mastema, came and said: "Lord, Creator, let some of them remain before me, and let them hearken to my voice, and do all that I shall say unto them; for if some of them are not left to me, I shall not be able to execute the power of my will on the sons of men; for these are for corruption and leading astray before my judgment, for great is the wickedness of the sons of men." And He said: "Let the tenth part of them remain before him, and let nine parts descend into the place of condemnation."... And we did according to all His words: all the malignant evil ones we bound in the place of condemnation, and a tenth part of them we left that they might be subject before Satan on the earth. And we explained to Noah all the medicines of their diseases, together with their seductions, how he might heal them with herbs of the earth.

Book of Jubilees 10:8-12

Based on the position of this record immediately prior to the construction of the tower of Babel, this record appears to be the surrender of Jericho and final defeat of the Hyksos. Mastema is pharaoh Ahmose, who has the Hyksos at his mercy. At the end of the quote, the reference to medicines and herbs is because the people were sickly and starving. Starvation is how a siege ends.. Ahmose can wait until all are dead but those who have turned to cannibalism, but instead he has offered a quicker end. If one in ten surrender as slaves (hearken to his voice), nine in ten will have some other fate. But it is not at all clear what that other fate is. Ordering that "*nine parts descend into the place of condemnation*" sounds foreboding, as if there is an undiscovered pit at Jericho holding the remains of the condemned. Yet somebody survived to tell the story. Mastema also wants the one in ten such that he can "*execute the power of my will on the sons of men,*" which means somebody is still alive that he intends rule over using the slaves as hostages. The truth may be some of each. Nine in ten of the *men of fighting age* are in pit somewhere, one in ten were taken as hostage slaves, and the civilians were set free with the knowledge that their obedience would determine the fate of the hostages. For slaves, Ahmose doesn't want the malignant ones, the sick. They are to be bound in the place of condemnation. After the condemned were bound and the civilian population had filed out with no possessions, Jericho was plundered by the Egyptians before the walls were pulled down and the city burned.

That's my best interpretation of a vague but chilling story. It is deliberately confusing in the Book of Jubilees and completely absent from the Old Testament. The archaeological record from Jericho incomplete because of the randomness of archaeological preservation, but there are fragments of the same story. The surrender of a fortress in Canaan after a protracted siege is known to have occurred during the reign of Ahmose. The fortress, called 'Sharuhem' in Egyptian records, has been presumed to be in southwest Palestine (south and west of Jericho) because Ahmose had recently expelled the Hyksos from Egypt, and southwest Palestine is just over the border. However, the location of Sharuhem has never been positively identified by physical evidence. Jericho was also a Hyksos stronghold close to Egypt.

After a long period, Avaris surrendered and the Hyksos fled into Sharuhene, a fortress in southwestern Palestine. The Egyptians followed there as well. Placing Sharuhene under siege... Sharuhene surrendered after three, or possibly six, years, and the Egyptians followed the Hyksos all the way into modern Syria. They fought battles there to rid themselves of Hyksos survivors... An inscription at Masara states that in his 22nd year of rule, Ahmose opened the quarry there for limestone... captured Hyksos oxen were used to drag the quarried stones to barges on the Nile.

Margaret Bunson, *Encyclopedia of Ancient Egypt*, (2009), p. 15.

If Sharuhene surrendered six years after the fall of Avaris in 1538 BC, the year was 1532 BC, which is just after the founding of the Kassite dynasty and possibly the 21st year of Ahmose (ca.1552-1526 BC), depending on his exact reign. The quarry inscription is explicitly his 22nd year (c.1531 BC), and it is presumed to mark the end of the Hyksos war and a resumption of peacetime temple construction (i.e. the reasoning behind six years for the length of the siege). This approximate date is a match to the c.1530 BC radiocarbon date for the destruction of Jericho. Thus the numbers are all clustered around the same year; the siege at Jericho could have been the final defeat of the Hyksos military in Canaan, and since the Hyksos were still an extension of the Sealand dynasty in Babylonia, their defeat was an opportunity for Ham's branch to seize political power and establish the Kassite dynasty. But why is there no Egyptian record of the destruction of Jericho?

Jericho is a name from the Bible, unconfirmed in any archaeological record. Allowing for some mistranslation in the Biblical record, Sharuhene – Jeruhene – Jericho: the besieged Hyksos fortress could be Jericho. It's farther from Egypt than historians had imagined, but not beyond the reach of an army that also followed the Hyksos all the way to modern Syria. The pieces of the puzzle then all fit together. Jericho was the last stronghold of the Hyksos in Canaan. The Hyksos surrendered to pharaoh Ahmose in 1532/31 BC, after which the city walls were pulled down and the city was burned. The survivors at Jericho were unarmed and subjugated; their possessions were looted, and their oxen were soon pulling limestone blocks in Egypt.

III. Eastward to Shinar

The destruction of Jericho marks the end of the Hyksos era, but not the end of the story for the Shem's branch of the Hebrew royal family. If the word Hebrew comes from Eber, then the Hyksos expulsion is technically the start of the Hebrew era, but it is less confusing to extend the term back to Adam, the founding king of a royal family that included the Sealand Dynasty, Hyksos Dynasty, Kassite Dynasty and Hebrew priesthood of king Solomon's Jerusalem. Is that the whole list? Following Eber back to Mesopotamia is the way to find out.

At this point there is actually humor in imagining the Hebrew priests trying to preserve their history without telling too much. Adam's ancestors must have lived near and revered the double volcano called the Mountains of Ararat in eastern Turkey. Noah's wealth and power as a Hyksos pharaoh makes it plausible that his body was taken all the way back to Turkey for burial in his ancestral homeland

And Noah slept with his fathers, and was buried on Mount Lubar in the land of Ararat.

Book of Jubilees 10:15



Figure 17-2: The Mountains of Ararat, near the eastern border of Turkey.

However, later in the same chapter, it makes no sense whatsoever that “*they*” (whoever they are) departed from the land of Ararat and traveled “*eastward to Shinar*,” just in time to build the Tower of Babel.

For they departed from the land of Ararat eastward to Shinar; for in his days they built the city and the tower, saying, “Go to, let us ascend thereby into heaven.” And they began to build, and in the fourth week they made brick with fire and the bricks served them for stone, and the clay with which they cemented them together was asphalt which cometh out of the sea, and out of the fountains of water in the land of Shinar.

Book of Jubilees 10:19

This is a record from the Hyksos archives. The first record is truthful account of Noah’s burial in the land of Ararat. The second record was a truthful record of the Hyksos departing from the land of *Canaan*, then traveling eastward to Shinar. From Canaan one can travel east to Shinar in Mesopotamia. Traveling eastward from Ararat leads one to Armenia and the Caspian Sea! The Hebrew priests must have presumed that the Israelites knew too little geography to notice. In the more condensed Book of Genesis, the word ‘Ararat’ was removed entirely.

As men moved eastward, they found a plain in Shinar and settled there... Then they said come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves and not be scattered over the face of the whole earth.

Genesis 11:2-4

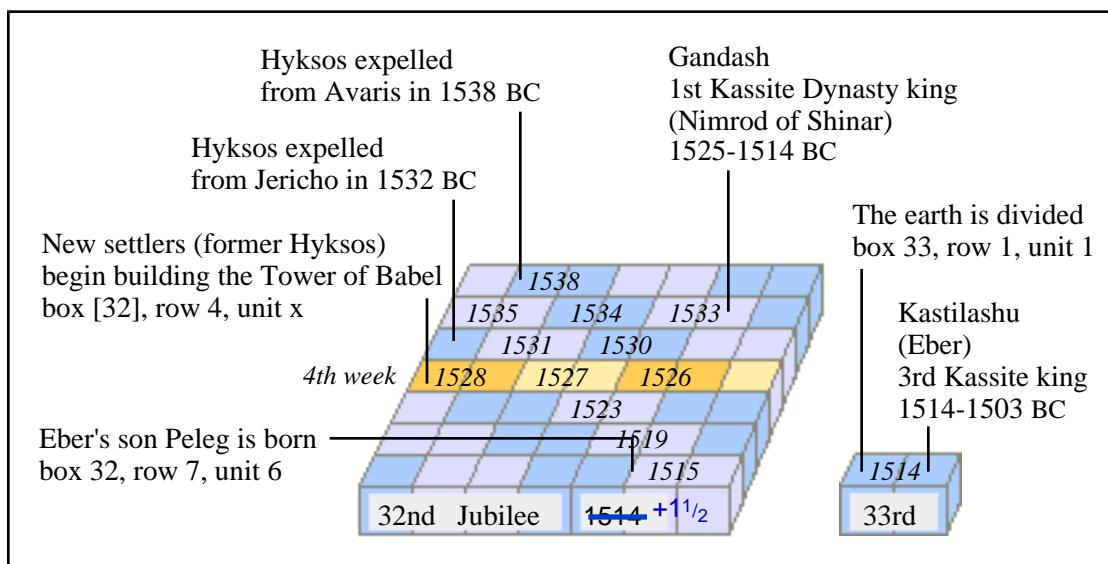


Figure 17-3: The Jubilees calendar and the return of the Hyksos to Mesopotamia.

Figure 17-3 shows box 32 of the Jubilees calendar (chap. 5:I), which contains the destruction of Jericho in row 3, and the start of construction of the Tower of Babel in row 4. The expulsion of the Hyksos from Avaris came first, in 1538 BC; this was followed five years later by the founding of the Kassite Dynasty by Gandash in 1533 BC. Gandash has been identified as Noah’s great grandson Nimrod, from Ham’s branch of the royal family (chap. 16:II). The surrender of Jericho to Ahmose (Mastema of Jubilees 10:8) was in or shortly before 1531 BC, corresponding to early in row 3, or the “third week”, as the date is partially recorded in Jubilees 10:1. Similarly, Jubilees 10:20 gives only a partial date for when construction of the Tower of Babel began. It is the “fourth week” of an unrecorded jubilee, but Genesis 11:2-4 (above) implies that the former Hyksos had settled in Shinar before construction of the tower began. Thus the construction of the tower can be placed in the row 4, shortly after the fall of Jericho in row 3, corresponding to 1528

BC, or shortly thereafter. Hyksos refugees fleeing from Ahmose then give meaning to the phrase “scattered over the face of the whole earth” in Genesis 11:4. Settling in Shinar was preferable to being pursued by Ahmose in Canaan.

Both the destruction of Jericho in or shortly before 1531 BC, and the construction of the tower in or shortly after 1528 BC, are in agreement with the c.1530 BC radiocarbon date of both the ziggurat at Aqur Quf and especially Jericho’s destruction, which due to a higher precision of measurement is definitely the 1530’s or 1520’s (figure 17-1, inset). Also, the founding of the Kassite Dynasty by Gandash is a few years earlier than box 32, row 4, as it must be, because Gandash must be in power before construction began on and tower. There is a five to seven year delay between his accession and the construction of the tower, but he built both a city and a tower; practical buildings have to come first. Thus the 32nd jubilee is definitely the right box. The label on box 32 has been changed by a year and a half relative to counting back from the anchor at Moses. This is such that the division of the earth in box 33, row 1, unit 1, will align to the accession half-year of the 3rd Kassite king Kastilashu (1514-1503 BC). The reasoning for this alignment is yet to be explained, but it is better to correct box 32 to match box 33, and explain it when discussing the division of the earth, which is next.

The numbers can be overwhelming, but they need to be checked. The end result is that radiocarbon gives an ‘area of interest’, and then, upon closer inspection, the details are found to be consistent: Ahmose clearly succeeded in expelling the Hyksos from Egypt and then driving them all the way back to Mesopotamia. The Egyptian New Kingdom is on the rise.

IV. The Earth is Divided

What is good for Egypt is bad for the Hebrews, especially Shem’s branch, the former Hyksos. All three branches of the Hebrew royal family are now in Babylonia, but there is no need for three kings in Babylonia. The last Hyksos king was Eber. He did not die in Jericho, because his son Peleg was born about 15 years after Jericho’s destruction, in box 32, row 7, unit 6. This means that Peleg was born after Eber had returned to Mesopotamia, but Eber was now a king without a land, in a kingdom ruled by another branch of the royal family.

Recall that in the both the Old Testament and the Book of Jasher, there is an unexplained comment that “*the earth was divided*” in the days of Peleg (chap. 15:IV). This was a clue that something political happened during the lifetime of Peleg. The Book of Jubilees also contains that phrase, and it explains what it means. The *land* was being divided up among the three branches of the Hebrew royal family.

Eber ... took unto himself a wife...in the thirty-second jubilee, in the seventh week... And in the sixth year thereof, she bare him a son, and he called his name Peleg; for in the days when he was born the children of Noah began to divide the earth amongst themselves: for this reason he called his name Peleg... And it came to pass in the beginning of the thirty-third jubilee that they divided the earth into three parts, for Shem and Ham and Japheth, according to the inheritance of each, in the first year in the first week...

Book of Jubilees 8:7-10

The above record also gives the exact date, box 33, row 1, unit 1, as shown above in figure 17-3. The division of the land was just one year after Peleg’s birth. The record then continues as if Noah’s sons were alive and drawing lots from three written documents prepared by Noah. Noah had actually died more than a century earlier, and his sons would have all died about seventy to eighty years earlier.

And he called his sons, and they drew nigh to him, they and their children, and he divided the earth into the lots, which his three sons were to take in possession, and they reached forth their hands, and took the writing out of the bosom of Noah, their father.

Book of Jubilees 8:11

The story is not true, but was it changed by later priests, or is this how it was originally presented at the time that the land was divided? “Gather round, we’ve discovered these documents written by great grandfather Noah.” I don’t know. I only know that it’s the handiwork of either the early generations or the later generations. It’s strikingly similar to the description of Joshua dividing up the land for the Israelites:

Joshua instructed them, “Go and make a survey of the land and write up a description of it. Then return to me, and I will cast lots for you here at Shiloh in the presence of the Lord”

Joshua 18:8

It’s the same (transparent) trick in both cases. This is the drawing of political boundaries by an intelligent king, while claiming that it was a lottery conducted by a revered ancestor. That way, the king cannot be blamed if the people don’t like what *their hero* wrote in this ancient document that the king had discovered (on his writing desk).

Returning to Noah and his sons. The newly drafted treaty was to keep the three branches of the royal family from fighting, thus the sons’ names are used to label the new districts. The land for each son is then subdivided among grandsons and great grandsons.

And there came forth on the writing as Shem's lot the middle of the earth which he should take as an inheritance for himself and for his sons for the generations of eternity, from the middle of the mountain range of Rafa, from the mouth of the water from the river Tina. And his portion goeth towards the west through the midst of this river, and it extendeth till it reacheth the water of the abysses, out of which this river goeth forth and poureth its waters into the sea Me'at, and this river floweth into the great sea. And all that is towards the north is Japheth's, and all that is towards the south belongeth to Shem.

Book of Jubilees 8:12

The major difference between this division of the land and Joshua’s division of the land is the scale. The dividing line in the above description follows the ‘river Tina’. From the landmarks, this is the relatively short Orontes River, which wells up in Lebanon from the Great Springs of Labweh (water of the abysses) then flows north and cascades down a gorge into the Lake of Homs (sea Me’at) before turning west and emptying into the Mediterranean (great sea). The Orontes River marks the division between the new territory for the former Hyksos Dynasty (Shem’s inheritance), and the new territory for the former Sealand Dynasty (Japheth’s inheritance). The Hyksos Hebrews are given all the land south of the Orontes, which is roughly the land of Canaan, where they had already resided, although Ahmose had driven them out. Ahmose was now dead, and the next Egyptian offensive would not come for several decades. The Sealand Hebrews are given the land north of the Orontes. This is Anatolia, the land of the Hurrians, and farther to the west, the Hittites.

That was the boundary near the Mediterranean Sea. The eastern lands, *also* in Shem’s territory extend beyond Canaan and across Mesopotamia:

And Noah rejoiced that this portion came forth for Shem and for his sons... the whole land of Eden and the whole land of the Red Sea, and the whole land of the east, and India, and on the Red Sea and the mountains thereof, and all the land of Bashan, and all the land of Lebanon and the islands of Kaftur, and all the mountains of Sanir and Amana, and the mountains of Asshur in the north, and all the land of Elam, Asshur, and Babel, and Susan and Ma’edai and all the mountains of Ararat, and all the region beyond the sea, which is beyond the mountains of Asshur towards the north, a blessed and spacious land, and all that is in it is very good.

Book of Jubilees 8:18, 21

Noah is rejoicing, even if fictitiously, because the former Hyksos are receiving both Canaan (the land of Lebanon) and the majority of Mesopotamia including Assyria and the mountains of Ararat, farther to the north. The inclusion of India may be wishful thinking, but it is part of a description of lands bordering Mesopotamia on the east. Only the southernmost portion of Mesopotamia goes to Ham, as described next:

And for Ham came forth the second portion, beyond the Gihon towards the south to the right of the Garden, and it extendeth towards the south and it extendeth to all the mountains of fire, and it extendeth towards the west to the sea of Atel and it extendeth towards the west till it reacheth the sea of Ma'uk – that (sea) into which everything which is not destroyed descendeth. And it goeth forth towards the north to the limits of Gadir, and it goeth forth to the coast of the waters of the sea to the waters of the great sea till it draweth near to the river Gihon, and goeth along the river Gihon till it reacheth the right of the Garden of Eden. And this is the land which came forth for Ham as the portion which he was to occupy for ever for himself and his sons unto their generations for ever.

Book of Jubilees 8:22

The river Gihon seems to be in both Mesopotamia and near the Mediterranean, which could be a copying error. Nevertheless, this description is surprising because Ham is given only land south of the river Gihon, which has been identified as the canal that connects the Tigris to the Euphrates south of Babylon (13:III, figure 13-6). Thus the conquest of Babylonia by Ham's grandson Nimrod is negated. Both the traditional capitol Babylon and the new capitol at Aqar Quf are in Shem's territory. How could Nimrod be convinced to give it up? That's a clue that the drawing of lots wasn't entirely fair.

Ham's branch of the royal family has received by far the smallest territory, including none of the major cities in Babylonia. Japheth's branch has also lost Babylonia, but has received land farther north. The general description of this land is vague. To understand how much land is given to Japheth's branch, one has to read the subdivisions, [1]-[7], assigned to each of Japheth's seven sons in the quote below. The subdivisions begin near the Orontes River at the border of Syria with Turkey [1]; Gomer gets all of the land to the east. To the west, although it is not clear where the divisions lie, a comparison with a map of the Mediterranean will reveal that the islands near Lud, [3]-[4], and three tongues of land, [5]-[6], can only be descriptions of the islands and peninsula of Greece, the heel of Italy, and the toe of Italy. Beyond the toe of Italy, the four great islands [7] are Sicily, Sardinia, Corsica, and Majorca.

And Japheth also divided the land of his inheritance amongst his sons.

[1] And the first portion came forth for Gomer to the east from the north side to the river Tina;

[2] and in the north there came forth for Magog all the inner portions of the north until it reacheth to the sea of Me'at.

[3] And for Madai came forth as his portion that he should possess from the west of his two brothers to the islands, and to the coasts of the islands.

[4] And for Javan came forth the fourth portion every island and the islands which are towards the border of Lud.

[5] And for Tubal there came forth the fifth portion in the midst of the tongue which approacheth towards the border of the portion of Lud to the second tongue, to the region beyond the second tongue unto the third tongue.

[6] And for Meshech came forth the sixth portion, all the region beyond the third tongue till it approacheth the east of Gadir.

[7] And for Tiras there came forth the seventh portion, four great islands in the midst of the sea, which reach to the portion of Ham and the islands of Kamaturi came out by lot for the sons of Arphaxad as his inheritance.

Book of Jubilees 9:7-13

The identification of Greece and Italy within Japheth's territory is confirmed in the Book of Jasher, via recognizable place names within a description of lands settled by the descendants of Japheth. Four that are obvious are: Macedonia, Tuscany, Lombardy, and Italy.

And the sons of Japheth the son of Noah...were divided upon the face of the earth into many divisions and languages... And the children of Javan are the Javanim who dwell in the land of Makdonia... and the children of Tubal are those that dwell in the land of Tuskanah by the river Pashiah... And the children of Elishah are the Almanim... and of them were the people of Lumbardi who dwell opposite the mountains of Job and Shibathmo, and they conquered the land of Italia and remained there unto this day.

Book of Jasher 10:13-15

In the Book of Jasher, the above quote is part of the flood myth, as if these are the locations where Noah's descendants went to live after the flood. This can be explained as a recycling of the record that already existed from the division of the land. The people were already there. Their languages and cultures were already there. This is a list of the land that was approached by the Hyksos and conquered or peacefully incorporated into the Hyksos empire, and now is being divided up. The Hyksos empire encompassed the entire northern perimeter of the Mediterranean Sea. They had learned how to sail, and how to transport armies on ships.

Of course the larger and more diverse the empire, the more difficult it is to hold together. In particular, a Mediterranean empire cannot be controlled without a Mediterranean port, which Shem's branch lost when they were expelled from Avaris. Therefore the vast Mediterranean territory awarded to Japheth and Ham is actually a list of what Shem's branch has already lost! It's pure politics. They are pretending to make concessions while losing nothing. The real prize is Babylonia, which Shem's branch has claimed. They're the ones drawing the lines. Ham's branch is given only the southern half of the former Sealand. The land south of the river Gihon is only the marshlands bordering the Persian Gulf.

Kassite Dynasty	half-years	yrs	
1. Gandash	16	8	1533-1525
2. Agum, his son	22	11	1525-1514
— end of civil war and division of the land —————			
3. Kashtilashu I	22	11	1514-1503
4. Abirattash, his son	8	4	1503-1499
			Cush, son of Ham
			Nimrod, son of Cush
			Eber, descendent of Shem
			Peleg, son of Eber

Figure 17-4: The first four kings of the Kassite Dynasty.

Now the tie to the Kassite Dynasty Chronology is clear. There has been a civil war in Babylonia. Ham's branch would die before they would give up their newly built capitol in Shinar. Their king is dead. The Hyksos returned to Mesopotamia while Eber was still a teenager. As an adult, he rose up against Ham's branch and won himself a new kingdom. The river Gihon is how far Ham's branch was driven south in the war against Eber. Like most treaties at the end of a war, the line is drawn on paper where the troops were standing at ceasefire. It has to be Eber, because Peleg is not old enough. Eber is still the head of the Shem's branch. Ham's branch has nothing but swamp and desert. Shem's branch has the agricultural heartland of Mesopotamia.

Since the date of the treaty is the when the war ended, it must exactly match a transition from one Kassite Dynasty king to the next. Also, the new king after the treaty cannot be the son of the king before the treaty, since a different branch of the royal family has come to power. The first two kings of the Kassite Dynasty are listed as father and son on Babylonian King List A: Gandash (1533-1525 BC) was succeeded by his son Agum (1525-1514 BC), whose reign included only the 1st half of 1514 BC. Gandash has been identified as Nimrod, the great grandson of Noah through Ham. Agum is a son of Nimrod who is never named in Hebrew

scripture because Shem's branch didn't like Ham's branch; thus they didn't keep records beyond Gandash. The division of the land has to be upon the defeat and death of Agum. And for that reason, box 33, row 1 unit 1 of the Jubilees calendar must be exactly the first half of 1514 BC. Bringing the Book of Jubilees calendar into alignment required a 1½-year fine-tuning. It was almost exact already, and truthfully, the problem could be in either the Jubilees calendar or Babylonian King List A. The two could be considered one continuous record because *they are one continuous record*. Both are from the same royal archives of the Kassite Dynasty.

The third Kassite Dynasty king would then be Eber, who was the child king Kamudi in Avaris, and then the teen king Hotepibre on two scarabs discovered at Jericho, and is now an adult reigning as king Kastilashu I (1514-1503 BC) of Kassite Babylonia. The Hyksos did not disappear. They are the chameleon kings. They can change their names, changed their language, change their gods, and find a way to rise to power in a completely different land.

Kastilashu reigned just 11 years before he was succeeded by his son, Abirattash (1503-1409 BC), who reigned just 4 years. Abirattash would then be Eber's oldest son Peleg. Though one must admire Eber for being clever enough to become a Babylonian king, perhaps it would have been smarter not to become king. Eber did not live a full life; he died before he was 50 years old. Peleg then became a child king. He was born in 1515 BC, became a king at 12 years old, and died or fled for his life at 16 years old. Peleg is an ancestor of Abraham: Peleg – Reu – Serug – Nahor – Terah – Abraham, therefore he lived long enough to have a son Reu. Unless he had a son very early, it is likely that Peleg was deposed and escaped with his life. It is not hard to imagine that he was deposed, because the grossly lopsided division of the land certainly set the stage for an uprising by Ham's branch of the royal family.

It is also possible to locate Japheth's branch and give them a name familiar to historians. To the east of Italy and Greece, which were nominally 'inherited' but inaccessible to Japheth's branch, there are two kingdoms in Anatolia that also lie within the territory of Japheth: the kingdom of the Hittites, and the kingdom of Mittani. The Hittites kingdom began earlier than the Hyksos era, but according to the quote below, Mittani made its first appearance in history during the reign of Ahmose, the pharaoh who expelled the Hyksos

Mittani had grown strong enough in the time of Ahmose to invade Anatolia and inflict a heavy defeat on the Hittite Kingdom. By the reign of Amenhotep I, Mittani had driven the Hittites out of northern Syria, upsetting the delicate political balance in the Near East. Mittani was on the march, sweeping all before it. It seemed only a matter of time before it encroached upon the Egyptian sphere of interest. Faced with such a prospect, Thuthmose determined that a preemptive strike was the wisest policy: better safe than sorry.

So, in the fourth year of his reign, he set out for the kingdom of Mitanni, known by the Egyptians as Naharin, 'the two rivers', in other words Mesopotamia... it seems likely that, to avoid a lengthy and protracted campaign through Palestine, Tuthmose opted instead for an amphibious operation, sailing up the coast of the Mediterranean... From there, it would have been a much shorter, overland march into northern Syria and to the Bannks of the upper Euphrates... The king lost no time in engaging the enemy and "made great carnage among them"... Honor satisfied, the Egyptian army turned for home. All out conquest of Mitanni had never been in the cards, for Egypt had no strategic interest in controlling a land so far from home.

Toby Wilkinson, *The Rise and Fall of Ancient Egypt*, (2011), p. 227.

Though Mittani in the above quote is described as Mesopotamia, it was the upper Euphrates, in Japheth's territory after the division of the land. Mittani can be traced no earlier than a war with the Hittites during the reign of Ahmose. That is harder to explain if the Mittani are Japheth's branch of the Hebrews. The Hittites had come to the aid of Japheth by conquering Babylon; why would Japheth's descendants attack the Hittites just a few decades later? But such shifting alliances do happen. The expulsion of the Hyksos pushed too many people into a limited amount of land. Allies can become enemies when land is needed.

Five years after the Hyksos expulsion, Ham's branch conquered Babylon from Japheth's branch. That must have pushed Japheth's branch north. They attacked the Hittites to make more space. While still reigning at Avaris, Shem's branch had paid the Hittites to conquer Babylon, now they needed a new home and claimed what they had paid for! That explains where everybody was at the time that a meeting was called to draw up new boundaries and call off the fighting. The end result is a new political entity called the kingdom of Mittani, which is actually Japheth's branch of the Hebrew royal family. They will speak and write Hurrian, which is likely the Hebrews true cultural heritage. Shem's branch, the former Hyksos, will now speak and write in the language of Babylonia (Akkadian cuneiform), because the Hebrews always adopt to the culture where they rule. However, all three branches of the royal family were known as Kassites since Adam, and by that reasoning, historians have appropriately labeled the Third Dynasty of Babylon the Kassite Dynasty.

Before The Exodus

Chapter 18

From Eber to Abraham

I. Canaan and the Egyptian New Kingdom

Figure 18-2 is a summary of the answer to one simple question: where were the Hebrews before Abraham arrived in Canaan? The answer can be traced geographically to Mesopotamia, and genealogically to a line of Kassite warrior kings who invaded Mesopotamia in c. 1800 BC. With their superior horse and chariot warfare, Abraham's ancestors conquered and subjugated the kingdoms and citizens of the Ancient Near East. There is no indication that the Kassites themselves were a massive hoard. They were warriors with a swift mobile army, that could topple a king, and then collect taxes from the local population. The monarchy at the top would learn the local language and conform to local customs, and rule as if nothing had changed.

Royal Line to Abraham	Historical identity	reign	years
<i>Kassite kings of Larsa</i>			
Adam	1. Kudur-Mabuk	(died 1762)	
Abel, son of Adam	2. Warad-Sin	1798-1793	6
Cain, son of Adam	3. Rim-Sin I	1792-1762/	30 1/2
Enoch, [son of Cain]	4. Rim-Sin II	1761-1741/	20
<i>Sealand Dynasty (1717-1533)</i>			
Methuselah, son of Enoch	1. Iluma-ilu	/1717-1687/	30
Lamech, son of Methuselah	2. Itti-ili-nibi	/1687-1660	27 1/2
kingship is usurped by Damiqilishu of Isin		1659-1642	
then restored to Kassites under Noah			
<i>Hyksos Dynasty (1647-1538)</i>			
Noah, son of Lamech	1. Sheshi	1647-1634	13
Shem, son of Noah	2. Yakhubur	1634-1616?	18?
Arphaxad, son of Shem	3. Khyan	ca..1616-1590	
Kainan, son of Arphaxad	4. Apepi I	ca..1590-1550	
Shelah, son of Kainan	5. Apepi II	ca..1550- (?)	
Eber, son of Shelah	6. Khamudi	(?)-1538	
Hyksos in Canaan until fall of Jericho		1538-1532	
Nimrod founds Kassite Dynasty		1533	
<i>Kassite Dynasty (1633-1155)</i>			
Eber (after Kassite civil war)	3. Kastilashu I	/1514-1503/	11
Peleg, son of Eber	4. Abirattash	/1503-1499/	4
kingship is usurped in further civil war			
Kassite kingship unrealized: Reu – Serug – Nahor – Terah (father of Abraham)			

Figure 18-1: The royal ancestors of Abraham.

Largely because of the numerical pairings of Hebrew records with Babylonian King List A, for three hundred years, it has been possible to track Abraham's ancestors Adam through Peleg as they ruled first in Larsa, then the Sealand Dynasty, then the vast Hyksos Empire founded by Noah, then a shrinking region, as Ahmose expelled the Hyksos and drove them back eastward to what had become Kassite Babylonia. Eber remarkably recovered from the loss of Egypt and rose to become the third king of Kassite Babylonia. In a way, this was a restoration of his hereditary claim to the kingship. Eber is in the direct line of eldest sons all the way back to Adam. He may have made that point known as part of his rise to power in Babylonia.

Eber was Kastilashu I and his son Peleg must be Abirattash, who is recorded as a son of Kashtilashu on Babylonian King List A. This immensely enlightening cuneiform record begins to crumble after Peleg, but ironically, the very brief, four-year reign of Peleg (figure 18-1) is an indication that the power of Abraham's royal ancestors began to crumble as well. Peleg's reign ended in 1499 BC when he was just 16 years old, having been born in 1515 BC, the year before Eber became king in Babylonia. Peleg was the father of Reu, but presuming that Peleg was not yet a father at age 16, that requires that he was deposed and escaped with his life. It appears that Peleg was later restored to the throne, because there was a *second* division of the land, according to Bar Hebraeus. The first was in 1514 BC, when Eber rose to power and imposed a grossly unequal division, giving Shem's branch (himself) Canaan and Mesopotamia, and Ham's branch only the swamps and desert of the south. This is what Shem's branch receives according to the second division. Once again, the prize territory in Mesopotamia goes to Shem's branch.

And in the one hundred and fortieth year of Peleg the earth was divided a second time, between the sons of Noah. And to the sons of Shem came the inheritance from the middle of the inhabited world to the limit thereof on the east, [including] Palestine, Arabia, and Phoenicia, and the country of Syria, and all the country between the Two Rivers (Mesopotamia), and Hyrcania, and Assyria, and the country of Shinar, and Babil, and Kardo, and all Persia, and Northern India and Bactriana.

Bar Hebraeus, *Chronography* 1:24

If the age is correct, Peleg was $140 \div 2 = 70$ years old at the time, but ages in the records of Bar Hebreus are more often wrong than not. A second division of the land during the life of Peleg is more likely when a second king called Nimrod died in the Tower of Babel when the tower was 'overturned' in 1482 BC (chap. 16:IV). Peleg would have been 33 years old at that time. At that age it is plausible that he or perhaps his younger brother Joktan reclaimed the throne for Shem's branch, by killing a king from Ham's branch who was by default again called Nimrod.

Figure 18-2 shows the first ten kings of the Kassite Dynasty, using the Synchronistic King List to fill in nos. 7-10 after Babylonian King List A breaks off. Without their reigns, or records of which were father and son, the list only shows that the list doesn't help. Nimrod II and the second division of the land could be anywhere among kings 5 through 9. The name Abirattash does not appear a second time, but that doesn't rule out Joktan, nor is it certain that the Synchronistic King List is complete.

Kassite Dynasty	half-years	yrs	
1. Gandash	16	8	1533-1525
2. Agum, his son	22	11	1525-1514
— end of civil war and 1st division of the land —————			
3. Kashtilashu I	22	11	1514-1503
4. Abirattash, his son	8	4	1503-1499
5. Kashtilashu II			Eber, descendent of Shem
6. Tazzigurumash			Nimrod, son of Cush
7. Harbashiipak			{deposed, civil war}
8. Tiptakzi			Nimrod II, killed in tower
9. Agum II			Peleg restored?
10. Burnaburiash I	{treaty w/ Puzur-Ashur III 1459-1446}		

Figure 18-2: The first ten kings of the Kassite Dynasty.

Though the details are becoming murky, the broader picture is still clear; the Hebrews are in control of Kassite Babylonia as well as Mitanni to the north. Throughout Mesopotamia Hebrews face no threat but each other. In Canaan the enemy is the rising power of the Egyptian New Kingdom. In the second division of the land, Ham's branch is generously granted Egypt and northern Africa, which is of little more practical value than a deed to the moon. Conspicuously

absent from the list, is any part of Mesopotamia whatsoever. Ham's branch was completely defeated, even in the Sealand. They were homeless.

And to the sons of Ham [came the inheritance], the whole of the south, from east to west, India (Central, Outer, and Southern), Kush, Sheba, Egypt, Lybia, Thebais, Africa... and of the Islands Cyprus, Chios, Sicily, and twenty others.

Bar Hebraeus, *Chronography* 1:24

This places a date, 1482 BC, on the 'scattering' of the sons of Canaan, the fourth son of Ham.

The sons of Ham, Cush, Mizraim, Put and Canaan...later the Canaanite clans scattered and the borders of Canaan reached from Sidon toward Gerar as far as Gaza, and then toward Sodom, Gomorrah, Admah and Zeboiim, as far as Lasha.

Genesis 10:6, 18-19

A comparison of the above two record explains what happened. After losing a second civil war against Shem's branch in Babylonia, Ham's branch was driven out of Mesopotamia and told to resettle in either India or Africa (out of my sight). Instead, they circled back and took land from Shem's branch in Lebanon and Palestine. Sidon through Gaza is the Mediterranean coast; Sodom and Gomorrah are inland to the Dead Sea. The name 'Canaan' is a Hebrew name for lands settled by an expelled branch of the Hebrew royal family. Egyptians called the same region 'Syria.' That name is now applied to the land that was not conquered by Canaan's [branch of Ham's] branch of the Hebrews.

It was specifically Ham's son Canaan who was cursed by Noah, "*Cursed be Canaan!...May Canaan be the slave of Shem*" (Genesis 9:25-26). Canaan was too young to have been guilty of anything during the lifetime of Noah. Therefore, this part of the curse was added later, by the descendants of Shem who had lost territory to the descendants of Canaan. Bar Hebraeus also records the dissatisfaction of Ham's branch after the second division of the land, and their decision to trespass on Shem's territory instead.

And when the sons of Canaan, the son of Ham, the son of Noah, saw that the land of Palestine and the land of Lebanon were good, they sat down there and they did not wish to go to their inheritance, which was the western maritime regions of Egypt.

Bar Hebraeus, *Chronography* 1:24

The saga of Ham's branch is not yet over. They are not the only ones who saw that the lands of Palestine and Lebanon were good. The lunar date fixing the exact reign of Tuthmosis III is from an account of his victory at the Battle of Megiddo in the 23rd year of his reign (chap. 15:III). The exact date is the new moon of April 16, 1457 BC. Ham's branch had been in Canaan for just 25 years when Tuthmosis III began pressing the Egyptian frontier into exactly the same land. The allied kings that Tuthmosis III fought at the Battle of Megiddo were specifically from Lebanon and Mitanni. This was now an alliance of Ham's branch and Japheth's branch of the Hebrews, trying to hold their ground against the advancing Egyptians.

Then the kingdom and city of Kadesh, on the upper Orontes, quietly organized a formidable revolt, which united all of Egypt's Asiatic enemies from Sharuhem on the south to the Euphrates on the north. It is clear also that the powerful kingdom of Mitanni assisted this general revolt with men and means. For the Mitanian king naturally feared to see the armies of the Pharaoh in Naharin at his very threshold. Early in the year 23, Thutmosis III met and overthrew the allied Syrians at Megiddo, which he besieged and captured... he established a fortress in the southern Lebanon, to prevent another southward advance by the king of Kadesh, and then returned home.

James Henry Breasted, *Ancient Records of Egypt*, vol. 2, (1906), pp. 167.

By the reasoning that an enemy of my enemy is my friend, the Hebrews are now united in their battle against Tuthmosis III. The annals of Tuthmosis III describes the Hebrews losing the battle of Megiddo, though they were never called Hebrews; they are called Asiatics. The account

begins with a description of the Hebrews initially at war with each other.

Now (at) that period [the Asiatics had fallen into] disagreement, each man [fighting] against [his neighbor] —— Now it happened that the tribes — — the people, who were in the city of Sharuhem; behold, from Yeraza to the marshes of the earth (they) had begun to revolt against his majesty.

Annals of Tuthmosis III, trans. by J. H. Breasted, *ibid.*, §416, p. 179.

This record names the Hyksos stronghold Sharuhem, but in the past tense, “*the people who were in the city of Sharuhem*”. The city is no more, but its people extended “*to the marshes of the earth*”. This is a direct statement that the Hyksos also lived in the Sealand. But that’s easier to recognize in hindsight. It doesn’t claim that the Hyksos were originally from the Sealand. Presuming it is correct that Sharuhem was Jericho (chap. 17:II), Jericho had been destroyed and never rebuilt because that territory was controlled by Egypt ever since. However Tuthmosis states the the people of the region had begun to revolt against this majesty. The Hebrews were trying to reclaim the territory. The people themselves are caught in the middle. Do they pay tribute to Egypt or pay tribute to the Hebrews? You have to say ‘no’ to someone. The rest of the arrangement is that’s its ‘protection money’, If they’ve paid tribute to the Hebrews, the Hebrews are supposed to fight the Egyptians and send them away. That’s the Battle of Megiddo.

But, it wasn’t the Hebrews who sent the Egyptians away. As Tuthmosis III describes it, the Asiatics fled in terror as his army advanced. The people of Megiddo had closed the city gates, forcing the retreating Hebrew kings to abandon their gold and silver chariots outside the city wall. Though the kings who rode in them were hoisted to safety, their horses and chariots, and many of their men, were captured and taken to Egypt as plunder of war.

Now, if only the army of his majesty had not given their heart to plundering the enemy, they would have [captured] Megiddo at this moment, when the wretched foe of Kadesh and the wretched foe of this city were hauled up in haste to bring them into this city... Then there were captured their horses, their chariots of gold and silver were made spoil; their champions lay stretched out like fishes on the ground... They brought up the booty which they had taken, consisting of hands, of living prisoners, of horses, chariots of gold and silver, of — .

James Henry Breasted, *Ancient Records of Egypt*, vol. 2, (1906), §431-2, pp. 184-5.

The gold and silver chariots captured by the Egyptians were probably manufactured of gold and silver collected as tribute from Egypt during the Hyksos era. The Hebrews were losing territory once again. Although the city of Megiddo was not captured on the first day, it surrendered after a seven-month siege. During that time, the king of Kadesh, certainly from Ham’s branch, had escaped. This is the third siege; Avaris, Jericho and Megiddo, in which the city was lost but the Hebrew king escaped alive.

Thereafter, Tuthmosis III returned year after year, pushing the Egyptian empire north. After 5 campaigns he had captured the Phoenician coast bordering Kadesh, making it possible to transport troops and supplies by ship. Then Tuthmosis III had the upper hand, and he conquered and subdued Kadesh in his 30th year.

The next three campaigns (2, 3, and 4) are meagerly recorded, but in the year 29, on the fifth campaign, we find the king plainly making preparations for the conquest of Kadesh, by first securing the coast and getting possession of the harbors of Phoenicia... The next year, therefore, the king disembarked his army in some Phoenician harbor, and marched upon Kadesh, which he captured and chastised... The foothold in north Syria necessary for an advance into the Euphrates country had now been gained, and Kadesh, the dangerous enemy who would have threatened his rear on such a march, had been subdued.

J. H. Breasted, *ibid.*, pp. 168.

The commoners of Kadesh who did not resist could remain and simply pay their taxes to a different king, but the army and royalty of the Hebrews in Canaan had to either flee or be taken prisoner. With Kadesh subdued, Tuthmosis III pressed on into the territory of Mitanni.

The next year (31) was therefore spent in equipping the Phoenician harbors with supplies and quelling any smoldering embers of rebellion there. It was not until the second year (33) after these preparations that the great king landed in Phoenicia for his march into the heart of the Naharin... the king of Mitanni, who had, with Kadesh, been the heart and soul of the Syrian resistance, was totally defeated, Carchemish was reached and taken, the Euphrates was crossed, and at last Tuthmosis III sets up his boundary tablet, marking the northern limits of his empire, beside that of his father Tuthmosis I.

The Syrian campaign by Tuthmosis III in his 33rd year was in 1447 BC. As shown on figure 18-3, the series of Syrian campaigns by Tuthmosis III fell in the 35th jubilee (box 35) of the Jubilees calendar (chap. 5:1). The Egyptian king was methodically advancing into Hebrew territory, with the conquest of Megiddo, then Kadesh and ultimately a march to and across the Euphrates River, deep into the territory of Mitanni. The gains were permanent. The Egyptian frontier was advancing and holding fast. On the opposite side of that frontier, these were days of crisis for the Hebrew royal family.

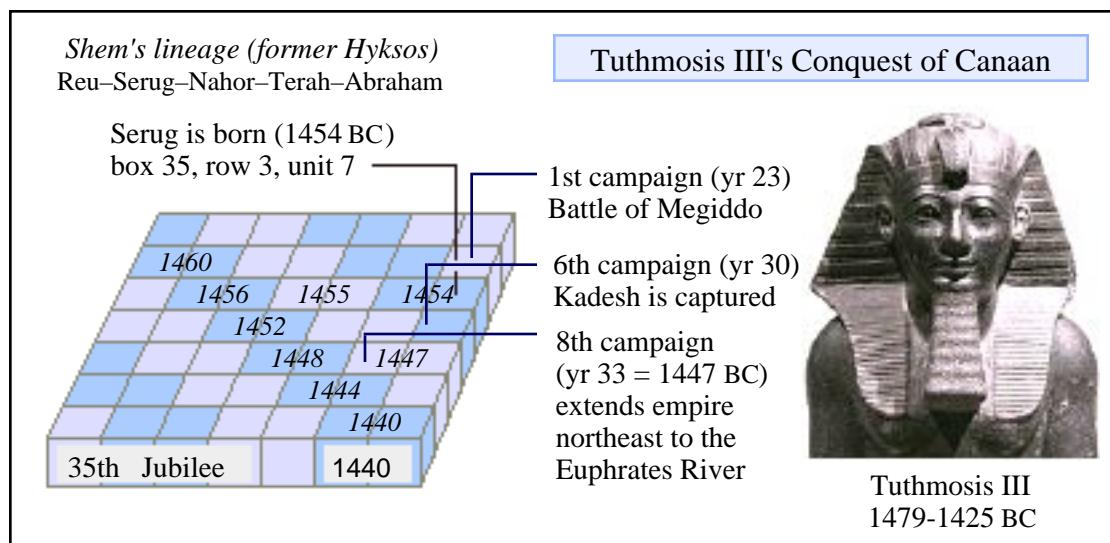


Figure 18-3: The campaigns of Tuthmosis III, relative to the Hebrew chronology.

Though it is no longer possible to keep track of who was in power in Babylonia, Peleg would be in the later years of his life as the 35th jubilee began. Box 35 corresponds to the adult life of Reu whose first son, Serug, was born in box 35, row 3, unit 7. With Tuthmosis III carving away at their territory, it is not surprising that the record of Serug's birth is followed by a report that the sons of Noah began turning on each other. As the Hebrew royals lost territory and revenue to Tuthmosis III, the land that remained belonged to a cousin or a brother.

And in the thirty-fifth jubilee, in the third week... Reu took to himself a wife...and she bare him a son, and he called his name Seroh, in the seventh year of this week in this jubilee. And the sons of Noah began to war on each other, to take captive and to slay each other, and to shed the blood of men on the earth, and to eat blood, and to build strong cities, and walls, and towers, and individuals began to exalt themselves above the nation, and to found the beginnings of kingdoms, and to go to war people against people, and nation against nation, and city against city, and all began to do evil, and to acquire arms, and to teach their sons war, and they began to capture cities, and to sell male and female slaves.

Book of Jubilees 11:1-2

Bar Hebraeus gives a confirmation of the above account, by noting that the sons of Peleg's brother Yuktan established three government administrations and began to conquer territory independent of the national government. The sons of Yuktan would be cousins of Reu, and therefore adults at the same time that Tuthmosis III was campaigning in Hebrew territory.

And after Peleg died and the sons of Joktan, his brother, saw that they had no inheritance, they set up three governors, Sheba, and Asher, and Hawila, and they seized [other] countries. And men began to build fortresses (or, citadels) whereunto they might go and take refuge from the armour (or, weapons) of the sons of Joktan, for they were the first to begin to arm themselves.

Bar Hebraeus, *Chronography* 1:25

The Book of Jubilees also names the culprit who is ultimately responsible for inciting the sons of Noah to war on each other. It is once again Mastema, who in an earlier appearance (Jubilees 10:2-9) was chief of the demons who were "*leading astray and blinding and slaying*" Noah's sons' sons. In that case, chief Mastema was clearly pharaoh Ahmose, at war with the Hyksos. (chap. 17:II). In the passage below, Mastema again appears to be a generic name for the pharaoh of Egypt.

And they made for themselves molten images... and malignant spirits assisted and seduced them into committing transgression and uncleanness. And the prince Mastema exerted himself to do all this, and he sent forth other spirits, those which were put under his hand, to do all manner of wrong and sin, and all manner of transgression, to corrupt and destroy, and to shed blood upon the earth. For this reason he called the name of Seroh, Serug, for every one turned to do all manner of sin and transgression.

Book of Jubilees 11:1-2

The claim that Mastema "*sent forth other spirits*" sounds like he was sending forth ambassadors to reward those who cooperated with Egypt. This is a strategy to take advantage of internal conflict. It is probably incorrect to think of a single king in Babylonia at this time, but at least one king in Babylonia did establish diplomatic ties with Tuthmosis III, following his momentous military advance through the kingdoms of Kadesh (wholly conquered) and Mitanni (significantly reduced in area).

The earliest reference to contact between the dynasty XVIII kings of Egypt and the Kassite rulers comes from the Annals of Tuthmosis III... The climax of his military conquests was the eighth campaign, during which the Egyptians crossed the Euphrates, penetrated Mitanni, erected a commemorative stele on Mitanni's territory... Egypt was now a power with whom great states needed to establish formal links and work out a political relationship. It is, therefore, not surprising that one of the results of Tuthmosis III's campaign was the arrival of embassies bearing congratulatory gifts from the Hittites and Babylonia... The identity of the Babylonian king who welcomed Tuthmosis III is not certain, and, given the chronological problems of the Kassite dynasty, likely to remain so.

Amélie Kuhrt, *The Ancient Near East* vol. 1, (1995), p. 339.

Therefore, while Japheth's branch of the Hebrew royal family (Mitanni) was suffering at the hands of the Egyptian pharaoh, someone within the Hebrew royal family was making overtures of peace. This political outreach is significant toward understanding the Old Testament, because it is just over a century before Abraham begins his journey from Mesopotamia to Canaan. When Abraham arrives in Canaan, he is a direct descendant of Eber and Peleg, the 3rd and 4th kings of Kassite Babylonia. Abraham's father Terah is the rightful heir to the throne of Babylonia, following the hereditary line of eldest sons (figure 18-1). Terah accompanied Abraham to Haran, and Abraham later continued into Canaan. Lest there be any doubt, Abraham, as he made his journey from Haran into the land of Canaan, arrived as either a guest or an enemy of the pharaoh of Egypt. As of Tuthmosis III, Canaan was a territorial possession of Egypt.

II. The Hebrews Return to Ur

What began as a simple search for the ancestors of Abraham, has become a series of discoveries about the hidden role of the Hebrews in Ancient Near East history. The Hebrews are the Kassites, the Hyksos and the Mitanni, possibly more, but I need to let other historians pick up the trail from here. My interest is still in Abraham's ancestry, and what role Abraham played in history. The historical record from Kassite Babylonia is almost nil after a Kassite king sent a congratulatory gift to Tuthmosis III. The Old Testament is also nearly silent, giving only a list of names with ages now inaccurately recorded. There is no obvious correction, but the lifetimes of Abraham's Kassite Babylonian forefathers were certainly normal.

When Serug had lived 30 years, he became the father of Nahor. And after he became the father of Nahor, Serug lived 200 years and had other sons and daughters.

When Nahor had lived 29 years, he became the father of Terah. And after he became the father of Terah, Nahor lived 119 years and had other sons and daughters.

After Terah had lived 70 years, he became the father of Abram, Nahor and Terah.

Genesis 11:22-26

The next question is, were Serug, Nahor and Terah kings of Kassite Babylonia? The answer is definitely no, because if they were Babylonian kings, they would live in Babylon or Aqar Quf, the two known capitols of Babylonia. In the Book of Jubilees, after the record that the sons of Noah began to war on each other, it is reported that Reu's son Serug resides in Ur.

Serug... grew up, and dwelt in Ur of the Chaldees, near to the father of his wife's mother, and he worshipped idols, and he took to himself a wife in the thirty-sixth jubilee, in the fifth week... And she bare him Nahor, in the first year of this week, and he grew and dwelt in Ur of the Chaldees, and his father taught him the researches of the Chaldees to divine and augur, according to the signs of heaven.

Book of Jubilees 11:1-2

This record can only mean that Serug's family has retreated to the Sealand along the Persian Gulf. It is the same place that Ham's branch resided after the first division of the land, before they were driven out of Mesopotamia altogether. Ur is, unfortunately, where losers retreat to, after falling from power in the north. Bar Hebraeus confirms that Serug was not the Babylonian king by explicitly stating that there was now arose a second king in Babel, who reigned in the days of Serug. Babel is specifically Aqar Quf, where Nimrod from Ham's branch had built the Tower of Babel.

And after Nimrod arose the second king in Babel, Kambiros; he reigned eighty-five years in the days of Serug.

Bar Hebraeus, Chronography 1:29

From this record, because it is only the second king at Babel, while there have certainly been ten or more kings of Kassite Babylonia, Aqar Quf must be specifically the capitol used when Ham's branch of the royal family is in power. This is a re-establishment of Ham's branch as kings of Babylonia, and since Serug is living in the city of Ur, not hiding in a swamp. There are probably now two separate capitols, if not three. Serug is likely king only of the Sealand, and not recognized as king of Babylonia.

Bar Hebraeus also mentions the worship of idols and men relying on help from demons during the days of Serug, and the appearance of money from Ophir.

After Reu came Serug his son... Now in his days money and womens' chains (i.e. jewelry) appeared from Ophir. And men made idols for the devils, and they relied for help upon demons.

Bar Hebraeus, Chronography 1:28

The above are references to foreign trade and a foreign religion, which is looked upon with contempt as making idols for the devils (foreigners). The money and jewelry is arriving from Ophir, which is an unrecognizable place name. The contempt for the idols is unusual for Hebrews, who have no particular preference for religion, as long as it helps them rule over the locals. In this case, the worship of idols is despised only because the idols are the religion of foreigners competing for power against the Hebrews. That's why it is called making idols for the devils. Worshipping their idols, is acknowledging that the foreigners are in power. This means that Serug is now a vassal king who must serve a foreign power against his will.

Where is Ophir? I suspect it is a Cushite held region in Nubia. By Cushite, I don't mean the natives of Africa, I mean the royal family ruling over them, who were descended from Ham's son Cush. This would also explain why Nubia is interchangeably called Kush (Kush), just as southern Syria is interchangeably called Canaan. These names are a legacy of Hebrew rulers.

Nubia was the source of gold in Egypt, thus when "*money and women's chains appeared from Ophir*" this is a description of gold coins and gold chains arriving by sea from a Nubian port on the east coast of Africa. That's two Nubian connections: the name Kush, and the source of gold. Another connection is political: a Hyksos messenger was captured trying deliver a letter to a Nubian king early in the Hyksos war against Kamose, the predecessor of Ahmose. The content of the letter is unknown; it is only known that Kamose boasted of capturing the secretive message. This can be easily explained if Noah had conquered the Nile all the way to Nubia. The letter was not a 'cold-call' to a stranger; the messenger was trying to reach fellow Hebrews.

The famous letter sent by Kamose's northern Hyksos opponent to the Nubian ruler is tantalizing, if a bit vague, concerning the political setup of Lower and Upper Nubia. The messenger had attempted to bypass the Theban kingdom of the Seventeenth Dynasty by traveling westward... Considering the overt hostility that had arisen between the Thebans and the Hyksos... it is not at all speculative to argue that Kush and the Hyksos state had cordial relations predating the attack of Kamose. After all, the famous "Buhen Horse" found in burial at that site, can be best explained as a gift from the north; would the Thebans of even the early Seventeenth Dynasty have allowed this modern technology to be sent to their potential foes?

Eric Cline and David O'Conner, *Thutmose III: A New Biography*, (2006), p. 345.

At the end of the above quote there is a clincher. A horse was found buried in a Nubian archaeological site of the Hyksos era. So a Kassite horse had found its way to Cushite Nubia. That's the Hebrews. The last clue of Ophir's location is geographical. Ur was accessible by sea through the Persian Gulf, and king Solomon also received shipments of gold from Ophir, via a port at Ezion Geber on the Red Sea (Gulf of Aqaba). Again the ships from Ophir are bringing Nubian gold from a port on the east coast of Africa.

King Solomon also built ships at Ezion Geber, which is near Elath in Edom, on the shore of the Red Sea... they sailed to Ophir and brought back 420 talents of gold, which they delivered to King Solomon.

1st Kings 9:27-28

Connecting the above clues, after Tuthmosis III had conquered Canaan, Abraham's great grandfather Serug was a vassal king in Ur while Ham's branch ruled Babylonia and was receiving gold in trade from their allies, the Cushites of Nubia. This gold passed through Ur via a nearby port on the Persian Gulf. But here there is another connection. Kush was no longer independent in the reign of Tuthmosis III. The Cushite king had been killed by Tuthmosis I, the third pharaoh of the New Kingdom.

And after Kambiros rose up Samiros, the third king of the Chaldeans... And after him rose up the third governor in Egypt... and it was because he made war on the Cushites and conquered them that he was called by this name, whereof the interpretation is

'Cushite'. And he slew Shebha. And after Shebha his daughter reigned forty years, and henceforward women began to reign over the Cushites.

Bar Hebraeus, *Chronography* 1:28

Hebraeus has his Egyptian chronology a few decades out of synchronization, because the conquest of Cush was during the reign of Tuthmosis I (1506-1493 BC), and by the Jubilees calendar, Serug was not born until 1454 BC (5:I, figure 5-3). The error indicates that when describing Babylonian vs. Egyptian history, Hebraeus was using blind tallies, with two columns side by side, but no way to detect if one column was falling behind the other. The discrepancy is not critical, because after the Egyptian pharaoh killed the king of Cush, the Cushites were conquered and remained conquered. The pharaoh decided who was the Cushite ruler after that. Apparently a tradition was started of placing women as vassals on the throne rather than men, probably because the pharaoh thought women would be less trouble.

The conquest of Cush prior to the days of Serug implies that Ophir was Egyptian-held territory, and the Sealand is ultimately subjugated by Egypt, with a pecking order that includes Ham's branch of the royal family in both Babylonia and Cush. Neither Babylonia nor Cush is independent; they send their taxes to Egypt. If they cooperate, it's not bad. If they don't cooperate, it gets worse.

III. The Ravens Descend Upon Ur

This situation may have remained stable under Abraham's great grandfather Serug and his grandfather Nahor. There was contempt for the demons (Egyptians) and their idols. But Abraham's family remained in Ur, and there is no record of any significant change. Then when Abraham's father Terah was born, a change occurred.

And in the thirty-seventh jubilee, in the sixth week... [Nahor] took to himself a wife, and her name was Ijaska the daughter of Nestag of the Chaldees. And she bare him Terah in the seventh year of this week.

Book of Jubilees 11:9-10

Notice that Nahor married the daughter of Nestag of the Chaldees. The Book of Jubilees always names the father-in-law, who is usually identified as a close relative. This is either a deliberate practice to keep the royal blood pure, or simply because royalty don't socialize with anyone beyond their inner circle. The explicit mention that Nestag is of the Chaldees, and no mention that he is a close relative, is probably indicative of a political marriage to a daughter of the Babylonian king. Thus Nahor is cooperating with Babylonia. There should be no trouble, yet trouble came. During the lifetime of Terah, prince Mastema sent his ravens to steal the seed of the land.

And the prince Mastema sent ravens and birds to devour the seed which was sown in the land, in order to destroy the land, and rob the children of men of their labours... And for this reason he called his name Terah, because the ravens and the birds reduced them to destitution and devoured their seed. And the years began to be barren, owing to the birds, and they devoured all the fruit of the trees from the trees: it was only with great effort that they could save a little of all the fruit of the earth in their days.

Book of Jubilees 11:11-13

No prince has the power to control the behavior of birds. The ravens are figurative for Mastema's tax collectors. The seed being devoured is the grain harvest, the wealth of the land. Mastema could again be the pharaoh, but in that case something doesn't make sense. Despite cooperation with Babylonia, the tax has increased to the point that it is unbearable. It is punative tribute, rather than a tolerable tax. Something has changed. But what?

The change is that prince Mastema is no longer a pharaoh. Mastema is a general term for an evil overlord. It is now Belus, the king of Assyria, who has sent his ravenous tribute collectors.

This is known through the Babylonian history of Bar Hebraues, who describes a political transition in Babylonia on a specific date, recorded as the 5th half-year of Terah's life.

After Nahor came Terah his son. When he was seventy years old he begot Abraham... And in the fifth year of Terah a fifth king rose up in Babel Arpazadh; he reigned eighteen years, and then the kingdom of Babel came to an end for seven years, until Belus, the Assyrian, rebelled against the Chaldeans. And he made war upon them and upon the Medes and conquered them, and he reigned over Assyria and Babel, and over the whole of Asia with the exception of India...

Bar Hebraeus, *Chronography* 1:36

The above record at first seems contradictory, because the kingdom of Babel comes to an end before Belus the Assyrian rebels against the Chaldeans. If the kingdom of Babel is Babylonia, who are the Chaldeans in power that Belus must rebel against? The answer is Mitanni! Chaldeans are a people, not a place. Mitanni is ruled by Japheth's branch of the Hebrews, who are every bit as Chaldean as Ham's branch ruling in Babylonia. The kingdom of Babel must have fallen to Mittani to the north, only to then be claimed by Belus of Assyria, who had to that point been a vassal king of Mittani. Hebraeus is describing the political aftermath in Mesopotamia following a Hittite offensive on Mittani's western border.

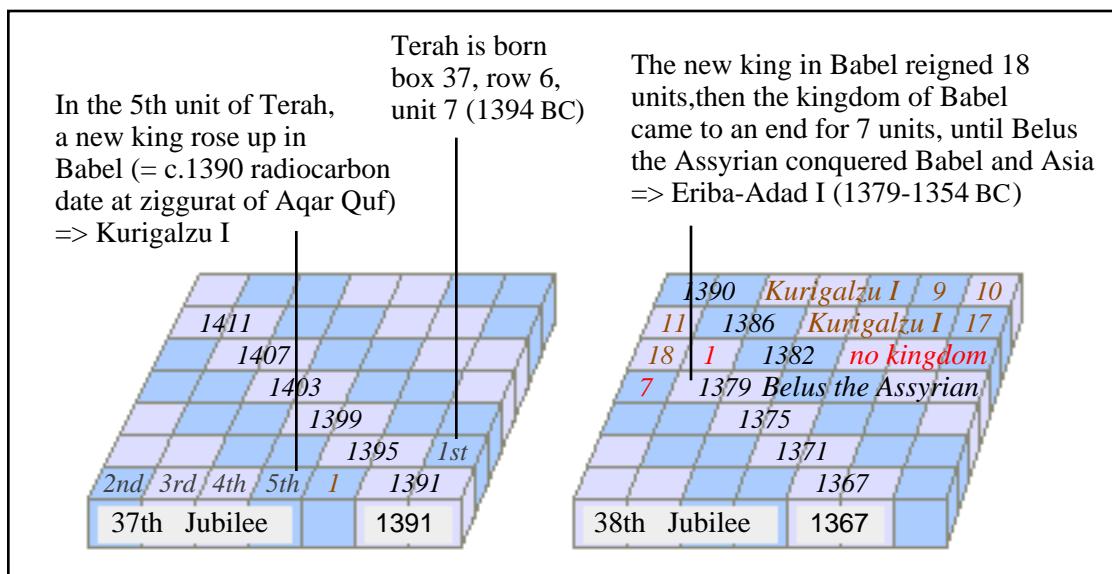


Figure 18-4: Kings of Babylonia and Assyria contemporary to Abraham's father Terah.

Figure 18-4 is the Jubilees calendar for the early life of Terah. Box 37, row 6, unit 7, is the recorded birth date of Terah, corresponding to 1394 BC (5:I, figure 5-3). In the 5th half-year of the life of Terah, Hebraeus reports that “*a fifth king rose up in Babel*”. Babel is specifically Aqar Quf, and the date, 1392 BC, is a good match to the c.1390 BC radiocarbon date of sample BM-177, specifically from the 2nd stage, or *later built* construction of the ziggurat at Aqar Quf (16:IV, figure 16-5).

The city at Aqar Quf (Babel) is known to historians as Dur-Kurigalzu. It is probable that one of two kings by that name restored the ziggurat in c.1390 BC when he renamed the city after himself. Adding to that tentative connection, based on correspondence with Egypt, Kurigalzu I ruled in c.1390 BC.

Several Kassite rulers had dealings with Egypt, and some are mentioned in the Amarna correspondence. Burna-Buriash II (1359-1333 B.C.E.), Kurigalzu I, (c. 1390 B.C.E.), and Kurigalzu II (1332-1308 B.C.E.) are among those kings.

Margaret Bunson, *Encyclopedia of Ancient Egypt*, (2009). p. 195.

The Jubilees calendar date for the accession of ‘Arpazadh’, Bar Hebraeus’ fifth king of Babel, is 1392 BC. This provides a name for the Babylonian king who accended the throne in the 5th half-year of Terah, and gives an exact reign, 1392-1384 BC, for Kurigalzu I. The fog of the Kassite Dynasty is lifting, and a trail is again discernable. Following up on the above quote, if Kurigalzu was in correspondence with Egypt, what did he say? We don’t get to read the letter, but we do get a confirmation that Kurigalzu I was loyal to Egypt.

After the brief encounter with Thutmose III in ca. 1447 B.C., known relations between Egypt and Babylon ran through three reigns in each case. Thus Burnaburiash II later wrote to one of Amenhotep’s successors, claiming that in days gone by his own forefather Kurigalzu (I) had loyally refused to support a Canaanite conspiracy to rebel against Egypt... On this basis, the conspiracy in Canaan spurned by Kurigalzu I would have fallen within the first fifteen years of the reign of Amenhotep III, and the incident (if we believe Burnaburiash) would indicate good official relations between Egypt and Babylon.

David O’Conner and Eric Cline, *Amenhotep III: Perspectives on His Reign*, (2001), p. 253.

This trail is again connecting in several directions, and one must not forget the question: Who is prince Mastema, who sent the ravens to steal seed during the lifetime of Abraham’s father Terah? Mastema is not Amenhotep III in Egypt, nor Kurigalzu I in Babylonia. They are allies who are about to fall victim to the winds of political change. The rising power is Assyria, and historians have had no record of how forcefully Assyria burst onto the scene. Referring again to figure 18-4, Kurigalzu I reigned for just 9 years (18 units) followed by $3\frac{1}{2}$ years (7 units) with no kingdom of Babel at all. During that time, presumably Mitanni had conquered Babylonia. At least that is an explanation for Hebraeus’ claim that the kingdom of Babel came to an end until Belus of Assyria rebelled (against Mitanni) and then ruled over both Assyria and Babel.

There had to be someone in power to rebel against, and the Assyrian capitol is known to have been sacked by Mittani shortly after Thutmose III had pushed Mittani back from its western territory in Syria. It is presumed that Assyria was a vassal kingdom of Mitanni after this conquest, but for how long?

Glimpses of the early Mitanni state come from various sources... around 1447 Thutmose III defeated Mitannian forces in a major battle near Aleppo and ravaged lands on both banks of the Euphrates. An embassy was sent from Babylon to congratulate him on his victory. The Assyrian king Ashur-nadin-ahhe I also sent an embassy to Thutmose III. Possibly in revenge for this action, the Mitanni king Saushtatar, who flourished around 1430, sacked Assur, carrying off a gold and silver door from Assur’s temple to the Mitanni capitol...

Jane McIntosh, *Ancient Mesopotamia: New Perspectives*, (2005), p. 92.

For Assyria, the opportunity to break free of Mittani oppression came with the rising power of the Hittites, but according to the quote below, evidence of Assyrian independence is unknown before about 1350 BC, despite being “weakened by a Hittite victory in 1380.” If Bar Hebraeus is correct. That Hittite victory was much more devastating than has been previously known.

The Hurrians gained power in northeastern Anatolia about 1700; the earliest Assyrian dynasty began to rule from its capitolat Ashur on the Tigris River about 1670. At that time Assyria was an autonomous vassal state of the hurrian kingdom of Mitanni. About 1350... Assyria attacked Mitanni, perhaps with help from the Hittite ruler Suppiluliumas (c. 1375 – c.1335). The Mittani kingdom, already weakened by a Hittite victory in 1380, lost parts of northeastern Mesopotamia and thereby contributed to the founding of the Assyrian Empire.

George C. Kohn, *Dictionary of Wars*, (2013), p. 36.

Hebraeus’ claim does not contradict the claim that Assyria went to war with Mitanni in about 1350 BC, he merely fills in an intermediate step in Assyria’s reversal of fortune. Assyria had gained independence *immediately* after the Hittite victory in 1380 BC. Notice on figure 18-4, that

the seven half-years when there was no kingdom in Babel come to an end in 1380 BC. Then, in 1379 BC, Belus the Assyrian rebelled against the Chaldeans (Mitanni) and not only won independence, but also seized all lands to the south that had been claimed by Mitanni upon the (presumed) earlier Mitanni defeat of Kurigalzu I. Thus Belus became ruler over the kingdom of Babel, and was free to choose his own vassal Babylonian king.

Once again, the story is about the ravens. It is 1379 BC, early in the life of Terah, and the ravenous tribute collectors *from Assyria* have been sent south to steal the seed of the Sealand kingdom at Ur. The last test that all the pieces fit together is the Assyrian chronology. Already in chapter 3, the estimated lifetime of Abraham was used to show that the Assyrian kings Belus and his son Ninus could only be Eriba-Adad I and his son Ashur-uballit I. In chapter 5, a claim by Hebraeus that Abraham was 15 when Belus died and was succeeded by Ninus was used as a test of the Jubilees calendar. Two reigns were possible for Ashur-uballit: conventional (1365-1330 BC), or low (1353-1318 BC). Counting from the jubilees calendar birthdate of Abraham (1359 BC), missed the low Assyrian chronology accession year of Ashur-uballit (1354 BC) by two-years, which was good enough to conclude that the Jubilees calendar is not significantly in error (5:I, figure 5-1). The two-year discrepancy could be an undercount in the Jubilees calendar, or the count of '15 units' could be wrong in the record of Bar Hebraeus, or there could be a small error in the Assyrian King List.

On figure 18-4, it is a similar count of '18 + 7 units' from the birth of Terah (1394 BC) on the Jubilees calendar to the year in which Belus rebelled and began to rule over Assyria and Babel (1379 BC). There is again the possibility of copying errors. But the low chronology reign of Eriba-Adad is 1379-1354 BC, which means that the Jubilees chronology and the Assyrian King List in this case could both be exactly correct. This isn't certain; but if not exact, the Jubilee calendar is still so close that there is no doubt when the ravens descended upon Ur. It was when Eriba-Adad I of Assyria rose to power and subjugated Babylonia.

Checking the numbers is cumbersome, but it must be done. Because the numbers will add up when the reasoning is sound. In this case, the numbers and the political context are entirely consistent with Bar Hebraeus' record of Babylonia being subjugated by Assyria during the childhood of Abraham's father Terah. In conclusion, Abraham's family lineage is Shem's branch of the Hebrew royal family. At their finest moment they were kings of the Hyksos empire. They were defeated in Egypt and escaped to Canaan, defeated in Canaan and escaped to Babylonia, defeated in Babylonia and retreated to Ur of the Chaldees, where Abraham's grandfather Nahor was a vassal king of Kassite Babylonia until Babylonia was conquered by the oppressive Assyrian king Eriba-Adad I.

The king of Assyria is prince Mastema who has sent the ravens. Eriba-Adad I was still king of Assyria when Abraham was born. He was succeeded by his son Ashur-uballit I, who followed in his father's footsteps, transforming Assyria into an empire. The following account of Abraham chasing away the ravens is not the story of a little boy chasing birds with a stick. It is the story of a brash young prince with a sword and a chariot, chasing away the tribute collectors of the Assyrian empire. Abraham is playing with fire, and he will soon be on the run to Canaan.

And a cloud of ravens came to devour the seed, and Abram ran to meet them before they settled on the ground, and cried to them before they settled on the ground to devour the seed, and said, "Descend not: return to the place whence ye came," and they proceeded to turn back. And he caused the clouds of ravens to turn back that day seventy times, and of all the ravens throughout all the land where Abram was there settled there not so much as one. And all who were with him throughout all the land saw him cry out, and all the ravens turn back, and his name became great in all the land of the Chaldees.

Book of Jubilees 11:19-21