

Chronological Framework of Ancient History. 5: The Babylonian Dynasties of Berossus

Ken Griffith and Darrell K. White, Independent Scholars, Middletown, Virginia, 22645

Abstract

The Babylonian dynasties of Berossus are incomplete. The authors solve for the missing values in Berossus using known information. As a result, we find dates for Ninyas, the Fall of Akkad to the Guti, Sardanapalus, and the first and second Median Revolts in the days of Ashur-danin-pal and Sargon II. We also find clarifying information about the reign and identity of Semiramis II as a contemporary of Tukulti Ninurta I. Finally, we identify three of the "god-kings" common to the histories of the ancient nations, as real people in the king lists. The resulting table of Berossus covers the era from the Flood to the conquest of Babylon by Cyrus, in 1,809 years.

Keywords: Berossus, Ancient History, Babylon, Nimrod, Sardanapalus, Trojan War, Semiramis, Menes, Hermes, Thoth, Tukulti Ninurta I, Fall of Akkad

Chronological Framework of Ancient History

This paper is the fifth in the Chronological Framework of Ancient History series in which the authors attempt to build a model of ancient history using the durations recorded by the ancient chroniclers, with the goal of finding a result that is consistent with the biblical text. The methodology for this series was developed in the first paper CFAH-1 (Griffith and White 2022a).

In each paper as we triangulate the dates for events, we number them as anchor points, which are also recorded as a tab in the accompanying spreadsheet, and numbered in the form AP-X, where X is the number of the anchor point in the series. The "Anchor Points" tab lists the anchor points in the order they are determined for the first five papers, and lists the paper in this series as CFAH-X where X is the paper. You are currently reading CFAH-5. We will release updates to the spreadsheet as the series progresses. Previous papers in the series are available at the *Answers Research Journal* website.

Introduction

In papers CFAH-2 (Griffith and White 2022b) through CFAH-4 (Griffith and White 2023b), we have shown that the ancient chroniclers had access to information that allowed them to accurately calculate durations back to key events in ancient history; and we defined a method of triangulating these durations that allows dates for events in ancient history to be firmly established. Using this methodology to filter durations given by the ancient chroniclers has allowed, so far, some 30 key events in ancient history to be triangulated. Table 1 shows anchor points relevant to this paper.

The question is whether this forms a reliable chronological framework. Can we integrate the chronologies of Berossus, Manetho, the Assyrian King List, the Babylonian King List, and the Sumerian King List? We believe so, but we need to process them one at a time.

The history of Mesopotamia poses a difficult problem because the narrative and durations passed down to us by chroniclers and historians of the Greco-Roman Era appear at first glance to differ considerably from the information that has been excavated and translated from tablets in the ancient cities of the same region, such as the Sumerian, Babylonian, and Assyrian King Lists. Drews (1965) gives an excellent account of the modern rejection of the ancient Greek universal histories of Assyria and Babylonia, followed by their partial reconciliation with the tablets excavated in the past two centuries.

Berossus records eight dynasties that ruled over Babylon from shortly after the Flood down to the Persian Conquest of Babylon. However, the tablets recovered from Sumer seem to indicate that Babylon was an Amorite colony that was founded during the Akkadian Era, centuries after the oldest cities in Sumeria (Oppenheim 1964, 155).

We believe that both sets of information were originally valid, and with some error checking, may be completely reconciled. However, to do this in detail will first require a detailed revision of the chronology of Egypt.

In this paper, we will work out and restore the full chronology of the eight dynasties of Berossus and will show that it fits with the Sumerian King List and Babylonian King List, at least as far as the dates for the Fall of Akkad, and the conquest of Babylon by Semiramis II. In the paper, CFAH-15, we will revisit the subject and attempt to synchronize the king lists of Egypt, Assyria, Babylon, Sumer, and Elam in greater detail.

#	# Event Date BC					
	Event	Date BC	Paper			
1	Babel Founded	2234/2233	CFAH-2			
2	Dispersion	2192/2191	CFAH-2			
3	Egyptian Cities Founded	2189/2188	CFAH-2			
6	VAT-4956 Nebuchadnezzar II Year 37	568/567	CFAH-3			
7	Era of Cyrus	560/559	CFAH-3			
9	Era of Nabonassar	747	CFAH-3			
10	Era of the Olympiads	776/775	CFAH-3			
11	Era of Rome	753	CFAH-3			
12	Fall of Troy	1184/1183	CFAH-3			
13	Battle of Salamis	480	CFAH-3			
15	Semiramis II	1232/1231	CFAH-3			
19	Phoroneus	1753	CFAH-3			
21	Semiramis I	2036/2035	CFAH-3			
22	Thoth brings Writing to Egypt, War of Unification	2164	CFAH-3			
23	Kali Yuga	3104	CFAH-3			
27	First Territorial Division	2254	CFAH-4			
28	Second and Final Territorial Division	2247	CFAH-4			
29	The Flood	2348	CFAH-4			
30	Craction	4004	CEVH 4			

Table 1. Anchor points relevant to this paper (known dates).

A Brief Historical Review of Sumeria, Akkad, and Assyria

The conventional chronology of the Ancient Near East recognizes a series of civilizations that occupied and ruled the region that is today called Iraq.

Sumerians

While the pre-Pottery Neolithic A and succeeding cultures are recognized as the oldest civilizations on earth, the earliest cities in the lower Mesopotamian plains were built by the Ubaid and Uruk cultures. These gave rise to a civilization called the Sumerians, whose primary cities were Uruk, Kish, Ur, Nippur, Eridu, Isin, and Larsa, all of which lay near the Tigris and Euphrates rivers on the plains above the Persian Gulf. The Sumerians developed cuneiform writing from pictographs invented by their second king, Enmer-kar, whom Rohl (1995, 206–207) identified as Nimrod. They spoke an agglutinative language that has not been conclusively linked to any other known language family (Michalowski 2004).

Akkadian Empire

Several centuries after the Dispersion, Sargon of Akkad conquered his Sumerian neighbors and created one of the first recognized empires. The city of Akkad was located to the North of Sumer and created an empire that lasted about a century and a half.

The Akkadian language was Semitic, related to Hebrew, but used the Sumerian cuneiform script and became the primary administrative and diplomatic language of civilizations from the Akkadian Empire down until the defeat of the Achaemenid Empire by Alexander in 331 B.C. The city of Akkad is not believed to have been found yet by archaeologists, though we will argue that Akkad was the same city known as Babylon.

Assyrian Empire

About 550 km north of the oldest cities of Sumeria was a city named Asshur, which became the seat of the later Assyrian Empire. The Assyrians worshiped the biblical Asshur, son of Shem (Genesis 10:22) as their ancestral god. The Assyrians spoke a dialect of Akkadian for most of their 1,300 year history until their final 150 years when Tiglath Pileser III changed the official language to Aramaic. Thus, one might argue that Assyria was an ethnic subset of the Akkadian culture.

Intermediate Civilizations

In addition to these three oldest civilizations of Sumer, Akkad, and Assyria, several other ethnic groups struggled with Assyria for power in the region. These included the Guti, the Amorites, the Kassites, the Hurrians, and the Elamites.

The Guti

The Gutean people, from the land of Gutium in the mountains northeast of Assyria, defeated the Akkadian Empire and, according to the Sumerian King List, ruled Sumer for several generations. Very little is known about them other than what can be discerned from their names. By their neighbors, they were called the Quti, Kurti, and Kuti.

The Amorites

The Amorites were Semitic-speaking westerners who invaded the region of Sumer and Akkad along with or shortly after the Gutean defeat of Akkad. The name Amorite, written as "Amurru" in Sumerian, was derived from the word Martu, which meant "West" in the Sumerian language. Thus, the Amorites were westerners from the perspective of Sumeria. Biblical archaeologists have assumed since the nineteenth century that the Amurru of Sumeria were the same people as the biblical Amorites (Genesis 10:16), one of the tribes descended from Canaan.

This assumption may not be fully justified, in part because the signs for syllables in cuneiform and hieroglyphic scripts are not necessarily written in the order they were pronounced. Shem had another son, Aram, whose tribe in Hebrew and Semitic languages was called "Aramu." Aramu and Amurru could be easily written the same way in cuneiform script. Furthermore, the Sumerian Amurru could refer to a wide set of western tribes, while the biblical Amorites were a specific tribe of Canaanites who lived between Bashan and the Mediterranean coast.

In English translations of the Bible, the tribe descended from Aram is called the Arameans, and their language, which was later used by Christ, was called Aramaic. The Semitic-speaking Amorites came to dominate the region around Babylon, and eventually founded the "Amorite Dynasty of Babylon" of which Hammurabi was the most famous king.

The Kassites

The Kassites, who called themselves "Kassu," invaded the region of Babylonia from the northwest at least a century after the Amorites did. Their name for Babylonia was "Karduniash," and they ruled from an administrative center in the city of Nippur, as well as the fortress, Dur Kurigalzu, in the North, and Sealand in the South. The Kassites were the major faction that opposed the Assyrians in the struggle to control Babylon for nearly six centuries.

Sargon II referred to Merodach Baladan as a "Kaldu," which was the Assyrian way of saying Kassite. Given that some languages and dialects replace "r" with "l" and vice versa, it seems likely that the name Karduniash was the source of the word "Chaldean."

The Hurrians

Another tribe of nomadic people lived in the region between Carchemish on the Euphrates and the Upper Tigris River. They are referred to as the Hurri or Hurrians in Assyrian correspondence, and they were sometimes ruled by another group called Mitanni. They seem to have come to dominate the region of Upper Mesopotamia in the centuries after the Amorite invasion of Akkad.

The Elamites

Alongside all of these, the nation of Elam, another of Shem's sons, lay to the southeast of Sumer and Akkad. Elam periodically invaded or was invaded by the major powers of the Babylonian heartland until it was conquered by King Asshurbanipal of Assyria in the seventh century before Christ and given to his allied tribe, the Parsua, which is to say, the Persians.

The Babylonian History of Berossus

Berossus was a Babylonian priest of Bel-Marduk who wrote a three-volume history entitled Babyloniaca from 290 to 278 B.C. under the sponsorship of Antiochus I Soter of the Seleucid Empire. However, his work was dedicated to the successor, Antiochus Theos, who came to the throne in 262 B.C. Berossus was a contemporary of Manetho and the 70 rabbis who translated the Septuagint in the competing kingdom of Ptolemaic Egypt.

We begin the reconstruction of ancient history with Berossus' Babylonian History for three reasons.

First, it appears that Berossus had access to precise and trustworthy data.

Second, details, including exact durations, for each dynasty except the first, third, and seventh have survived.

And, third, the history of Berossus is chronologically one of the most complete, outside of the Bible, stretching from the Creation to the end of the Achaemenid Empire.

The original writings of Berossus are no longer extant, but his chronology can be pieced together (table 2) from ancient chroniclers who quoted his works (King 1907, 90–91).

Given some durations from other historical sources, this is like a matrix or puzzle for which we have enough known information from other sources to solve for the missing values.

Table 2. Babylonian dynasties of Berossus.

Dynasty	Reigns	Dynasty	Duration
Period 1	10		432,000
Period 2	86		34,080
1	?	Chaldean	?
2	8	Median	224
3	11	Interregnum	?
4	49	Chaldean	458
5	9	Arabian	245
6	45	Assyrian	526
7	?	Assyrian	?
8	6	Chaldean	87

Before attempting to place the dynasties of Berossus, let's review two key rulers that anchor his chronology: Semiramis II and Sardanapalus.

Semiramis II: 1232 B.C.

Reviewing what we found in Griffith and White (2023a), "Anchor Points of Ancient History," the second Queen Semiramis is thus far unattested by that name from archaeology. Yet, she is one of the best-dated characters in ancient history.

We have 12 durations to her conquest of Babylon, six from the Trojan war and later events, and six back to the founding eras of the Flood, Babel, and the Dispersion. The actions of defeating the Arabs and conquering Babylon, as well as the dates attributed to her match the era of Shalmaneser I and Tukulti Ninurta I. The chroniclers testify that she was the daughter of "Assyrian Belus," whom we identify as Shalmaneser I, and she was therefore either the sister or wife of Tukulti-Ninurta or possibly even Tukulti Ninurta, himself. Alternatively, the later chroniclers beginning with Berossus may have misinterpreted the Tukulti Ninurta Epic to conclude that this was a woman rather than a man.

In addition to the 12 durations to her reign already cited, we will bring to bear several more, as well as an inscription from the palace of Tukulti Ninurta I that hints that "he" may have been a woman ruling as a male king. These will pinpoint the reign of Tukulti Ninurta I relative to his father Shalmaneser I, and also confirm our placement of the Fall of Akkad.

Sardanapalus

Sardanapalus was supposedly the last king of the Assyrian Empire, however, the chroniclers seem to have conflated several different people under this name, and if we include modern scholars, at least six different men have been identified as Sardanapalus.

Let's review the ancient sources:

Syncellus: Sardanapalus was the last of 41 Assyrian kings whose reigns totaled 1,460 years. (Browne 1844, 559)

Castor of Rhodes: A second Ninus gained the Assyrian Empire after the death of Sardanapalus, which was 1,280 years after the first Ninus. (Cory 1876, 91)

Ctesius: "[Assyrians in Asia]...reigned for thirty generations down to Sardanapalus; for it was under this ruler that the Empire of the Assyrians fell to the Medes, after it had lasted more than thirteen hundred years, as Ctesias of Cnidus says in his Second Book" (Diodorus 1935, vol. 1, book 2, 423).

Ctesias [recorded]...that Sardanapalus, in whose reign the Medes and Babylonians took Nineveh, and destroyed the Assyrian Empire, which was thenceforth transferred to the Medes, and so placed this destruction of the Assyrian Empire in the End of his Reign... (Jackson 1752, 257)

According to [Ctesias], for 30 generations after Ninyas, the kings led a life of luxury and indolence in their palace; the last of them, Sardanapalus, made a vigorous defense against Arbaces, the rebel governor of Media, but finding it impossible to defend Nineveh, he set fire to his palace, and burnt himself with all his treasures; this event took place 1306 years after Ninus. (Chambers 1880, 811)

Eusebius quotes Abydenus, "Then he lists [the kings of the Assyrians] from Ninus and Semiramis up until Sardanapallus, who was the last of all the kings; and from Sardanapallus until the first Olympiad, there are 67 years." (Bosanquet 1873, 167; Eusebius 2008, 53)

The Greek scholars citing Ctesias give between 41 and 31 generations, and between 1,460 to 1,280 years for the Assyrian civilization. It seems difficult to believe they were reading the same source.

Adding to the confusion of the Greek chroniclers themselves, the later chroniclers such as Eusebius interpreted Sardanapalus as Esarhaddon or Nabopolassar, and modern scholars have offered both Ashurbanipal (Nichols 2008) and Tiglath Pileser III as candidates for Sardanapalus, despite the fact that his legend resembles neither of those strong kings.

It appears to us, as long ago stated by the chronicler Hellanicus, that there were two different kings understood by the name Sardanapalus (Drews 1965, 130).

The first of these, Ashur-danin-pal, son of Shalmaneser III, coreigned with his father from 843 to 823B.C. As per Abydenus, the reign of Sardanapallus began 67 years before the Olympic Era, giving 843B.C. (Smith 2008, 53). Ashur-danin-pal made Nineveh his citadel and fought a civil war against his father prior to his death. Transliterating Ashur-danin-pal into Greek yields "Sardanapalus" (Klonsky 1974, 2).

Vellieus Paterculus claimed that Sardanapalus died 870 years before his time, which gives 841 B.C., yet he references four other events at the same time which cluster around 823 B.C. (Paterculus 1924, I.6.1-4). This suggests he was referring to Ashur-danin-pal as Sardanapalus but confused the start of his coreign with his death.

Berossus or his redactors appear to have confused Sardanapalus with Sargon II, as he places the end of the first Assyrian Dynasty of Babylon in 706B.C., which was followed by a Median revolt until 700. Arbaku the Mede paid tribute to Sargon II in 713B.C., (Luckenbill 1989, vol. 2, §192) and may have been the Arbaces credited with slaying the misidentified Sardanapalus.

Abydenus confused the issue even further by conflating Tiglath Pileser, Nabopolassar, and Sardanapalus as one king (Clinton 1824, 267). He apparently thought the P-L-S consonants in all of their names signified they were the same man. This shows the pitfall of building chronology on etymology rather than vice versa.

In the Assyrian records, there were two revolts of the Medes. The eponyms for the last four years of Shalmaneser III say "revolt" (Glassner 2005, #9). His successor, Shamshi Adad V, recorded that his older brother Ashur-danin-pal had led the entire nation to rebel against his father, and then the subject nations rebelled too (Luckenbill 1989, vol. 1, §254). In his third campaign, Shamshi-Adad V reconquered the Medes (Luckenbill 1989, vol. 1, §257). Gertoux (2016) argues that Jonah's mission to Nineveh occurred in the middle of this revolt in the year 824B.C. The second revolt of the Medes occurred when Sargon II was slain in 705 and appears to have lasted five years until 700B.C.

Some of the Greek chroniclers, such as Abydenus, also seem to have confused these two revolts of the Medes with the fall of Nineveh to Cyaxares the Mede and Nabopolassar the Babylonian in 612 B.C.

Finally, we must conclude that while the original work of Ctesias appears to have been valid and detailed information, by the third century of the Christian Era, the Greek and Roman chroniclers completely misunderstood Assyrian history, largely due to confusion over the identity and time of Sardanapalus. A number of the durations recorded by Ctesias were preserved by them, but not necessarily in the correct context.

The confusion about Assyrian history continued from the Roman Era until the Assyrian tablets were deciphered in the nineteenth century of the Christian era. The discovery and translation of the Assyrian King List and several historical chronicles have greatly aided the reconstruction of Assyrian history. However, there still remain some confusing and contested points that directly impact Biblical chronology, particularly concerning the reigns of Sargon II, Sennacherib, and Shalmaneser III, and supposed identifications of Ahab and Jehu in the Assyrian inscriptions.

With those caveats in mind, we will proceed to attempt a reconstruction of the dynasties of Berossus.

Period 1—The Prediluvian Kings

Period 1 (table 2) is considered to represent the time from Creation to the Great Flood. The 10 reigns match the 10 Patriarchs before the Flood in number but not in actual years of reign. As mentioned in Griffith and White (2022a), the 432,000 years represent 120 saroi of 3,600 days, which signifies about 1,200 years.

There are two possible meanings for this period. First, Hamilton argues from the Hindu records of the predeluvial era that this 120 saroi of 1,200 "prophetic years" of 360 day years, being 1,182 Julian years, only counted from the "return of Atri," or Cain, to the realm of Eden 474 years after Creation, to the Flood itself (Hamilton 1820, vol. 1, 359, 279–402). Thus, Hamilton places these 120 decades as being the time of the rule of Cain and his descendants.

Alternatively, these 1,200 years could count from Creation to the Flood using the cipher of the Babylonians and Hindus, as explained below. As seen in Griffith and White (2023b), this 120 *saroi* may represent a priestly symbolic period of the "120 years" in Genesis 6:3, where they used multiplication and division to transform the days of the actual period of 1,656 years before the Flood into a form of the number 120.

As noted by Hamilton and Bosanquet (Bosanquet 1880, 27; Hamilton 1820, vol. 1, 279–402), the Hindus apparently multiplied 120 times seven days of a week, times two for mornings and evenings, to get 1,680 prophetic years from Adam to the Flood. Then they multiplied by 360 days and divided by 365.25 to get 1655.85 Julian years from Adam to the Flood, which is within two months of the value in the Masoretic Text. This interpretation suggests that the 120 saroi duration of the Predeluvian kings in Berossus is symbolic rather than literal.

Of the two possibilities, we consider Hamilton's first to be more likely to be correct, that the Babylonian 120 *saroi* is counting the rule of the patriarchs in the line of Cain from the date of Cain's return to the Land of Eden until the Flood extinguished his line.

For a detailed reconstruction of the history of the 1656 years from Creation until the Flood, Hamilton (1820) integrated the writings of the Hindus, Chinese, and Babylonians with the Masoretic Text of the Bible. His two volumes are worth reading, with the warning that he strays into ecumenism at several points.

Period 2—From the Flood to the First Division of the Earth

Period 2 falls immediately after the Flood and has 34,080 "years," though Polyhistor gives an alternate reading of 33,091 years. Interpreting the 34,080 of Period 2 as days yields 93.3 Julian years from the Flood to the beginning of the First Dynasty of Babylon, which we identify as the rule of Bel Marduk, which was the Babylonian deification of Cush, the son of Ham (fig. 1).

As Cush, with the help of Nimrod, was the builder of Babel, he must have begun to rule in some sense prior to the ritual founding of that city. The chroniclers preserve three different durations for the rule of "Belus": 62 years, 55 years, and the duration

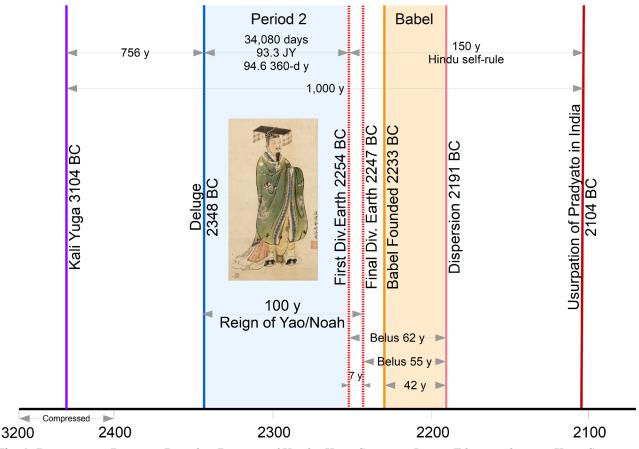


Fig. 1. Durations to Berossus Period 2. Painting of Yao by Kanō Sansetsu.Japan, Edo period, 1632. Kanō Sansetsu (符野 山雪 1589–1651) "Japanese painting of the legendary Chinese Emperor Yao, by Kanō Sansetsu. From a folio depicting various Confucian figures," https://commons.wikimedia.org/wiki/File:Great_Confucian_Figures_-_Painting_of_Emperor_Yao_by_Kan%C5%8D_Sansetsu.jpg. CC BY-4.0.

of the Tower of Babel as 42 or 43 years, as we found in Griffith and White (2022b).

The variants of Ctesias that have been passed down to us have two durations for the length of the reign of Belus, the first king at Babel. Syncellus records 55 years, while Scaliger recorded 62 years (Clinton 1824, 267). When placed before the Dispersion in 2192/2191 B.C., these come to 2254 and 2247 B.C. for the start of the reign of Belus. These two dates correspond to the first and second divisions of the earth mentioned in the Book of Jubilees and Genesis Griffith and White (2023b, AP-27, AP-28).

This interpretation is confirmed by the Hindu record that they ruled themselves for 150 years after the division of the earth prior to the Usurpation of Pradyato which was 1,000 years after the Kali Yuga (Hamilton 1820, vol. 1, 153).

3104B.C. Kali Yuga; minus, <u>1,000 years; gives:</u> **2104B.C. Usurpation of Pradyato**

In the previous paper, Griffith and White (2023b), we triangulated anchor points for the first and second divisions of the earth by the patriarchs. The

first division, probably into quarters, occurred in 2254 B.C. Griffith and White (2023b, 478, AP-27), and the final division of the earth into territories for the 70 nations occurred in 2247 B.C., the year of Peleg's birth (Griffith and White 2023b, 478, AP-28).

Counting back from the Usurpation of Pradyato in Kali Year 1000, or 2104B.C., by 150 years yields 2254B.C. for the division of the earth by which the Hindus began to count their own nation's history.

The first division in 2254B.C. preceded the founding of Babel by 21 years. But after the disaster of the confusion of tongues, we can see how a nation might have counted their history as beginning with the division of the earth when they were first given a claim of title to the territory that would become their nation.

Given that the Flood occurred in 2348 B.C., which was Kali Year 756, this leaves 94 years from the end of the Flood to the first division of the earth.

2348 B.C. year of the Flood; minus, 94 years to the First Division of the earth; minus, 150 years of Hindu self-rule; gives: 2104 B.C. Usurpation of Pradyato Thus the 34,080-day duration of Period 2, being 93.3 Julian years, or 94.7 years of 360 days, averaged as 94 years exactly, triangulates with the Hindu records, as well as the Book of Jubilees which says that the children of Noah secretly divided the earth among themselves seven years before the final division of the earth (Charles 1913, 8.9) in the year that Peleg was born, thus in 2254B.C. This presents the picture that the division of the earth was a seven-year process.

Rawlinson cited Gutschmid who had first suggested that the 86 "kings" for Period 2 in Berossus appear to represent a checksum, which is a number used to verify the accuracy of the data. We will solve for the missing numbers in the eight historical dynasties, and then return to the question of Period 2 and the reign of Belus, the first king at Babel.

In order to solve for the missing values in dynasties 1, 3, and 7 we must first see if the dynasties with complete information can be anchored. Then we will solve for the unknown values from the known. (Note that our anchor points for the dynasties appear out of order, until the end when listed in chronological order.)

Dynasty 6: 526 years of Assyrian Rule of Babylon

Berossus identifies Semiramis II at the beginning and "Phallus," which is short for Sardanapalus, at the end of Dynasty 6. Most scholars speculate on the identity of Sardanapalus, but our anchor point for Semiramis II provides the key. Semiramis II began her sole reign in 1232B.C. (Griffith and White 2023a, 135, AP-15) and the Sixth Dynasty lasted 526 years, so 706/705B.C. would be the date for the end of Dynasty 6 when Assyrian control of Babylon was interrupted. 705B.C. was the year that Sargon II was killed by a rebellion near Tabal in Anatolia (fig. 2).

From the annals of Sargon and his son, Sennacherib, we know that Elam conquered and held portions of lower Babylonia for two or three years prior to the year the chroniclers count as the start of "the Median Revolt" (Luckenbill 1989, vol.2, §42, §234–254). This Elamite incursion occurred between Sargon's defeat of Merodach Baladan in 710 B.C., and his final campaign to conquer the Chaldean holdouts in Bit Yakin in 706 B.C.

Thus, the Median Revolt, which is unrelated to Median Dynasty 2 of Berossus, began with the death of Sargon II in 705 and culminated with Median independence in 700B.C.

However, there were actually two such wars that could be called Median revolts, which is why the chroniclers confused them, and three if we count the destruction of Nineveh by Cyaxares in 612 B.C. The earlier Median revolt coincided with the rebellion of Ashur-danin-pal from 826 to 822 in the last four years of Shalmaneser III.

As noted above, the original Sardanapalus was Ashur-danin-pal who died shortly after his father in 823 B.C., therefore Berossus or his copyists appear to have confused him with the Assyrian king who was killed in the second Median revolt.

Regarding the Median revolt, Herodotus relates (Herodotus 1862, Book I, §95):

The Assyrians had held the empire of Upper Asia for the space of five hundred and twenty years, when the Medes set the example of revolt from their authority. They took arms for the recovery of their freedom, and fought a battle with the Assyrians, in which they behaved with such gallantry as to shake off the yoke of servitude, and to become a free people. Upon their success the other nations also revolted and regained their independence.

Counting from Semiramis II in 1232 B.C., 520 years brings us to 712 B.C. in the reign of Sargon II, plus or minus five years, which is close to the date that Deioces (Day-ee-ohk-keys) became king of the Medes.

We interpret this passage to mean that the Median revolt began when Sargon was ambushed on a campaign to Anatolia early in 705B.C., and as soon as news of his death spread, the other nations revolted. Sennacherib's attention was focused on putting down rebellions for the next several years so that the Medes were able to gain their independence by 700B.C..

The Royal Canon of Ptolemy lists the Babylonian kings back to Nabonassar in 747 B.C. The Canon records two kingless years in Babylon following the final year of Sargon II.

Ptolemy's Canon agrees with Berossus that disruption of Assyrian rule over Babylon occurred at this time, but places Sargon's final year one year later in 705/704B.C. rather than 706/705B.C., as our duration to Semiramis suggests. The two kingless years in Ptolemy suggest a rebellion or war, though it could also be caused by the later Neo-Babylonians striking Sennacherib out of their king list because he destroyed the city of Babylon later in his reign. Sennacherib is listed as king of Babylon for those two years in the Babylonian King List B (Pritchard 1969, 272).

The Greek chroniclers place the end of the Assyrian Empire variously in 608, 612, 700, 705, 824, or 843 B.C. But we know that Nineveh was not destroyed until 612 B.C., and the last forces of Ashur-Uballit II were scattered in 608 B.C.

This discrepancy is probably due to the fact that the Greeks got their Assyrian chronology from Ctesias, who was the medical doctor to the Persian King Artaxerxes II and had access to the archives of the Medes and Persians. From the perspective of the Medes, they were dominated by Assyria in some form or other for over 14 centuries, until 700 B.C., when they obtained independence under the reign of Deioces.

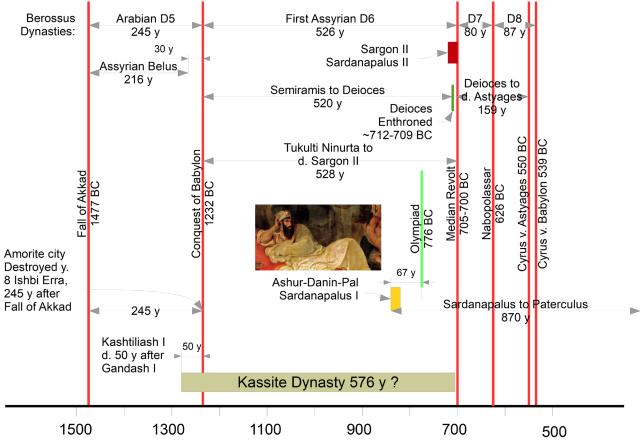


Fig. 2. Durations to Berossus Dynasty 6. Eugène Delacroix. The Death of Sardanapalus. Oil on canvas. 12' 1"×16' 3". Louvre. "La Mort de Sardanapale," https://commons.wikimedia.org/wiki/File:Eug%C3%A8ne_Delacroix_-_La_Mort_de_Sardanapale.jpg. Public Domain.

AP-32: Deioces the Mede: 710/709 B.C.

The "Deioces" of Herodotus and Ctesias appears to be based on the Da-a-a-uk-ku mentioned as a governor of Mannea in Sargon's annals, and his family as Bit Da-a-uku. Sargon captured him in his seventh campaign and deported him with his family to Northern Syria (Luckenbill 1989, vol. 2, §6–11). The question is whether the career of Deioces was ended by Sargon in that year, or did Sargon inadvertently give him the opportunity which enabled him to become King of the Medes?

Deioces was the King of the Medes during what Ctesias called, "the Median revolt," in which Sargon was slain and Media became independent of Assyria.

The Assyrians however, did not look at it quite that way. After Sargon was killed, Sennacherib fought revolts for the next five years, but still viewed himself as the ruler of the "Four Quarters of the Earth."

Herodotus (1862, Book I, §95) gives 520 years of Assyrian rule before Deioces became king, which is 520 years after Semiramis II in 1232B.C., giving 712B.C. But he only counts 150 years from Deioces to the defeat of Astyages by Cyrus, which is usually dated 550B.C.

1232 B.C. Semiramis II; minus, 520 years to Deioces; gives: 712 B.C. ±5 years for the accession of Deioces (717–707 B.C.)

Counting from the other direction:

53 years Deioces reigned (I.102)
22 years Phraortes (I.103)
28 years under Scythia
40 years Cyaxares
35 years Astyages gives:
150 years from Deioces to defeat of Astyages; added to,
560 B.C. reign of Cyrus; gives:
710 B.C. ±2 years reign of Deioces

From Ctesias we have a different list of Median kings starting about a century and a half earlier. The years for the last king are not preserved, but most scholars equate Aspondas with Astyages, so we will substitute his reign for the missing value. Starting from the king near the time of Deioces his

list is: (Diodorus 2004, 2.31.10-34.6)

22 Arbianes 40 Artaios 22 Artines 40 Astibaras [35] Aspondas; gives:

159 years before the defeat of Astyages; added to, 550 B.C. defeat of Astyages; gives:

709B.C.±2 years reign of Arbianes/Deioces

In calculating the reign of Deioces from Herodotus, most scholars use the start of Cyrus' sole reign, 558B.C., yielding 708B.C. for Deioces' reign, but if using the start of Cyrus' co-reign, 560/559B.C., it yields 710/709B.C. for the start of Deioces' reign. Thus it appears that Herodotus counted from the accession of Cyrus as coregent with his father in 560B.C. and omitted one or two rulers between Deioces and Cyrus, while Ctesias counted the period from the actual date of the defeat of Astyages, ten years later, in 550B.C.

The best fit for all this information is Deioces starting to reign between 711 and 708 B.C., Berossus Dynasty 6 of Babylon ending with the death of Sargon II in 705 B.C., and the culmination of the Median Revolt five years later in 700 B.C.

The reign of Deioces is pivotal to the history of both the Medes and the Hittites, which we will examine in the forthcoming paper, CFAH-13. The durations present the picture that by transplanting Deioces from Mannea in Northwest Iran to Northern Syria, Sargon gave Deioces the opportunity that enabled him to become a king over the nomadic Umman Manda tribes that ranged between Anatolia and Iran, from which position he stirred up the rebellion that ambushed and killed Sargon eight years later.

Technically, Deioces began to reign as a judge in Mannea shortly before Sargon deported him in 714. But by 708 he and his son had created a new alliance in the region North of the Taurus Mountains, including the Cimmerians in Cappadocia, the tribes of Urartu in Armenia, and perhaps Media in the East.

Conflicting Interpretations for Dynasty 6

Most scholars focus on Sardanapalus or the Median Revolt, the most popular interpretations being:

Mainstream: 612B.C.: Many secular scholars are certain that Berossus and Herodotus confused the Median revolt with the end of the Assyrian Empire (Grote 2022, 865). They argue that Berossus and Herodotus are in error, and Nineveh fell only once, in 612B.C. It is clear that the Assyrian Empire fell in 612B.C., but some scholars make unwarranted assumptions which cause them to reject the testimony of Berossus and Herodotus.

Pul: 747/775*B.C.*: Eusebius and Rawlinson identified Sardanapalus as the Pul of the Bible,

who is usually identified as Tiglath-Pileser III. Then they place the end of Dynasty 6 of Babylon in 747B.C. Since modern scholarship assigns a new dynasty to Babylon in 747B.C., matching the Era of Nabonassar, they assume that Berossus must have started a new dynasty at that time also. Rawlinson arbitrarily assigned an additional 28 years to the reign of Pul in order to match his chronological system, resulting in 775B.C. for the end of dynasty six. Contradicting Rawlinson, we previously demonstrated Brahe's hypothesis that 747B.C. was a calendar reform similar to the Gregorian reform of the Julian Calendar, not a new Babylonian dynasty (Griffith and White 2022b).

Castor of Rhodes: 843B.C.: Velleius Paterculus, who published his book around the time of Christ's ministry, states that Media started to break away from Assyria some 870 years before his era, after the monarchy had lasted for 1,070 years. He appears to have been following Castor, a contemporary of Julius Caesar, who dated the first breaking away of the Medes to 843B.C., which was the first year of the co-reign of Ashur-danin-pal with his father Shalmaneser III.

Castor may have been nearly correct, as the eponyms 20 years later for the years 826 to 823 for Shalmaneser III all say "revolt."

The question is what he meant by "the monarchy." Was he counting from the reign of Ninus or the death of Ninus?

Using 823B.C. for the death of Sardanapalus, the 1,070 year duration of Paterculus only reaches to 1893B.C. If Paterculus had counted from the Era of Augustus, 27B.C., then his 870 plus 1,070 year durations go back to 1968B.C. which was the death of Ninyas/Gilgamesh. But this gives 897B.C. for the "breaking away" of the Medes.

As argued above there were two Median revolts, 122 years apart. If we analyze the passage of Paterculus, he gives four other events related to Sardanapalus, clustered around 823 B.C., which year saw the defeat of Ashur-danin-pal. Therefore, it would seem that Paterculus counted the 870 years back to the start of the 20 year coreign of Ashur-danin-pal in 843 B.C.

It appears he made a 55 year error regardless of which starting point we use. We consider it most likely he correctly counted 844/843 as the start of the reign of Sardanapalus, and thus his 1,070 year duration was 55 years short, if he meant to count back to the 1968B.C. death of Ninyas.

Freret: 898B.C.: Freret interpreted the 870 years of Paterculus from the era of Augustus, 28/27B.C., concluding the Median break away started in 898B.C., and therefore the Assyrian Monarchy, which had lasted 1,070 years to this time, started in

1968 B.C., the year that Ninyas/Gilgamesh died. Some chronologists incorrectly interpret this breaking away as the Median Revolt. Freret's interpretation appears confirmed by Justin as follows: (Russell 1827, vol. 2, 69).

Justin, the abbreviator of Trogus Pompeius, relates that the kingdom of the Medes, from Arbaces to Cyrus, continued 350 years....The calculation of Velleius [Paterculus] would give 338 [years], that is to say, 12 years less than Justin, and 19 less than would result from a computation founded on the length of the reigns as recorded by Herodotus.

Freret's interpretation of Paterculus assigns 338 years between Arbaces, the first Median king, and Cyrus' coreign in 560/559 B.C., which yields 898/897 B.C. for Arbaces, when Media started to break away. This may refer to a third event.

We conclude that Berossus' Sixth Dynasty of Babylon lasted from 1232/1231 B.C. to 706/705 B.C. with the Median Revolt culminating in independence six years later in 700 B.C.

Since the chroniclers gave durations to two different "Sardanapalus" and two different Median Revolts, we will make them anchor points to distinguish them.

AP-33: Defeat of Sardanapalus I—Ashur-danin-pal—First Median Revolt: 826–822 B.C.

The real person named Sardanapalus was Ashurdanin-pal who was defeated and presumably died in the last year of Shalmaneser III, 823 B.C. (Luckenbill 1989, vol. 1, 254). His rebellion also led the Medes and other nations to rebel against Assyria, thus we count this as the First Median Revolt.

AP-34: Sardanapalus II—Sargon II: Second Median Revolt: 705–700 B.C.

Based on the date of his death, Sargon II appears to be the second person referred to by the chroniclers as Sardanapalus, despite that not being his name. Perhaps one of the chroniclers decided that "Sargon" was meant to be "Sardan."

Sargon's death by the hand of the Umman Manda tribes in 705 B.C. was the opening volley of the Second Median Revolt, which appears to have been successful by 700 B.C. Although Esarhaddon later had a vassal treaty with the Scythians and Medes under Bartatua/Phraortes, they were never completely subjugated by Assyria again.

The 1,306 year duration given by Ctesias from Ninyas to Sardanapallus appears to count from 2006B.C., the start of the coreign of Ninyas, to 700B.C., the culmination of the Second Median Revolt. However, there are two problems.

First, Ctesias or his redactors confused this event with the self-immolation by Sardanapallus.

We have no surviving record of self-immolation by Sargon II or Ashur-danin-pal. This may be an embellishment of Sardanapalus based on Shamashshum-ukin, the older brother of Ashurbanipal who burned down the palace of Babylon around himself in 648 B.C.

Second, the 1,306 year duration assumes that Sardanapallus died the same year as the culmination of the second Median Revolt in 700 B.C. As they give Sardanapalus 20 years of reign, this would have matched Sargon II, whose reign began in 720 or 721, except that he died in 705. Thus the chroniclers add an extra five years to the "Sardanapalus" who was killed by the Medes.

AP-43: Conclusions for Dynasty 6: 1232-706 B.C.

We have found strong triangulations to the reign of Semiramis II when Dynasty 6 began in 1232/1231 B.C., as well as to Sargon II with whom Dynasty Six ended in 705 B.C. However, all of the chronicler's durations point to the death of Sargon in 706 B.C., when Assyrian sources pinpoint it to 705 B.C. This appears to be a one year error in the chronological scheme of Berossus.

The primary person on whom the legend of Sardanapalus was based appears to have been Ashurdanin-pal, the son of Shalmaneser III, who coreigned with his father from 843 until his death in 824B.C. Durations given by the chroniclers to Sardanapalus may refer to Sargon, Ashur-danin-pal, or to the fall of Assyria in the time of Ashur-Uballit II. The event intended by the chroniclers must be determined by the context.

The First Assyrian Dynasty of Babylon, as Berossus called it, was founded by an Assyrian King, Tukulti Ninurta I, and also ended with three Assyrian kings ruling Babylon. Those were Tiglath Pileser III, Shalmaneser V, and Sargon II.

However, during much of the interval between Tukulti Ninurta and Tiglath Pileser, the kings of Babylon appear to have been appointed by the Kassites whose administrative capital was the city of Nippur. Therefore the "First Assyrian Dynasty" of Babylon was not controlled by Assyria for much of its 526 years of existence. Berossus appears to have named it thus simply as a way of dividing Babylonian history between major events.

AP-45: Dynasty 8: Neo-Babylonian Empire: 626–539 B.C.

It is generally agreed that the Eighth Dynasty of Berossus, known as the Neo-Babylonian Empire, lasted 87 years from 626/625 B.C., when Nabopolassar took the kingship of Babylon away from Assyria, until 539 B.C. when Babylon was conquered by Darius the Mede and Cyrus the Persian.

The thirty-seventh year of Nebuchadnezzar II in 568 B.C. is one of the most firmly dated events in antiquity, due to an astronomical diary that recorded not just eclipses but the positions of the planets as well (Griffith and White 2023a, 132. AP-6). Thus we have a high degree of confidence for the start and end dates of the Eighth Dynasty of Babylon.

AP-44: Dynasty 7: Second Assyrian Dynasty of Babylon: 705–626 B.C.

Solving for the unknown from the known, we reason that the duration of the Seventh Dynasty of Berossus was 80 years, from the end of Dynasty Six (706B.C.) to the start of Dynasty Eight (626B.C.). This supplies the first missing value of the Berossus king list.

The Royal Canon of Ptolemy supplies the missing number of kings of Babylon and their reigns for this dynasty, starting after Sargon's last year.

Kingless (2)

Bel-ibni (3)

Assur-nadin-shum (6)

Nergal-ushezib (1)

Mushezib-Murduk (4)

Kingless (8)

Assur-akh-iddin (13)

Shamash-shum-ukin (20)

Kandalanu (22)

Seven kings with combined reigns total 69 years, plus ten kingless years in Babylon during that period yields 79 years for the last Assyrian Dynasty of Babylon. Adding one year for the fact that Berossus mistakenly counted the death of Sargon II as 706 rather than 705B.C., gives 80 years for the Second Assyrian Dynasty in the table of Berossus.

AP-42: Dynasty 5: "Arab" Dynasty: 1477-1232 B.C.

According to Berossus, the Arabs of Dynasty Five ruled Babylon for 245 years. Dynasty Five ended when Semiramis II took Babylon from the Arabs and began her reign over Babylon in 1232 B.C. This gives 1477 B.C. for the start of Dynasty Five.

The question is who were the Arabs mentioned by Berossus that ruled Babylon for 245 years?

We know of three non-native groups that conquered Akkad or Babylon prior to Tukulti Ninurta I:

- 1. The Gutium conventionally conquered Akkad around 2200 B.C.;
- 2. The Amorites are considered the founders of Hammurabi's "Amorite Dynasty of Babylon" around 1900 B.C.; and,
- 3. The Kassites are believed to have conquered Babylonia circa 1590 B.C.

We propose that the answer to the question is that the Gutium and Amorites were allied tribes that defeated King Shar-Kali-Sharri of Akkad together. The city was then taken over by the Amorites. However, the Amorite Dynasty of Babylon in the Babylonian King List was not formed until about two centuries later.

The Kassites also arrived about two centuries after the Fall of Akkad and established hegemony over southern Babylonia, as well as the city of Akkad in the north which was by then called Babylon. By the time of Tukulti Ninurta, the Kassites, Gutium, and Amorites of Babylon were loosely allied against Assyria with the monarchy controlled by the Kassite nobility.

While the Guti or Gutium are believed to have come from the Zagros Mountains, we don't know enough to identify them as Arabs per se. However, the names Guti and Kurti are similar to "Gether," a son of Aram in the Table of Nations (Genesis 10:23).

The Kassites spoke a language that was neither Semitic, nor Indo-European. But some believe it was a branch of the Hurrian-Urartian language family (Schneider 2003). The Hurrians lived in the region of Sanli-Urfa, which Cyrus Gordon identified as Ur Kasdim (Gordon 1958, 1977), and were probably a mix of Arameans and Arphaxadites, like Abraham's family was (Genesis 25:20; Deuteronomy 26:5). Abraham's older brother Nahor had a son named Kesed who may have been the progenitor of the Kassidim (Genesis 22:22).

While it is widely assumed that all Semites spoke Semitic languages, this was not universally the case. The Elamites, who were unquestionably descended from Shem (Genesis 10:22), spoke a language that is not related to any other known. Likewise, the Lydians, descended from Shem's son, Lud, spoke Luwian, which was a branch of Indo-European.

The Hurrians living north of the Euphrates, referred to in Scripture as the "Arameans beyond the River" (2 Samuel 10:16) spoke a non-semitic language, while the Amorites and Arameans south of the Euphrates River in the Levant spoke languages closely related to Hebrew, called "Ugaritic" and "Aramaic," respectively.

The Kassites may have been a subset of the Hurrians, who were in turn descended from Arphaxad in the region of Ur Kasdim, today called Sanliurfa. They were either close cousins of Abraham's line, or they were the tribe of Kesed, the nephew of Abraham by his brother Nahor.

The Kassites, who called themselves "Kassu" in Akkadian (Balkan 1954, 131 f.; Zadok 2013), were later called "Kaldu" or Chaldeans by Sargon II (Luckenbill 1989, vol.2, §35). Their name, Kassu, was possibly derived from either Arpha-kassad or Kesed, the nephew of Abraham, to give the biblical "Kasdim" which was much later rendered as "Kaldu" or "Chaldean."

While the Kassites are commonly assumed to have come from Iran due to that being their location after the peak of their influence had passed, Zadok (2013) writes:

J.A. Brinkman (1976–80, p.465a) and W. De Smet (1990, p.11) point out that the earliest evidence for Kassites is from northern Babylonia and west of it, viz., the Middle Euphrates and Alalah VII (see Brinkman, 1976–80, p.466b).

Alalakh is located on the Orontes River near Antioch in Syria, not far from the Mediterranean Coast. This is consistent with an Arphaxadite or Kesedite origin of the Kassites in the region of Harran and Urfa. (fig. 3)

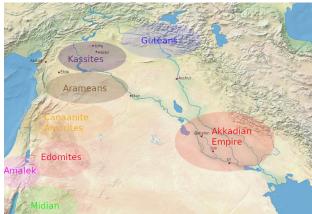


Fig. 3. Territories of Amorites and Arameans prior to the fall of Akkad. Fulvio314, "Middle East topographic mapblank," https://en.m.wikipedia.org/wiki/File:Middle_East_topographic_map-blank_3000bc_crop.svg. CC BY 3.0

The Kassites were known for their breeding of horses (Heinz 1995, 167; Zadock 2013).

Berossus, writing in the third century before Christ, used the term "Arab" to describe a group of people in the second millennium before Christ. But, the Bible does not use the word "Arabian" until late in the reign of Solomon at the dawn of the first millennium (1 Kings 10:15; 2 Chronicles 21:16). Instead Genesis uses the term, "people of the East."

Abraham sent his younger sons "to the East," and Jacob visited his uncle Laban in Haran among the "people of the East" (Genesis 29:1). Later in the Bible, the Midianites and Amalekites in Arabia were also called "the people of the East" (Judges 6:3, 33). And finally, the journey of the Joktanites "from Mesha toward Sephar, the great mountain of the East" suggests that Mash or Mesha and his brother Gether inherited lands to the North and East of Assyria, which is precisely where the Guti suddenly appeared from in the time of Naram Sin of the Akkadian Empire.

Therefore we do not consider it a stretch to suggest that the Fall of Babylon to the Arabs and Phoenicians reported by Berossus was the same location and event as the Fall of Akkad to the Gutium and Amorites, which ended the Akkadian Empire. We would further argue that the Guti, or Kurti as the Assyrians called them, were an Aramean tribe allied to the early Amorites who were the "people of the East" which included the tribes of Abraham's descendents through Ishmael, Esau, and his sons by Keturah, many of whom had intermarried with the Canaanites.

AP-35: Fall of Akkad to the Guti Arabs: 1477/1476 B.C.

The date 1477B.C. will prove to be pivotal when we synchronize the Arab dynasty of Babylon with the Arab/Hyksos dynasties of Egypt in the next paper. Eusebius reported from Berossus that the Phoenicians and Arabs went to war with Babylon and were victorious, starting the Arabian Dynasty of Babylon as suggested by the following:

164. In the eighteenth year of Cecrops, the Chaldeans made war and fought with the Phoenicians. (Eusebius Chronicle, 1.1.1:61)

165. In this war the Chaldeans were defeated, and the Arabians reigned in the country of Babylon for two hundred and sixteen years before Belus the Assyrian came to reign. (Ussher 2003, §164,165)

These two entries in Ussher's annals for the years 1539 and 1538B.C. are enigmatic because we cannot find the original sources of these quotes from the *Chronicle* of Eusebius about the war between the Chaldeans and Phoenicians, and the 216 year duration to the Assyrian Belus. However, the citation of section 61 of the first book of the *Chronicon* matches the content of sections 62–67 which give a detailed chronology of Cecrops, who was one of the first kings of the region of Attica in Greece. This suggests that a fragment from this section detailing the war of the Chaldeans has been lost since Ussher's time.

The original Greek version of the *Chronicle* was also lost until the late eighteenth century when an Armenian translation was found in Yerevan. It is from the Armenian manuscript that we have today's English translation of the *Chronicle*. However, Bishop Ussher cited the *Chronicle* of Eusebius two centuries before the Armenian manuscript was found. Many classical and medieval chroniclers quoted passages of the *Chronicle*, and there are two known Syriac manuscripts that preserve fragments. Our best guess is that Ussher was quoting a passage quoted by an earlier source, or that he possessed a surviving manuscript of the *Chronicon*.

We have reason to believe that Eusebius was using Castor's chronology and that he got the information about the Chaldean War from Polyhistor's citations of Berossus. The Chaldean War and the 216 year duration both fit precisely in our framework, but not in the way that Ussher applied them. Due to Castor's misidentification of Sardanapalus his chronology is consistently high by several decades for events prior to 800 B.C.

Continuing the hypothesis that the Fall of Babylon to the Arabians and Phoenicians refers to the Fall of Akkad, we can see that the quote of Eusebius above refers to the wars of Naram Sin of Akkad, who boasted that he conquered Armanum, Ebla, and Amanus on his way to the Mediterranean Sea (Frayne 1993, 133).

Thus the archaeological evidence supports Ussher's citation that the Chaldeans went to war against the Phoenicians, which is to say, the Canaanites.

Eusebius used the names for the people of those regions in his day in the third century A.D. to refer to the Akkadians as Chaldeans, the Amorites of Canaan and Syria as Phoenicians, and the Aramean and Abrahamic "People of the East" as Arabs. Since we've argued above that the Kassites were the Chaldeans, we can see that the word Chaldean came to mean "Babylonian" in the Greek language. But the Akkadians were a different tribe from the Chaldeans who replaced them.

Ironically, the people whom the Bible calls "People of the East" appear to us to be the same people whom the Sumerians referred to as "Amurru," or Amorites. "Westerners." Amurru in Sumerian means, Therefore the People of the East from the perspective of Abraham in Palestine were the Westerners from the perspective of Sumeria. We contend that these Amorites included Arameans, Gether (Guti), Arphaxadites (Hurrians and Kassites), the sons of Keturah, Midianites, Edomites, and actual Canaanite Hittites and biblical Amorites who intermarried with them.

There are two pieces of evidence in the ancient tablets themselves supporting the hypothesis that the Guti and Amorites were allied in their attack on Akkad (fig. 4).

First, ancient cities used year names instead of year numbers. Excavations in Iraq have revealed year names on tablets from the Akkadian Era. For Shar-Kali-Sharri, who appears to be the Akkadian King who was killed by the Gutium, about 23 of his year names have been found. Two of these are named after his defeats of the Gutium, and two of these are named after his defeats of the Ammuru, or Amorites (CDLI:Wiki 2023).

Second, from the Assyrian King List, which we consider to be reasonably accurate back to Ashur-Uballit I, we find that a major enemy of the Assyrian kings in this 200 year period from 1477 to 1232B.C. was the Guti or Kuti tribe. This tribe lived in the

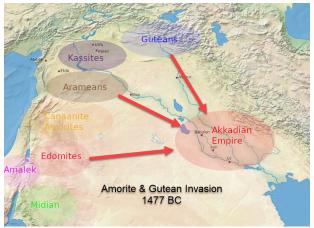


Fig. 4. Amorite invasion in 1477 B.C. Fulvio 314, "Middle East topographic map-blank," https://en.m.wikipedia.org/wiki/File:Middle_East_topographic_map-blank_3000bc_crop.svg. CC BY 3.0.

Zagros mountains to the northeast of Babylonia.

In the conventional chronology the Guti conquered the Akkadian Empire around 2200 B.C., and their dynasty lasted only one century in Sumeria before the rise of the Third Dynasty of Ur.

However, the Assyrian annals give us precise years for campaigns against the Guti/Kuti by Arik-den-ili, Shalmaneser I, and Tukulti Ninurta I (Luckenbill 1989, vol. 1, 26, 40, 50). These Assyrian campaigns against the Guti took place from 1305 to 1232B.C., with one last campaign against them by Tiglath Pileser I around 1150B.C.

Tukulti Ninurta was the first Assyrian king to conquer Babylon. The reign of Tukulti Ninurta I coincides in time with the Babylonian recollection of Semiramis II conquering Babylon and then (re)building its walls in 1232B.C.

Combining Berossus with the Assyrian King List we find that the Guti and associated Amorite tribes conquered Akkad/Babylon in 1477B.C. While the Guti themselves were eventually expelled in a series of campaigns beginning in 1305B.C. and culminating in a short lived Assyrian conquest of Babylon in 1232B.C., the allied Amorites and Kassites continued to rule the city of Babylon and the region of Karduniash for five more centuries.

The Assyrian Belus began to reign in 1261, as did Shalmaneser I. Semiramis II began her sole reign around 1232 B.C., as did Tukulti Ninurta I.

We have clear records of Shalmaneser I and Tukulti Ninurta I fighting major campaigns against the Kuti in the same narrow time frame that Berossus places the downfall of the Arabian Dynasty of Babylon.

Recognizing the Amorites and their successors, the early Kassites, as the "Arabian Dynasty" of Berossus, conventionally dated to have captured Akkad in 2200 B.C., we can see that the earlier periods

of the conventional chronology of Babylon have been pushed back more than seven centuries beyond their real dates which can be found by triangulation of historical durations.

But, it can be argued that Tukukti Ninurta defeated the Kassite King Kashtiliash, not the Guti! After solving for the missing information in the dynasties of Berossus, we will demonstrate that Tukulti Ninurta certainly defeated both the Guti and the allied Kassites.

AP-36: Assyrian Belus— Shalmaneser I: 1261 B.C.

We learned from the above quote by Eusebius that the Assyrian Belus, or "Lord," began his reign 216 years after the Arabians took Akkad/Babylon. Using 1477 B.C. for the Fall of Babylon, 216 years later was 1261 B.C., the same year that Shalmaneser I began to reign according to the Assyrian King List (Glassner 2005, Text 5). According to Berossus the Arabs still ruled Babylon until the death of Assyrian Belus.

Given that the War of the Chaldeans is dated by Ussher to the eighteenth year of Cecrops, we have enough information from Eusebius about Cecrops to count back to another of our anchor points, the reign of Phoroneus in 1753 B.C. from (2008, 180–182).

Ogygus is said to have been the first [king] of the Athenians....Phoroneus the son of Inachus, king of the Argives, is considered to have lived at this time. Plato mentions this in the *Timaeus*, as follows: "When he wished to acquaint them with ancient history, so they could discuss the antiquity of this city, he began his account with the old stories about Phoroneus and Niobe, and then what happened after the flood." Ogygus lived in the time of Messapus, the ninth king of Sicyon, and Belochus, the eighth king of the Assyrians.

After Ogygus and until the time of Cecrops, it is said that there was no king in Attica for 190 years, because of the great destruction caused by the flood. The number of years is calculated from the kings of the Argives, who reigned before Ogygus. From the end of the reign of Phoroneus, king of the Argives, in whose time Ogygus' flood is said to have occurred, until Phorbas, in whose time Cecrops became king of Attica, 190 years elapsed.

In our third paper we triangulated the reign of Phoroneus to 1753 B.C. which is one of our anchor points (Griffith and White 2023a, AP-19). Earlier in section 64, Eusebius gives the reign of Phoroneus as 60 years. Eusebius also gives the duration of 780 years from the first year of Cecrops to the first Olympiad. These durations allow us to estimate the reign of Cecrops.

1753 B.C. first year of Phoroneus; minus, 60 year reign of Phoroneus; minus, 190 years to Phorbas; gives: 1503 B.C. reign of Phorbas

We do not know in which year of Phorbas that Cecrops became king. But, this puts the war of the Chaldeans against the Phoenicians, that the Chaldeans ultimately lost, within ten years of 1485 B.C.

Eusebius also states about Cecrops that, "At this time, Moses had become recognized amongst the Hebrews" (2008, 183). Using Ussher's dates for Moses, his flight from Egypt occurred in 1531B.C. Given that Cecrops reigned for several decades, using Ussher's date of 1491B.C. for the Exodus, it occurred in the reign of Cecrops.

Returning to Ussher, who places the reign of the Arabs in the year following the war of Chaldeans in the eighteenth year of Cecrops, we can see he also made an error. Where Ussher erred was the assumption that the war was completed in a single year. Similar to the Hundred Years War, the war between the Amorites and Kassites against the Akkadians lasted two generations from Naram Sin to Shar Kali Shari before Akkad finally fell. Thus the 216 year duration should be counted from the Fall of Akkad, not from the reign of Naram Sin or Cecrops.

1477 B.C. Fall of Akkad; minus, 216 years: gives; 1261 B.C. Assyrian Belus

721 B.C. last year of Shalmaneser V; plus, 540 years to Shalmaneser I in AKL; gives: 1261 B.C. Shalmaneser I

Conclusion for Dynasty 5

Durations from the reign of Semiramis II place the capture of Babylon by the Arab Dynasty in 1477 B.C. The Assyrian kings recorded their campaigns against the Kuti beginning in 1305 and culminating with the capture of Babylon around 1232 B.C., which matches the sole reign of Tukulti Ninurta within a year. These details match the chroniclers' records of Semiramis II, as well as the capture of Akkad by the Guti recorded in the Sumerian King List.

We also find that Shalmaneser I was the person referred to as Belochus II and "Assyrian Belus" by the chroniclers.

AP-41: Dynasty 4: Chaldean: 458 years: 1935—1477 B.C.

According to Berossus, the Fourth Dynasty of Babylon lasted for 458 years and ended with the Arab

and Phoenician victory which occurred in 1477 B.C. This gives 1935 B.C. for the start of Dynasty Four.

The start of this dynasty is in the time frame of Abraham and Chedorlaomer of Scripture, one century after the start of the reign of Semiramis I.

While not precisely dated in Scripture, Abram's defeat of Chedorlaomer was between his seventy-sixth and eighty-sixth years, after his descent and return from Egypt. According to Ussher-Jones, Abram's eighty-sixth year would be in the year 1911/1910. Therefore Chedorlaomer's first campaign, 14 years earlier, must have been no later than 1925, four years before Abraham left Harran in 1921 B.C.

Unfortunately, the records of the kings of Elam are minimal for this period. Assyriologists of the nineteenth century identified Chedorlaomer as a supposed "Khudur Lagomer" who was a contemporary of Hammurabi (Shook 1916, 21). However, this identification turned out to be a mistranslation.

We will elaborate further in CFAH-15, that Berossus Dynasty 4 covers the same period as much of the Sumerian King List, starting about three decades after the death of Gilgamesh in Uruk Dynasty I, and culminating with the collapse of the Akkadian Empire under the Guti and Amorite hordes in 14777 B.C.

AP-38: Dynasty 1: Chaldean: 2233—2191 B.C.

We have good reason to connect the reign of Belus, the legendary first king at Babylon with the Tower of Babel. Drews (1965, 133) writes:

Castor (F1) recorded Belus as a contemporary of Ogygus, and of the Cyclopes who forged thunderbolts for use against the Titans....Thallus, a first century A.D. admirer of Euhemerus, wrote that Ogygus and Belus, king of Assyria, fought on the side of Cronus against Zeus and the so-called gods (Fallus F2). Abydenus (F4) located the battle at the Tower of Babel, and cited the confusion of tongues as the unhappy result of the battle.

Though Castor placed them as enemies of each other, the king named Belus and the god called Zeus, or Picus, appear both to be based upon Cush, who was according to many sources, Bel Marduk, the first king at Babel.

If we identify the first dynasty of Berossus as the reign of Cush at Babel, then we have three possible starting dates for his reign: the first division of the land, (Griffith and White 2023b, AP-27) for which we have seen the duration of 62 years before the Dispersion, the second division in the year of Peleg's birth in 2247 B.C. (Griffith and White 2023b, AP-28), or the founding of Babel in 2233 B.C. (Griffith and White 2022b, AP-1).

The most obvious choice given that Period 2 gives 34,080 days from the Flood to Cush's reign, would be the first division of the land. That would give Cush a reign of 62 years, as recorded for Belus by Ctesias.

However, given the results of our research in Griffith and White 2022b, Berossus may have counted his First Dynasty of Babylon from when the city of Babel was founded in 2233 B.C., for the entire 42/43 years that the Tower of Babel was being built until the Dispersion in 2192/2191 B.C. We can try both values and see which one fits with the checksum to be explained at the end of our reconstruction of his dynasties.

The Irish annals record that "At the end of forty-two years after the building of the Tower, Ninus son of Belus took the kingship of the world" (Macalister 1941, §13).

This suggests that Cush, as "Belus" reigned over Babylon for 43/42 years while the Tower was being built and that Nimrod probably coreigned with Cush during the Babel project. The question is whether Berossus counted one king or two with Ninus coreigning for the first dynasty.

Eusebius copied Polyhistor's version of Berossus, in which he relates that the First Dynasty had two kings named Evouchus and Chomasbelus. (Eusebius 2008, 24) These are identifiable as Cush and Nimrod. Therefore the First Dynasty had two kings.

For now, we see two possible start dates for Dynasty 1, 2254 and 2233 B.C. We will seek to clarify which was intended by the list after solving for the other missing information.

AP-39: Median Dynasty of Babylon: 224 years: 2191–1968 B.C.

Since we have deduced that the First Dynasty of Berossus lasted from either the first division of the earth (2254B.C.) or the founding of Babel (2233B.C.) until the Dispersion (2191B.C.), the Second Dynasty, for which he gives 224 years, logically begins with the Dispersion.

How could the Medes have obtained rule over Babel during the rule of Ninus?

Current scholarship denies that the Medes existed as an identifiable group prior to the first millennium before Christ. Genesis (10:2) lists Madai as one of the sons of Japheth among the 70 tribal leaders. But the biblical text does not mention Madai or the Medes again until the deportation of Samaria in 721 B.C. (2 Kings 17:6; 18:11).

The Book of Jubilees says that Madai's lot was the "land of the sea," which appears to have been North-West Europe. "Madai saw the land of the sea and it did not please him, and he begged a [portion] from Ham and Asshur and Arpachshad, his wife's brother,

and he dwelt in the land of Media,..." (Charles 1913, Jubilees 10:35–36).

Therefore, after Babel, Madai remained in the territory he traded for, which must have included the region of Babel. In an earlier paper (Griffith and White 2021a), we made the case that the original Babel and territory of the Medes was in the region of Subartu near the modern city of Diyarbakir, Turkey at the center of the Pre-Pottery Neolithic-A Culture.

Since it is clear that Ninus ruled the near-east after the Dispersion, then Madai's occupation of Babel would have been under Ninus' lordship.

Diodorus relates the story of how this Median Dynasty came to be: (Diodorus 2004, Book II, Ch. 1)

And as his power continually increased, he made a campaign against Media...[he]made one of his friends astrap of Media, while he himself set about the task of subduing the nations of Asia, and within a period of seventeen years he became master of them all...

The chroniclers also mention a second Ninus 1,280 years after the first, whom we identify as the Assyrian King Shamshi Adad V, who, like the first Ninus, had a wife named Shamurammat, or Semiramis. Given that he also conquered the Medes, it is uncertain which Ninus the above story refers to.

That being said, the "Median Dynasty of Babylon" appears to have been a foreign dynasty appointed by Nimrod over the original region of Media and the original city of Babel, long before the Medes migrated into Iran. This region, Subartu, would in later centuries become the core territory of the Kingdom of Mitanni. Whether Mitanni had any lineal connection to Madai, there is not enough evidence currently known to say.

Using the 224 year duration given by Berossus, the Median Dynasty collapsed with the death of Ninyas, the son of Semiramis I, in 1968 B.C.

Polyhistor's testimony conflicts a little with our dates for the second dynasty. "Polyhistor gives 975 years as the interval between the Median conquest of Babylon and the commencement of the Assyrian empire of 526 years" (Clinton 1824, 281).

The commencement of the Assyrian empire of 526 years represents the start of Dynasty 6 when Tukulti Ninurta conquered Babylon in 1232B.C. Nine hundred and seventy-five years before 1232B.C. yields 2207B.C. for when the ancient Medes obtained control over Babel, which is assumed to be the start of Dynasty 2. This is 15 years earlier than our anchor point for the Dispersion, yet it is relatively supportive of our dates for the second dynasty.

As will be considered below, several lines of evidence suggest that the Greek chroniclers considered 1968 B.C. to be the start of the Old Assyrian Empire, which coincides with the end of the Median Dynasty of Babylon.

AP-40: Dynasty 3: Division and Rebellion: 33 Years: 1968–1935B.C.

A footnote in the Armenian version of Eusebius citing Polyhistor, who based his chronology upon that of Berossus, indicates that the duration of Dynasty 3 was already missing from the text, but there are two margin notes stating 34 years and 48 years (Eusebius 2008, 25; King 1907, 90). Clinton (1824, 272) included this number in his chart of Berossus.

Using the dates we've already found from the end of Berossus Dynasty 2, 1968B.C., to the start of Berossus Dynasty 4, 1935B.C., is a short period of 33 years. Thus, we may interpret the margin notes of 34 and 48 to be the two possible values, of which 34 is closest to our own calculation. This allows us to fill in the missing number for the third dynasty, which might be called an "interregnum" of 34 years.

The extra 15 years calculated for the 48 year duration can be explained by Polyhistor's duration to the Median Dynasty of Babylon, meaning the Dispersion, which is 15 years high by our calculation. It seems likely that Polyhistor used the same method we have. He calculated his date for the start of the Median Dynasty, and then subtracted 224 to get the beginning of Dynasty 3. And then he calculated back two dynasties from Semiramis in 1232 to arrive at 1935B.C. for the start of Dynasty 4. Taking the difference he got 48 years as the duration of Dynasty 3.

Since we have triangulated the dates for Babel and the Dispersion from about 16 sources in Griffith and White (2022b), we will keep our 2191B.C. date for the Dispersion. Therefore, we find that 33 years is the best fit for Dynasty 3. This is confirmed by the checksum, explained below.

Regardless of whether it was 33 or 48 years, to have 11 kings in such a short period indicates a time of instability. Thus, it appears that when Ninyas died the empire, if it could be so-called, fragmented.

Using the Ussher-Jones dates for Abraham, the Third Dynasty of Berossus lasted from Abram's years 28 to 61 in Ur of the Chaldees.

The Checksum

A checksum is a technique used in computer engineering to ensure accurate values for important numbers in order to maintain and preserve the integrity of the data. Typically a series of numbers or a value is summed or run through a more complex algorithm giving a unique value that is separate from the data.

For example, some types of computer memory use an additional bit to allow for verification of data; the bit is set to "1" if the 8 bits in the byte are odd, or a "0" if the 8 bits in the byte are even. If a single error occurs, then that byte can be flagged as erroneous. More complex checksums allow for data to be verified and even corrected.

Rawlinson cites Gutschmid as suggesting that the total of the years in the king list of Berossus including the checksum should add up to 36,000, which is ten saroi (Rawlinson 1862, vol. 1, 191–193). However, analysts performing checksums on data include all of the data, not just part.

Thus, if Gutschmid's hypothesis was correct, the sum of the reigns plus the sum of the number of kings in the table of Berossus should yield 36,000. Using the values we found for the missing data, the sum of the kings and the years of reign does indeed come to 36,000. Table 3 shows our reconstruction of the nine dynasties after the Flood.

We do find an imperfection in our solution, but it appears to be original to Berossus. There is a 20 year gap between Period 2 and the start of Dynasty 1. We see no way to reduce one of the missing numbers sufficiently to raise the duration of Dynasty 1 by 20 years. Thus the 86 reigns of Period 2 must represent some real value, possibly the total population of men and women alive in 2254B.C.

If the First Dynasty had been counted as 62 years, then the chronology would be complete from the Flood to Fall of Babylon. But that would require reducing either the checksum of 86 kings or the 34,080 days by 20. Perhaps Berossus only wanted to count the reigns of the kings over the city itself, which was not founded until 2234/2233B.C. Alternatively, the preserved value of 86 kings, may have been corrupted from an original of 66, which is closer to the biblical value of 70 tribal leaders (Genesis 10).

The easiest place from which to obtain the missing 20 years would be from the 34,080 days for Period 2 from the Flood to the First Division of the Earth, because 20 days would be insignificant to the number of years. The fact that Polyhistor gives an alternate

reading of 33,091 suggests that either Berossus or later chroniclers made variants which adjusted the numbers to fit alternate chronologies.

If we reduce the 34,080 days to 34,060 days, and give the First Dynasty a reign of 62 years, then the checksum and the chronology are both "perfect" in terms of Ussher's Biblical chronology. However, we will just present the chart with the numbers as we have received them, and use 42 years for the reign of Cush over Babel.

In the previous paper, Griffith and White 2023b, we confirmed Cullimore's hypothesis that the variant chronogeneologies in the Samaritan and LXX manuscripts were altered to fit estimates using an erroneous rate of precession to calculate the number of years since the Flood, when the Vernal Equinox was in the Pleiades. We showed that alterations were being made as late as Clement in the first century using the Babylonian estimate of precession of 1° per century, instead of the more accurate value of 1° in 71.585 years.

If we followed the LXX chronology, we might use Polyhistor's reading of 33,091 days and add the missing 989 days as years to Dynasty 1; this would push the Flood date back to 3222B.C. This suggests that Polyhistor's variant was adjusted to match the date of the Flood as calculated by precession using the Babylonian rate of 1° per century, and was calculated circa 147B.C. (Griffith and White 2023b).

Returning to the canonical version of Berossus, the total of 1,696 years for the eight dynasties prior to 538B.C. comes out to 2234B.C., which falls within a year of our other triangulations for the founding of Babel (Griffith and White 2022b, AP-1), which is well within the error of four years that we would expect from summing eight durations. This time period also covers the two Babylonian calendar periods, the Era of Nabonassar and the Era of the Chaldeans. Therefore, a year of error could easily have slipped in.

The checksum's close correspondence provides strong evidence that the dates we have suggested for the Babylonian dynasties are indeed correct.

Tab	le 3.	Kings	after	the	Flood-	–Berossus	reconstructed.	

	Kings After the Flood—Berossus Reconstructed							
AP	#	Dynasty	Kings	Years	From (BC)	To (BC)		
39	0	Period 2	86	34,080	2348	2354		
40	1	Chaldean	2	42	2233	2191		
41	2	Median	8	224	2192	1968		
42	3	Interregnum	11	33	1968	1935		
43	4	Chaldean	49	458	1935	1477		
44	5	Arabian / Guti	9	245	1477	1232		
45	6	Assyrian	45	526	1232	706		
46	7	Assyrian	9	81	706	625		
47	8	Neo-Babylonian	6	87	625	538		
	Total 223 35,777 = 36,000							

The use of a sophisticated technique such as a checksum to preserve the integrity of the data also shows that the ancient Babylonians were far more advanced than evolutionary anthropologists might imagine.

The checksum conclusively confirms the accuracy of the numbers in and of itself. Combined with the other triangulations (Griffith and White 2022b, AP-1–3) which confirm 2234/2233B.C. for the founding of Babel, it becomes quite certain that we have the correct overall duration of the dynasties from Babel to the conquest of Babylon by Cyrus. Fig. 5 charts all eight of the Dynasties of Berossus.

Confirmation of the Fall of Akkad Via Other Sources

Our claim that the Fall of Akkad occurred in 1477B.C., rather than the conventional date of 2200B.C., reduces the conventional timeline for Sumer and Akkad by more than seven centuries. This calls for stronger evidence than two citations from Berossus and Ctesias. We have found eight additional durations and synchronisms that appear to confirm our hypothesis that the sack of Babylon recorded by Berossus as beginning the Arabian Dynasty of Babylon in 1477B.C. was in fact the Fall of Akkad to the Guti and Amorite hordes.

In Ctesias' king list of Nineveh there is a king named Belochus in three versions of this list from Syncellus, Eusebius, and Scaliger (Clinton 1824, vol. 1, 267) (Table 4), who is associated with a daughter "who ruled on her own" variously named Badossa, Atossa, Semiramis, Tratre's, and Aku'urartist. Depending on

the source, she is said to have reigned for either 7 or 17 years.

His daughter Tratre's, who was also called Ak'urartist, ruled in her own stead for 17 years (Eusebius 2008, 65).

Having been placed in the same time frame, this woman should be the historical person referred to by the chroniclers as the second Semiramis.

However, there appears to be no record of her in the Assyrian King List, nor in inscriptions from the time of Shalmaneser I and Tukulti Ninurta I yet discovered. That is, unless we consider the possibility that Semiramis II has been under our noses in the archaeological record as Tukulti Ninurta I "himself."

Eight additional durations and synchronisms seem to confirm this possibility, as well as our interpretation of the Fall of Babylon to the "Arabs" as being the Fall of Akkad (fig. 6).

1. Tukulti Ninurta I reigned 37 years

All known copies of the Assyrian King List give Tukulti Ninurta a reign of 37 years (Glassner 2005, Text 5).

2. Kashtiliash was defeated near year 20 of Tukulti Ninurta

Based on his annals, scholars estimate that Tukulti Ninurta defeated Kashtiliash around year 19 or 20 of his reign. If his reign began in 1233 as per the Assyrian King List (Glassner 2005, Text 5), then this puts the conquest of Babylon two decades later

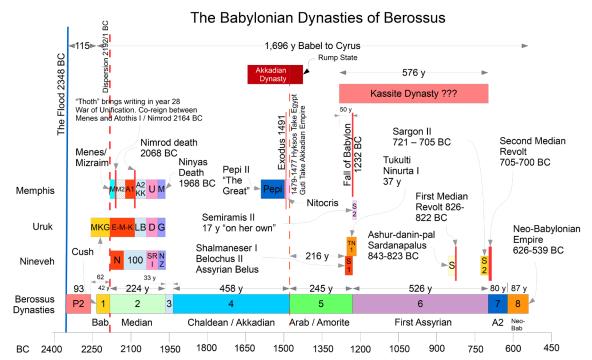


Fig. 5. Solution to the Dynasties of Berossus.

 Table 4. Rescensions of Ctesias.

Eusebius	Years	Years	Syncellus	Years	Barbarus	Years
Ensenins	Lib. I	Lib II	Belus	55	Belus	fears 62
Ninus	52	52	Ninus	52	Ninus	52
Semiramis	42	42	Semiramis	42	Semiramis	42
		-	<u> </u>	-	 	+
Ninyas/Zames	38	38	Ninyas	38	Zinas	38
Arius	30	30	Arius	30	Arius	30
Aralius/Amyrus	40	40	Aralius	40	Aranus	40
Xerxes Balaeus	30	30	Xerxes	30	Xerxes Ballaeus	30
Armamithres	38	38	Armamithres	38	Mamythus	38
Belochus	35	35	Belochus	35	Belochus	35
Balaeus	52	52	Balaeus	52	Balleus	52
Altadas	32	32	Sethos	50	Altallus	35
Mamythus	30	30	Mamythus	30	Mamithus	30
Macchalaeus	30	30	Aschalius	28		
Spherus	22	20	Spherus	22	Spherus	20
Mamylus	30	30	Mamylus	30	Mammythus	35
Sparetheus	40	39	Spartheus	42	Spareus	40
Ascatades	40	40	Ascatades	38	Ascatagus	40
Amyntas	45	45	Amyntas	45	Amintas	50
Belochus	45	25	Belochus	25	Atossa / Semiramis II	23
Filia Tratres/ Badossa vel Semiramis	17	7			Bilochus	25
Balatores	30	30	Balatores	30	Belleroparus	34
Lamprides	32	32	Lamprides	30	Lampridus	32
Sosares	8	20	Sosares	20	Posarus	20
Lampares	30	30	Lampares	30	Lamparus	30
Pannias	42	45	Panyas	45	Pannius	45
Sosarmus	19	19	Sosarmus	22	Sosarmus	20
Mithraeus	27	27	Mithraeus	27	Mithreus	35
Teutamus	32	31	Teutamus	32	Tautelus	32
Teutaeus	40	40	Teutaeus	44		
Subtotal	908	929		947		903
			Arabelus	42		<u> </u>
			Chalaus	45		
			Anebus	38		<u> </u>
			Babius / Teutamus II	37		i i
 Thinaus	30	30	lost	30	Eutaeus	40
Dercylus	40	40	Dercylus	40	Cercillus	40
Eupalmeus	38	38	Eupaomes	38	Eupalus	36
Laosthenes	45	45	Laosthenes	45	Lausthenes	45
Peritiades	30	30	Pertiades	30	Peritiadus	30
Ophrataeus	21	20	Ophratius	21	Ophrateus	20
Ophratanes	50	50	Ephecheres	52	Ophratanus	50
Acrazanes	42	42	Acraganes	42	Acrapanus	40
		-	<u> </u>	_	· ·	_
Sardanapalus	20	20	Sardanapalus	20	Sardanapalus Ninus II	30
		i .	I .	I	I INITIUS II	19

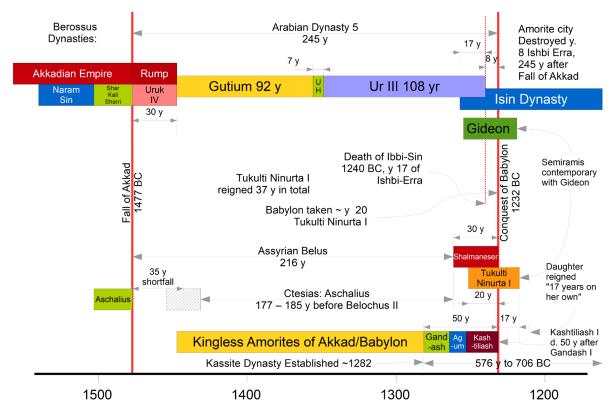


Fig. 6. Addition durations to the Fall of Akkad.

than our triangulated date. Are we mistaken that Babylon fell to Assyria in 1232B.C.?

3. Eusebius 17 years "on her own"

We can triangulate the coreign of Shalmaneser I and Tukulti Ninurta I using the following information. First, Ussher, citing a lost fragment of Eusebius (1.1.1:61 not found in Schoene's edition) tells us that Assyrian Belus, who was Shalmaneser I, began to reign 216 years after the Fall of Babylon to the Arabs (Ussher 2003, §164,165), which was earlier determined to be 1477B.C. We are also told by Berossus that Semiramis conquered the Arabian Dynasty of Babylon 245 years after their conquest of that city (Eusebius 2008, 25-26).

245 years of Arabian Dynasty; minus; 216 years until Assyrian Belus; gives: 29 years ±6 mo. of Shalmaneser's reign

The Assyrian King List gives Shalmaneser I a reign of 30 years. This suggests he was still alive when Babylon was conquered, unless there is a year of error in the length of his reign or the durations from Berossus.

The passage quoted above gives "Ak'urartist" a reign "on her own" of 17 years, which implies she had a coreign with her father Belochus, a.k.a. Shalmaneser I.

If we deduct 17 years from the 37 year total reign of Tukulti Ninurta, it suggests "his" coreign with Shalmaneser I began 20 years before the sack of Babylon in 1232. This now agrees with the Fall of Babylon being in 1232 and being around year 20 of the reign of Tukulti Ninurta.

Conventional scholars also place the reign of Tukulti Ninurta a decade or two earlier than the Assyrian King List, so this is a rare case where we agree with conventional chronologists.

4. Gideon contemporary with Semiramis

Sanchoniathon was cited by Porphyry and Eusebius as a contemporary of Semiramis. (Eusebius 2002, 484, 485)

[PORPHYRY] 'Of the affairs of the Jews the truest history, because the most in accordance with their places and names, is that of Sanchuniathon of Berytus, who received the records from Hierombalus the priest of the god Ieuo; he dedicated his history to Abibalus king of Berytus, and was approved by him and by the investigators of truth in his time. Now the times of these men fall even before the date of the Trojan war, and approach nearly to the times of Moses, as is shown by the successions of the kings of Phoenicia. And Sanchuniathon, who made a complete collection of ancient history from the records in the various cities and from the registers in the temples, and wrote in the Phoenician language with a love of truth, lived in the reign of Semiramis, the queen of the Assyrians, who is recorded to have lived before the Trojan war or in those very times. And the works

of Sanchuniathon were translated into the Greek tongue by Philo of Byblos.'

Sanchuniathon's source was cited as the books of the priest Heirombalus of the god "Ieuo." While Gideon was not a priest, his God was called Yah[weh], and his nickname after destroying Baal's altar was Jerubbaal (Judges 6:32). Gideon appears to be the person cited by Sanchoniathon.

According to Jones, Gideon defeated the coalition of Midian, Amalek, and Sidon in 1251 B.C. (Jones 2002, 279, Chart 5). Our 20 year upward adjustment of the reign of Tukulti Ninurta places the first year of the coreign of Semiramis and the tenth year of Shalmaneser in 1251 B.C. Thus Semiramis II is found to have been the contemporary of Gideon from 1251 until his death in 1218 B.C., and outlived him by four years.

5. Kassites 576 y minus 50 to death of Kashtiliash

We are informed by the Tukulti Ninurta Epic that the name of the king of Babylon defeated by him was Kashtiliash. This is confirmed by a recovered letter on a clay tablet from Tukulti Ninurta to his grand vizier which was found at Dūr-Katlimmu (Fales 2010, 82), advising him that the captive Kashtiliash with his wife and a retinue of women were being sent to him.

Due to the current placement of the Kassite Dynasty of Babylon by historians, it is assumed that Tukulti Ninurta defeated Kashtiliash IV. However, only two kings named Kashtiliash are named in the Babylonian King List. The middle section of the Kassite list falls into a lacuna, so we do not know how many kings had that name.

The Babylonian King List informs us that the Kassite Dynasty lasted 576 years. Its third king was Kashtiliash I, whose reign ended 50 years after the dynasty was founded by Gandash (Pritchard 1969, 272).

As an experiment, if we anchor the end of the reign of Kashtiliash I to the sack of Babylon in 1232 B.C., then the Kassite Dynasty can be computed as follows.

1232 B.C. defeat of Kashtiliash I; plus,
50 years to Gandash; gives:
1282 B.C. Kassite Dynasty founded; minus,
576 years for entire Kassite Dynasty; gives,
706 B.C. Kassite Dynasty Ended

The last three kings of the Kassite Dynasty are included in the Babylonian King List B, they were: (Pritchard 1969, 272)

13 Mardukaplaiddin 1 year Zababa shumiddin 3 Ellilnadin[ahhe] The last two Kassite kings reigned a total of four years after the dethronement of Marduk-apla-iddina I. In this thought experiment which pegs the Kassite dynasty to the defeat of Kashtiliash I in 1232 B.C., that places the defeat of Marduk-apla-iddina I in 710 B.C. Coincidentally, that is the same year that Marduk-apla-iddina II (Merodach Baladan) was defeated by Sargon II and his son Sennacherib, thus ending his reign as well.

After a one-year reign by a usurper, the final Kassite King was installed by his father, the King of Elam, Shatruk Nahunte, who was the nephew of Marduk-appla-iddina, and the son reigned for three years.

Coincidentally, Merodach-appla-idina II also interacted with an Elamite king named Shutruk Nahunte who refused to help him when he was attacked by Sargon II (Luckenbill 1989, vol. 2, §32–34, 47, 67, 257).

Remember that the Elamites had seized Babylonia for three years prior to the Median Revolt B, which began in 705 B.C. In Sargon's second to last campaign the previous year, 706 B.C., he sent his generals against Bit Yakin to defeat the Elamites and "Kaldu" who had taken Karduniash, but not Babylon proper.

We know from the history of Sargon II and Ptolemy's Canon that the king of Babylon defeated and expelled by Sargon in 710B.C. was Mardukappla-iddina II, aka Merodach Baladan of the Bible (Isaiah 39:1).

Both Merodach Baladan I and Merodach Baladan II were Kassite, or Chaldean, kings who both interacted with a king of Elam named Shutruk Nahunte, supposedly I and II, 475 years apart. And the death or deposing of both kings named Merodach Baladan was immediately followed by an Elamite invasion of Karduniash and installation of an Elamite king of Karduniash with a claim to the throne. And in both cases, after Shutruk Nahunte died he was succeeded by a son named Kudur-Nanhunte.

This highly improbable cluster of coincidences strongly suggests the possibility that one person, Merodach Baladan, has been duplicated by serializing the Babylonian King List. His Elamite contemporaries Shutruk Nahunte, and Kudur-Nanhunte have been duplicated with him.

There are many supposed synchronisms that appear to place the Kassite Dynasty, and particularly Merodach Baladan I, in the time frame of the second millennium. Reilly has made a fair beginning of taking apart some of those synchronisms, showing them to be false (Reilly 2023, n.d.).

We intend to examine the Kassite Dynasty and its false synchronisms in detail in the paper CFAH-15.

For now we merely note that the defeat of Kashtiliash I fits to the year with the conquest of Babylon by Tukulti Ninurta I in 1232 B.C.; and that the end of the Kassite Dynasty in 706 B.C. is consistent in fine detail with recorded events in the annals of Sargon II and Sennacherib. This is a puzzle piece that appears to fit precisely. But to prove it will require a dedicated paper, which will be CFAH-15 in this series. For now we mention it, and set it aside as interesting but thus far unproven.

6. Sargon, Naram Sin, and Shar Kali Sharri in Ctesias King List

Table 4 referred to above, shows the four recensions we have of the king list of Ctesias for Assyria going back to the Dispersion. In that list, if we identify Traatres as Semiramis, as she was explicitly named by Eusebius, and her predecessor, Belochus, as Shalmaneser I, then we can anchor the first year of Belochus II to 1261B.C., the known first year of Shalmaneser I.

There are four kings in the Ctesias list that can be identified as Sargon of Akkad, Manishtushu, Naram Sin, and Shar-Kali-Sharri, who were the four strongest kings of the Akkadian Empire. Sargon's son, Rimush, is omitted by Ctesias.

Akkadian Name: Ctesias Name
Sargon, 56 yr: Balaeus, 52 yr
Rimush, 9 yr: unlisted
Manishtushu, 15 yr: Mamuthos, 30 yr
Naram Sin, 37 yr: Sethos/Altallus 35 yr
Shar Kali Sharri, 25 yr: Aschalius, 28 yr
Totals 142 yr: 145 yr

We identify the probable Fall of Akkad as occurring at the end of the reign of Shar Kali Sharri. There is a year name found in the economic tablets, "year the king of Akkad was killed in battle," (CDLI:Wiki, 2023) which almost certainly refers to Shar Kali Sharri.

The crippled Akkadian Dynasty limped through three more kings, who are listed in the Sumerian King List. But power apparently shifted to Uruk with the death of Shar Kali Shari. So the remaining 38 years of the dynasty after his death were parallel with the first rulers of the Uruk IV Dynasty.

Thus, counting from the death of Aschalius to Belochus II in Ctesias can give us a rough estimate of the duration that we've already confirmed to be 216 years from the Fall of Akkad to Shalmaneser I.

The regnal lengths for the list of Ctesias that have been passed down to us appear to be inaccurate, but still within the general ballpark.

Counting reigns in Ctesias from the death of Aschalius (Sharri Kari) to start of Belochus II Eusebius Lib I: 177 yr Eusebius Lib II: 174 yr Syncellus: 177 yr Barbarus: 185 yr

Eusebius preserved the precise 216 year duration from the Fall of Babylon to the Arabs down to Assyrian Belus. He clearly did not get this figure from the values of Ctesias, as he relates it with the figures relating to Cecrops of Athens. Nevertheless, Ctesias comes within a few decades of the same results.

If the Fall of Akkad had occurred in 2200 B.C., then how did Ctesias get the names of Manishtushu as "Mamuthis" and Shar Kali Sharri as "Aschalius" and place them only two centuries before Shalmaneser I?

While not as precise, Ctesias is an external and independent witness that the Fall of Akkad was the event referred to by Berossus as the Arab Conquest of Babylon, and that it occurred in the fifteenth century before Christ, not the twenty-second.

7. Ishbi-Erra 8th year Amorite city destroyed: AP-46

Tukulti Ninurta painted such a large swath of red across the Ancient Near East that he could not possibly have been missed by his contemporaries. If, as we claim, the Fall of Babylon to the Arabs in 1477 B.C. was the Fall of Akkad to the allied Guti and Amorites, then the subsequent dynasties in lower Sumeria must surely have noted the conquest of Babylon by Tukulti Ninurta I.

The Sumerian King List informs us of four dynasties after the Fall of Akkad: Uruk IV, Guti, Ur III, and Isin. It also gives us the individual reigns of kings and the total years for each Dynasty.

The entry for Utu Hegal between the Guteans and Ur III gives his reign as "420 years and 7 days; one king ruled 427 years and 6 days." This appears to be a scribal error. The unit 420 represents the power of 6, and 7 days the power of 1, for a total of $6\times420+7=2,527$ days.

Two thousand, five hundred and twenty-seven days is seven years and seven days of 360 day years, or 6.92 Julian Years. Most scholars accept this to mean seven years.

1477B.C., Fall of Akkad; minus, 30, Uruk Dynasty IV; minus, 92, Guti kings to Utu-Hengal; minus, 7, Utu-Hegal; minus, 108, Ur III to death of Ibi-Sin: 108 yrs; gives: 1240B.C. ±2 yr, death of Ibbi-Sin: AP-46

Ibbi-Sin of Ur III was defeated by Ishbi-Erra, the King of Isin in the seventeenth year of the latter (Sigrist 1988, 4, 13–14).

Scholars are divided over the proper order for the year names of Ishbi-Erra (Sigrist 1988, 4). The year

name presumed by Mieroop to be Ishbi-Erra's eighth year says, "Year the Amorite City was Destroyed" (Fitzgerald 2002, 156–157; Sigrist 1988, 13). Assuming this was counted from his conquest of Ur, as opposed to his first year as king in Isin, the result matches perfectly. However, that means it would be his twenty-fifth year as King of Isin.

Recall that the "First Dynasty of Babylon" of which Hammurabi was a king, is called the "Amorite Dynasty of Babylon" by scholars. It is well documented from the year names of lower Sumeria that the city of Babylon was taken over by Amorites after the Fall of Akkad to the allied Guti horde.

1240 B.C. Fall of Isin ±2 yr, minus 8 years, gives

1232 B.C. ±2.5 years destruction of Amorite City

This matches the conquest of Babylon, the Amorite City, by Semiramis/Tukulti-Ninurta in 1232 B.C. Note that we rounded up the partial year for the reign of the Guti. If we had rounded down, the result would have been 1233 B.C., which is still within the error range to triangulate.

The two paths for durations from the Fall of Akkad to the Fall of Babylon to Tukulti Ninurta triangulate both dates, as well as the Fall of Ur to Ishbi-Erra in 1241/40B.C., which is noted as Anchor Point 46.

8. Sargon of Akkad and Pepi I

In Griffith and White 2023a, AP-16 we triangulated the reign of Nitocris, or Netjerkare, the last ruler of Dynasty 6 of Egypt, using durations from the Turin Canon and Africanus to Menes, the end of Dynasty 8, and the Trojan War. She died in 1479B.C.

Both Sargon of Akkad and Naram Sin boasted that they conquered the Syrian city of Ebla. When Ebla was excavated two vessels were found in the presumed Akkadian destruction layer bearing the cartouche of Pepi I of the Sixth Dynasty of Egypt (Aruz 2003, 241). This has been taken to mean that Pepi I was either contemporary with or reigned slightly before either Sargon or Naram Sin of Akkad.

Does our chronological framework support or contradict this archaeological synchronism?

Counting back from the death of Nitocris in 1479B.C. to the reign of Pepi I, using the regnal lengths in Manetho from Africanus, places the reign of Pepi I or "Phius" beginning 167 years before the death of Nitocris, and lasting 53 years (Manetho 1964, 53–54). Thus, using 1479B.C. for the death of Nitocris, Pepi I reigned from about 1646 to 1593B.C., and Pepi II was born a full year after his death, and therefore named after his grandfather.

There are variations in the regnal lengths for the kings of Akkad in the different copies of the Sumerian King List. Counting back from the death of Shar Kari Sharri and the Fall of Akkad in 1477 B.C. to the reign of Sargon of Akkad using the durations in the Sumerian King List places the earliest date for the start of Sargon's reign in the year 1642 B.C., and the latest date for his death in 1553 B.C. The reigns of Sargon I and Pepi I, using our anchor points, overlapped, with Pepi's reign beginning a decade or two before that of Sargon. Naram Sin's reign began a few decades after the death of Pepi I. Therefore the cartouches of Pepi in the destruction layer at Ebla support the destruction by either Sargon or Naram Sin.

We find that this archaeological synchronism between Sargon of Akkad and Pepi I of Memphis appears to support our framework.

Etymology of the Names

Having placed them in the same place and time by other means, we can look at the etymology of the names of the daughter of Shalmaneser, "Tratres" and "Aku'urartist," compared to the name Tukulti Ninurta. Keeping in mind they were translated from Akkadian into Greek by Ctesias, and finally to English using Latin script, both names, especially Aku'urartist, look like bad transliterations of Tukulti Ninurta. Note that the name of Tukulti Ninurta was written in Assyrian as "Tukulti-Urta." Thus the transliteration might have originally been:

[T]aku[lti] ur-artis; or,

[T]aku[lti] [N]ur-artis

As previously seen in the case of Nitocris of Egypt (Griffith and White 2023a, AP-16), in the second millennium before Christ wherever the chroniclers tell us about a woman who ruled as king, the archaeological record shows us a "man" with a similar name. This is because kingship was universally viewed as a male office. In order for a woman to rule, she had to rule as a man.

The Enigma of Semiramis II and Tukulti Ninurta I

Taken all together, these triangulations and synchronisms suggest that Tukulti Ninurta I may have been the throne name of the woman remembered in legend as Semiramis II. Alternatively, she could have been his queen.

Returning to the colorful account of Diodorus, most of her story appears to be taken from Semiramis I. These would include being the wife of Ninus, mother of Ninyas, a first husband named Onnes, and her association with Egypt.

However, the campaigns against Armenia (Urartu/Quti), Cappadocia, and India as well as the building of Babylon appear to be based on Tukulti Ninurta. In the annals of Shalmaneser I and Tukulti Ninurta I we see that the legend of Semiramis II may be much closer to reality than anyone would have guessed.

Semiramis was said to have campaigned in Cappadocia and Armenia. Shalmaneser I and Tukulti Ninurta I campaigned in the same regions.

Semiramis II supposedly fought a war against a king of India. Tukulti Ninurta defeated a Kassite King named Kashtiliash, who was the third king of a dynasty whose founder was Gandash. The Greek geographers considered India to be the land of the "Kassoi," meaning Cushites, and India was thought to begin in the Zagros Mountains just East of Babylon. Thus we can easily see that the Greek chroniclers may have confused Kassu (Kassite) for Kassoi (Cushite) and thus began the legend that Semiramis invaded India and Ethiopia.

The Kassite personal names were similar to later Hindi names, and some of their gods had the same names and attributes as later Hindu gods. The Kassites were obviously not kings of India, but the Kassite culture had enough affinities with later Hindi culture that later Greek historians may have assumed that the kings of Karduniash were kings of India. Thus the story of Semiramis versus the King of India recorded by Diodorus could have been based on the battles between Tukulti Ninurta and Kashtiliash in the Tukulti Ninurta Epic.

Semiramis was said by Diodorus to be "libidinous," (F1i and F1ld as well as Dio Chrys. 47.24) which is to say, lustful and promiscuous. In the palace of Tukulti Ninurta were found many pornographic images, which were extreme even by pagan standards (Bloch and Peri 2016–2017, 16).

Based on the surviving images of Tukulti Ninurta I, this person definitely wanted to be perceived and remembered as a hypermasculine man. Fig. 7 shows an inscription assumed to be two copies of Tukulti Ninurta standing and kneeling in worship before an altar. Perhaps this could be better understood as a representation of Shalmaneser I standing, and Tukulti Ninurta, depicted as his son, kneeling in front of him.

However, there is a strange passage in "The Tukulti Ninurta Inscription" found in his palace in Kar Tukulti Ninurta which hints at something else. This inscription names his deeds of the first ten years and ends with a curse on any future king who might remove his name.

Such formulaic curses are found on many Assyrian inscriptions. Typically they wish defeat, starvation, exile, and slavery on anyone who defaced their inscription or inserted their own name into it. However, the curse of Tukulti Ninurta contains a unique element.

He who erases (my) inscription (literally, inscribed name)

May the lady of the battle fray, who called



Fig. 7. Tukulti Ninurta Altar Depiction. Osama Shukir Muhammed Amin FRCP(Glasg), "Detail of a symbolic base with a cuneiform inscription of Tukulti-Ninurta I, 13th century BCE. From the Temple of Ishtar at Assur, Iraq. Pergamon Museum, Berlin, Germany. Two men were depicted in relief, standing and kneeling holding a mace (representing the Assyrian king Tulkulti-Ninurta I, r. 1243-1207 BCE, in two movements), before a symbolic base with a symbol of the god Nabu of writing (not shown here). The cuneiform inscription mentions the name of the king and the god Nusku (Nuska)," https:// commons.wikimedia.org/wiki/File:Detail._Assyrian_ king_Tukulti-Ninurta_I_stands_and_kneels,_13th_ century_BCE._From_Assur,_Iraq._Pergamon_Museum. jpg. CC BY-SA 4.0.

my reign (into being), turn him from a man into a woman. May she make his manhood be poured out. (Bloch and Peri 2016–2017, 33 and 35)

This curse is unique for two reasons. First, unlike the Babylonians, Assyrian Kings nearly unanimously claimed that the god Asshur had appointed them to kingship. While in Babylon, Ishtar or Inanna was credited with "granting her love" to the man she chose to be king, the Assyrian kings did not look to a female goddess to give them power, with only one known exception. (Ashur-nasirpal I left an inscription praying to Ishtar to be healed of a disease in which he credited her with making him king in the hopes that she would heal him.)

Assyrian kings may have nodded to the Sumerian tradition by referring to themselves as "the favorite prince" of Ishtar, but kingship was conferred by Asshur, because the king was the vizier, or high priest, of the god Asshur. Here, Tukulti Ninurta credits the goddess of battle for calling his reign into existence.

Second, there are no other known instances of an Assyrian curse that calls for the offending man to be turned into a woman. This was a significant deviation from the curse formula used before and after Tukulti Ninurta.

The curse could be taken to imply that Tukulti Ninurta viewed "himself" as a woman who had been raised up to manhood and kingship by the warrior goddess Ishtar, who, incidentally, was the first Semiramis. And thus she self-consciously viewed herself as repeating the actions of her ancestor goddess.

According to Justin, the first Semiramis, the wife of Ninus, took the throne after his death by pretending to be a man: (Justinus 1853, Book I.2) [emphasis added]

Semiramis, not daring to entrust the government to a youth, or openly to take it upon herself (as so many great nations would scarcely submit to one man, much less to a woman), pretended that she was the son of Ninus instead of his wife, a male instead of a female. ² The stature of both mother and son was low, their voice alike weak, and the cast of their features similar. 3 She accordingly clad her arms and legs in long garments, and decked her head with a turban; and, that she might not appear to conceal anything by this new dress, she ordered her subjects also to wear the same apparel; a fashion which the whole nation has since retained. 4 Having thus dissembled her sex at the commencement of her reign, she was believed to be a male. ⁵ She afterwards performed many noble actions; and when she thought envy was overcome by the greatness of them, she acknowledged who she was, and whom she had impersonated. 6 Nor did this confession detract from her authority as a sovereign, but increased the admiration of her, since she, being a woman, surpassed not only women, but men, in heroism.

In the curse, Tukulti Ninurta refers to that former woman, by this time worshiped as the goddess of battle, as the one who called his reign into being. By saying, "[may she] turn him from a man into a woman" he is saying, may the reverse of what was done to me be done to you.

The evidence suggests that the hypermasculine Tukulti Ninurta I was quite possibly the woman remembered as Semiramis II, who reigned claiming the title "King of Kings," not as a Queen. Tukulti Ninurta wanted to be perceived and remembered as a man, not as a woman. If there were two famous women who pretended to be and ruled as men, then this could also explain why both of them were called "Semiramis" by the later chroniclers.

While later queens like Hatshepsut and Cleopatra wore a fake beard on the throne, they also had statues depicting themselves as beautiful women. If Tukulti Ninurta I was really the woman remembered as the second Semiramis, then unlike them, she may have taken the idea of literally becoming a man quite seriously.

A reasonable question is how a woman could possibly have become the King of Assyria?

We should note that there was historical precedent for this in the first Semiramis, assuming her legend to have been based on the real person, who was their ancestor. We know that both the Assyrians and Egyptians worshiped a goddess under the names Ishtar and Neith, depicted as carrying a bow and shield and being the goddess of battle. The Greeks appear to have borrowed Athena from the Egyptian Neith. The real woman who was later worshiped as Ishtar must have had some event in her life where she wore the male accoutrements of battle.

If our chronology section above is correct, then her coregency with her father began in his ninth or tenth year, so that she had 20 years of his backing to secure her grip on the throne. By the time of his death the Assyrian superstitions around the goddess Ishtar may have protected her.

The death of her father may have created a crisis for her. Would one of the generals of Assyria try to wrest the throne away from the woman pretending to be a man?

Perhaps the motive behind her conquest of Babylon around the year of her father's death may have been to prove herself worthy of the throne beyond any shadow of doubt. By conquering the city of Babylon, formerly known as Akkad, she did what no prior King of Asshur had done.

As Solomon wrote, there is nothing new under the sun (Ecclesiastes 1:9). The mad attempts by men and women of modernity to escape the bounds of sexuality placed upon and within us by our Creator is nothing new in the course of human history.

We don't have enough evidence to conclusively say that Tukulti Ninurta was a woman, nor is that a conclusion we would wish to find. Another possibility is that the later Babylonian chroniclers misread or misunderstood the Tukulti Ninurta Epic such that Berossus believed Tukulti Ninurta was a woman, and then this tradition found its way into the Greek world as the Semiramis myth. For now, we simply note that the information we have about them, except for their sex, seems to match up quite tightly.

Objections to 1477 B.C. Fall of Akkad

There are three sets of objections to our date for the Fall of Akkad, coming from the Kassite, Hittite, and Assyrian chronologies.

Kassite Synchronisms

The Babylonian King List places the Kassite Dynasty after the First Dynasty of Babylon and the Fifth Dynasty of Uruk. An entry in a different Babylonian chronicle for the last king of the First Dynasty says that in his days the man of Hatti attacked Akkad (Glassner 2004, Text 41). This is assumed to refer to the sack of Babylon by Mursilis I the Hittite, which we agree it was. Then the Kassite Dynasty is assumed to have taken over Babylon immediately following the Hittite sack of Babylon. With this, we strongly disagree.

The Kassite Dynasty ruled from the city of Nippur over Karduniash, which was the larger region of Chaldea that included the city of Babylon. The Kassite Kings sometimes ruled over the Kings of Babylon. More accurately, the Kassite and Assyrian Kings struggled with each other for the right to choose the kings of Babylon for about five centuries.

The Babylonian King List, being composed in the Neo-Babylonian Era for the purpose of glorifying Babylon, placed the native Amorite Dynasty of Babylonian kings first; then the kings of Uruk, the oldest city, second; then the Kassite Dynasty who ruled over them for much of that time from Nippur, third. Then followed the dynasties of lesser regions and cities like Sealand, Isin, and Bit-Bazi, followed again by the Assyrian-appointed kings from Tiglath Pileser III to Kandalanu (Pritchard 1969, 272).

In the forthcoming paper CFAH-15 we will make a detailed case that the city dynasties in the Babylonian King List reigned in parallel.

Scholars are aware that each of the major kings were followed by many petty kings of local cities. Notably in the Mari texts was found a letter comparing Hammurabi to Yarim Lim, king of Yamhad (Dalley 2002, 44) which said:

There is no king who is mighty by himself. Ten or fifteen kings follow Hammurabi the ruler of Babylon, a like number of Rim-Sin of Larsa, a like number of Ibal-pi-el of Eshnunna, a like number of Amudpi-el of Qatanum, but twenty follow Yarim-Lim of Yamhad.

Who were these petty kings who followed Hammurabi? The Babylonian King List tells us the cities which they ruled included Uruk, Karduniash/Nippur, Sealand, Bit Bazi, and E.

The tentative Kashtiliash I synchronism noted above suggests that the Kassite Dynasty actually began a few generations before the First Dynasty of Babylon. Thus the entire Babylonian King List appears to cover the period from Ghandash in 1282 B.C. to Kandalanu in 627 B.C., listing the kings of city states as separate dynasties for the period in between.

As discussed in our first paper (Griffith and White 2022a), serializing parallel dynasties stretches out history and duplicates events. The Babylonian King List imitates the style of the Sumerian King List, which was the first to deliberately serialize parallel dynasties in order to give the appearance of great antiquity and to promote the propaganda that only one king was entitled to rule over all the cities of Sumeria at any given time.

Hittite Synchronisms

There are claimed synchronisms between the Hittites and the Babylonian King List at several points. First it is claimed that Mursilis I sacked Babylon, ending the reign of Samsuditana, the last king of Hammurabi's dynasty. We agree with this synchronism, but the question is when did Mursilis I live and reign? We will seek to answer that definitively in the forthcoming paper CFAH-13.

It is also claimed that Tudhkhaliya IV was defeated by Tukulti Ninurta I at the Battle of Nihriya. However, neither king mentions the other by name. In CFAH-13 we will demonstrate this to be a false synchronism because Tudkhaliya IV lived centuries after Tukulti Ninurta I. We will deal with the other supposed Hittite synchronisms as well.

Shamshi Adad I

The strongest argument against our placement of the Fall of Akkad in 1477 B.C. is the placement of Shamshi Adad I in the Assyrian King List around 1808 B.C. The entry for him says that he came up from Karduniash and defeated King Erishum. And this is even supported by an ancient list of year names that appears to record the birth of Shamshi Adad during the reign of Naram Sin (Glassner 2005, Text #8).

Since this Shamshi Adad was known to be a contemporary of Hammurabi, and Hammurabi is known to have reigned about four and a half centuries after the Fall of Akkad, therefore the Fall of Akkad would have to be placed before 2200 B.C., if the peg for Shamshi Adad I in the Assyrian King List is correct.

There was a Shamshi Adad I who lived nearly six centuries before Shalmaneser I and rebuilt a temple that Shalmaneser later repaired (Luckenbill 1989, vol. 1, §119). However, we contend that Shamshi Adad I was not the great conqueror of Ashur, Mari, and Yamhad who was contemporary with Hammurabi.

There is another entry in the Assyrian King List for Shamshi Adad IV saying that he "came up from Karduniash" and conquered the city of Ashur in 1053/2 B.C.

We will demonstrate that the Shamshi Adad who conquered Ashur and Mari was Shamshi Adad IV. As first proposed by Hoeh (1967, chapter 12) and Hickman (1986), he was a contemporary of Kings Saul, Ishbosheth, and David.

In CFAH-14 and CFAH-15 we will examine a cluster of strong synchronisms between Shamshi Adad and the Kings of Mari and Yamhad with the united monarchy of Israel. But before we can do that, we need to process the Egyptian and Hittite chronologies and firmly anchor them using durations and triangulations.

We simply note for now that we are aware of the objection that Shamshi Adad I was a contemporary of Hammurabi, and both the AKL and the Limmu List seem to place him in the nineteenth century B.C.

We have a thorough answer to this objection. But it requires two papers of its own. And happily, the solution to this problem will unlock what appear to be six of the "archaeologically unattested" kings of Israel in the correspondence of neighboring countries.

Synchronizing Berossus with the Sumerian King List

We have made the case previously (Griffith and White 2021) that Nimrod's Babel and Nebuchadnezzar's Babylon were different cities. When Sargon of Akkad conquered Subartu, he claimed to have taken holy soil and the priesthood from "Babylon" and "built a new Babylon opposite Akkad."

We argued that the Babylon that Sargon built "opposite Akkad" was simply an external enclosure for the temple shrine similar to the layout of cities in Sumeria, and probably across the Euphrates River from Akkad. Centuries later the city of Akkad came to be called Babylon in reference to its temple and ziggurat, which by the time of Nebuchadnezzar, were inside the city walls. Nebuchadnezzar's city was divided by the river, and the walls enclosed both sides

The idea that Akkad and Babylon were the same city is supported by the chronicles of Nebuchadnezzar and Neriglissar of Babylon, which refer to them simply as the "King of Akkad" (Glassner 2005, Texts 24, 25).

Diodorus agrees that Babylon did not yet exist when Ninus conquered that region (Booth 1814, Book II, chapter I):

Ninus therefore, the Assyrian king, with the prince of Arabia, his assistant, with a numerous army, invaded the Babylonians then next bordering upon him: for the Babylon that is now, was not built at that time but the province of Babylon had in it then many other considerable cities, whose inhabitants he easily subdued...

If Babel and Babylon were two different cities, then how was Berossus able to count a continuous series of dynasties from Babylon back to Babel?

We count the first four dynasties of Berossus as ruling over the original Babel in Subartu which was the territory of the early Medes and their descendants since the Division of the Earth by Noah in 2247B.C. The fourth dynasty of Berossus included Sumerian kings such as Lugal Zagesi who had conquered Subartu. Sargon of Akkad transferred the priesthood from Babel in Subartu to his city of Akkad, which eventually came to be called Babylon. The records going back to the founding of Babel would have been brought by those priests to Akkad. Additionally, the Kassites, whom we have argued were the real "Chaldeans," may have brought their astronomical records from Harran when they established the Kassite Dynasty in 1282B.C.

We have found that we can synchronize the chronology of Berossus with the known data from the Sumerian and Babylonian king lists. However, to prove it more thoroughly requires first triangulating the Egyptian, Hittite, and Assyrian chronologies, which we will attempt to do in papers 6 through 14. But, we do have enough information to correlate the first dynasties of Uruk and Kish to Berossus, so we will do so below.

AP-47: The Reign of Ninyas Zames/ Gilgamesh: 2006–1968 B.C.

There was a semi-legendary king who appears in three king lists under different names (fig 8). The Greeks knew him as Ninyas Zames, the Babylonians as Gil-gamesh, which appears to be the source of "Zames," and the Egyptians referred to him as the god Horus the Younger, but in the king list as a real person named Mbeidos in Greek, or Den in the Egyptian tongue. All three had the same length of reign, 38 years, and durations to his death reach the same year in both Egypt and Nineveh.

We previously triangulated the 42 year reign of Semiramis I to the years 2036–1994B.C. (Griffith and White 2023a, AP-21). In the Irish annals we find Semiramis credited with a 30 year reign, and Ninyas Zames 38 (Murphy 1896, 14). This implies that they shared a coregency during the final 12 years of her reign. Counting 12 years before her death gives the years 2006–1968B.C. for the reign of Ninyas or Gilgamesh, with his sole-reign beginning in 1994B.C. Some of the chroniclers seem to count the beginning of the Old Assyrian Empire from the death of Ninyas, while others count from his coreign, and still others count from the reign of Ninus.

2036 B.C. reign of Semiramis I; minus, 30 years sole-reign; gives: 2006 B.C. ±5 years for the co-reign of Ninyas and Semiramis

Chambers cited Ctesias as giving 1,306 years from Ninyas to the death of Sardanapalus.

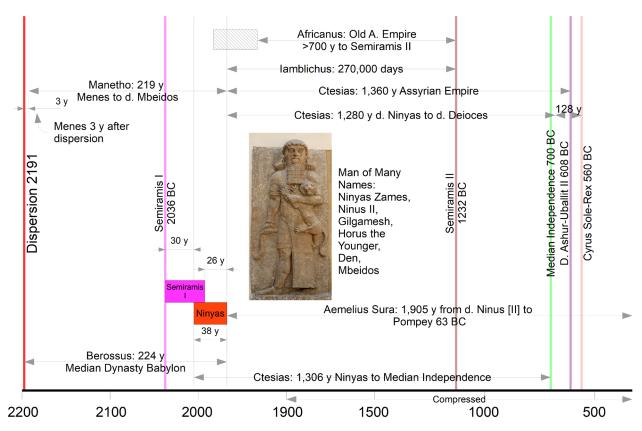


Fig. 8. Durations to the reign of Gilgamesh aka Ninyas. Hero holding lion from Dur Sharrukin, Louvre. Jastrow (2006), "A hero taming a lion. Bas-relief from the façade of the throne room, in the Assyrian Palace of Sargon II at Khorsabad (Dur Sharrukin), 713–706 BCE," https://commons.wikimedia.org/wiki/File:Hero_lion_Dur-Sharrukin_Louvre_AO19862.jpg. Public Domain.

According to [Ctesias], for 30 generations after Ninyas, the kings led a life of luxury and indolence in their palace; the last of them, Sardanapalus, made a vigorous defense against Arbaces, the rebel governor of Media, but finding it impossible to defend Nineveh, he set fire to his palace, and burnt himself with all his treasures; this event took place 1306 years after Ninus. (Chambers 1880, 811)

Note that Chambers conflated Ninyas with Ninus. They were two different people. Recognizing that the chroniclers confused the second Median Revolt with the death of Sardanapalus, many of their durations are from the year of Median Independence in 700B.C.

700 B.C. the year of Median Independence; plus, 1306 years from Ninyas; gives: 2006 B.C. ±0.5 years for the start of the reign of Ninyas

The Old Assyrian Empire, which began with the death of Ninyas, was said by Africanus to have begun over seven centuries before the reign of Semiramis II. (Cullimore 1833a, 175)

1232 B.C. reign of Semiramis II (Griffith and White 2023a, AP-15); plus, 700 years; gives:

1932 + 50 years to death of Ninyas (1982–1932 B.C.)

In Plato's Timaeus, the character Hipparchus cites Iamblichus as stating the Assyrians had made 270,000 years of astronomical observations. Interpreted as days that duration is 739 years, (Cullimore 1833a, 161, 176; Hare 1832, vol. 1, 42) though the start and end of the period have not been preserved. This fairly well approximates the period from the death of Ninyas until Semiramis II.

1232B.C. Semiramis II; plus, <u>739 years; gives:</u> 1971B.C. ±1.4 years (1972.4–1969.6B.C.)

Counting from the founding of Egypt via Manetho's First Dynasty: (Manetho 1964, 29)

2188 B.C., Menes founded Thinis; minus, 62 years, Menes (Mizraim) 57 years, Atothis I (Nimrod) 31 years, Kenkenes (Atothis II) 23 years, Uonephes (Isis/Semiramis) 20 years, Usaphaidos (vizier or co-regent) 26 years, Miebidos (Ninyas/Gilgamesh) 1969 B.C. ±3 years for the death of Ninyas/Gilgamesh

For some reason Eratosthenes omitted Uoenephes in his first dynasty list, so we cannot use it to get a duration to the death of Ninyas.

Ctesias gives 1,280 years from the death of Ninyas to the death of Deioces (Russell 1827, vol. 2, 352, 353). If we include the 28 year overlordship of the Scythians, then Herodotus places the death of Deioces 128 years before Cyrus (Russell 1827, vol. 2, 353) became king of Anshan, which was in 560 B.C. (Griffith and White 2023a, AP-7).

> 560 B.C., Cyrus co-rex in Anshan; plus, 128 years to death of Deioces; plus, 1,280 years to death of Ninyas; gives: 1968B.C. ±6 years for death of Ninyas

As Diodorus records, the first Median Dynasty was established by Nimrod as a vassal of his empire (Diodorus 2004, II.1). Its duration, as per Berossus, ended 224 years after the Dispersion. The end of the Median Dynasty coincided with the death of Ninyas/ Gilgamesh, "the last of the gods."

2191 B.C. Dispersion; minus, 224 years of Median Dynasty of Babylon; gives: 1967 B.C. ±6 months for the end of Nimrod's Empire

And finally, Aemelius Sura gives 1,905 years from the death of Ninus to the establishment of the Roman dominion in Asia by Lucellus and Pompey in 63 B.C. (Russell 1827, vol. 1, 352, 353). As Ninyas was sometimes referred to as the second Ninus, it appears he was meant by this duration, as it triangulates perfectly with the others for his death.

63B.C. Roman conquest of Asia; plus, 1905 years; gives:

1968B.C. ±0.5 years for death of Ninus [II]

There is a ninth duration that seems to fit, but belongs elsewhere. Ctesias said it was 1,360 years from Ninus to the death of Sardanapalus (Cory 1876, 83). If interpreted from the reign of Ninus II, or Ninyas, in 1968 B.C., this duration reaches the death of Ashur Uballit II in 608 B.C. However, Ashur Uballit II was not Sardanapalus; and, as shown below, this duration better fits the death of Nimrod to the death of Sargon II.

608B.C. Death of Ashur-Uballit II; plus 1,360 years to start of Assyrian Empire; gives: 1968B.C. ±5 years for the death of Ninyas

These eight or nine durations to the death of Ninyas/Gilgamesh and the beginning of the Old Assyrian Empire triangulate, placing his death in 1969/1968 B.C., 224 years after the Dispersion, at the end of Berossus Dynasty 2.

AP-48: Death of Ninus/Nimrod: 2068 B.C.

We previously established 2192/2191 as the year of the Dispersion in which Nimrod, remembered as Ninus, among other names, founded Nineveh (Griffith and White 2022b, AP-2).

In Egypt the reign of Atothis in Dynasty 1 is given 57 years by Africanus after the 62 year reign of Menes (Manetho 1964, 27–29).

> 2188B.C. Menes founds Thinis; minus, 62 year reign of Menes; minus, 57 year reign of Atothis (Nimrod); gives: 2069 B.C. death of Atothis/Nimrod

There is a second witness to these numbers in Eratosthenes (Manetho 1964, 215):

> 2188 B.C. Menes founds Thinis; minus, 62 year reign of Menes; minus, 59 year reign of Atothis I/Nimrod; gives: 2067 B.C. death of Atothis I/Nimrod

As noted in AP-47 the 1,360 year duration fits in two different places. Diodorus cites Ctesias as giving 1,360 years from the death of Ninus until the death of Sardanapalus (Cory 1876, 83), which we interpret as a reference to the death of Sargon II in 705 B.C.

705 B.C. Median revolt kills Sargon II; plus, 1,360 years since Ninus; gives: 2065 B.C. ±5 years for the Death of Ninus

Layard (1849, 257) compares the many durations given by the chroniclers to Ninus:

The antiquity of the Assyrian Empire is the first point to which we shall allude. The period of that empire was computed at 1360 years by Ctesias, as the fragments of his work now read, but which, as Browne has shown in his Ordo Seclorum, was undoubtedly at first, 1460. Diodorus says 1400 years, Castor 1280, Africanus 1484, Eusebius 1240, Velleius Paterculus 1230, Orosius 1164, Syncellus 1460, Augustine 1305, Trogus and Justin 1300. These variations are caused to a great extent by the epochs from and to which the several writers computed. All agree in assigning a period of about 1460 years from Ninus to the destruction of Nineveh.

Given the other durations to follow this one, the 1,460 years appears to be from the final defeat of the forces of Ashur-Uballit II in 608 B.C., rather than from the Fall of Nineveh four years earlier.

608 B.C. final defeat of Ashur-Uballit II; plus, 1,460 years to death of Ninus; gives: 2068 B.C. ±5 years for death of Ninus

We previously triangulated the reign of Semiramis I from five sources as being from 2036 to 1994 B.C. (Griffith and White 2023a, AP-21). In Manetho's First Dynasty, Kenkenes ruled between Atothis and Uonephes. We identify Uonephes as the same person as Semiramis I, ruling under a male name, a hypothesis which will be explored in more detail in CFAH-6.

Kenkenes is given 31 years by Africanus, 32 by Eratosthenes, and 39 years by Eusebius. We interpret the extra years in Eusebius as a co-reign with either his predecessor or successor. Thus, the death of Atothis I/Nimrod would have been at most 32 years before the first year of Semiramis. She did not rule immediately after his death, but appears to have taken about 32 years to consolidate her power and take the throne.

2036B.C. start of reign of Ounephes/Merneith/Semiramis I; plus, 32 years of Kenkenes; gives:

2068B.C. ±0.5 years for the death of Atothis/Nimrod

Summing up the evidence, we have a loose triangulation of two durations given by Ctesias from two different events, an exact duration from Syncellus, and three sets of Egyptian data for the First Dynasty of Egypt confirming that Nimrod,

known as Ninus, Atothis, and Narmer, died between 2070 and 2065, with tight triangulations for 2068B.C. (fig. 9).

There is a major discrepancy between the records of Ninus in Nineveh and Atothis I in Egypt as the person that many scholars have identified as Nimrod. According to Ctesius, Ninus ruled only 52 years in Nineveh. Fifty-two years after the Dispersion in 2191 was 2139B.C. As shown above, Atothis died 71 years later in 2068B.C.

The testimony of the ancient chroniclers tells us that the "Olympians" led by Heracles, were chased into Egypt by Titan or Typhon (Allan 1899, 78). Identifying Heracles as Nimrod, and Titan as Shem, we expect to find a different date for the end of Nimrod's reign in Assyria, from his reign and death in Egypt.

Ancient sources make several references to a war that began immediately after the Dispersion between Titan, also called Typhon, and Kronos and the followers of Zeus/Cush. From Cory's ancient fragments (Cory 1876, 76):

The Sibyl having named Kronus, Titan, and Iapetus (Japheth) as the three sons of the Patriarch (Noah), who governed the world in the tenth generation, after the Flood, and mentioned the division of the world

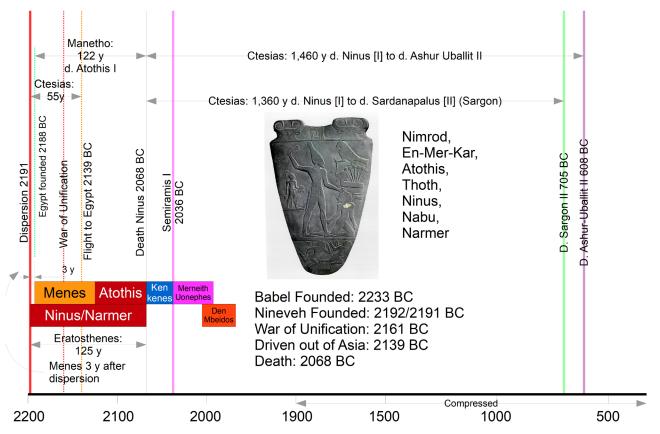


Fig. 9. Durations to the death of Ninus, aka Nimrod. Narmer Palettte, verso. Heagy1, "Verso of the Narmer Palette," https://commons.wikimedia.org/wiki/File:Narmer_Palette_verso.jpg. CC BY-SA 3.0.

into three parts, (viz, by Shem, Ham, and Japheth), over which each of the Patriarchs ruled in peace, then relates the death of Noah, and the war between Kronus and Titan.

The "Olympians", whom many scholars (Johnson 2003, 2016) have identified as the faction of Cush and Nimrod, are said to have fled from Titan, also called Typhon, to Egypt.

As the god Amen [Amun] was identified with Zeus and Jupiter of the Greeks and Romans, so also was Aries, although this popularly was attributed to the story that the classical divinity assumed the Ram's form when all the inhabitants of Olympus fled into Egypt from the giants led by Typhon. (Allan 1899, 78)

The "divinity assumed the Ram's form," may be a reference to the Vernal Equinox having moved into Aries, the Ram, by the time that Nimrod fled from Assyria into Egypt. His flight would account for the reign of Ninus in Nineveh being only 52 years, ending in 2139; while in Egypt as "Atothis", which is the Greek form of the name "Thoth" in Manetho, based on Djehudi" in the original Egyptian tongue. He lived another 68 years until his death in 2068B.C.

In Griffith and White (2023a), Anchor Point 22, we found that Thoth brought writing to Egypt in 2164/2163BC, the same year as the War of Unification which was fought by Narmer and Menes in the 28th year of Menes. The Sumerian Epic, *En-mer-kar and the Lord of Aratta*, records that En-mer-kar, whom Rohl identifies as Nimrod (1995, 206–207), invented writing pictures on clay tablets to send messages (Vanstiphout 2003, 50, 85–87).

Having placed both characters in the same time by durations, we can recognize from their actions that they were the same man, and therefore Egyptian and Sumerian pictorial writing had the same source—Nimrod. Later scribes took the pictographic writing system in different directions, resulting in cuneiform in Sumer, and hieroglyphics in Egypt.

In addition to the name Thoth, Nimrod was also known as Nar-Mer in Egypt, which is probably a localized form of En-Mer-Kar from Uruk. In Sumerian, En-Mer, meant "Lord Storm." We can see that the divine author of Scripture was making a play on his real name by calling him NMRD, which means "we shall rebel" in Hebrew.

Uonephes/Semiramis did not take the throne until 32 years after his death in 2036B.C. This means that Ctesias' Nineveh king list as preserved by Eusebius and others is missing a 103 year interregnum between the flight of Ninus to Egypt and the enthronement of Semiramis as "Dumuzi" in Uruk. This must have been noted in the original text of Ctesias because several of the chroniclers who cited him preserved precise durations back to Babel and the Dispersion that cross the interregnum accurately.

Given the precision of durations cited from Ctesias himself, we must conclude that the original Babylonian sources used by Ctesias contained far more detailed information, of which we have been handed down only the barest summary by the later chroniclers. It is a shame that the scribes of the Middle Ages did not preserve his entire body of work.

The First Dynasties of Uruk and Kish

While we are here, we can make some sense of the first dynasties of Kish and Uruk in the Sumerian King List. Both cities counted their first king as a man named Gasir or Gaur. David Rohl was the first to identify the founding kings of Uruk, Mes-kiagasir as Cush, and En-mer-kar as Nimrod (1995, 206–207). We would add to his analysis that Gaur or Gasir of Kish was also Cush. Kish and Uruk both counted their king lists back to the rebellion of Cush against Noah and the founding of Babel, which is to say, decades before the actual founding of either Kish or Uruk.

The reigns of most of the kings prior to Sargon of Akkad found in the Sumerian King List use a different unit of time which has been mistranslated as years. Thus Gasir is given a reign of 1,200 years in Kish, and Mes-kia-gasir is given 324 years in Uruk. Both refer to Cush, whose reign is counted as 62, 55, or 42 years depending on which starting point is used. We will revisit the Uruk list, after looking at the other sources.

In Kish the king called Kullassina-bêl, incorrectly rendered "Pala-kinatim" in early translations, means, "all of them were king" (Maier 1997, 244). The reigns of Gisur and Kullassina-bêl add up to 2,100 "years" but when divided by 36 give 58.3 years, which loosely approximates the reign of Cush from the division of the land until the Dispersion. "All of them were king" might mean that in the last two decades at Babel they experimented with some kind of democracy with Cush as the head of the assembly. As noted by Pritchard: (1969, 52)

The Anunnaki, to judge from the available Sumerian material, are the unnamed "great gods" of the Sumerian pantheon who participated in the assemblies called by the leading deities before making final decisions...

Thus the 70 clan leaders listed in Genesis 10 might literally have represented the first senate or sanhedrin, both of which mean a ruling body of 70. In Sumerian texts the number is usually given as 50, while in the Hittite texts it is 70 (Pritchard 1969, 124). This first senate was remembered in the mythologies as the "assembly of the gods," called the "lesser anumaki" or "igigii" whose numbers were inflated in later centuries to 300 and again to 600 (Pritchard 1969, 69, 72). This could also account for

the later egalitarian political ideology of the Guti of whom the Sumerian King List claimed, "no king was famous; they were their own kings" (ECTSL 2006).

We appear to have another witness to the Babel data from Polyhistor as quoted by Eusebius (Eusebius 2008, 24–25):

That is what Polyhistor says about the building of the tower. He continues with the following details.

After the flood, Euchius ruled the land of the Chaldaeans, for 4 ners.

Then his son Chomasbelus became king, for 4 ners and 5 sosses.

Recalling that a neros is 600 and a sossos is 60 we have two rulers over Babel after the Flood given as:

Evechius: 2400 units Chomasbelus: 2700 units

This appears to be another version of the same information from the Kish Dynasty, thus, Evechius was Cush and "Chomasbelus" may be intended to refer to "Kullasina-bel" meaning "all of them were king," or it could refer to a co-reign with Nimrod, his son (Genesis 10:10; Glassner 2005, 60; Maier 1997, 244).

Attempting to find what units these are, Table 5 divides the 5,100 total units by the various possible known combined reigns of Cush and "all of them were king." The most likely unit used will give a whole number of days when divided into either 365.25 or 360.

Table 5. Solving for the units in the durations of polyhistor.

Solving for the Units in the Durations of Polyhistor								
Total Units			Into 365.25	Into 360				
5100	62	82.25	4.44 days	4.37 days				
5100	60	85	4.29 days	4.23 days				
5100	42	121.42	2.93	2.96 days				

It appears that the best fit is about 42 years total reign, using 3 days of a 360 day year as the unit of time. Thus they multiplied the actual number of years by 120.

5100/120=42.5 years for the combined reign broken down as

Total Reign:	42.5 years
Chomasbelus:	22.5 years
Evechius / Cush:	20 years

Using similar data from the First Dynasty of Kish, divided by 36, we get:

 Gasir/Cush:
 33.33 years

 Kullasina-bel:
 25.0 years

 Total reign:
 58.33 years

If we assume that the period the Kish king list intended to refer to was from the division of the earth in the days of Peleg then the combined reigns of Gasir and Kullasina-bel would come to 55 years. Dividing 2,100 by 55 gives a multiple of 38.182 per year. It is not immediately evident why they would have used that multiple, but if we divide the regnal lengths at Kish by 38 we find that Chomasbelus and Kullasinabel had about the same length of reign, being about 23 years.

Total reign:	55.25 years
Kullasina-bel:	23.68
Gasir/Cush:	31.57

A third possibility is that the nice rounded 1,200, which is 2 neroi of 600, for Gasir in the Kish king list is missing a few nessoi which are units of 60. If we reverse engineer the Kish list to get a nice rounded multiple, multiplying 62 years×36 gives 2,232, which is three neroi and 7.2 sessoi. Subtracting the 900 of Kullasina-bel's reign from the total leaves Gasir's reign with 1,332 units, and thus the missing value is 2.2 sessoi. Dividing these new numbers by 36 we get:

Total reign	3 neroi,	7.2sessoi	2,232	62.0 years
Kullasina-bel:	1 neroi,	5 sessoi,	900 1/36=	25.0 years
Gasir/Cush:	2 neroi,	[2.2sessoi],	1,332 1/36=	37.0 years

Calculating 2347–94–62=2191 B.C. for the Dispersion. This counts from the end of the Flood rather than from its beginning in 2348 B.C., but is within one year of a perfect representation of the time from the Flood to the Dispersion.

Both sets of data seem to imply that for the last two decades of Cush's reign at Babel he shared power either with the senate or with his son, Nimrod. The differing lengths of Cush's reign could be counted as 42.5 years from the founding of Babel in 2233B.C.; 55 years from the final division of the land in 2247B.C., the year Peleg was born; or 62 years from the first division of the land, about 94 years after the end of the Flood.

Solving the First Dynasty of Uruk

Table 6 compares the known reigns of the same kings from Nineveh and Egypt with the values from Uruk. The values of the first five reigns at Uruk appear to be using a multiple, while the sixth king and onwards appear to be using regular years. The first five kings also have the star by their names indicating they were gods, thus we are looking at the "reign of the gods." The last of the "gods" in this list is Gilgamesh, and in Egypt Horus the Younger was said to be the last of the gods.

Solving the First Dynasty of Uruk								
Bible Name Known Reigns Uruk Name Uruk Reign Divided by 3.33								
Cush: 62, 55, 42, 33, 20	65, 62, 55, 42, 40, 20	Mes-kia-gasher	324	97				
Nimrod	123, 57, 55, 52	En-mer-kar	420	126				
Interregnum (Kenkenes)	100, 32	Lugal Banda	1200	360				
Naamah	42, 30	Dumuzi	100	30				
[Ninyas], Hor, Arba	38, 26	Gilgamesh	126	38				

Table 6. Comparison of Reigns in Uruk to Ctesias and Manetho

By trial and error, we found that dividing the Uruk reigns by 3.33 gives values that are quite close to the known reigns of Ninus, Semiramis, and Ninyas. We saw this multiple in Griffith and White (2022b) used by Syncellus to convert 30,000 years of Hephaestus to 9,000. It is unclear to us why they used a multiple of 3.33, as it does not match any natural division of the year, but is simply one third of 10. Given that the used sexagesimal as their numbering system, 10 is one of their bases, and 6 is the other, and 3 is half of 6. So perhaps they multiplied by ten and divided by six, and then divided again by two to get these values.

However, using this multiple for Mes-kia-gasher for Uruk, the reign for Cush comes out 33 years higher than the highest previously determined value of 62 years.

Lugal Banda means "little king" and is mentioned in the Epic of Gilgamesh to be the father or forefather of Gilgamesh. That name seems to be an insertion in this list, for three reasons. First, the reign of 1,200 units is three times higher than any other reign recorded in the Uruk list. Second, the value of 1,200 may be from the same source as the Kish list, which gives Gisur (Cush) 1,200 units of reign. If that is the case, then the 1200 units of reign for Lugal Banda are using a different unit of time than the other values in the Uruk list.

And, third, if Lugal Banda refers to Cush, then we have him twice in the list under different names. However, the details of the two Sumerian Epics about Lugal Banda and the war against Aratta suggest he was probably not Cush, as he was one of the warrior companions of En-mer-kar who was left behind in a cave to die (Vanstiphout 2003, 97–137).

At any rate, Lugal Banda appears to be a scribal insertion to fill the interregnum between the death of Nimrod/Enmerkar and the accession of Semiramis, who is recorded as Dumuzi in this list. Since it doesn't make sense as a number, we will just set that piece aside for now. The 32 year reign of Kenkenes in Egypt gives us the length of the interregnum in Egypt.

The Sumerian poem, Gilgamesh and Agga, gives us the names of Agga and his father Enmebarragesi as the rulers of Kish to whom Gilgamesh refused to submit (Katz 1993, 43). They were the most

likely rulers of Sumeria and Nineveh during the interregnum between the expulsion of Nimrod from Assyria in 2139 B.C. and the reigns of Semiramis I and Ninyas-Gilgamesh a century later.

The value for Mes-kia-gasher may also have come from another source using a different unit of time. Dividing it by 5 comes to 64.8 years, which we suggested was the combined reign of Belus and Kullassina-bêl in the Kish list, counting from the first division of the earth to the Dispersion. One fifth of a 360 day year was 60 days, the bimestral of two months.

It seems likely that Nimrod founded the city of Uruk in Sumer early in his 123-year post-dispersion rule. Therefore the reigns for En-mer-kar, Dumuzi, and Gilgamesh were local data from Uruk, but the value for Cush would have come from a predispersion source, and could have been misunderstood by the much later Sumerian scribes.

Thus we find that the multiple being used for three of the first five kings in the Uruk king list was 3.33, or 110 days, and the multiple used in the Kish list was 36, which is ten pre-flood days, and the values for Mes-kia-gaser and Lugal Banda in the Uruk list are insertions using different units from the other three "gods."

As in the Hindu reigns of the first three Yugas which were multiplied by 4,320, it appears that the Sumerian scribes deliberately counted the reigns of certain ancestors, whom they viewed as gods, using multiples of the real years, perhaps as a way of setting them apart from the later kings in the lists.

Conclusions

The most important conclusion is that the chronology of Berossus confirms the durations back to Babel and the Dispersion that we cited in Griffith and White (2022b). First we counted back to Babel, the Dispersion, and the Flood. In this paper we counted forward from the Flood to Cyrus using Babylonian sources, and got the same answer. Berossus was missing a 21 year gap between the end of Period 2 and the first dynasty of Babylon, but for all other dates from Babel to Cyrus he is precise. The duration from the Flood to the conquest of Babylon by Cyrus was 1,809 years.

Synchronizing the Babylonian Dynasties of Berossus with the anchor point for Semiramis II (1232/1231B.C.) and with our triangulated dates for Babel and the Dispersion results in a nearly perfect fit with our Chronological Framework of Ancient History, further supporting the assertion that the ancient chroniclers had access to accurate chronological data whereby they were able to calculate precise durations from ancient events to events in their day.

A built-in checksum using both reign durations and number of kings confirms that this reconstruction is accurate. The use of a checksum by Berossus demonstrates dedication to accuracy and a high degree of sophistication, and has enabled us to repair the lost data with reasonable confidence. The checksum further supports 539/538B.C. for Cyrus' conquest of Babylon and 2234/2233B.C. for the founding of Babel.

This degree of accuracy and sophistication suggests that the testimonies of Berossus and Herodotus in regard to the time of the Median Revolt were based on valid information, though it was misunderstood and corrupted by later Greek chroniclers.

While the characters of Ninus, Semiramis, and Ninyas have obviously been embellished by the Greek chroniclers, the fact that the durations to their reigns match the Egyptian data for the rulers of the First Dynasty gives us confidence that the Greek chroniclers gained access to a core of real historical information from the Medes, Persians, Babylonians, and Egyptians.

The consistency of the testimonies of the ancient chroniclers leaves little doubt that the earlier periods of the accepted chronology of the Ancient Near East are grossly in error due to the circular reasoning used to derive and support those chronologies.

The two most controversial findings in this paper are that the Fall of Akkad occurred in 1477B.C., and that Tukulti Ninurta I was probably the person remembered in legend as the second Queen Semiramis. The second assertion is certainly not one that we had wished to find. Yet, the data leads us to these seemingly unlikely conclusions.

In the next set of six papers we will look at the chronology of Egypt and make the case that it affirms the biblical component of the chronology of Ussher's interpretation of the Latin Vulgate and the Masoretic Text, while completely contradicting his citations of Egyptian dates from the serialized dynasties of Manetho.

References

Aruz, Joan. 2003. "Art and Interconnections in the Third Millennium B.C.". In Art of the First Cities: The Third Millennium B.C. From the Mediterranean to the Indus.

Edited by Joan Aruz and Ronald Wallenfels. New Haven, Connecticut: Yale University Press.

- Balkan, K. 1954. "Kassitenstudien, 1: Die Sprache der Kassiten." American Oriental Series 37.
- Bloch, Yigal and Laura A. Peri. 2016–2017. "I Placed My Name There": The Great Inscription of Tukulti-Ninurta I, King of Assyria, from the Collection of David and Cindy Sofer, London. Israel Museum Studies in Archaeology 8: 2–55.
- Booth, G. trans. 1814. The Historical Library of Diodorus the Sicilian in Fifteen Books to which are added the Fragments of Diodorus. London, United Kingdom: McDowell, Row & Square, Fleet Street.
- Bosanquet, J.W. 1873. "On the Date of the Fall of Nineveh, and the Beginning of the Reign of Nebuchadnezzar at Babylon." Transactions of the Society of Biblical Archaeology 2: 147–178.
- Bosanquet, Samuel Richard. 1880. *Hindu Chronology and Antediluvian History*. London, United Kingdom: Hatchards Piccadilly.
- Browne, Henry. 1844. Ordo Sæculorum: A Treatise on the Chronology of the Holy Scriptures: And the Indications Therein Contained of a Divine Plan of Times and Seasons: Together With an Appendix. London, United Kingdom: John W. Parker.
- CDLI:Wiki. 2023. "Year Names of Sharkalisharri." https://cdli. ox.ac.uk/wiki/doku.php?id=sharkalisharri_year-names.
- Charles, R.H. 1913. "The Book of Jubilees." In *The Apocrypha and Pseudepigrapha of the Old Testament*. Oxford, United Kingdom: Clarendon Press.
- Chambers, Ephraim. and Andrew Findlater. eds. 1880. Library of Universal Knowledge with Copious Additions by American Editors. Vol. 1 of 15. New York, New York: American Book Exchange.
- Clinton, Henry Fynes. 1824. Fasti Hellenici. The Civil and Literary Chronology of Greece, From the LVth to the CXXIVth Olympiad. Vols.1–3. Oxford, United Kingdom: Oxford University Press.
- Cory, Isaac Preston. 1876. Cory's Ancient Fragments of the Phoenician, Carthaginian, Babylonian, Egyptian, and Other Authors. Edited by Edward Richmond Hodges. London, United Kingdom: Reeves & Turner.
- Cullimore, Isaac. 1833a. "On The Ancient Chaldean and Egyptian Chronology." *The Morning Watch* 6: 161–179. https://www.google.com/books/edition/The_Morning_Watch/j4U3AAAAMAAJ.
- Dalley, Stephanie. 2002. Mari and Karana: Two Old Babylonian Cities. Piscataway, New Jersey: Gorgias Press LLC.
- Diodorus Siculus. 1935. *The Library of History of Diodorus Siculus*. Loeb Classical Library. https://penelope.uchicago.edu/Thayer/E/Roman/Texts/Diodorus_Siculus/1A*.html.
- Diodorus, Siculus. 2004. Diodorus Siculus. Translated by C. H. Oldfather. Cambridge, Massachusetts: Harvard University Press.
- Drews, Robert. 1965. "Assyria in Classical Universal Histories." *Historia: Zeitschrift für Alte Geschichte*, 14, no. 2 (April), 129–142. http://www.jstor.org/stable/4434874
- ETCSL Project. 2006. "Gutium." Faculty of Oriental Studies. Oxford, United Kingdom: Oxford University. https://etcsl.orinst.ox.ac.uk/cgi-bin/etcsl.
- Eusebius of Caesarea. 2002. Preparation for the Gospel. Vol. 1.

 Translated by Edwin Hamilton Gifford. Eugene, Oregon: Wipf and Stock Publishers.

- Eusebius of Caesarea. 2008. Chronicon. Book 1. Translated by Andrew Smith. Translated from Alfred Schoenes, 1875. Eusebi Chronicorum Liber Prior. Berlin, Germany: Wiedmann. https://www.tertullian.org/fathers/eusebius_chronicon_01_text.htm
- Fales, Frederick Mario. 2010. "Production and Consumption at Dūr-Katlimmu: A Survey of the Evidence." In Dūr-Katlimmu 2008 and Beyond. Edited by Hartmut Kühne. Wiesbaden, Germany: Harrassowitz Verlag.
- Fitzgerald, Madeleine A. 2002. "The Rulers of Larsa." PhD diss., Yale University, New Haven, Connecticut.
- Frayne, Douglas. 1993. Sargonic and Gutian Periods (2234–2113B.C.). The Royal Inscriptions of Mesopotamia. Vol. 2. Toronto, Canada: University of Toronto Press.
- Gertoux, Gerard. 2016. Jonah vs King of Nineveh: Chronological, Historical and Archaeological Evidence. Durham, North Carolina: Glasstree Publishing.
- Glassner, Jean-Jacques. 2005. Mesopotamian Chronicles. Edited by Benjamin R. Foster. Boston. Massachusetts; Brill.
- Gordon, Cyrus H. 1977. "Where is Abraham's Ur?" Hershel Shanks Editor. *Biblical Archaeology Review* 03:02 (June).
- Gordon, Cyrus H. 1958. "Abraham and the Merchants of Ura." Journal of Near Eastern Studies 17, no. 1 (January): 28–31.
- Griffith, Ken, and Darrell K. White. 2021. "An Upper Mesopotamian Location for Babel." *Journal of Creation* 35, no.2 (August): 69–79.
- Grote, George. 2022. *History of Greece*. (Vols. 1–12): Complete Edition. e-artnow.
- Hamilton, Alexander. 1820. A Key to the Chronology of the Hindus: A Series of Letters in Which an Attempt is Made to Understand the Progress of Christianity in Hindostand by Proving that the Protracted Numbers of All Oriental Nations Agree with the Hebrew Text of the Bible. Vol. 1. Cambridge, United Kingdom: J. Smith, Printer to the University.
- Hare, Julius Charles. 1832. The Philological Museum. Cambridge, United Kingdom: J. Smith.
- Heinz, M. 1995. "Migration und Assimilation im 2. Jt. v. Chr.: Die Kassiten." In Zwischen Euphrat und Indus. Aktuelle Forschungsprobleme in der vorderasiatischen Archäologie.
 Edited by K. Bartl, R. Bernbeck, and M. Heinz, 165–174.
 Hildesheim, Germany: Georg Olms Verlag.
- Herodotus. 1862. History of Herodotus, A New English Version, Edited with Copious Notes and Appendices, Illustrating the History and Geography of Herodotus, from the Most Recent Sources of Information; and Embodying the Chief Results, Historical and Ethnographical, Which Have Been Obtained in the Progress of Cuneiform and Hieroglyphical Discovery. Vols. 1–4. Translated by George Rawlinson. London, United Kingdom: W. Clowes and Sons. https://www.google.com/ books/edition/The_History_of_Herodotus/tzENAAAIAAJ.
- Hickman, George Albert. 1986. "The Dating of Hammurabi." In Proceedings of The Third Seminar of Catastrophism and Ancient History. Edited by Marvin Arnold Luckerman, 13–28. Los Angeles, California: Catastrophism and Ancient History Press.
- Hoeh, Herman L. 1967. Compendium of World History. Vol. 1. PhD diss., Ambassador College, Pasadena, California.
- Jackson, John. 1752. Chronological Antiquities: Or, The Antiquities and Chronology of the Most Ancient Kingdoms, from the Creation of the World, for the Space of Five Thousand Years. Vol. 1. London: J. Noon. https://www. google.com/books/edition/Chronological_Antiquities/ NHXIAAAAMAAJ.

- Johnson, Robert Bowie, Jr. 2003. Athena and Kain: The True Meaning of Greek Myth. Annapolis, Maryland: Solving Light Books.
- Johnson, Robert Bowie, Jr. 2016. Genesis Characters and Events in Ancient Greek Art. Annapolis: Solving Light Books.
- Jones, Floyd Nolen. 2002. Chronology of the Old Testament: A Return to Basics. 15th ed. The Woodlands, Texas: Kingsword Press.
- Justinus, Marcus Junius. 1853. Epitome of the Philippic History of Pompeius Trogus. Translated, with notes, by Rev. John Selby Watson. London, United Kingdom: Henry G. Bohn.
- Katz, Dina. 1993. Gilgamesh and Akka. Groningen, Netherlands: Styx Publications.
- King, Leonard William. ed. 1907. Chronicles Concerning Early Babylonian Kings: Introductory Chapters. London, United Kingdom: Luzac and Company.
- Klonsky, Milton. 1974. The Fabulous Ego: Absolute Power in History. New York, New York: Quadrangle.
- Layard, Austin Henry. 1849. "Layard's Remains of Nineveh." The Church Review and Ecclesiastical Register, Vol 2. 1849–50: 245–263. New Haven, Connecticut: George B. Bassett.
- Luckenbill, Daniel David. 1989. Ancient Records of Assyria and Babylonia. Vols. 1 and 2. London, United Kingdom: Histories & Mysteries of Man Ltd.
- Maier, John R. 1997. *Gilgamesh: A Reader*. Wauconda, Illinois: Bolchazy-Carducci Publishers.
- Macalister, R.A.S. (trans. and ed.) 1941. *Lebor Gabála Érenn:*Book of the Taking of Ireland. Part 1. Dublin, Ireland: Irish
 Texts Society.
- Manetho of Sennebytus. (3B.C.) 1964. *Manetho: History of Egypt.* Translated by W.G. Waddell. Cambridge, Massachusetts: Harvard University Press.
- Michalowski, Piotr. 2004. "Sumerian." In *The Cambridge Encyclopedia of the World's Ancient Languages*. Edited by Roger D. Woodard, 19–59. Cambridge, United Kingdom: Cambridge University Press.
- Murphy, Denis. ed. 1896. The Annals of Clonmacnoise being Annals of Ireland from The Earliest Period to AD 1408.
 Translated into English AD 1627 by Conell Mageoghagan.
 Dublin. Ireland: The University Press for the Royal Society of Antiquaries of Ireland.
- Nichols, Andrew. 2008. "The Complete Fragments of Ctesias of Cnidus: Translation and Commentary with an Introduction." PhD diss., University of Florida.
- Oppenheim, A. Leo. 1964, 1977. Ancient Mesopotamia, Portrait of a Dead Civilization. Chicago, Illinois: University of Chicago Press.
- Paterculus, C. Velleius. (1744) 1924. Compendium of Roman History. Res Gestae Divi Augusti. Harvard, Massachusetts: Harvard University Press.
- Pritchard, James B. ed. 1969. The Ancient Near Eastern Texts Relating to the Old Testament. Third edition with supplement. Princeton, New Jersey: Princeton University Press.
- Rawlinson, George. 1862. The Five Great Monarchies of the Ancient Eastern World or, the History, Geography, and Antiquities of Chaldaea, Assyria, Babylon, Media, and Persia. Vol. 1. New York, New York: Scribner, Welford, and Co.

- Reilly, James. 2023a. Near Eastern Kings Named in the Amarna Letters—A Preamble. Self-published. http://http://www.displaceddynasties.com/uploads/6/2/6/5/6265423/near_eastern_kings_named_on_amarna_documents.pdf.
- Reilly, James. n.d. "Babylonian Dynastic History—a Late 10th to late 8th Century Outline. The Beginning of a Revision of Babyloanian History." http://www.displaceddynasties.com/uploads/6/2/6/5/6265423/paper_4_babylonian_dynastic_history_%E2%80%93_a_late_10th_to_late_8th_century_outline..pdf.
- Rohl, David M. 1995. *Pharaohs and Kings: A Biblical Quest.* New York, New York: Crown Publishers.
- Russell, Michael. 1827. A Connection of Sacred and Profane History: From the Death of Joshua to the Decline of the Kingdoms of Israel and Judah. Vol.2. London, United Kingdom: C. & J. Rivington.
- Schneider, Thomas. 2003. "Kassitisch und Hurro-Urartäisch. Ein Diskussionsbeitrag zu Möglichen Lexikalischen Isoglossen". *Altorientalische Forschungen* 30, no.2: 372–381.

- Shook, Charles A. 1916. *The Gist of the Bible: A Complete Handbook for Class and Home Study*. Cincinnati, Ohio: The Standard Publishing Company.
- Sigrist, Marcel. 1988. "Isin Year Names." https://digitalcommons.andrews.edu/books/74.
- Ussher, James. 2003. The Annals of the World. Translated by Larry and Marion Pierce. Green Forest, Arkansas: Master Books.
- Vanstiphout, Herman. 2003. Epics of Sumerian Kings: The Matter of Aratta. Atlanta, Georgia: Society of Biblical Literature.
- Zadok, Ran. 2013. "Kassites." Encyclopædia Iranica. https://www.iranicaonline.org/articles/kassites#:~:text=KASSITES%2C%20a%20people%20who%20probably,the%2016th%2D12th%20centuries%20BCE.