

Paper #3 Argument that there exists no record of human existence prior to ca 4000 BC: Part 2. In this paper we will trace human history back from Abraham to Adam, whose creation we date to the year 4114 BC, and we will provide support for this dating from an analysis of Babylonian & Sumerian mythological texts and the Sumerian King List

Prologue

In paper #1 we determined, from an analysis of Genesis 1:1-2, that God created the universe at an undetermined time in the distant past. How long ago and by what processes this took place are not revealed in the biblical text. Much more recently, as described in Genesis 1:3-31, God selected the earth as it then existed, and modified it and its environment to accommodate the plant and animal life forms he then brought into being. This process, which included the creation of the first human, took six literal days and according to genealogical texts in both the Old and New Testaments it took place around the year 4000 BC.

In paper #2 we left Genesis behind, temporarily at least, in order to determine precisely when the events recorded in Genesis 1:3-31 took place. We discovered from the New Testament (Matthew 1 and Luke 3) that precisely 60 generations separate the creation of man from the life of Jesus. And using the data included in the Hebrew Bible we were able to trace our way back in time from Jesus to Abraham, the Jewish patriarch, dating this pivotal figure in the time frame 2166-1991 BC. Those numbers were then confirmed using a multitude of Egyptian hieroglyphic inscriptions, as detailed in the radical revision of Egyptian dynastic history on the webpage displaceddynasties.com.

In this, our 3rd paper, we complete our journey back in time from Jesus to Adam by returning to Genesis, where we use the genealogies recorded in Genesis chapter 5 and 11:10-32 to assign absolute dates to the ancestors of Abraham, and to Adam himself. This process precisely dates God's creation of Adam to the year 4114 BC. And we back up that date via a mass of ancient tablets, both Sumerian and Babylonian, which confirm the accuracy of the biblical data.

Let us begin.

The genealogy from Abraham to Adam.

A. Biblical data which dates Adam in the time frame 4114-3184 BC.

This section of our paper will be relatively brief. The relevant genealogy is spelled out in detail in two chapters of the book of Genesis, and is summarized in the two charts in Figures 1 & 2 below.

The Genesis material actually provides the required genealogy in reverse order, and in two sections. While most genealogies begin in the present and trace ancestors going back in time, the Genesis 5 list begins with Adam, and moves forward generation by generation to the time of Noah and the great flood (see Figure 1). Six chapters later Genesis takes another leap forward, tracing the descent from Noah to Abraham (Figure 2). These genealogies are air-tight. For every generation (except Adam's) we are informed when the individual was born to his parent, how old he was when his first child was born, and how long he lived afterward. There are no gaps in the resulting genealogy.

Figure 1: The genealogy of Adam traced to the time of the flood in Genesis chapter 5.

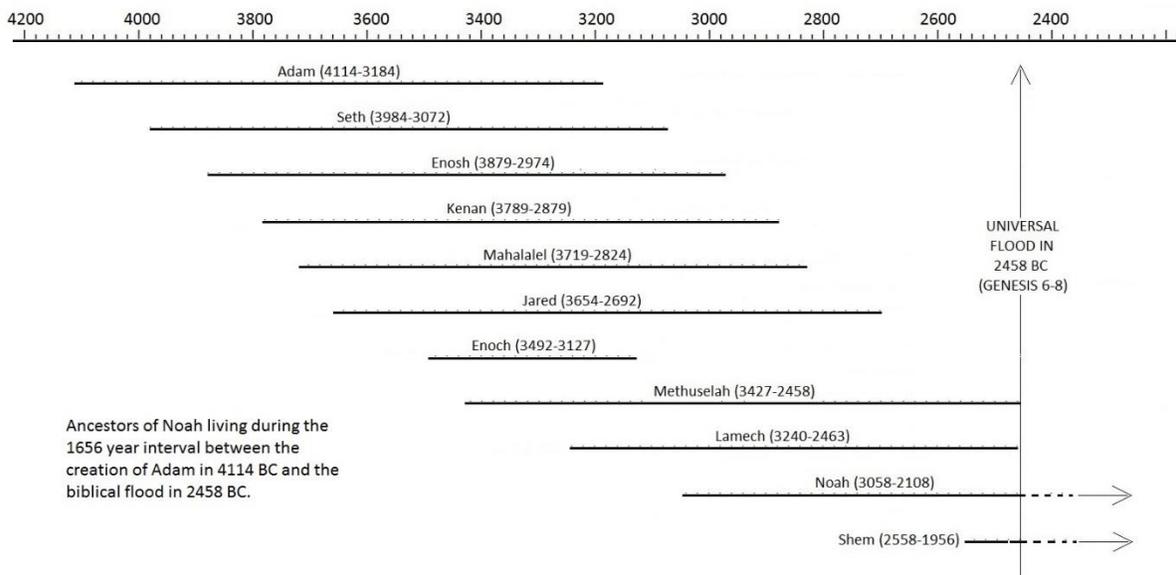
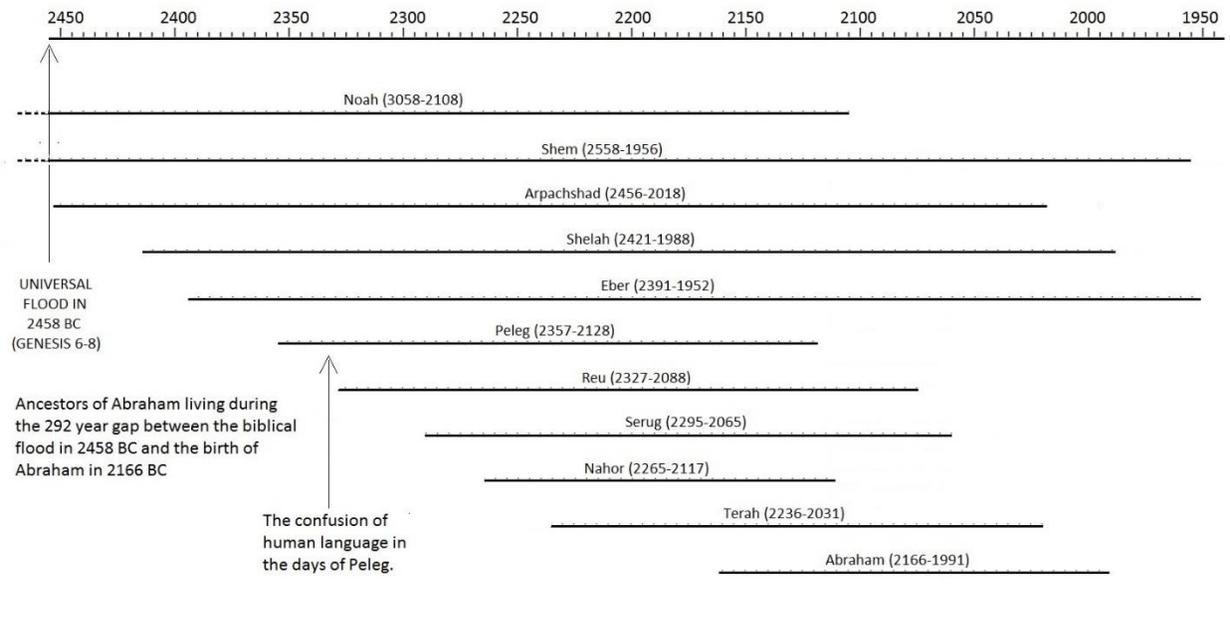


Figure 2: The genealogy of Adam traced from the time of the flood to the time of Terah, father of Abraham, in Genesis 11: 10-32

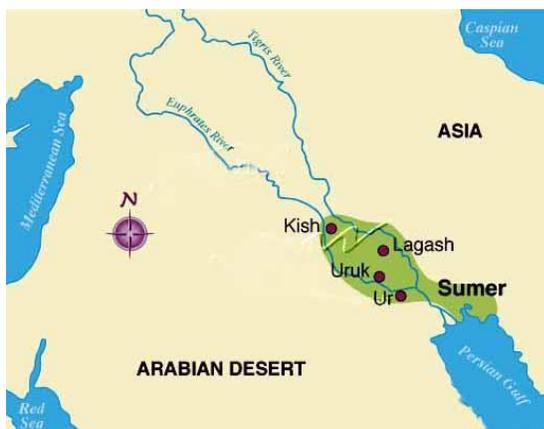


Before providing external support for this genealogy we take a few moments to itemize several noteworthy features of the timeline charts.

1) We have omitted from the postdiluvian chart (Figure 2) the detailed genealogies of Shem, Ham, and Japheth, the three sons of Noah, that occupy the whole of Genesis chapter 10. We may well deal with this material at a later date. That chapter, frequently referred to as the “table of the nations”, does include a brief mention of Arpachshad, father of Shelah, father of Eber (verse 24), precisely following the chapter 11 genealogy depicted in Figure 2, and it also includes the important fact that in the days of Peleg, son of Eber, “the earth was divided” (verse 25), a fact indicated by a single arrow added to our Figure 2 chart, though it is unclear precisely where in the lifespan of Peleg to date the beginning of this critical process.

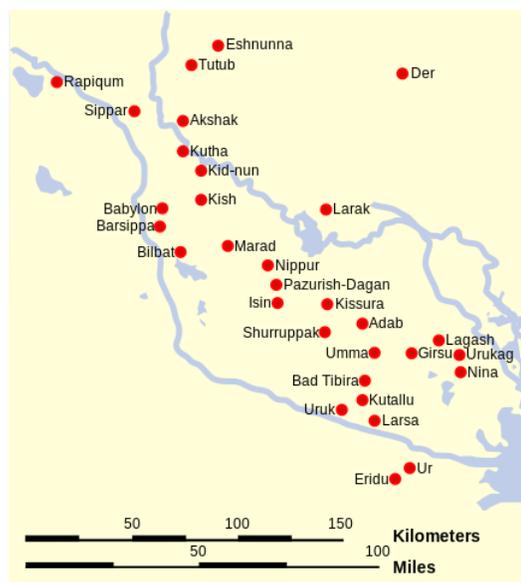
The division of the earth mentioned in Genesis 10:25 is a reference to the story line introduced in Genesis 11:1-9, where it is recorded that God, aware of the dire consequences of an earth unified by a common language, intervened and began to introduce variations in human patterns of speech. In Mesopotamia, the original homeland of the descendants of Noah and his three sons, where

apparently everyone still spoke the original pre-flood “Adamic” language (almost certainly a proto-Semitic dialect) only one variant language group emerged. The



new linguist group is called *Sumerian* by scholars, partly because of the biblical text which identifies the region where the confusion of languages first took place, partly because the emergence of the Sumerian speaking population is localized by archaeologists in the southernmost region of present day Iraq, between the Tigris and Euphrates Rivers, at their confluence before they enter the Persian Gulf (see map to the left and below to the right), a region known by the ancients themselves as “Sumer”.

We have no concrete evidence explaining how this linguistic transformation was accomplished, but a study of earth’s languages, many of which have no known antecedents, confirms the fact that it did. In the opinion of this author the occupants of Sumer may have suffered what psychologists describe as “[collective amnesia](#)”, perhaps occasioned by some [traumatic event](#) which effectively obstructed their language comprehension capacity and distorted their collective memory of past events. If so, then the lapse of memory which affected language comprehension is also an explanation for the [mythologizing of ancient traditions](#) which appeared suddenly at this juncture in history.



Regarding the sudden appearance of the Sumerian language three facts are noteworthy.

i) On the one hand, as already noted, its emergence in Sumer is described in no uncertain terms in the Hebrew Bible, where the text of Genesis 11:1 specifically states that the “[confusion of tongues](#)” first took place in “Shinar”, ancient Sumer.

Now the whole earth used the same language and the same words.

And it came about as they journeyed east, that they found a plain in the land of Shinar and settled there

And they said to one another, “Come, let us make bricks and burn them thoroughly.”

And they used brick for stone, and they used tar for mortar.

And they said, “Come, let us build for ourselves a city, and a tower whose top will reach into heaven, and let us make for ourselves a name; lest we be scattered abroad over the face of the whole earth.”

And the LORD came down to see the city and the tower which the sons of men had built.

And the LORD said, “Behold, they are one people, and they all have the same language. And this is what they began to do, and now nothing which they purpose to do will be impossible for them.

“Come, let Us go down and there confuse their language, that they may not understand one another’s speech.” (Genesis 11: 1-7)

ii) Secondly, it is an incontrovertible fact, attested by hundreds, if not multiple thousands of extant ancient tablets written in this Sumerian language, that the language is first attested in the latter half of the 3rd millennium BC, precisely where our Figure 2 dates the Genesis 11 “division of tongues”.

iii) And finally, it turns out that the Sumerian language is an “[isolate language](#)”. It emerged out of nowhere, with no known antecedents, precisely where and when the Hebrew Bible says it did.

To their collective discredit, scholars merely note these facts without barely a mention of the fact that they serve to corroborate the Hebrew Bible. We prefer to “give credit where credit is due.”

2) Clearly the most problematic aspect of our two genealogical charts are the enormously long lives recorded for both the pre-flood (antediluvian) and post-flood (postdiluvian) ancestors of Abraham. We can do little to ameliorate the “disbelief” engendered by this unusual phenomenon, except to add that genetically speaking there is nothing in the chromosomes of humans that precludes such long lives, and indeed [many species of plants and lower animals](#)

[today are said to live multiple hundreds of years](#). Exegetes are quick to point out the fact that the pre-flood world was blanketed with an atmosphere saturated with water, created on the second day of the creation week (Genesis 1:6-8), which would considerably lessen the damaging effects of cosmic radiation. Those waters were removed at the time of the Noahic flood (see Genesis 7:12), and it is duly noted that the ages of the post-flood descendants of Noah diminished over time to more conventional levels.

What we do want to emphasize here is the fact, already stated, that *the genealogies recorded in our Figures 1 & 2 are unalterable. In the Hebrew Bible they are worded in such a way that there is absolutely no way to justify adjusting them, as if to lessen the difficulty of accepting them. You either accept them as fact, or deny them arbitrarily*, though we will point out the fact that you will also have to deny the reliability of thousands of ancient documents unearthed in the past several centuries by archaeologists in the vicinity of ancient Sumer (southern Iraq) verifying almost all of the features of the Genesis record we are here discussing, including a) multiple versions of the story of man's creation in the recent past, b) multiple versions of the Genesis flood story, duplicating most of its most intimate details, c) multiple attestations of the enormously long lives of the antediluvian and postdiluvian ancestors of the Sumerians and Babylonians, and d) [at least one independent account of the fact that the earth was at one time unified by a common tongue and that "a god" intervened and confounded human language, insisting, as does the Hebrew Bible, that this action first took place in ancient Sumer](#). Most of these accounts feature [Enki, the Sumerian creator god](#). Even the Sumerian name for this god is interesting, it being a simple construct of the Sumerian names of heaven (En) and earth (Ki), shades of Genesis 1:1.

And we exit this topic by reminding the reader again that the Sumerian language appeared out of nowhere alongside the existing Akkadian (proto-Semitic) dialects of central and northern Iraq, sometime in the second half of the 3rd millennium BC, precisely in agreement with our placement of the arrow in our Figure 2.

3) It is all but certain that the population of the pre-flood civilization was enormous. Long lives of human males, coupled with the ability of women to conceive when extremely old, would populate, and perhaps over-populate that world quickly. And according to the text of Genesis, as we approach the time of Noah, certainly by the time of Jared, g-g-grandfather of Noah, the world became

populated by giants, both human and animal, and in consequence the earth became morally degenerate, a degeneracy which led to God's decision to destroy mankind. This is, of course, the time of the dinosaurs, and in a later paper we will discuss the events which led to the creation of these "behemoths" and the ultimate destruction of human life which soon followed, Noah and his immediate family excepted. It is perhaps noteworthy that the timing of the flood awaited the death of Noah's father Lamed, who died five years before the flood, and his grandfather Methusaleh, who died the same year as the flood (if not in the flood itself).

4) Curious inquirers, and of course hostile critics, often question how the details of the creation account in Genesis chapters 1 & 2, and the endless genealogical details that followed, not to mention the story of the flood, of the confusion of tongues, and the genealogical details of the early postdiluvian world, were transmitted to future generations. Those questions and many more find a ready answer in our Figure 1 & 2 timelines. We note, first of all, that even if the story line was transmitted orally, we are not looking at an endless chain of story tellers. According to the Hebrew Bible Adam lived 930 years, from 4114 BC through to 3184 BC. Methusaleh, his g-g-g-g-g-grandson, was born in 3427 BC and died in 2458 BC, the year of the great flood. Their lives overlapped for a total of 243 years, more than enough time for Methusaleh to have heard the story of creation so many times he was sick of hearing it. And without doubt he could name his father, grandfather and his five great grandfathers by his second birthday. Of course we speak with tongue in cheek, but the reader no doubt gets the point. Everyone in the latter years of the antediluvian/prediluvian/pre-flood world probably knew the details recorded in the early chapters of Genesis by heart, and without doubt could recite from memory further details sufficient to fill a book. But that is not the end of our story.

Noah, born in 3058 BC, lived with his grandfather Methusaleh for 500 years before the flood and he lived another 350 years after. Whatever tales Methusaleh could tell, Noah would know by heart, and these details would almost certainly be passed on to the postdiluvian world. And it is important to observe that Noah's death in 2108 BC implies that his life, and that of Abraham, overlapped for 58 years. Abraham was no doubt privy to innumerable details concerning the pre-flood and post-flood worlds that did not make their way into

the Bible, details passed down by word of mouth in a chain possibly consisting of only three other persons, Adam, Methusaleh and Noah.

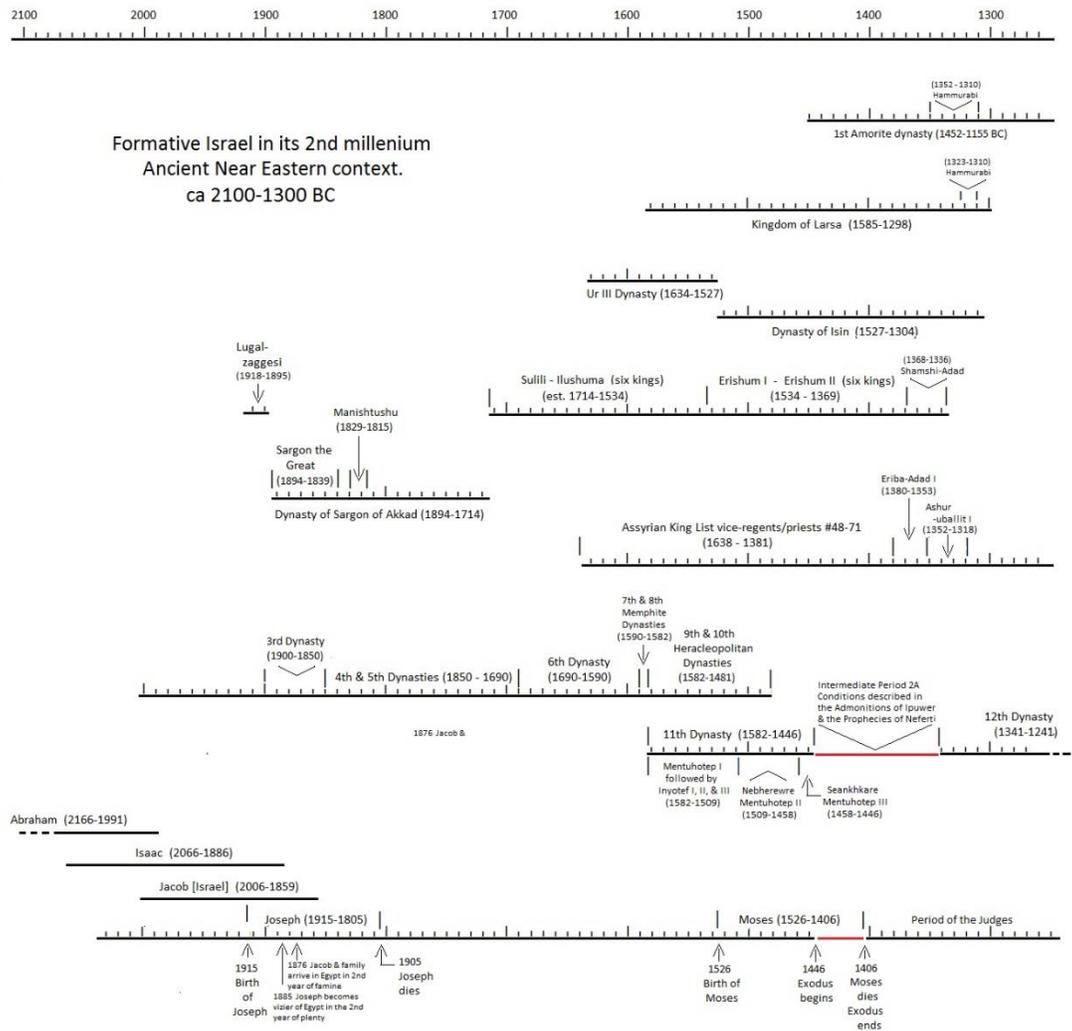
And we have neglected to mention the fact that almost certainly the prediluvian world had developed the art of writing, and that some of this written material, if inscribed on stone, or even on fired clay tablets, might well have survived the flood. We will speak to this issue on an ad hoc basis in several of the following papers.

B. External support for dating Adam in the time frame 4114-3184 BC.

When in the last paper we outlined the biblical data which dated Abraham in the time frame 2166-1991 BC and then set about to provide external support, that support was forthcoming from a revised Egyptian chronology which confirmed the accuracy of several pivotal chronological dates. It makes sense that we do something similar here. At minimum it should be possible to confirm the fact that the biblical flood took place in the approximate year 2458 BC, since that date precedes the birth of Abraham by only 292 years. Confirmation that Adam's birth took place only 1656 years before the flood is yet another matter, though we should be able to establish the fact that the occupants of this prediluvian world did live enormously long lives, and that they first made their appearance after 4114 BC. That, at least, is our objective in the following pages.

We begin by duplicating on the following page, as our Figure 3, the chart we included at the end of our previous paper, comprised entirely of 2nd millennium BC timelines representing the biblical and Egyptian data discussed in that paper, with the inclusion of a selection of contemporary Assyrian and Babylonian kingdoms, whose dates were determined via research recorded in papers #3-12 in the Chronology section of our displaceddynasties.com webpage. Our intention here is to extend the Figure 3 chart a further four hundred years to the left to intersect with the biblical flood. The task turns out to be surprisingly easy, though we admit at the outset that we cannot date events with the same precision as in our previous paper. The further back in time we go, the less inscriptional evidence exists to confirm our dating. But we can at least roughly confirm the biblical data.

Figure 3: Chart showing timelines for Akkad, Sumer, Babylonia, Assyria, Egypt and Israel in the 2nd millenium BC (based on research described on the webpage displaceddynasties.com).



We should add at the outset a fact known to anyone familiar with the research on the *Displaced Dynasties* website. Our determination of the placement of the timelines on the Figure 3 chart was based entirely on information forthcoming from original data preserved on ancient fired clay tablets, stela, boundary stones (kudurru) and stone monuments, and in some cases surviving vellum and papyrus documents. We relied heavily on the monument Berlin 23673 for the

revised Egyptian chronology, and on Assyrian and Babylonian king lists for the Mesopotamian timelines. In general we found those documents to be amazingly accurate portrayals of the actual situation, enabling us to synchronize events described in those cultures with a remarkable degree of precision. What we need now is some document that will enable us to extend our Figure 3 timelines back to the flood. And this document does exist, is widely known in the scholarly world, and has been extensively examined, reviewed and discussed in academic circles for upwards of 100 years. We refer of course to the multitude of documents that are collectively known as the *Sumerian King List*.

The Sumerian King List

Almost twenty copies, or fragments of copies of this ancient king list are known to exist. According to Thorkild Jacobsen, an early authority on the list, and author of the 1939 classic analysis of the composite text entitled "[The Sumerian King List](#)":

“The first fragment of the Sumerian King List of any importance was published by Hilprecht in 1906, the second by Scheil in 1911. The following ten years saw a steady stream of new material appear: four important texts were published by Poebel in 1914, two more by Legrain in 1920-21; and lastly, in 1923, came the magnificent Weld-Blundell prism, which in many respects was to close the earlier phase of the study of our document.” (Jacobsen, SKL, 1939, page 1)

The excellent [Wikipedia article](#) dedicated to the Sumerian King List itemizes a few of the most important sources of material containing the whole or substantial parts of the List, including WB (1923) 144, the Weld-Blundell prism cited by Jacobsen.

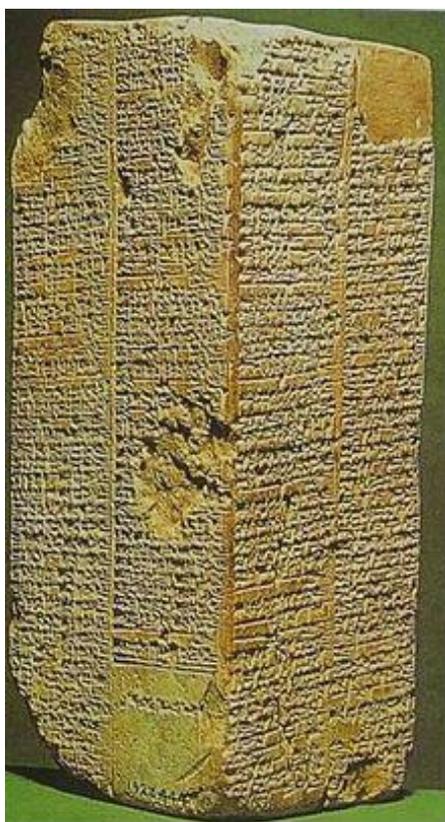
- (1) Apkullu-list (W.20030,7); (2) Babyloniaca ([Berossus](#));
- (3) [Dynastic Chronicle](#) (ABC 18) including copies, K 11261+ and K 12054;
- (4) Kish Tablet ([Scheil dynastic tablet](#)); (5) UCBC 9-1819 ("California Tablet")
- (6) WB 62; and (7) WB 444 ([Weld-Blundell Prism](#))

Of special interest to this paper are the comments regarding WB 62 and WB 144:

“The last two sources (WB) are a part of the "Weld-Blundell collection", donated by [Herbert Weld Blundell](#) to the [Ashmolean Museum](#). WB 62 is a small clay tablet, inscribed only on one side, unearthed from [Larsa](#). It is the oldest dated source, at c. 2000 BC, that contains the list. WB 444, in contrast, is a unique inscribed vertical [prism](#), dated c. 1817 BC, although some scholars prefer c. 1827 BC.

In this section of our paper we restrict our comments to the second of these Ashmolean Museum artifacts. The tablet WB 62 will be discussed later in this paper, when we discuss the chronology of the pre-flood world. Here we are concerned only with events taking place after the flood.

A. Chronology of the post-diluvian world according to the Sumerian King List.



The 4 sided prism W-B 144 containing 8 columns of text, including names of most of the prediluvian and postdiluvian kings of the Sumerian King List.

A translation of the Weld-Blundell prism can be read on pages 8-21 of [Volume 2 of the Oxford Editions of Cuneiform Texts](#), where in 1923 the Assyriologist [Stephen Herbert Langdon](#) first introduced this newly translated prism. We highly recommend the reading of this document, especially if the reader suffers from insomnia. It is much more effective a remedy than counting sheep. Alternatively the reader might prefer the translation produced by W. Leo Oppenheim in Pritchard's [Ancient Near Eastern Texts \(ANET\)](#), [beginning on page 265](#). Oppenheim is actually translating a collated text which takes into account parallel passages from other sources, but for the most part he is following the W-B 144 prism, especially on the one page we have duplicated below. Since many readers of this paper may have difficulty accessing the Oppenheim text, we have replicated the opening page of the ANET article as our Figure 4. This translation of the initial verses of the *Sumerian King List* will suffice for the purposes of this paper. One last option, assuming the site remains online, would be the much more readable

[translation provided by the Livius group](#), though the reader is cautioned to ignore the added estimations of the dates for the later dynasties named on the List.

Figure 4: Page 265 from Pritchard's *Ancient Near Eastern Texts* providing a translation by A. Leo Oppenheim of columns 1 & 2 on the prism WB 144.

Texts from the Beginnings to the First Dynasty of Babylon

For this section, two documents have been selected to illustrate the content and the stylistic features of early Mesopotamian historiography, while two groups of texts have been translated to represent the historical source material, which is rather rare in this period.

The texts of the first part are: (1) an excerpt of the Sumerian King List, and (2) the "Sargon Chronicle." The second part contains (1) two inscriptions from statues of Sargon of Agade, (2) an excerpt from an inscription of Naram-Sin, and (3) excerpts from three inscriptions of the well-known Gudea of Lagash.

HISTORIOGRAPHIC DOCUMENTS

I. THE SUMERIAN KING LIST

In his book *The Sumerian King List* (AS, No. 11), Thorkild Jacobsen offers not only a critical edition of the entire text material¹ and an excellent translation,² but also critical examination of all textual, stylistic, and historical problems involved. On the basis of a systematic study of the numerous variant readings, Jacobsen has shown that all extant "manuscripts" go back to one single original written at the time of Utu-hegal, king of Uruk, the liberator of Sumer from the yoke of the Guti domination. To demonstrate that his country had always been united under one king—though these kings were ruling successively in different capitals—the learned and patriotic author compiled this interesting document from two types of literary sources: from lists containing the names of the kings, the places and the lengths of their rules (established originally for practical chronological purposes), and from epical texts, legendary stories, local anecdotic traditions, etc., dealing with the biography and the marvelous deeds of some of these primeval kings. This literary material is referred to in very succinct sentences scattered throughout the monotonous enumeration of royal names, figures, and place names. To this opus has later been added a section dealing with the events before the Flood. This "preamble" has an entirely different literary background³ and does not appear in all manuscripts.

The entire text material has been utilized by Thorkild Jacobsen (*The Sumerian King List*) to establish a "standard version" of this document on the basis of the most extensive "manuscript" published by S. Langdon from the Weld-Blundell Collection (= *Oxford Edition of Cuneiform Texts*, Vol. II [Oxford, 1923]), No. 1923, 444, pp. 13 ff. and Pls. 1-1v.

The following translation contains lines i 1—iv 5 with the "ante-diluvian" preamble (cf. above) and the historical survey from the beginnings to the end of the First Dynasty of Ur. This section has been selected because it contains the names of the kings who ruled for an excessive length of time as well as nearly all the passages of mythological and literary interest.

¹ An additional text has been published since by V. Scheil, *Liste susienne des dynasties de Sumer-Accad*, in *Mémoires, inst. franç. d'archéol. orientale . . . du Caire*, LXII (1934), (= *Mélanges Maspéro*, I), 393-400.

² My translation differs only slightly and in minor points from that of T. Jacobsen.

³ Cf., for a more detailed discussion, Jacobsen, *op.cit.*, pp. 63 f.

When kingship was lowered from heaven, kingship was (first) in Eridu. (In) Eridu, A-Julim* (became) king and ruled 28,800 years. Alalgar ruled 36,000 years. Two kings (thus) ruled it for 64,800 years.

I drop (the topic) Eridu (because) its kingship was brought to Bad-tibira. (In) Bad-tibira, En-men-lu-Anna ruled 43,200 years; En-men-gal-Anna ruled 28,800 years; the god Dumu-zi, a shepherd, ruled 36,000 years. Three kings (thus) ruled it for 108,000 years.

I drop (the topic) Bad-tibira (because) its kingship was brought to Larak. (In) Larak, En-sipa-zi-Anna ruled 28,800 years. One king (thus) ruled it for 28,800 years.

I drop (the topic) Larak (because) its kingship was brought to Sippar. (In) Sippar, En-men-dur-Anna became king and ruled 21,000 years. One king (thus) ruled it for 21,000 years.

I drop (the topic) Sippar (because) its kingship was brought to Shuruppak. (In) Shuruppak, Ubar-Tutu became king and ruled 18,600 years. One king (thus) ruled it for 18,600 years.

These are five cities, eight kings ruled them for 241,000 years. (Then) the Flood swept over (the earth).

After the Flood had swept over (the earth) (and) when kingship was lowered (again) from heaven, kingship was (first) in Kish. In Kish, Ga[. . .]ur became king and ruled 1,200 years—(original) destroyed! legible (only) to heavenly Nidaba (the goddess of writing)—ruled 960 years. [Pala-kinatim ruled 900 years; Nangish-lishma ruled . . . years];⁴ Bah[i]na ruled . . . years; BU.AN. [. . .]um ruled [8]40 ye[ars]; Kalibum ruled 960 years; Qalumum ruled 840 years; Zuqaqip ruled 900 years; Atab ruled 600 years; [Mashda, son]⁵ of Atab ruled 840 years; Arwi'um, son of Mashda, ruled 720 years; Etana, a shepherd, he who ascended to heaven (and) who consolidated all countries, became king and ruled 1,560 (var.: 1,500) years; Balih, son of Etana, ruled 400 (var.: 410) years; En-me-nunna ruled 660 years; Melam-Kishi, son of En-me-nunna ruled 900 years; Bar-sal-nunna, son of En-me-nunna, ruled 1,200 years; Samug, son of Bar-sal-nunna, ruled 140 years; Tizkar, son of Samug, ruled 305 years; Ilku' ruled 900 years; Ilta-sadum ruled 1,200 years; En-men-barage-si, he who carried away as spoil the "weapon" of Elam, became king and ruled 900 years; Aka, son of En-men-barage-si, ruled 629 years. Twenty-three kings (thus) ruled it for 24,510 years, 3 months, and 3½ days.

⁴ For a late (Neo-Assyrian) reference to this first king of Mesopotamia, cf. my note in *BASOR*, 97 (1944), 26-27.

⁵ The passage in square brackets does not appear in the Weld-Blundell text.

⁶ Emendation of T. Jacobsen; cf. Jacobsen, *op.cit.*, p. 24.

On lines 1-35 of the 1st column of W-B 144 we read the names of 8 kings who ruled over five cities prior to the flood, two in Eridu, three in Badtibira, and 1 each in Larak, Sippar, and Šuruppak. Oppenheim condenses the 35 lines into five paragraphs, one paragraph per city. There follow on the prism three brief lines (#36-38) summing up the previous data: 36) Five cities 37) Eight kings 38) They ruled 241,200 years. We describe these initial verses here in order to provide context. Clearly the enormous lengths of these prediluvian rulers are an issue which needs to be discussed, but our concern at the moment is with the rulers who appear after the flood. A discussion of the pre-diluvian kings must await the last section of this paper.

The summary statements on lines 36-38 of W-B 144 conclude the prism's treatment of the antediluvian kings. There follow four more lines of text (39-42), by far the most important feature of the entire document as far as this paper is concerned.

- 39) The Deluge came up (upon the land)**
- 40) After the Deluge had come**
- 41) The rulership descended from heaven**
- 42) At Kish**

Our purpose here is not to examine endless details of the ensuing list of kings, which fill the balance of column one and continue through column eight. According to Langdon, this post-diluvian list includes 11 cities and 125 kings. He summarizes the dynasties represented on the prism, precisely in the order in which they appear, via a table produced on his pages 5 & 6. We duplicate that table in our Figure 5 on the following page. Comment will follow, though we should probably mention here that almost all scholars accept the proposal - defended by Thorkild Jacobsen in his thorough analysis of the source documents related to the collated text - that several features of the structure of the List are artificial distinctions created by the scribes who first began to create this King List. Chief among them is the fact that these dynasties are said to have followed one another in succession, in the order cited, as the wording of the links between dynasties described in the King List suggests that they did. Instead Jacobsen argues that they overlap each other considerably, and that there do exist synchronisms between the various constituent timelines that confirm that fact, and which assist in restructuring and dating the dynasties. We will refer momentarily to his adjustments to the succession of the dynasties.

**Figure 5: List of the 20 dynasties of post-diluvian kings on the prism WB 144.
(duplicated from pages 5 & 6 of Langdon's essay)**

Post-diluvian period			
Dynasty number	Dynasty	Number of kings	Length of dynasty
1.	1 st dynasty of Kish	23	24,510
2.	1 st dynasty of Erech	12	2310
3.	1 st dynasty of Ur	4	177
4.	Awan	3	356
5.	2 nd dynasty of Kish	8	3195
6.	Hamasi	1	360
7.	2 nd dynasty of Erech	1 (?)	420
8.	2 nd dynasty of Ur	4	108 (?)
9.	Adab	1	90
10.	Maer	6	136
11.	3 rd dynasty of Kish	1	100
12.	Aksak	6	93
13.	4 th dynasty of Kish	7	97
14.	3 rd dynasty of Erech	1	25
15.	Agade	11	151
16.	4 th dynasty of Erech	5	30
17.	Gutium	21	125
18.	5 th dynasty of Erech	1	7
19.	3 rd dynasty of Ur	5	108
20.	Isin	14	203

In the few pages that follow we want to clarify several items (actually a total of seven items) related to our Figure 5 table:

1. The reader needs to be clear when reading about linguistic groups such as the Sumerians, the Akkadians, the Babylonians, etc. that we are not talking about ethnicity. Even when we come to discussing the “table of nations” in Genesis 10, and read about descendants of Shem, Ham and Japheth named Mizraim, Cush, Javan, and Canaan, (to randomly select four of the almost seventy nations mentioned in that chapter) there are absolutely no grounds for introducing the concept of “race”, as if the Egyptians, the Ethiopians, the Greeks and the

Canaanites were visually distinguishable from one another, and genetically unrelated. All of these peoples were part of the same extended family, distinguished solely on the basis of language, and even linguistically many of these national groups in the “table of nations” were related, the “confusion of tongues” having merely introduced distinct dialects of the existing languages.

2. The reader must also constantly keep in mind that when discussing the *Sumerian King List* we are dealing with the rule of “kings”, not with the duration of human lives as in the biblical genealogies. Even if and when we are able to estimate when “kingship descended from heaven” after the flood, we will never be able to precisely date the flood from this data, since we can only guess at the length of time the descendants of Noah lived in family groups dispersed throughout Mesopotamia, prior to the arrival of kingship in Kish. In our next paper we will discuss and provide dates for these assorted primitive cultures that developed after the flood but before the arrival of kingship.

3. When Jacobsen dealt with the data on the King Lists he recognized immediately that there existed absolutely no time lapse between the successive stages of the multiple dynasties of Kish, Erech (Uruk) and Ur, as their spacial separation of the King List, and in our Table 5 might imply. One Kish dynasty began immediately after the preceding one ended, and the same could be said of the multiple Erech and Ur dynasties. The Babylonian scribes are merely following a time worn tradition of listing dynasties according to when they began, even when this system would necessitate separating the phases of occupation of any specific city.

4. One of the first things we notice about this list of kings is that it is not a list of Sumerian kings, as the title might be wrongly interpreted as saying, though certainly some of the earlier kings in the list may have been Sumerian speakers. The title of the Sumerian King List derives instead from the Sumerian language in which all of the existing source documents of the King List were composed. As we near the end of the list all of the kings and kingdoms cited are certainly Babylonian, and several of them can be found on our Figure 3 chart, including the dynasty of Isin (1527-1304), the Ur III dynasty (1634-1527), the kingdom of Agade (Akkad) (1894-1714), and even Lugalzagizzi, the sole member of the 3rd dynasty of Erech (1918-1895). This overlap with our existing timelines is extremely fortunate. Now if only we can assign dates to the dynasties earlier than the 14th

in our Figure 5 (that which names Lugalzagezi, king of Erech), we can at least estimate dates for the biblical flood.

5. The fact that the SKL, as represented on WB 144, extends forward to the time of the dynasty of Isin, informs us that this particular version was updated by a scribe belonging to that dynasty. Other source documents for the SKL extend the list beyond this limit. At least one was apparently composed during the Hammurabi dynasty, probably by Hammurabi's successor Samsuiluna, the 7th king of that Amorite dynasty. The point we are making here is that all of the existing copies of the SKL lists are of relatively late date, composed by Babylonian scribes, though in this instance scribes employing the Sumerian language, the language of diplomacy, much as Latin was used in ecclesiastical circles long after it ceased to function as a spoken language. Being late compositions, they provide very few clues as to the source of the data incorporated in the earlier sections of the King Lists. Presumably many of the dynastic lists of kings ruling in a particular city derive from kings lists preserved over time in those very cities, the majority probably composed in Semitic Akkadian. The data for the city of Kish is notoriously problematic. Its early rulers are said to have reigned for multiple thousands of years, 23 kings ruling for a combined 24,510 years are cited at the beginning of the post-diluvian list, over a thousand years on average for each ruling monarch. While we do know from the biblical data that the offspring of Noah did live many hundreds of years, and kings governing cities in the early post-flood period might well have ruled for as much as a century, over 1000 years for the reign length of a single king is clearly "beyond the pale". In a moment we will drastically reduce those numbers.

6. There is yet another factor which impinges of the data related to the dynasty of Kish. When the Babylonian scribe lists the kings who ruled that city some indeterminate time after the flood, he begins with a king named Ga-ur. There follows a king whose name is obscured, then ten more kings beginning with Palkinatum and continuing through to Arwi'um. There follows in position 13 a king Etana, who apparently is well known, since for him alone a comment is provided. It is said of this king that he was a shepherd, who ascended to heaven, and consolidated all countries. It is also stated that he ruled for 1,560 years (1500 years on another source). Six of the kings who preceded Etana on the prism W-B 144 are attested in that same relative position, though not in precisely the same order, on at least three other more fragmentary King Lists. There is therefore no

doubt that they existed, though when Jacobsen creates his timeline for the Kish sequence of kings he traces the dynasty only as far back as Etana, the 13th king. He does this, we presume (though Jacobsen does not discuss the matter) partly because there exists no independent inscriptional evidence on which to base an estimate for the duration of the first 12 king, and partly (we think) because there do exist multiple other documents, including a lengthy epic entitled the [Myth of Etana](#), attesting not only Etana's existence, but many details of his life, including the facts that *he was* a shepherd, that *he did* ascend to heaven on the wings of an eagle, that *he did* unify his realm, and most importantly, that *he was the first king of Kish*. When we reproduce Jacobsen's timelines we need to be cognizant of the fact that his timeline for Kish excludes a dozen kings.

7. One other factor relating to the various dynasties cited on the SKL, one previously mentioned in this paper, needs to be underscored here. We noted earlier that Jacobsen, and Langdon before him, assumed that while all of the dynasties in our Figure 5 are listed sequentially, and the language employed by the scribes assumes that they ruled in succession, there is no doubt that in fact they overlapped to a considerable extent. That fact could have been predicted without examining a single detail of the Sumerian King List, once it was determined that all of the existing copies of the SKL were created by Babylonian scholars in the last third of the 2nd millennium BC. This author spent years analyzing Assyrian and Babylonian king lists created in this time frame and they all had this same characteristic. Without exception they all simply strung together sequences of dynastic kings as if they ruled in succession, whereas in fact the timelines of the constituent dynasties overlapped considerably.

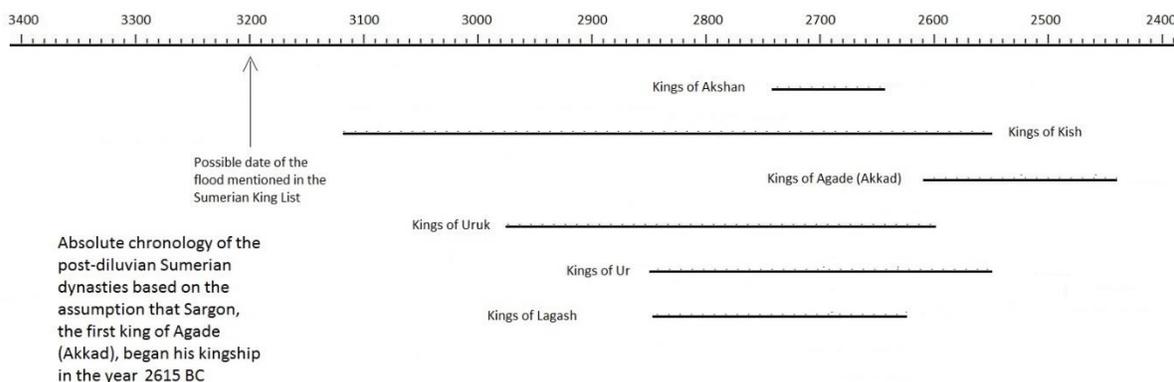
Based on the interpretive assumptions listed in the previous seven points, and partially in reliance on synchronisms provided by sources unrelated to the king lists, both Langdon and Jacobsen managed to assign absolute dates to most of the dynasties earlier than the 14th. In order to do this they first disregarded the excessively large numbers assigned as reign lengths on the AKL documents, providing instead average reign lengths for most of the kings.

Filling the timeline gap between the flood and Akkad (Agade) dynasty.

Stephen Langdon, on his page 7, assigned provisional dates to all of the dynasties preceding the Agade dynasty, based on his dating of that dynasty in the time frame 2808-2628 BC. He concluded that the 1st dynasty of Kish began ca. 5500 BC. We believe he included the first twelve kings for his dynasty of Kish in that determination, and we draw the attention of the reader to the fact that his 1923 paper dated the beginning of the Agade dynasty in the year 2808 BC, and that this is approximately 900 years earlier than the 1894 BC date assigned to that same event in our Figure 3 timeline chart. Taking that 900 year difference into account, and eliminating the reigns of the initial 12 postdiluvian kings from consideration, we assume that Langdon's estimate for the beginning of the 1st dynasty of Kish would be in the vicinity of 4000 BC, still much too early to validate the existence of the flood in the year 2458 BC, but at least a partial vindication of the biblical numbers.

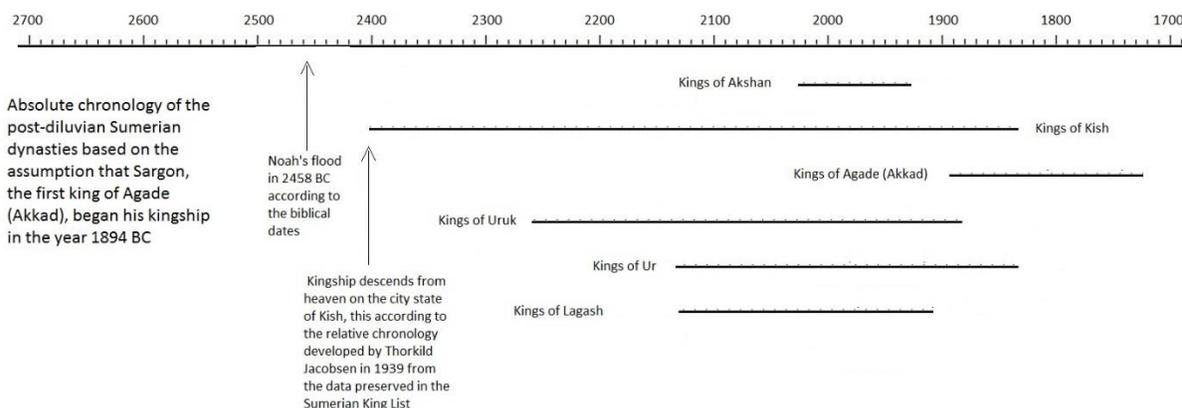
Thorkild Jacobsen was even more specific, assigning average reign lengths of approximately 30 years to each king of the earliest dynasties, or 20 years to each king's son in cases where a king was succeeded by more than one son. He also used a multitude of independent documentary sources to establish links (synchronisms) between overlapping dynasties. In the end he managed to create timelines with relative dating for each of the six major representative cities listed on the primary SKL documents (see his Table 1 between pages 180 & 181 of his book). Later, after a lengthy discussion related to the dating of the last dynasties cited on the King List, including his determination that the Akkad dynasty began in the year 2615 BC, he then assigned absolute dates to his earlier table (see his Table 2 inserted between pages 208 & 209 of his book). We have duplicated these timelines on our Figure 6 chart on the following page. The reader should take note that Jacobsen dates the beginning of the first dynasty of Kish around the year 3120 BC and we have added the approximate date 3200 BC for the flood on the assumption that kingship likely began around the time of Nimrod, three generations removed from Adam. [It is perhaps noteworthy that [some scholars have even attempted to identify the biblical Nimrod and Etana, king of Kish!](#)]

Figure 6: Absolute chronology of the kings of the first 15 dynasties listed on the Sumerian King List according to Thorkild Jacobsen, assuming that the reign of Sargon of Akkad began in the year 2615 BC (see Table 2 following page 208 in the 1939 publication of the composite *Sumerian King List*)



As noted, Jacobsen dated the beginning of the realm of Sargon of Akkad in 2615 BC, approximately 720 years earlier than we dated the beginning of that dynasty on our Figure 3 chart. Were he to have used our ca 1895 BC date for Sargon in order to affix absolute dates to his timelines, his chart would look like that in our Figure 7 below.

Figure 7: Absolute chronology of the kings of the first 15 dynasties listed on the Sumerian King List according to the relative chronology of Thorkild Jacobsen, assuming that the reign of Sargon of Akkad began in the year 1894 BC.



With the publication of our Figure 7 chart we have provided the promised bridge between the data on our Figure 3 timelines and the biblical flood. If the reader wonders what happened to the 12 kings listed on the Sumerian King List before

the name of Etana appears in position 13, we can only state our opinion (and possibly the opinion of Jacobsen himself) that these names do not belong where they appear in the King List. Though at least four versions of the King List attest their presence, Jacobsen spends almost a quarter of his book arguing that these various sources are in reality only one, since they all derive from a common original (what the Germans call a vorlage) created probably during the reign of Utu-Hengal, the sole occupant of the 5th dynasty of Erech (Uruk) listed on our Figure 5 chart. We have omitted him from our Figure 3, but have included the 3rd dynasty of Ur that succeeded him. Assuming that a king by the name Ga-ur, or an early king with a name remotely similar, actually existed and that he was the proverbial founder of kingship in Sumer, it must be considered a minor miracle that there exists no mention of him, nor for that matter of his eleven successors, in the tens of thousands of documents excavated in the region of Sumer over the past few centuries of archaeological excavations. How the scribe in the days of Utu-Hengal came upon this list of 12 kings, presumably very old (hence his placement of the data at the head of his list of dynasties) is a complete mystery. But of two things we can be absolutely certain. Ga-ur and his eleven successors were not founding kings of Kish. There are simply too many mythological stories that assign that honor to Etana and his successors. And when it is eventually discovered where this dynastic group belongs, and their reign lengths are appropriately reduced, and their overlap with other dynastic groups is taken into consideration, the chronology depicted in our Figure 7 timelines will not be seriously affected.

There remain for us only two related tasks. On the one hand we need to defend the methodology by which Jacobsen established his post-flood timelines, i.e. the seemingly arbitrary way in which he dismissed the large reign length numbers on the source documents of the Sumerian King List. If we don't do that we can anticipate the critics crying foul, even though the critics themselves view the excessively large numbers as "unbelievable". On the other hand we need to defend the biblical genealogies which date the creation of Adam 1656 years prior to the flood, genealogies which state in no uncertain terms that humans in that time frame lived enormously long lives, many just short of 1000 years. The defense required in both instances is forthcoming from a common source, namely, our analysis of the pre-diluvian section of the Sumerian King List.

Chronology of the prediluvian/pre-flood world according to the Sumerian King List.

In a very real sense we can deal with both issues raised in the previous paragraph via a single procedure. If we can demonstrate that all of the excessively high numbers on the *Sumerian King List* (both in the pre-diluvian section and in the early portions of the post-diluvian section) can be drastically reduced by a simple expedient, thus vindicating the procedure followed by Jacobsen, and at the same time reducing the pre-diluvian numbers to “biblical proportions”, we will have successfully addressed both issues. The reduction will only take a few seconds. Defending it will not take much longer.

Even the casual reader of the *King List* will surely have noticed the fact that, while excessively large, the vast majority of the disproportionately large numbers have one thing in common. They are all multiples of the number 60, the preferred base of the Sumerian mathematical system and of the Babylonian numerical system which presumably followed. And dividing the listed numbers by 60 immediately reduces those in the prediluvian section to “biblical proportions”, and in the post-diluvian section to much more appropriate levels, lower even than the estimates provided by Jacobsen. Let me explain.

In our Figure 8 on the following page we have listed the data for the 8 pre-diluvian “kings” as represented on the W-B 144 prism, where absolutely every number included is a multiple of 60. In the third column are listed the reign lengths of the 8 kings, and in the fourth column we have listed the quotient when those numbers are divided by sixty. In our estimation, the results are an excellent approximation of how many years these “kings” actually governed. We put the word “king” in brackets deliberately, since we think that these individuals were actually no more than clan chieftains, or even simply patriarchal leaders and that the numbers represent much of the duration of their adult lives, during which they exercised limited influence over their clan in the cities named. Viewed in this light the revised numbers are at least consistent with the biblical data. In fact, the reasonableness of the revised numbers may be more than simply supportive of the genealogy in our Figure 1. It has been suggested by some conservative scholars that these eight names may well be Sumerian language equivalents of the biblical names.

Figure 8: Table showing the listed reign lengths for the 8 pre-diluvian kings, and their values when divided by the number 60.

Ruler	City	Reign in years listed on W-B 144	Reign length divided by 60
Alulim	Eridu	28,800	480
Alalgar		36,000	600
Total years of Eridu dynasty			1080
Enmenlu-Anna	Badtibira	43,200	720
Enmengal-Anna		28,800	480
Divine Dumuzi		36,000	600
Total years of Badtibira dynasty			1800
Ensipazi-Anna	Larak	28,800	480
Enmendur-Anna	Sippar	21000	350
Ubar-Tutu	Shuruppak	18,600	310
Total years if no overlap			4020

Though only five cities are named in the list, we assume that in the prediluvian civilization dozens, perhaps hundreds of such cities existed, each “governed” by a patriarchal figure. We can only guess at how the records of these few representative clan leaders came to the attention of post-diluvian scribes, enabling them to prefix them to the King List, but present day scholars without exception believe that the prefixed list of 8 prediluvian “kings” was a late addition to the King List, perhaps the result of some chance discovery. If so, the chance discovery must have taken place soon after the flood, since the names of the five cities mentioned in the prediluvian section of the SKL are incorporated into a Sumerian Epic which appears to contain vivid memories of the flood and the pre-flood civilization. Our assumed early date for the Epic would support the suggestion, noted above, that the 8 names on the King List might represent the pre-flood ancestors of Noah, residing in the named cities. The early date we assign to the Epic would suggest that the names did not original through the discovery of a prediluvian inscribed document, but rather through the oral tradition passed on to the postdiluvian world by Noah and his sons. The difference of names can be easily explained. The Epic was apparently created by the Sumerians in the post-flood period, not too long after the “confusion of tongues” where details of that early civilization were still remembered, but had to be expressed in a non-Semitic language, mythologized at the time or more likely in the centuries that followed.

The Epic is so important that we will, for a short time at least, digress and briefly discuss its content. Following that we will demonstrate the correctness of our claim that the excessively large numbers on the King List must be reduced by a factor of 60.

The Deluge Myth. Jacobsen, in his introduction to the prediluvian section of his 1939 analysis of the [Sumerian King List](#), mentions this Epic and considers it sufficiently important to occupy his attention for four entire pages (pp 58-61). He summarizes its content in a number of paragraphs worthy of repetition here.

The epic describes in the first column the creation of men and animals; then, after a lacuna, col. ii proceeds to relate the descent of kingship from heaven ... and the founding of five cities, which are mentioned in the order Eridu(g), Bad-tibira(k), Larak, Sippar, Shuruppak. After a new lacuna col. iii begins the story of the Deluge, which, interrupted by lacunas, continues through cols. iii-iv. The end of the Deluge is related in col. v in the following words: ...

“The Deluge sweeps at the same time over thes.
After the Deluge had swept over the land
For seven days and seven nights, “

The epic continues with a story of the creator god Enki determining to “destroy the seed of mankind” but permitting one man Ziusudra to build a great (boat) and escape the deluge. The epic is not long and can be read online in minutes in [Pritchard’s Ancient Near Eastern Texts, pp 42-44](#) under the heading “The Deluge”. It is highly recommended reading for our readers.

Jacobsen continues with a discussion related to the source of the epic and its relation to the prediluvian section of the King List:

That the tradition concerning the antediluvian rulers can thus be shown to exist as a separate entity outside the King List, appearing either by itself or as part of an epic, naturally raises the question where its original setting should be sought. The answer is not difficult to find. In the epic the god Enki plays a most conspicuous role. He is mentioned with Enlil and Ninursag as creator of mankind, and he is indisputably the hero of the following Deluge story, for it is through his activity alone that mankind is saved. We can therefore safely conclude that the epic hails from Eridu(g), the chief city of Enki, and draws on its mythical lore. ...

Jacobsen could well be correct that this is simply a story concocted by the scribes in the city of Eridu to extoll the virtues of the city god Enki. But of course we think otherwise. The parallels with Genesis are overwhelming. The late 3rd millennium date for the creation of this epic, shortly following the biblical flood, is compelling. The references to Enki's creation of man and animals, the advent of kingship, the desire of the gods to "destroy the seed of mankind", and of course the flood, the boat tossed about on the waters, and the opening of its windows by Ziusudra, the Sumerian Noah, are all reminiscent of the biblical story line. And now along comes the prediluvian section of the SKL to tell us that the rulers of these five cities lived lives sufficiently long that they were able to govern the inhabitants of their cities for between three and eight hundred years, assuming of course that our reduction of the reign lengths of these "patriarchs" by a factor of 60 proves to be valid. If the named individuals on the SKL are not the biblical patriarchs, ancestors of Noah, then they are certainly near relatives. Nothing on the King List suggests that all of the named individuals are linear descendants of one another, but their long lives do corroborate the biblical genealogy in our Figure 1. We let the reader decide the issue for himself/herself.

Before we get back to that elusive number 60 we have one more bit of coincidental evidence to relate. Assuming that the 8 prediluvian names are ancestors of Noah, the hero of the flood, who is well known in Sumerian literature by the name Ziusudra, then why does the SKL omit the name of Ziusudra himself, since he is identified in the ANET translation of the Epic as a king, and is without doubt the most famous of the prediluvian "kings". The simple answer is - the Sumerian King List does include the name of Ziusudra. The prism W-B 144 is not the only king list source document that has a prediluvian section. When on page 10 above we documented a few of the source documents of the SKL, we mentioned specifically the Ashmolean Museum's clay tablet W-B 62 and on page 11 above we promised to return to this document later in our paper. And here we are.

On page 2 of his 1923 analysis of the W-B 144 prism, at the beginning of his analysis of the prediluvian section, Langdon cited the prediluvian section of the clay tablet W-B 62, and an excerpt from another document called the *Babylonaica*, written a thousand years later by [Berossus](#), a 3rd century BC priest/scholar (see Figure 9 below).

**Figure 9: The prediluvian “rulers” according to the documents W-B 62 and 144 and the 3rd century Babylonian scholar Berossus.
(duplicated from page 2 of Langdon’s publication of the W-B 144 prism)**

W-B. 444			W-B. 62.		
NAME.	PLACE.	YEARS.	NAME.	PLACE.	YEARS.
1. Alulim	Eridu	28800	1. A-lulim	Ḫabur	67200
2. Alagar	"	36000	2. Alagar	"	72000
3. Enmenluanna	Badtibira	43200	3.kidunnu-šakinkin	Ellasar	72000
4. Enmengalanna	"	28800	4.uk ? ku ?	"	21600
5. Dumuzi-sib	"	36000	5. Dumuzi-sib	Badtibira	28800
6. Ensibzianna	Larak	28800	6. Enmenluanna	"	21600
7. Enmenduranna	Sippar	21000	7. Ensibzianna	Larak	36000
8. Ubardudu	Šuruppak	18600	8. Enmenduranna	Sippar	72000
		241200	9. Arad-gin	Šuruppak	28800
			10. Ziūsuddu	"	36000
					456000

BEROSSUS		
NAME.	PLACE.	YEARS.
1. Alorus	Babylon	36000. (1)
2. Alaparos	"	10800. (2)
3. Amēlōn	Pantibiblus	46800. (3)
4. Ammenōn	"	43200. (4)
5. Megalartos	"	64800.
6. Daōnos	"	36000. (5)
7. Euedōrachos	"	64800. (7)
8. Amempsinos	Larak	36000. (6)
9. Opartes	"	28800.
10. Xisuthros	[Šuruppak]	64800.
		432000:

The original of the Babylonaica is not extant, but early Christian era writers were privy to its content and duplicated the prediluvian list. We are interested in these two additional source documents for several reasons. On the one hand the Berossus material tells us that the memory of the pre-flood civilization, as interpreted by the Sumerians and the Babylonian prevailed for several thousand years. We note as well that the tradition of reign lengths numbering in the tens of thousands of years also prevailed, though the numbers themselves demonstrate that errors attributable to scribal copying are frequent, suggesting that we should not rely too heavily on the precise figures in the document W-B 144. And finally, we note that the corresponding material from the two other source documents does include Ziusudra. While we cannot explain the absence of this name on the prism W-B 144, it is certainly clear that it does belong in the King List tradition.

Enough said about peripheral matters. It is time to defend our reduction of numbers on the document W-B 144 by a factor of 60

Reduction of numbers on the document W-B 144.

Two things are certain about these numbers.

On the one hand they are absolutely correctly represented on the Sumerian documents W-B 144 and 62. And we assume that Berossus was also deriving his numbers from a Sumerian copy of the King List where the numbers cited are being correctly interpreted. We have neither time nor space to defend the claim that the Sumerian number system is absolutely precise, since we have already exceeded our predetermined limits for both. But we have included as an appendix to this paper a brief analysis of that number system to be read only by those with leisure time to spare. As it turns out the Sumerians employed an extremely precise system of enumeration. If, in the opinion of translators, the Sumerian King List says that a king reigned for 36,000 years, that is precisely what what the Sumerian numerals are denoting. *There is absolutely no ambiguity in the Sumerian numerical system.*

On the other hand absolutely every analyst examining the Sumerian numbers knows for certain that they are outrageously high. The biblical number nine hundred years plus for the life of Methusaleh stretches credulity. Thirty-six thousand years for Alagar of Eridu (to choose only one moderately high figure from the King List) is clearly outrageous.

Assuming that the outrageous Sumerian numbers are fairly represented in the English translations, it follows that the errant Sumerian numbers must be attributable to the process by which those numbers were produced, i.e. they must have come about at the time when the Sumerian King List first appeared in that language. And scholars are in general agreement that the Sumerian King List, called by that name because of the language in which it is written, was merely a translation of a Babylonian original. Its content can best be described as Babylonian history, not Sumerian history. And if the errant numbers in the Sumerian translation are attributable to the Babylonian original, we should seek the source of the error in the Babylonian number system, which is not precise.

Scholars are generally accepting of the fact that the Sumerians, and their northern neighbours the Babylonians, possibly from the very beginnings of organized life in the southern Tigris/Euphrates basin, (a time period that scholars refer to as the early dynastic period) used what is known as a [sexagesimal](#) number system. Which group initiated this system, and which borrowed it from their neighbour, is immaterial.

For the uninformed reader a rudimentary sexagesimal system simply means that one regards groups of sixty as a fundamental counting unit. Such a system can take many forms, just as did our own system of counting by tens. In our well developed system there emerged what we call a “positional system” for denoting numbers, one which employs only nine distinct digits plus a 0 to act as a “place holder”. Thus a number such as 3069 in this positional system represents nine units, plus 6 groups of ten, plus 0 groups of ten tens (= 10^2 or hundreds), plus 3 groups of ten x ten x ten (= 10^3 or thousands), etc. Our system also includes a [radix point](#) (or decimal point) enabling us to express both units and fractional parts of a unit, as in the number 23.41 where the 4 and 1 express tenths (multiples of $1/10$) and hundredths (multiples of $1/10^2$), etc. of a unit.

If such a positional system were developed using the number 60 it would require 59 distinct digits and a 0 to act as a “place holder”. Then a single digit would express units, then groups of 60, groups of 60×60 , groups of $60 \times 60 \times 60$, etc. And with a radix point a single number representation could express fractional multiples of $1/60$, $1/60^2$, etc. As it turns out the Sumerians did not develop such a positional system while the Babylonians did, almost at least. What the Babylonian system lacked was a “place holder” such as our 0, and a radix point. Our interest in this paper lies entirely with the Babylonian system, the source of the errant numbers in the Sumerian King List.

Since our objective here is to explain the large numbers on the *Sumerian King List*, not the intricacies of the Babylonian number system, we leave the latter task largely to the interested reader. The brief Wikipedia discussion of [Babylonian numerals](#) would be a good place to start. For ease of reference we simply duplicate a few of the essentials from that article here, beginning with the depiction of the Babylonian system for creating the 59 distinct foundational signs used in the system.

𐎶 1	𐎶𐎶 11	𐎶𐎶𐎶 21	𐎶𐎶𐎶𐎶 31	𐎶𐎶𐎶𐎶𐎶 41	𐎶𐎶𐎶𐎶𐎶𐎶 51
𐎷 2	𐎶𐎷 12	𐎶𐎶𐎷 22	𐎶𐎶𐎶𐎷 32	𐎶𐎶𐎶𐎶𐎷 42	𐎶𐎶𐎶𐎶𐎶𐎷 52
𐎸 3	𐎶𐎸 13	𐎶𐎶𐎸 23	𐎶𐎶𐎶𐎸 33	𐎶𐎶𐎶𐎶𐎸 43	𐎶𐎶𐎶𐎶𐎶𐎸 53
𐎹 4	𐎶𐎹 14	𐎶𐎶𐎹 24	𐎶𐎶𐎶𐎹 34	𐎶𐎶𐎶𐎶𐎹 44	𐎶𐎶𐎶𐎶𐎶𐎹 54
𐎺 5	𐎶𐎺 15	𐎶𐎶𐎺 25	𐎶𐎶𐎶𐎺 35	𐎶𐎶𐎶𐎶𐎺 45	𐎶𐎶𐎶𐎶𐎶𐎺 55
𐎻 6	𐎶𐎻 16	𐎶𐎶𐎻 26	𐎶𐎶𐎶𐎻 36	𐎶𐎶𐎶𐎶𐎻 46	𐎶𐎶𐎶𐎶𐎶𐎻 56
𐎼 7	𐎶𐎼 17	𐎶𐎶𐎼 27	𐎶𐎶𐎶𐎼 37	𐎶𐎶𐎶𐎶𐎼 47	𐎶𐎶𐎶𐎶𐎶𐎼 57
𐎽 8	𐎶𐎽 18	𐎶𐎶𐎽 28	𐎶𐎶𐎶𐎽 38	𐎶𐎶𐎶𐎶𐎽 48	𐎶𐎶𐎶𐎶𐎶𐎽 58
𐎾 9	𐎶𐎾 19	𐎶𐎶𐎾 29	𐎶𐎶𐎶𐎾 39	𐎶𐎶𐎶𐎶𐎾 49	𐎶𐎶𐎶𐎶𐎶𐎾 59
𐎿 10	𐎿𐎿 20	𐎿𐎿𐎿 30	𐎿𐎿𐎿𐎿 40	𐎿𐎿𐎿𐎿𐎿 50	

Having thus outlined the essential 59 unique numbers required for the system to operate, the article goes on to outline its major deficiency. While it was a positional system, and for most practical uses an adequate system, without a place holder and a radix point indicator, it lacked a clear cut means of denoting precisely what position is implied by any single digit. As the Wikipedia article states:

The Babylonian system is credited as being the first known [positional numeral system](#), in which the value of a particular digit depends both on the digit itself and its position within the number. This was an extremely important development, because non-place-value systems require unique symbols to represent each power of a base (ten, one hundred, one thousand, and so forth), which can make calculations more difficult.

Only two symbols ( to count units and  to count tens) were used to notate the 59 non-zero [digits](#). These symbols and their values were combined to form a digit in a [sign-value notation](#) quite similar to that of [Roman numerals](#); for example, the combination  represented the digit for 23... A space was left to indicate a place without value, similar to the modern-day [zero](#). Babylonians later devised a sign to represent this empty place. They lacked a symbol to serve the function of [radix point](#), so **the place of the units had to be inferred from context** :  could have represented **23 or 23×60 or 23×60×60 or 23/60, etc.** (emphasis added)

We have highlighted the one critical statement in the brief Wikipedia article. If in the Babylonian system the scribe wanted to denote the decimal number 23 when counting sheep in a small herd, he would simply record the tally with the cuneiform sign . There would be no ambiguity since for obvious reasons the nearest alternatives, interpreting the number as representing 1,380 sheep (23 x 60), or worse still as 23/60th of a sheep, would be completely unacceptable. That same number when used to tally the number of troops in a small army would

more naturally represent 1,380 troops, not 23 and not 82,800 (23 x 60 x 60).
Context is everything in the Babylonian system.

Having said that, there are situations where, even though the context is known, it is unclear how that context should be interpreted. One of these situations relates to the reign lengths of the antediluvian and postdiluvian rulers on the Sumerian King List, some of whom, in Babylonian mythology, were regarded as demigods. We know the physical context. What we don't know for certain is how the ancients interpreted that context. For example, suppose that an archaic document survived the flood, or that a post-flood oral tradition was passed on to the early Babylonian descendants of Noah, claiming that a pre-flood "ruler" named Dumuzi governed the city of Badtibira for 𐎠 years, or that a post-flood ruler named Etana governed Kish for 𐎠𐎵 years. Though the context is reasonably clear (since both individuals are simply human "kings" governing a city) the interpretations of the two Babylonian numbers would be quite distinct. The Babylonians themselves would certainly not interpret those numbers in the given context as if they represented the decimal numbers 10 and 25 respectively, even though those values would closely approximate the reign lengths of human kings in the mid-2nd millennium context when Babylonian documents were being translated into Sumerian to create the SKL.

By the middle of the 2nd millennium BC both [Dumuzi](#) and [Etana](#) had long been mythologized and in both instances deified, incorporated as demi-gods into multiple Sumerian and Babylonian mythological tales, well known to the public at large, not simply to the scribes. And without doubt the Babylonian scribes were also privy to tales of the incredibly long reigns of the prediluvian "kings" and the early postdivulian occupants of Sumer and Akkad. The numbers 10 and 25 could not possibly be interpreted as units. In the case of Dumuzi, the demi-god par excellence, the number 𐎠 could not even be interpreted as the decimal number 600 (10 x 60). Mere mortals might reign that long, but not the god/man Dumuzi. So they determined that he must have lived for 36,000 years (10 x 60 x 60), the nearest other possible interpretation of the single digit. And so the Babylonian scribe recorded the reign of Dumuzi as 36,000 years in the Sumerian King List, employing the Sumerian numerical system where there is no ambiguity in the symbolic representation of numbers. *Alternatively, the biblical text would suggest that the number 600 years (1/60 the size of the Sumerian number) would have been a much more reasonable translation.* For Etana as well the number 𐎠𐎵

years on the Babylonian original must certainly be understood to represent something much larger than a mere 25 years, whether because he was already regarded as a demi-god, or because there existed a tradition that the post-flood occupants of Sumer and Akkad lived many hundreds of years (but not thousands). Thus the Babylonian scribe (or scribes) recorded Etana's reign length as 1,500 years (25×60) in at least one Sumerian translation, *again sixty times what is probably the correct decimal number*.

We have selected above one name (Dumuzi) from the prediluvian section of the King List and one name (Etana) from the postdiluvian section, and have explained in each case how a Babylonian base 60 number in a poorly articulated system could give rise to the Sumerian number on the King List, or alternatively to that same numbers reduced by a factor of 60. That process is not unique and could be repeated for every other name on the King List whose reign length is unusually high. In minutes we can take every number in column three of our Figure 8, determine what the Babylonian number will look like, and repeat our arguments.

Here endeth the lesson. We have been compelled to literally "dumb down the Sumerian numbers" because the ancient Babylonian scribes have figuratively "screwed them up" (pardon the play on words). The prediluvian numbers, corrected through division by 60, accurately reflect the lives of individuals living seven, eight or even nine hundred years. The postdiluvian numbers of all kings whose reign lengths are excessive, and in particular those whose reigns are recorded as multiples of 60, certainly including all the kings belonging to the first three dynasties of Kish, the first two dynasties of Erech (Uruk), and the singular dynasties of Awan, Hamasi, and Adab, will see their numbers reduced into more typical ranges by the same reduction process. When that is done Jacobsen's number reductions will not seem out of place. In fact they need to be reduced by a modest amount. The result will be to move the beginning of the timelines for Kish and Erech many years to the right in our Figure 7, leaving even more space between the beginnings of kingship in those two cities, and the biblical flood. And that would leave even more room to include the dynasty of 12 kings omitted from Jacobsen's timeline charts, providing all those king's reign lengths are reduced by a factor of 60, and providing that this dynasty of kings (if we can call it that) overlaps the other dynasties by a significant amount. And it should be possible to make these changes, all the while leaving in place the synchronisms on which Jacobsen depended for his construction of the timelines.

The biblical numbers depicted in our Figure 1 timelines are secure, at least partially sustained by the data on the Sumerian King List. In our next paper we will add the resounding testimony of science to our growing list of vindications of the biblical numbers. With the publication of this paper it is becoming increasingly certain that Adam was created in the year 4114 BC, give or take a few years, not millions of years ago as claimed by evolutionary scientists.

Appendix: An explanation of the Sumerian system of numbers employed on the Sumerian King List, demonstrating the fact that the system is not open to the misinterpretation which exists in the Babylonian positional value system.

This brief appendix is not quite ready for publication and should be added within the week. Meanwhile, warm regards are extended to all readers for a joyful Christmas and a healthy and prosperous New Year.