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Chronological Identifiers Based on Sumerian Etymological Roots of Book of Mormon Terms and Names

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Chapter 4
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A previously untapped source for establishing a chronology of Jaredite history is linguistic analysis. Since the Jaredites left Mesopotamia from a particular place at a particular time, their language should display signs of Sumerian language as it existed at the time of their departure. Thus, analyzing Jaredite names, words, and written characters and comparing them with the Sumerian language at different points in its development will establish the window of time in which the Jaredites left Sumer for the Americas. As Joseph Smith once said, "If we start right, it is easy to go right all the time; but if we start wrong we may go wrong, and it will be a hard matter to get right" (Smith 1844). Using linguistic correlations to establish when the Jaredites left the Old World will give us the correct starting point for a chronology of Jaredite history, enabling us to get our chronology off on the right track.

An analysis of the Sumerian etymological roots of all the Book of Mormon names and unknown words was recently completed by the current author (Grover 2017). Portions of the book discussed Sumerian root words that could be reliably determined and provided some definitive dates, reproduced here. Methodological premises used in that work include:

1. The original location of the Jaredites was somewhere in Mesopotamia (see the great towers and confounding of languages in Ether 1:3, 33). As stated above, in this research, Sumer is shown to be the area of origination.

2. The Nephites, after joining with the people of Mulek, had, at a minimum, a bilingual society (Omni 1:17–18). Zeniff said he was taught in "all the language of the Nephites" (Mosiah 9:1), indicating multiple languages were in use at the same time. That the Nephites were outnumbered by the people of Mulek (Mosiah 25:2–3) indicates the language of the people of Mulek was likely more dominant.

3. The fact that names from Jaredite times appear in the Book of Mormon after the demise of the Jaredites clearly indicates the incorporation of the Jaredite language into the Nephite language, likely principally through the people of Mulek, but also possibly through other local peoples among whom the Nephites found themselves, even from their first landing.

4. The Caractors Document indicates multiple levels of linguistic meaning in the original name glyphs in the Book of Mormon (Grover 2015). Most of the personal and place names in the Book of Mormon have at least three levels of etymological meaning, in Hebrew, Jaredite/Sumerian, and reformed Egyptian.

5. Many of the names in the Book of Mormon are metonymic, which means the names were created and given after the fact (or at least later in life) and are based on the exploits and characteristics of the individual or place. This concept for explaining Book of Mormon names is not a new one (Thomasson 1994).

6. While well-meaning researchers have tried to find Hebrew names in the Old World and place them in the Book of Mormon, little thought has been given to the fact that most of the Book of Mormon was written after the Lehites were 1,000 years removed from the Old World. In the case of Jaredites and their names,

their records were found and translated approximately 2,500 years after leaving the Old World, and another 500 years passed before they were abridged by Moroni$_2$. Consideration must be given to the Mesoamerican location and the significant passage of time; both factors potentially modify our understanding of the underlying syntax and language.

Since the language of the Jaredite interpreted names is proposed to be Sumerian-based, a brief synopsis of the Sumerian language is in order.

Sumerian Language

Sumerian is a peculiar language in that it is not only a dead language but also a language that was not likely spoken already in the period from which most Sumerian texts date. From 2500 to 1600 BC, Sumerian gradually changed from a spoken language to an exclusively literary language (Thomsen 1984). Sumer was one of the ancient civilizations and historical regions in southern Mesopotamia, which is modern-day southern Iraq (see figure 10).
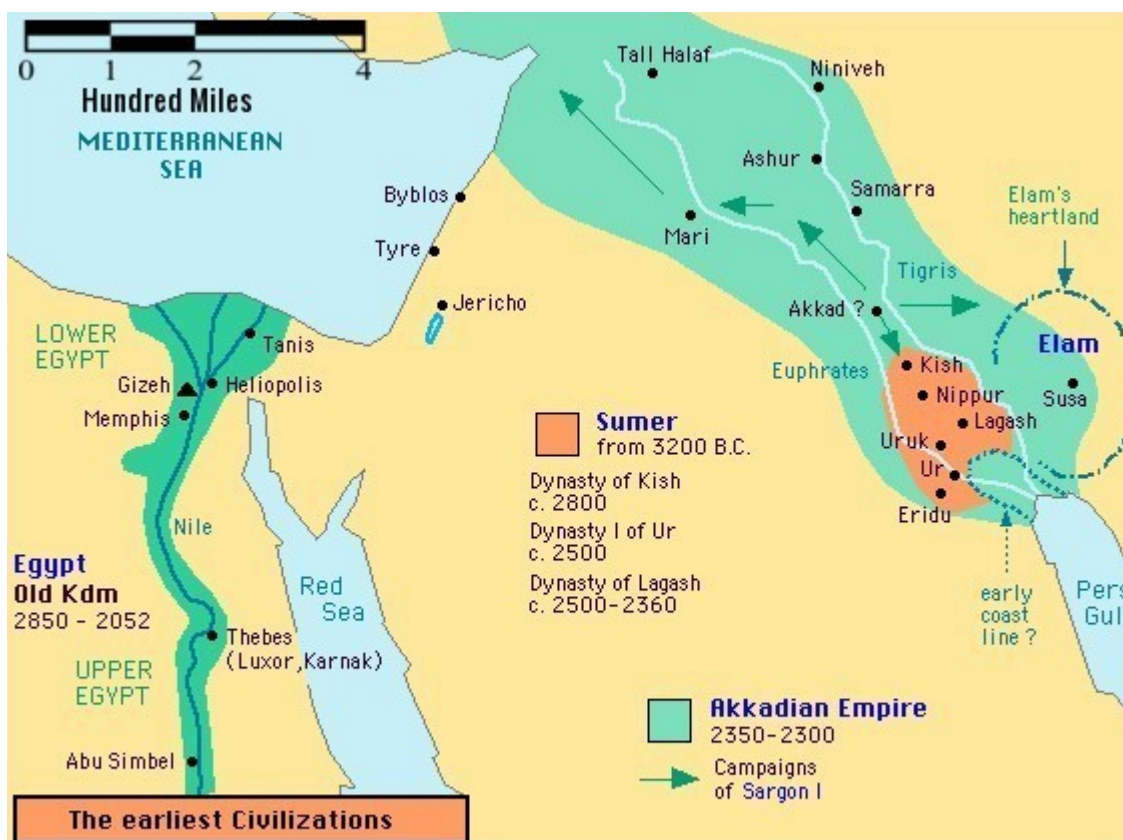

Figure 10. Map of ancient Sumer and Elam. (www.hyperhistory.com 2016)

It is not certain when the Sumerians had initial contact with the Akkadians, who were generally located to the northwest of Sumer, but it seems to have been as early as 3000 BC. It is likely that there was a long period of contact, at least in the boundary areas, although there are no written attestations until 2600 BC. Some 2600 BC Sumerian texts include Akkadian personal names, including the names of some of the scribes of the texts. A few loanwords also appeared at that time.

During the reign of Sargon (2334–2279 BC), the official language was principally Akkadian, with royal inscriptions, religious texts, and year dates being bilingual. Elsewhere, however, Sumerian was used only in Sumer proper, so it is surmised that the Sumerian language began to seriously vanish around this time. However, during the third dynasty of Ur (2112–2004 BC), after Sargon, the use of Sumerian increased in official documents and was almost exclusively

used in royal inscriptions, juridical and administrative documents, and correspondence, while the use of Sumerian as a spoken language was very limited.

During the Old Babylonian Period (2000–1600 BC), Sumerian is considered to have been a dead language, with Akkadian being the spoken language, though Sumerian was still used as an official and literary language. Sumerian may have been spoken by scholars and scientists. The death of a language is not a uniform or simple process, so there may have been pockets of Sumerian-speaking people, especially in the south.

Since Sumerian was a dead language at the time of the Akkadians, much of the knowledge of how Sumerian was actually pronounced must be gleaned from Old Babylonian period lexical texts in which the scribes took care to represent the full phonology of the Sumerian words. There are a few limitations to our understanding of Sumerian pronunciation, the first being that the lists represent the pronunciation of Sumerian as filtered through the Akkadian phonological system, and, second, the texts we have appear to be practice exercises as part of a scribal training process and so exhibit some errors (Smith 2007).

Structurally, Sumerian features a word structure called agglutination, which, by simplistically speaking, consists of "gluing" different morphemes (simple structures contained in a word) and word modifiers together to form a single, complex (often long) word (Cunningham 2013, 96). Another feature of Sumerian (and other languages) is compounding, or the combining of individual words to form a "compound word." In the case of many Book of Mormon names, construction is through compounding, since one does not contemplate a full sentence as a name. In compounding, different nouns/verbs/adjectives are placed together. For example, *green* and *house* can be compounded to become *greenhouse*.

In evaluating whether Sumerian is a candidate as a source language for Jaredite names, one must compare the phonetic sounds (letters) in Sumerian with known Jaredite names to see if the phonetics of each are compatible. Since there are probably some sounds in ancient Sumerian that are not precisely known, there may be a few defugalties. When looking at the transliteration of words in Sumerian, it must be recognized that the Romanized Sumerian dictionary (ePSD) used for comparison in this work does not include the English letters *c*, *f*, *j*, *o*, *q*, *v*, or *x*. Comparing Sumerian phonetics to definitively Jaredite names reveals that all of the Sumerian phonetic elements or letters (with the possible exception of *ĝ*) are found in the Jaredite names. In reverse, as in Sumerian, Jaredite names lack the *f*, *q*, and *x*. The Jaredite names have only one instance of *v*, which is in the name Levi, a clearly biblical name, which may have been the result of the translation of the Jaredite plates by Mosiah into the Nephite language, or may be a Nephite name assigned after the fact to this particular Jaredite king. Moroni$_2$ likely consulted the Mosiah translation to make his abridgement. The Jaredite names include *ph*, which does not necessarily equate to an *f* sound; the pronunciation could be a *p* sound followed by an *h* sound. The same may be true for the *th* that is also found in Jaredite names.

That leaves *j*, *o*, and *c* as the only Jaredite sounds or letters unaccounted for in the phonetics found in the ePSD Sumerian dictionary. Academics have accepted the fact that Sumerian transliteration dictionaries missed the *j* sound. As previously averred, modern knowledge of Sumerian phonology is inevitably flawed and incomplete because of the lack of native speakers, the transmission through the filter of Akkadian phonology, and the difficulties posed by the cuneiform script. As I. M. Diakonoff observes, "When we try to find out the morphophonological structure of the Sumerian language, we must constantly bear in mind that we are not dealing with a language directly but are reconstructing it from a very imperfect mnemonic writing system which had not been basically aimed at the rendering of morphophonemics" (Diakonoff 1976).

The existence of various other consonants has been hypothesized, including *j*, based on graphic alternations and loans. Diakonoff lists evidence for two *i* sounds, two *r* sounds, two *h* sounds, and two *g* sounds (excluding the velar nasal) and assumes a phonemic difference between consonants that are dropped word-finally (such as the *g* in zag

> za$_3$) and consonants that aren't (such as the *g* in lag). Other "hidden" consonant phonemes that have been suggested include semivowels such as /*j*/ and /*w*/ (www.wikipedia.org 2016). The *j* was lost in Sumerian at or before the Uruk III time period (2112–2004 BC) (Jagersma 2010, 54–55).

Some academics have also argued that a letter *o* phoneme might have existed, a fact concealed by the Akkadian transliteration, which does not distinguish it from the letter *u* (Michalowski 2008, 16). In collecting etymological possibilities from Sumerian in this work, to be thorough, both *a* and *u* will be considered when the letter *o* is present.

The letter *c* in Jaredite names seems to be equivalent to *k*, as far as expected pronunciation and word structure in English goes. A recent publication linking Sumerian to the Uralic language family identifies a phonetic *k* and a tonal *k'* for proto-Sumerian (ca. 4000–3000 BC) and so provides a reasonable explanation for the *k* and *c* that occur in Jaredite names (Parpola 2016, xxi). In collecting etymological possibilities from the ePSD Sumerian dictionary, *k* will be considered when the letter *c* is present.

In summary, the Jaredite names and Sumerian language appear to be phonetically compatible, so Sumerian, at least from the standpoint of similar sounds, is a good candidate as the source language of Jaredite names.

Attestation Timeframes

The dictionaries do not identify word attestation by exact dates; they use only archaeological or dynastic periods. Because there is not unanimity among academics as to the exact dating of these periods, for purposes of this work, what is called the Middle Chronology will be used, which is as follows:

Early Dynastic I: 2900–2700 BC
Early Dynastic II: 2750–2600 BC
Early Dynastic IIIa: 2600–2450 BC
Early Dynastic IIIb: 2500 –2350 BC
Old Akkadian: 2340–2200 BC
Lagash II: 2260–2023 BC
Ur III: 2112–2004 BC
Early Old Babylonian: 1950–1776 BC
Old Babylonian: 1950–1530 BC
Middle Babylonian: 1530–1000 BC

An "attestation" is the point in time and place where the word is found in some sort of text. Any attestation that currently is known to be the earliest or latest should not be assumed to be the earliest or latest that the word was ever used or spoken. In addition, the legible Sumerian cuneiform language that developed from the early proto-cuneiform, did so around 2600 BC, so attestations would not be expected prior to the Early Dynastic IIIa Period (2600 BC) simply because, other than the numbers and portions of the Sumerian metrological system, most of the proto-cuneiform has not been deciphered. With that in mind, the dates of attestation are still generally helpful in evaluating the timeframe of the Jaredites' departure.

Sumerian Writing

The first stages of Sumerian writing are found in Uruk and Gemdet Naṣr around and before 3000 BC. The writing was pictographic or ideographic (called proto-cuneiform). Sumerian writing was not always written in the order it had to be read. The ideographic writing system without phonetic signs for grammatical elements signifies that the identification of the language behind the written script is not apparent. It was considered a mnemonic language, using rebus principles, and functioned primarily as a memory aid. Even when using the maximum number of

phonetic symbols created for its signs, it remained a mnemonic system for which exact renderings of the pronunciation was not the goal:

> Sumerian writing never attempted to render the language phonetically correct, exactly as it was spoken. The very first stages of writing as attested in Uruk and Ğemdet Naṣr (about 3000 BC) were pictographic or ideographic in nature, thus rendering only the most important words like the catchwords of an account or a literary text. . . . The ideographic writing system without phonetic signs for grammatical elements means that the identification of the language behind the written records is not immediately evident. (Thomsen 1984, 22)

Thomsen (1984) has indicated that reconstructing the complete spoken Sumerian is probably impossible (24). Thus texts cannot be taken at face value and read as a detailed grammatical description of the language. Before the death of the language, the Sumerian script was mainly a memory aid, rendering the most important words in an ideographic way, and leaving out many things that were not thought absolutely necessary for the understanding of the text. As a result, knowledge of Old Sumerian grammar is limited. Old Sumerian dates from the early texts in 2600 BC to the end of the Sargonic dynasty in 2200 BC.

Unknown Words in the Book of Mormon

Paul Y. Hoskisson has written that "the greatest challenge for persons interested in the meanings of proper names in the Book of Mormon has to do with those names whose meanings we already know" (Hoskisson 2002). In addition to words where a meaning is specifically given, there are other words for which no meaning is provided, but some general understanding of the meaning can be derived through context. The following words in the Book of Mormon are not personal or place names and were not translated, but rather appear to have been transliterated: *amnor*, *antion*, *cumoms*, *cureloms*, *Deseret*, *ezrum* (*ezrom*), *Gazelem*, *leah*, *Liahona*, *limnah*, *neas*, *onti*, *Rameumptom*, *senine*, *senum*, *seon*, *Sheum*, *shiblon*, *shilum* (*shiblum)*, *shum*, and *Ziff*. *Shiblum* has been shown to be a spelling error of *shilum* at the time the printing of the 1830 edition of the Book of Mormon.

Two of the words, *cureloms* and *cumoms*, specifically pertain to the Jaredites. They are identified as animals: "cureloms and cumoms; all of which were useful unto man, and more especially the elephants and cureloms and cumoms" (Ether 9:16–19). A previous investigation of *Ziff* (another untranslated and presumably transliterated word) determined that the word had an ancient meaning of a specialized metal, and for the time period of the target language of the translation of the Book of Mormon, there was no available English word for that specialized metal (Grover 2016). The same criteria would be applicable for evaluation of *cureloms* and *cumoms*.

In the case of *cureloms* and *cumoms*, it is not certain whether the transliterated words were generated from Hebrew, from the language of the Jaredites, or from some other extant Mesoamerican language. The original Jaredite plates were first interpreted by Mosiah$_2$ and were then abridged by Moroni$_2$, so the words might have a Hebraic genesis. If the word does not have a Hebrew etymology, however, then it can be assumed that the Nephites, at the time of Mosiah$_2$, probably did not have a word for the animal, so it was just transliterated. In any event, exploring the possibility of a Mesopotamian language derivation is useful in determining whether any chronological information can be derived from it.

Curelom

A search for *curelom* in Sumerian presented a fairly straightforward definitional compound word etymology. It is assumed that the "s" on the end of both *cureloms* and *cumoms* is indicative of an English plural and was not part of the original transliterated name. The word *kur* or *kurra,* meaning "mountain(s)," is attested to in Sumerian during the Early Dynastic IIIa, Early Dynastic IIIb, Old Akkadian, Lagash II, Ur III, Early Old Babylonian, and Old Babylonian Periods, indicating the presence of this word from 2600 to 1600 BC (Pennsylvania Sumerian Dictionary 2006). The word *e$_3$-li-um* (a form of the word *e*), meaning "sheep" or "a description of ewes or lambs" is attested to in the

Early Dynastic IIIb Period, indicating the presence of this word from before or during 2500 to 2230 BC (Pennsylvania Sumerian Dictionary 2006). There is some disagreement over the chronological dates for these various periods, so the longest possible chronology was considered for each element of the word. A similar word, *kura*, is also found in Sumerian and means "a designation of looms," and is thus indicative of an animal that provides the source material for weaving (Pennsylvania Sumerian Dictionary 2006).

One issue involving the construction of this word is that it is not found as an attested compound in the Sumerian script. The typical construction of this word in Sumerian script (and also in Egyptian, Akkadian, and other Semitic languages) would place the adjective (*kur*) behind the noun, not in front of the noun. However, as has been discussed, the syntax and grammar of early spoken Sumerian cannot be accurately constructed from the Sumerian logograms. In addition, the translation of the Caractors Document (Grover 2015) indicates that one of the changes made in the reformed Egyptian was that the adjectives were moved in front of the nouns. Mormon indicated that modifications to the Egyptian syntax was to be expected:

> Mormon 9:32–33
>
> 32 And now, behold, we have written this record according to our knowledge, in the characters which are called among us the reformed Egyptian, being handed down and altered by us, according to our manner of speech.
> 33 And if our plates had been sufficiently large we should have written in Hebrew; but the Hebrew hath been altered by us also; and if we could have written in Hebrew, behold, ye would have had no imperfection in our record.

This method of compounding or agglutinating different words to make a name was used in Mesoamerica. For example, the typical way to form an Aztec place name is to combine nouns, typically by dropping a portion of one or more of the nouns, and also sometimes adding a place particle at the end. Book of Mormon place names do not appear to have a place particle included, but this may be an artifact of translation where the particle was replaced by the English form or word such as "city" or "land." For example, the Aztec place name Acamilixtlahuacan is translated as "where are level fields of rushes." The name is a compound of *aca*(*tl*) (reed); *mil*(*li*) (field); *ixtlahua*(*ca*) (level expanse); and *can* (place particle). The letters in parentheses are the letters that are dropped from each word when it is compounded (Starr 1920). An example of an Aztec place name that doesn't have a definitive place particle is Teocalhueyac, translated as "in the high or upreared temple," consisting of *teocal* (*li*) (temple) and *hueyac* (high, prolonged). Personal names in Nahuatl (the language of the Aztecs) are typically compound names as well. For example, the Nahuatl name Kozkakuahtli was created from *kozka*(*tl*) (necklace) and *kuauhtli* (eagle).

Many Maya names are compound names as well. For example, the Maya name Sachihiro is made of *'sachi*, which means "happiness," and *'hiro*, which means "vast." Zoque place names are typically compound names, and some also have place suffixes like the Aztec (Wonderly 1946). The Mixe also have compound names, such Naaxwiiñ, the name of a Mixe god, which is made of *naax* (earth) and *wiiñ* (face, surface).

Interestingly, the two languages whose proto-language was most likely spoken among the Olmec are Mixe and Zoque (Campbell et al. 1976). Both of these languages generally place the adjective (or adjective equivalent) in front of the noun (Faarlund 2012; Romero-Mendez 2008). The Nahuatl and the Maya languages exhibit this same feature. This may indicate that the word *curelom* was constructed by the Jaredite record-keepers sometime after their arrival and linguistic assimilation into the existing Mesoamerican population. According to the calculated chronology, the word *curelom* (and *cumom*) appears at the time of Emer, approximately 300 years after the Jaredites' arrival.

Strictly speaking, based on the etymology of word *curelom*, meaning "mountain sheep," the departure of the Jaredites would have been between or before 2500 BC and 2230 BC. There is of course some give and take for that timeframe, since the data is based on what has been found archaeologically—there may be some earlier or later examples of the word that have not yet been unearthed.

Other Sumerian etymological units found within the word *curelom* are:

u: sheep or ewe	2600–1000 BC
u_8-*ra* (form of *u*)	1950–1530 BC
ur: harness	2600–2450 BC, 1950–1530 BC
ur: to roam around	1950–1530 BC
re: that	2112–2004 BC, 1950–1530 BC
lah: to full (cloth, wool)	unknown

Following the identification of etymological units and analysis, a constructed compound word is proposed that is equivalent or close to the Book of Mormon name or term. Some letters or sounds may be shared more than twice, for example the "u" in "Kur-e_3-li-um" is actually shared by the words *kur*, *u*, *ur* (harness), and *ur* (to roam around). This superposition of multiple words phonetically allows language to pack a lot of meaning into a few letters. This concept appears in the reformed Egyptian glyphs and will be discussed later. In this book, when listing proposed compound words, bold font indicates potentially overlapping letters and/or words. Letters that are dropped when forming the compound appear inside parentheses. Compound construction presumes the name is metonymic, and so only etymological units consistent with the meaning in the Book of Mormon context are considered. This does not mean I have represented all of the potential constructs from the Sumerian etymological units, just the one(s) that are closest to the Book of Mormon spellings and meanings. If one assumes that a name is not metonymic, then it is probably possible to construct nearly all Book of Mormon names without dropping letters.

Constructed Compound Word: K**ur**-e_3-li-um

Cumom

Like *curelom*, *cumom* is also an animal whose name is a compound word in Sumerian, with the adjective preceding the noun. The first part of the word, KU, means "plough" or "plow" and is attested to in Sumerian during the Early Dynastic IIIb, Ur III, Early Old Babylonian, and Old Babylonian Periods (2500–2350 BC, 2112–2004 BC, 1950–1600 BC) (Pennsylvania Sumerian Dictionary 2006). When transcribing Sumerian syllabic signs into English, archaeologists use subscripts to mark different signs that have the same phonetic value. So for example, *gu* is "flax," gu_2 is "neck," and gu_3 is "voice." When transcribing logograms, capital letters are used, such as MUSHEN for "bird" or, as just mentioned, KU for "plow." The roots **ku-/*k(u)-* are also found in Indo-European and Semitic languages.

The second part of the word *cumom* is the Sumerian word u_2-*ma-am* (form of the word *umamu*), meaning "beasts," which is attested to in the Old Babylonian Period (1950–1530 BC). While not a perfect match chronologically, variants of the word have attestations dating potentially back to 2120 BC (Pennsylvania Sumerian Dictionary 2006).

Based on the etymology of *cumom*, meaning "plow beast," the departure of the Jaredites would have been between or before 2500 BC and 2230 BC. Like the timeframe for *curelom*, there is some give and take for this dating.

Other Sumerian etymological units found within the word *cumom* are:

u: sheep or ewe	2600–1000 BC
u_8-am_3 (form of *u*)	1950–1530 BC
mah: milk producing (of cows)	2600–1530 BC

Constructed Compound Word: K**U**-ma-am

Other Jaredite Words Found in Sumerian

For the remainder of this section, the Sumerian dictionary consulted is the online Pennsylvania Sumerian Dictionary, typically referred to as the ePSD. For Semitic and Egyptian references, the Book of Mormon Onomasticon and the online Abarim Publications website for Hebrew biblical names are the primary sources consulted. When various forms of Sumerian words are noted, no analysis is given of the rules involving Sumerian prefixes or suffixes, so further research and analysis are needed.

Gazelem

> Alma 37:23
>
> And the Lord said: I will prepare unto my servant Gazelem, a stone, which shall shine forth in darkness unto light, that I may discover unto my people who serve me, that I may discover unto them the works of their brethren, yea, their secret works, their works of darkness, and their wickedness and abominations.

The punctuation seems to indicate that *Gazelem* is the name of the stone, not the servant, but this interpretation is not universal. However, since punctuation was added to the Book of Mormon later, it is possible that the term refers to the servant instead of the stone, or perhaps to both.

The actual identification of *Gazelem* is not certain, but the most likely candidates are the seer stones used by Mosiah$_2$ and Joseph Smith. The Jaredites are the people whose secret works *Gazelem* brings to light, and both Mosiah$_2$ and Joseph Smith are supposed to have used seer stones to translate the Jaredite record.

The Book of Mormon Onomasticon (2016) offers potential Hebrew etymologies for *Gazelem* that appear to be promising but does not explore any Sumerian possibilities. There is a fairly direct Sumerian etymology for the word. When considering the timeframes listed for the attestations of each word, one should recognize that each word was probably used earlier than the time period listed. As discussed previously, the Book of Mormon words with Sumerian etymology may have some variations in order and syntax based on the New World setting. In addition, it became apparent in the translation of the Caractors Document that all of the personal and place names contain multiple meanings (sometimes in the complete name and sometimes in a portion of the glyphs). That fact should be kept in mind when approaching any search for meaning in Book of Mormon names.

The multiple Sumerian words from which *Gazelem* can be derived are:

ĝizzal: wisdom, understanding, hearing	2600–2450 BC, 1950 BC–1530 BC
lum: to shine	2500–2004 BC, 1950–1530 BC
za'am: piece of stone	unknown
zal: to shine	1950 –1530 BC
le'um: writing board	unknown
za: gem	2340–2023 BC, 1950–1530 BC

> Constructed Compound Word: Ĝiz**zal**um

It would appear that the definition of this word would not include that of "servant," favoring the punctuation that implies the name *Gazelem* refers to the stone. However, it should be noted that the word for "priest" in Sumerian is *lumah*, which is similar to the last syllable of *Ĝiz**zal**um*.

Rameumptom

In the first century BC, Alma₂ and a group of missionary companions visited the Zoramites, who were practicing an apostate form of religion that involved an elevated place in the center of their synagogue where one person could recite a prayer. This elevated place was referred to as *Rameumptom*, which was interpreted as "the holy stand."

> Alma 31:
>
> 12 Now, when they had come into the land, behold, to their astonishment they found that the Zoramites had built synagogues, and that they did gather themselves together on one day of the week, which day they did call the day of the Lord; and they did worship after a manner which Alma and his brethren had never beheld;
>
> 13 For they had a place built up in the center of their synagogue, a place for standing, which was high above the head; and the top thereof would only admit one person.
>
> 14 Therefore, whosoever desired to worship must go forth and stand upon the top thereof, and stretch forth his hands towards heaven, and cry with a loud voice, saying:
>
> 15 Holy, holy God; we believe that thou art God, and we believe that thou art holy, and that thou wast a spirit, and that thou art a spirit, and that thou wilt be a spirit forever.
>
> 16 Holy God, we believe that thou hast separated us from our brethren; and we do not believe in the tradition of our brethren, which was handed down to them by the childishness of their fathers; but we believe that thou hast elected us to be thy holy children; and also thou hast made it known unto us that there shall be no Christ.
>
> 17 But thou art the same yesterday, today, and forever; and thou hast elected us that we shall be saved, whilst all around us are elected to be cast by thy wrath down to hell; for the which holiness, O God, we thank thee; and we also thank thee that thou hast elected us, that we may not be led away after the foolish traditions of our brethren, which doth bind them down to a belief of Christ, which doth lead their hearts to wander far from thee, our God.
>
> 18 And again we thank thee, O God, that we are a chosen and a holy people. Amen.
>
> 19 Now it came to pass that after Alma and his brethren and his sons had heard these prayers, they were astonished beyond all measure.
>
> 20 For behold, every man did go forth and offer up these same prayers.
>
> 21 Now the place was called by them Rameumptom, which, being interpreted, is the holy stand.
>
> 22 Now, from this stand they did offer up, every man, the selfsame prayer unto God, thanking their God that they were chosen of him, and that he did not lead them away after the tradition of their brethren, and that their hearts were not stolen away to believe in things to come, which they knew nothing about.

The Book of Mormon Onomasticon provides a reasonable Hebraic etymology for *Rameumptom*, but a Sumerian etymology is also apparent:

ra: to be pure	unknown
me: Being, divine properties enabling cosmic activity; office; (cultic) ordinance	2500–2023 BC, 1950–1530 BC
e: temple; room	2600–2023 BC, 1950–1776 BC
e: perfect plural and imperfect stem of *dug* [to speak]	2500–1530 BC
u: to voice, cry	2340–2200 BC
me'am: term of endearment, dear	unknown
mi-am (form of *mi*): to praise	2500–2350 BC

ama: cell or chamber	2500–2350 BC, 2112–2004 BC
pu: lower course, footing; depth	2500–2350 BC, 2112–1000 BC
pu₂-ta (form of *pu*)	1530–1000 BC
tam: to be pure, to be clean	2340–2200 BC, 1950–1530 BC
tum: suitable, acceptable	2500–2004 BC, 1950 –1530 BC

Constructed Compound Word (among other possibilities): Ram**e**amaputum

The Nephite Metrology (Measuring) System

The Book of Mormon identifies how values of gold and silver were compared against the "measure of barley, and also for a measure of every kind of grain."

Alma 11:3–19

3 And the judge received for his wages according to his time—a senine of gold for a day, or a senum of silver, which is equal to a senine of gold; and this is according to the law which was given.

4 Now these are the names of the different pieces of their gold, and of their silver, according to their value. And the names are given by the Nephites, for they did not reckon after the manner of the Jews who were at Jerusalem; neither did they measure after the manner of the Jews; but they altered their reckoning and their measure, according to the minds and the circumstances of the people, in every generation, until the reign of the judges, they having been established by king Mosiah.

5 Now the reckoning is thus—a senine of gold, a seon of gold, a shum of gold, and a limnah of gold.

6 A senum of silver, an amnor of silver, an ezrom of silver, and an onti of silver.

7 A senum of silver was equal to a senine of gold, and either for a measure of barley, and also for a measure of every kind of grain.

8 Now the amount of a seon of gold was twice the value of a senine.

9 And a shum of gold was twice the value of a seon.

10 And a limnah of gold was the value of them all.

11 And an amnor of silver was as great as two senums.

12 And an ezrom of silver was as great as four senums.

13 And an onti was as great as them all.

14 Now this is the value of the lesser numbers of their reckoning—

15 A shiblon is half of a senum; therefore, a shiblon for half a measure of barley.

16 And a shiblum is a half of a shiblon.

17 And a leah is the half of a shiblum.

18 Now this is their number, according to their reckoning.

19 Now an antion of gold is equal to three shiblons.

A delineation of silver and gold values in terms of relative standard barley measures, as described in the above scripture, appears in the following table:

Table 2. Nephite Metrological Comparisons

Measures of Barley	Amount of Gold	Amount of Silver
7	limnah	onti
4	shum	ezrum
2	seon	amnor
1.5	antion	
1	senine	senum
.5		shiblon
.25		shilum
.125		leah

So far, all past research, as represented in the Book of Mormon Onomasticon, has not successfully identified etymological sources for these terms of measurement. Sumerian provides direct etymology for most of the terms and reasonable etymologies for all the terms. Sorenson (2013) suggested that the Akkadian or Sumerian morpheme *she* (which signifies "barley" or "grain") was a possible etymological source, given the fact that the morpheme has a secondary meaning of "unit of measure" (305).

By way of note, the small number subscripts on the Sumerian words do not change the pronunciation. Some different Sumerian glyphs carry the same pronunciation, and the number designates which is the underlying glyph. In addition, the phonetic *š* makes an English *sh* sound. The spelling of *ezrum* and *shiblon* are taken from Skousen's analysis of the Original and Printer's Manuscript of the Book of Mormon (Skousen 2009). The Sumerian etymologies of the Nephite measurement system are as follows:

limnah

la : to weigh	2500–2004 BC, 1950 –1530 BC
imin: seven	2500–2350 BC, 2260–2004 BC, 1950–1530 BC
imin-na (form of *imin)*	2112–2004 BC

As can be seen from the above table, a *limnah* is equivalent to seven measures of grain, an excellent match. Other Sumerian etymological units related to measurement found in the word *limnah* are:

na: stone weight	2500–1530 BC
na_4-*a* (form of *na*)	1950–1530 BC
i: container for oil	2600–1530 BC
i_3-am_3 (form of *i*)	2112–2004 BC

Constructed Compound Word: l(a)im**in**-**na**

shum

še: barley, grain; a unit weight/volume/length/area	2500–2004 BC, 1950 –1000 BC
še-am_3 (form of *še*)	2112–2004 BC, 1950–1530 BC
še-me (form of *še*)	2112–2004 BC

Other Sumerian etymological units related to measurement found in the word *shum* are:

šu: basket	2500–2350 BC
šu: a stone or shell (pestle)	1950–1530 BC
šuhum: a stone or shell	1950–1530 BC
u: grain	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u_2-*am*$_3$, u_2-*um* (forms of *u*)	1950–1530 BC

Constructed Compound Word: **š(e)**-(*a*)**um**$_3$ (the sound of *š* is "sh" in English)

seon

še: barley, grain; a unit weight/volume/length/area	2500–2004 BC, 1950–1000 BC
še-ni (form of *še*)	2340–2200 BC, 2112–2004 BC

Other Sumerian etymological units related to measurement found in the word *seon* are:

e: barley?	1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e_3-*a-ni* (form of *e*)	1950–1530 BC
e: chaff	2500–1530 BC
e_3-*ni* (form of *e*)	2112–2004 BC
u: grain	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u_2-*ni*, u_2-*ne*, u_2-*na* (forms of *u*)	2340–2200/1950–1530 BC, 2112–2004 BC, 1950–1530 BC
un: (to be) high	1950–1530 BC

Constructed Compound Word: ***še*-o**n

antion

ana: as much as; equivalent to (mathematically)	2500–2200 BC, 2112–2004 BC, 1950–1530 BC
te-am$_3$ *ta-am*$_3$, *ta, te, na*$_2$ (forms of *ana*)	1950–1530 BC

Other Sumerian etymological units related to measurement found in the word *antion* are:

ana: upper	2600–2450/1950–1530 BC
anta: upper	2600–2450/1950–1530 BC
u: grain	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u_2-*ni*, u_2-*ne*, u_2-*na* (forms of *u*)	2340–2200/1950–1530 BC, 2112–2004 BC, 1950–1530 BC
un: (to be) high	1950–1530 BC
i: container for oil	2600–1530 BC
i_3-*ni*, *NI* (form of *i*)	1950–1530 BC

na: stone weight	2500–1530 BC
na₄-a (form of *na*)	1950–1530 BC

Constructed Compound Word: ***ant(a)ion*** (The unit "o" can be represented as either "a" or "u.")

senine

še: barley, grain; a unit weight/volume/length/area	2500–2004 BC, 1950–1000 BC
še-ni (form of *še*)	2340–2200 BC, 2112–2004 BC
NE: designation of silver	2500–2350 BC, 2112–2004 BC
NE-NE: designation of silver	2500–2350 BC, 2112–2004 BC

Other Sumerian etymological units related to measurement found in the word *senine* are:

e: barley?	1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e₃-a-ni (form of *e*)	1950–1530 BC
e: chaff	2500–1530 BC
e₃-ni (form of *e*)	2112–2004 BC
i: container for oil	2600–1530 BC
i₃-ni, NI (form of *i*)	1950–1530 BC

Constructed Compound Word: ***še-niNE***

onti

anta: upper	2600–2450 BC, 1950–1530 BC
unta: to be high	1950–1530 BC

The *onti* was described as being "as great as them all" (Alma 11:13).

Other Sumerian etymological units related to measurement found in the word *onti* are:

u: grain	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u₂-ni, u₂-ne, u₂-na (forms of *u*)	2340–2200/1950–1530 BC, 2112–2004 BC, 1950–1530 BC
i: container for oil	2600–1530 BC
i₃-ni, NI (form of *i*)	1950–1530 BC

Constructed Compound Word: ***ont(a)i*** (The unit "o" can be represented as either "a" or "u.")

ezrum

eš rah: to measure	1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e₃-zu (form of *e*)	1950–1530 BC

rum: perfect, ideal	2112–2004/1950–1530 BC
u: grain	unknown

Other Sumerian etymological units related to measurement found in the word *ezrum* are:

e: barley?	1950–1530 BC
e: chaff	2500–1530 BC
e_3-*a-am*$_6$, e_3-*a-am*$_3$, e_3-*am*$_3$ (forms of *e*)	2500–2350 BC, 2340–2200/2112–2004 BC, 2340–2200 BC
zar: sheaf (of barley); stack of sheaves	2500–2350/2112–2004 BC
zar-ra (form of *zar*)	1950–1530 BC
u: bread, loaf; food; grass, herb	2500–1530 BC
u_2-*um*, u_2-*am*$_3$, u_2-*mu* (forms of *u*)	1950–1530 BC, 2112–2004 BC

> Constructed Compound Word: **e_3-z(*u*)r*um***

amnor

ama: cell; chamber	2500–2350 BC, 2112–2004 BC
a-min-ni (form of *ama*)	2112–2004 BC
mana: unit of weight	2600–2004 BC, 1950–1530 BC
na: stone; stone weight	2500–1530 BC
u: grain	unknown
ur: that, this same; one; corresponding (to one another); like (one another)	2260–1530 BC

Other Sumerian etymological units related to measurement found in the word *amnor* are:

na: pestle; a stone	1950–1530 BC
nir: valuable stone	2112–2004 BC, 1950–1530 BC
nu: (to be) not, no; without, un-	2500–1530 BC
nu-ur$_2$, *a-ma-nu* (forms of *nu*)	2112–2004 BC
u: bread, loaf; food; grass, herb	2500–1530 BC
u_2-*ra* (form of *u*)	2112–2004 BC
ur: (to be) abundant	1950–1530 BC

> Constructed Compound Word: ***am(a)n(a)or*** (The unit "o" can be represented as "a" or "u.")

senum

šenumun: seed	2500–2200 BC, 2112–2004 BC, 1950–1530 BC
še: barley; grain; a unit weight/volume/length/area	2500–2004 BC, 1950–1000 BC
[še]-nim (form of *še*)	1950–1530 BC
še-ni (form of *še*)	2340–2200 BC, 2112–2004 BC
še-am$_6$ (form of *še*)	2112–2004 BC, 1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e_3-*a-ni* (form of *e*)	1950–1530 BC
u : grain	unknown

Other Sumerian etymological units related to measurement found in the word *senum* are:

e: barley?	1950–1530 BC
e: chaff	2500–1530 BC
e₃-ni (form of *e*)	2112–2004 BC
u: bread, loaf; food; grass, herb	2500–1530 BC
u₂-um, u₂-am₃, u₂-mu (forms of *u*)	1950–1530 BC, 2112–2004 BC
nu: (to be) not, no; without, un-	2500–1530 BC
nu-ma (form of *nu*)	2340–2200 BC

       Constructed Compound Word: **še**n**u**m(un)

shiblon

še: barley; grain; a unit weight/volume/length/area	2500–2004 BC, 1950–1000 BC
še-bi-am₃ (form of *še*)	2112–2004 BC
še-ba-am₃ (form of *šeba*) grain ration	2340–2200 BC
ib: middle	2340–2200/2112–1530 BC
iba: ration	1950–1530 BC
ba: to divide into shares, share, halve; to allot	2500–1530 BC
i₃-ba, ib₂-ba (forms of *ba*)	2500–2200/2112–1530 BC, 2112–1530 BC
ba: half; thirty	1950–1530 BC
bala: conversion (math.)	2600–1530 BC
bal, šu-bal, i₃-bal, u₃-bal-e, bal-a-na, i₃-bal-la, bala-a-na, bala-a-ni, bil₂-a, i₃-bal-a, ib₂-bal-a (forms of *bala*)	2600–1530 BC
bala: wastage (in processing grain)	unknown
la: to supervise, check; to weigh, weigh (out), pay; to hang, balance, suspend, be suspended; to winnow (grain)	
la₂-e, bi₂-la₂, ib₂-la, i-ib₂-la₂, la₂-a-na, ba-la₂-a, la₂-a-ni (forms of *la*)	2600–1530 BC

As can be seen in table 2 above, a *shiblon* is equal to half a measure, so the Sumerian etymology of *ib* (middle), *iba* (ration), and *ba* (half) is exactly correct.

Other Sumerian etymological units related to measurement found in the word *shiblon* are:

i: container for oil	2600–1530 BC
i₃-bi, i₃-be₆ (forms of *i*)	2500–1530 BC, 2340–2200 BC
lu: (to be) abundant	2600–1530 BC

       Constructed Compound Word: *š(e)**ibalo**-n(i)* (The unit "o" can be represented as "a" or "u.")

shilum

še: barley, grain	2500–2004 BC, 1950–1000 BC
sila: a unit of capacity; a vessel	2600–1530 BC
sila₃-um (form of *sila*)	2112–2004 BC

sila$_3$-am$_3$ (form of *sila*)	2112–2004 BC, 1950–1530 BC
u: grain	unknown

Other Sumerian etymological units related to measurement found in the word *shilum* are:

i: container for oil	2600–1530 BC
il: a basket	unknown
il: to raise, carry	2500–1530 BC
il$_2$-la-am$_3$, il$_2$-am$_6$, il$_2$-am$_3$ (forms of *il*)	1950–1530 BC, 2500–2350 BC, 2112–2004 BC
lu: (to be) abundant	2260–1530 BC
lum: a small drinking vessel	1950–1530 BC
le'um: writing board	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u$_2$-um, u$_2$-am$_3$, u$_2$-mu (forms of *u*)	unknown

Constructed Compound Word: *š(e)(s)**il**(a)**um***

leah

la: to weigh, weigh (out)	2600–1530 BC
la$_2$-a (form of *la*)	2500–2200 BC, 2112–2004 BC, 1950–1530 BC
la$_2$-a-e, la$_2$-e (forms of *la*)	1950–1530 BC
e: barley?	1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e$_3$-a-ni (form of *e*)	1950–1530 BC

Other Sumerian etymological units related to measurement found in the word *leah* are:

le'um: writing board	unknown
e: chaff	2500–1530 BC
e$_3$-a (form of *e*)	1950–1530 BC
ea: a qualification of bitumen	1950–1530 BC
ah: (to be) dried (out), dry; to dry	2500–1530 BC

Constructed Compound Word: *l(a)**eah***

As is apparent, this metrological system is directly derived from one of the Sumerian metrological systems. Interestingly, the actual measurement value for those Nephite measurements beginning with "sh" or "se" do not overlap in value between gold and silver except for *senine* and *senum*, with those being "equal." That is consistent with the presence of a continuous Sumerian grain system of measurement. It is important to note the particular terminology utilized in the description. A "reckoning" refers to each of the individual measurements (gold, silver, and barley). The relationship of the individually measured amounts is only given internal to each system. The value tie between each of the three systems is set at the *senum-senine* measure of barley. The value is reiterated in the smaller amounts with the *antion-shiblon*-half measure of barley, which clarifies the relationship of the lower amounts of silver, where no lower gold amounts exist.

At this point, it is important to highlight a portion of the above-mentioned scripture:

> . . . for they did not reckon after the manner of the Jews who were at Jerusalem; neither did they measure after the manner of the Jews; but they altered their reckoning and their measure, according to the minds and the circumstances of the people, in every generation, until the reign of the judges, they having been established by king Mosiah.

As the scripture indicates, the system was altered through the generations by the "circumstances of the people, in every generation." The Nephites combined with the people of Mulek in 198 BC, with the reign of the judges commencing in approximately 89 BC, so there was at least a couple of generations of contact and mixing of the Nephites with a people that had direct contact with the end of the Jaredite era. It is possible that other Mesoamerican groups like the Maya incorporated Olmec/Jaredite elements into their measurement systems as well. When king Mosiah$_2$ apparently standardized the existing practices, the system exhibited both Hebraic and Jaredite/Sumerian elements.

Summary of Sumerian Grain-Measurement System and Other Numerical Systems

Approximately 1,200 different signs and sign variants have been isolated in the Sumerian archaic proto-cuneiform texts. Approximately 60 of them have been identified as numeric signs (See figure 11). The Sumerians had a complex assortment of incompatible archaic number systems, and each city had its own local way of writing numerals. Around 3200 BC, or slightly before, in the city of Uruk, there were more than 15 different numeric systems (See figure 12). In this city, there were separate number systems for counting discrete objects (such as animals, tools, and containers), cheese and grain products, volumes of grain (including fractions), beer ingredients, weights, land areas, and time and calendar units. Furthermore, these systems changed over time; for instance, numbers for counting volumes of grain changed when the size of the baskets carrying the grain changed.

The state adjacent to Sumer, Elam, also had a system of glyphs. Although most of the Elamite glyphs are different, the sequence of basic signs in the proto-Elamite numerical notations corresponds to that of the Sumerian proto-cuneiform notations (Damerow 1989, 21).

The actual Sumerian grain volume unit measurement has not yet been determined (meaning we don't know how many cubic inches a grain "measure" was). All that is known is the ratio between the different units in the system, which is all we really know about the Nephite gold/silver system as well. As has been discussed, the Nephite gold/silver system, implemented by Mosiah, is consistent with the Israelite weight system ratios.

Since the Nephite measuring system is close to 3,000 years removed from the Uruk system, one would not expect complete similarity. Also, Mormon indicated that the system had been "altered" even during Nephite times. The ratios in the Nephite measuring system do not appear to be consistent with any of the Uruk metrological systems. Perhaps there are a few ratios consistent with EN System E shown in figure 12. Alma 11:3 indicates that the names *senine* and *senum* for the gold/silver units were given by the Nephites; we don't know for sure who named the other units. At this point, it is clear that the Nephite measuring practice is consistent with the concept of having different metrological systems for each type of good or material and so is consistent with the Sumerian-Uruk archaic system in that respect. The Nephites used Sumerian/Jaredite names, with the meaning of some of the names containing descriptions consistent to the ratios. The system is also apparently derived, with some consistency, with Hebraic practice and Jaredite names. The change in "reckoning" and "measure" may also indicate a move from measurement of weight to one of volume.
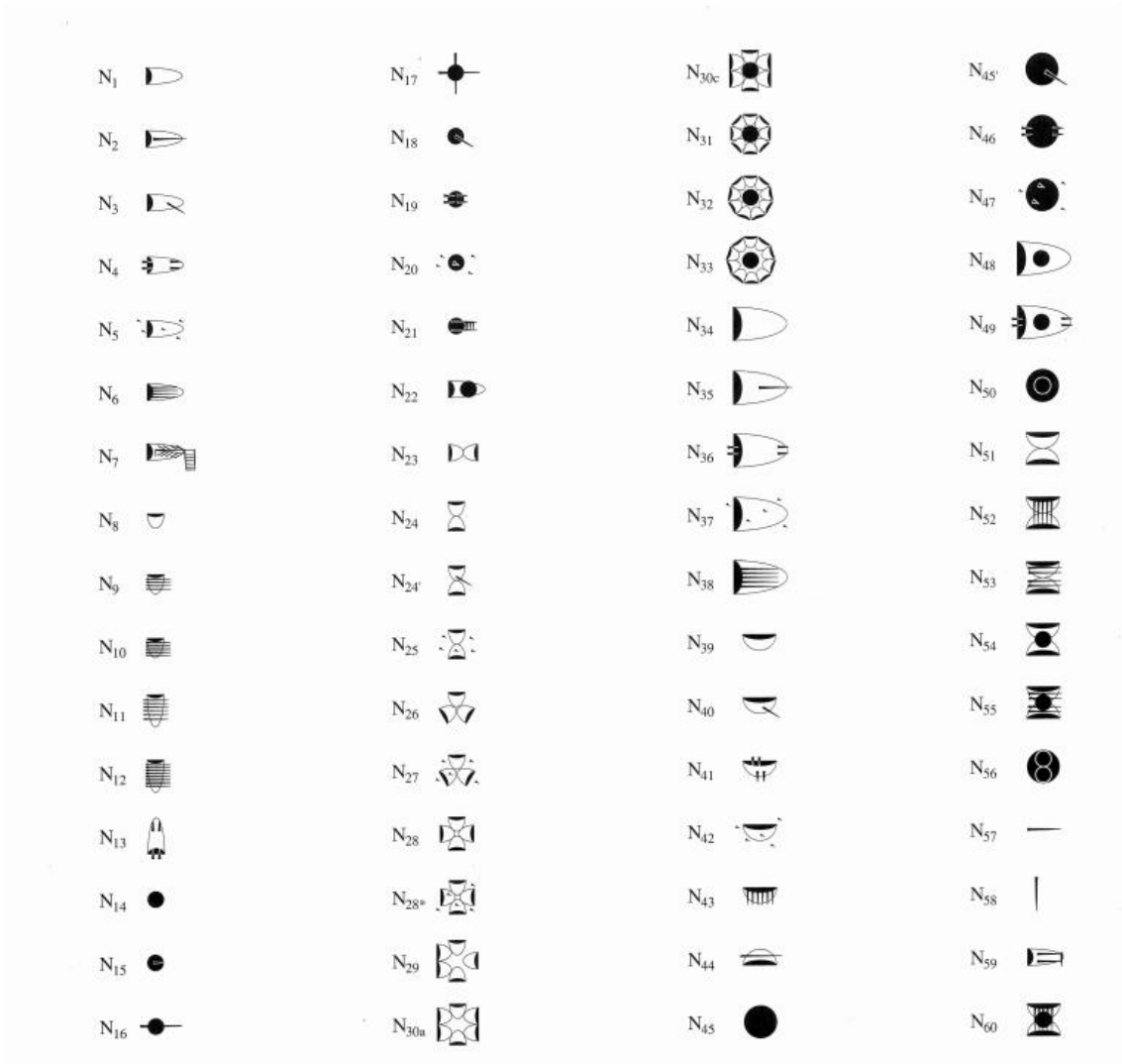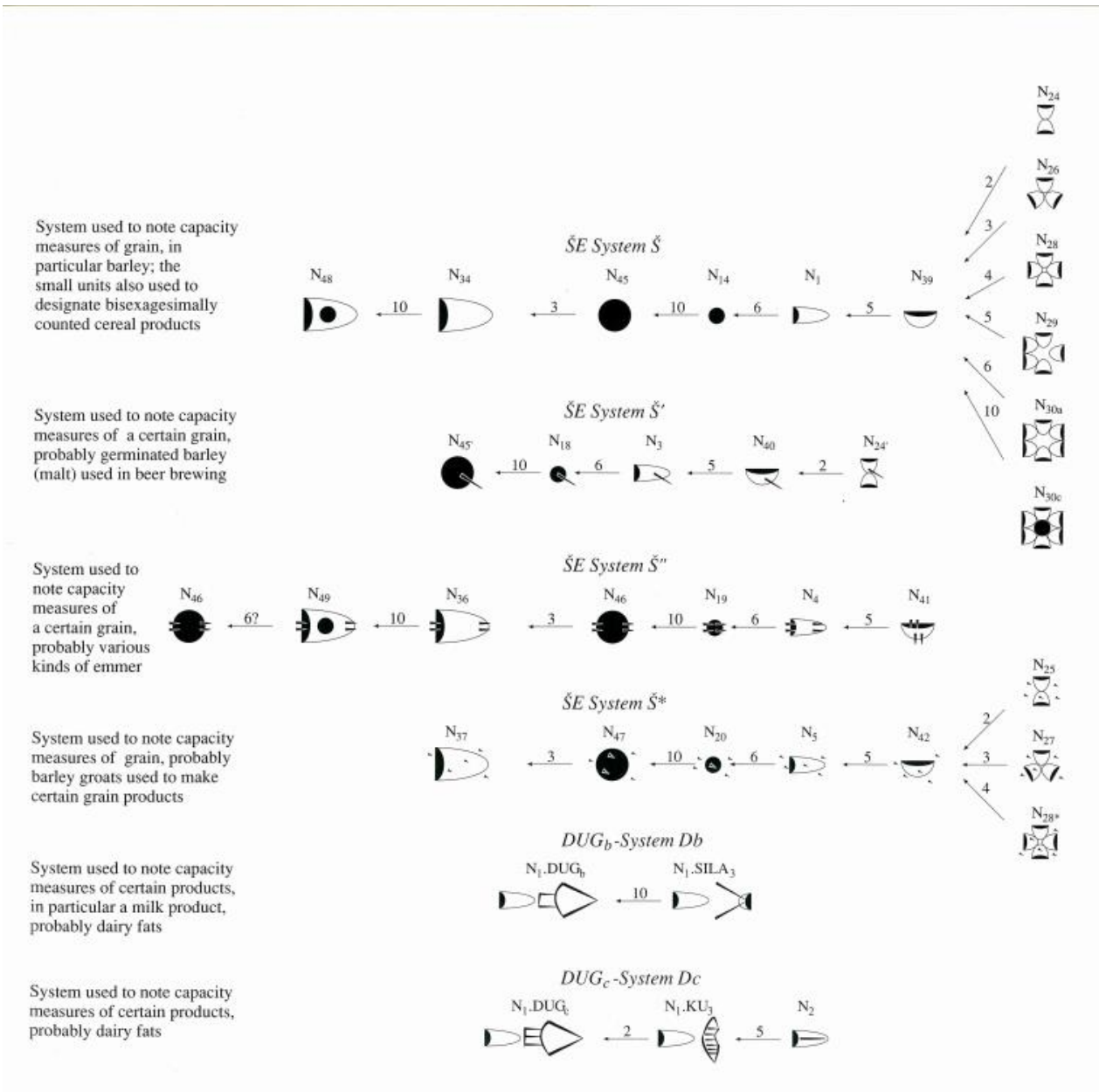
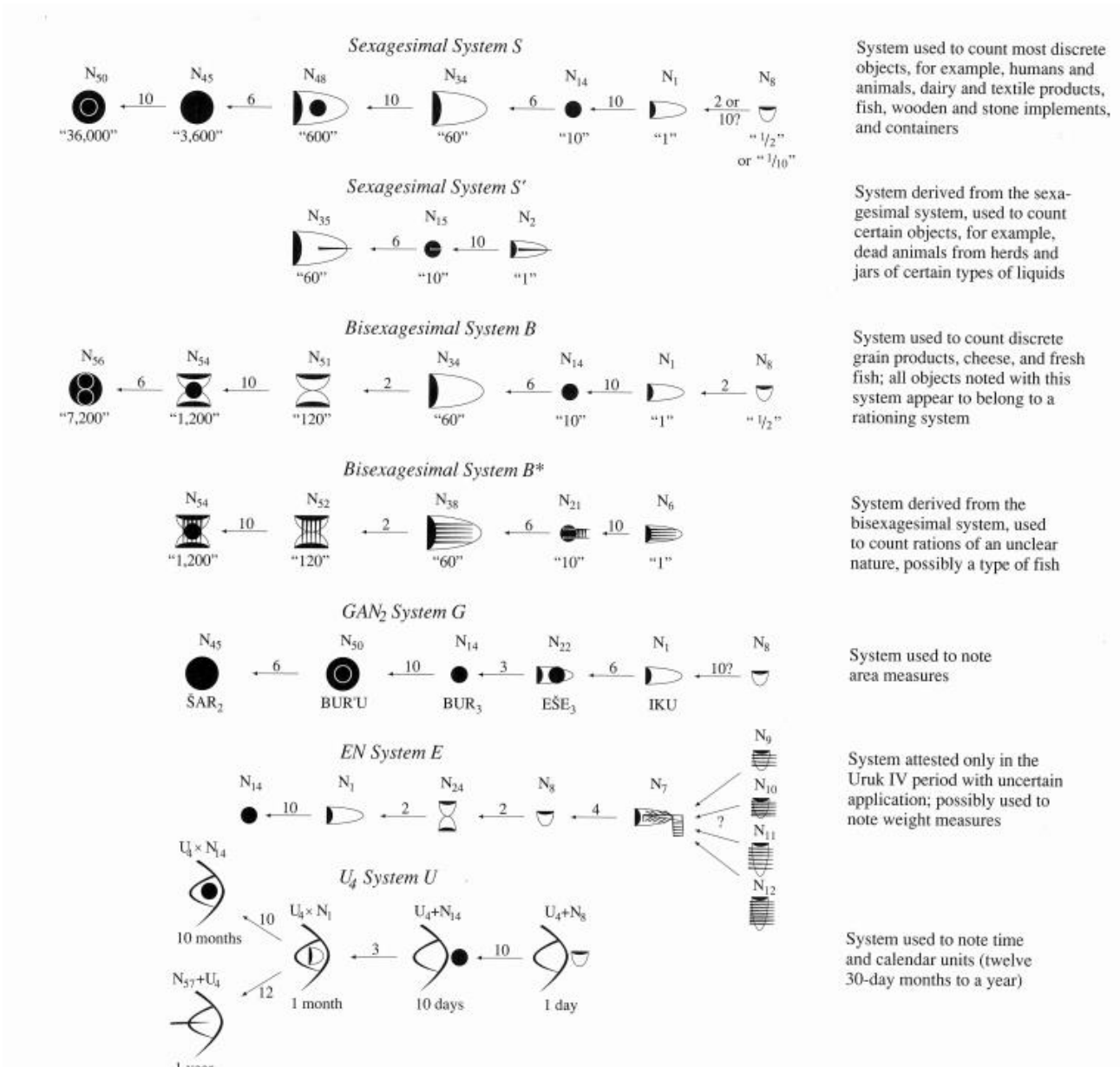Figure 11. The numerical signs of the proto-cuneiform texts from Uruk. (Nissen et al. 1993, 26)

System used to note capacity measures of grain, in particular barley; the small units also used to designate bisexagesimally counted cereal products

ŠE System Š

System used to note capacity measures of a certain grain, probably germinated barley (malt) used in beer brewing

ŠE System Š'

System used to note capacity measures of a certain grain, probably various kinds of emmer

ŠE System Š"

System used to note capacity measures of grain, probably barley groats used to make certain grain products

ŠE System Š*

System used to note capacity measures of certain products, in particular a milk product, probably dairy fats

DUG_b-System Db

System used to note capacity measures of certain products, probably dairy fats

DUG_c-System Dc

Figure 12. The numerical sign systems of the proto-cuneiform texts from Uruk. (Nissen et al. 1993, 28-29)

Nephite/Jaredite Terms Derived from Sumerian

Sheum

The agricultural product *Sheum* was noted in Mosiah 9:9 while discussing what the party of Zeniff had commenced to plant circa 163 BC in the land of Nephi (in the neighborhood of the Valley of Guatemala, using the Sorenson model):

> And we began to till the ground, yea, even with all manner of seeds, with seeds of corn, and of wheat, and of barley, and with neas, and with sheum, and with seeds of all manner of fruits; and we did begin to multiply and prosper in the land.

As was just indicated, the word *Sheum* has an exact Sumerian etymology of some type of grain:

še: barley, grain; a unit weight/volume/length/area	2500–2004 BC, 1950–1000 BC
še-am$_3$ (form of *še*)	2112–2004 BC, 1950–1530 BC

Additional Sumerian etymological units for or related to grain contained in the word *Sheum* are:

e: barley?	1950–1530 BC
e: to measure (grain) roughly (with a stick)	2600–1530 BC
e$_3$-am$_3$, *e$_3$-a-am$_3$* (forms of *e*)	2340–2200 BC, 2340–2200/2112–2004 BC
e: chaff	2500–1530 BC
e$_3$-a-am$_6$, *e$_3$-a-am$_3$*, *e$_3$-am$_3$*, *e$_3$-a-me* (forms of *e*)	2500–2350 BC, 2340–2200/2112–2004 BC, 2340–2200 BC, 2112–2004 BC
u: grain	unknown
u: bread, loaf; food; grass, herb	2500–1530 BC
u$_2$-am$_3$, *u$_2$-um* (forms of *u*)	1950–1530 BC, 2112–2004 BC

Constructed Compound Word: *Šeu$_2$-**um*** (the sound of *š* is "sh" in English)

Neas

Sumerian words and morphemes that provide a reasonable etymological construction for *neas* are:

us: a qualification of grain	2500–2004 BC, 1950–1530 BC
na-an-us (form of *us*)	2112–2004 BC
e: to sow	2600–1530 BC
nu-e$_3$ (form of *e*)	2112–2004 BC, 1950–1530 BC
na-e$_3$-e (form of *e*)	1950–1530 BC
na-e$_3$ (form of *e*)	1950–1530 BC
na-e$_3$-e$_3$ (form of *e*)	2112–2004 BC
i'iz: seed	unknown
ANIŠ: a plant	unknown
NIa: a plant	2600–2450 BC
NEhan: type of tree	2500–2004 BC, 1950–1530 BC
NE: designation of trees	1950–1530 BC
eš: a tree	1950–1530 BC

Constructed Compound Word: *NE**e**š* or *NIa(u)s*

Liahona

Since the *Liahona* was found by Lehi while still in the Old World, one might expect that the word would have a reasonable Semitic etymology. However, the actual name of the directional ball or compass made of fine brass is not indicated in the Book of Mormon until hundreds of years later, in Alma 37:38:

> And now, my son, I have somewhat to say concerning the thing which our fathers call a ball, or director—or our fathers called it Liahona, which is, being interpreted, a compass; and the Lord prepared it.

The Book of Mormon Onomasticon does not identify any reasonable Hebrew or other etymology behind this term—those listed appear to be quite tortured. Jonathan Curci, however, does provide a reasonable Hebraic etymology with "direction of the Lord," (Curci 2007). An on-point compound etymology for *Liahona* is also found in Sumerian:

la : to supervise, check; to show, display; to balance	2600–2004 BC, 1950–1530 BC
la$_2$-a, la$_2$-e, la$_2$-a-e, la$_2$-a-na, la$_2$-a-ni (forms of *la*)	2500–2004 BC, 1950–1530 BC
i: oil, container for oil (indicates priestly function)	2600–1530 BC
i$_3$-a (form of *i*)	1950–1530 BC
hunu: to be helpless	2112–2004 BC, 1950–1530 BC
al-hu-nu, hu-nu-a (forms of *hunu*)	1950–1530 BC
a: power	2600–1530 BC
an: heaven	2600–1530 BC
a-na, *an-na*, (forms of *an*)	2600–1530 BC
un: to arise	1950–1530 BC
u$_3$-na, un$_3$-na, (forms of *un*)	1950–1530 BC
anna: approval	1950–1530 BC
anna: metal (interpreted as tin or lead)	2500–2004 BC, 1950–1530 BC

The word for "brass" does not exist in Sumerian, so *anna* would appear to be a reasonable substitute.

> Constructed Compound Word: *L(a)**iahon(u)a*** (The unit "o" can be represented as "a" or "u.")

Deseret

> Ether 2:3, 5–6
>
> 3 And they did also carry with them deseret, which, by interpretation, is a honey bee; and thus they did carry with them swarms of bees, and all manner of that which was upon the face of the land, seeds of every kind.
>
> 5 And it came to pass that the Lord commanded them that they should go forth into the wilderness, yea, into that quarter where there never had man been. And it came to pass that the Lord did go before them, and did talk with them as he stood in a cloud, and gave directions whither they should travel.
>
> 6 And it came to pass that they did travel in the wilderness, and did build barges, in which they did cross many waters, being directed continually by the hand of the Lord.

No word for bee has been located in Sumerian. However, the words for honey (*lal*), beekeeper (*lu-lal*), and honeycomb (*gab-lal*) exist. Honey was used in Sumerian rituals, as indicated by cylinders that describe the building of a new temple for the god Ningirsu by Gudea, the ruler of the city of Lagash in about 2450 BC (Ransome 1937,

35). The Book of Mormon Onomasticon (2015), citing Hugh Nibley, indicates a possible Egyptian etymology for *deseret* as *dšr.t*.

There may also be a biblical Hebrew root element in the word *Deseret* that is consistent with the honeybee in the form of the word *sharats*, which can mean "to swarm" and is found in Exodus 8:3 and other locations in the Bible.

One question that arises in regard to *Deseret* is why the Jaredite word *Deseret* would need clarification to the Nephites when the 24 plates of the Jaredites were interpreted and translated. It is likely because the honeybee is described as a "stinging insect" in the Sumerian form of *Deseret*. All of the bees used for production of honey in ancient Mesoamerica were stingless bees native to America. A description of a "stinging insect" would not be consistent with the domesticated honeybees of ancient Mesoamerica known to the Nephites, so even if they did understand the Sumerian roots of the word, the term would need to be interpreted to be understood.

> The Maya cultural practice of bee husbandry dates back thousands of years. In the ancient Maya culture, honey was used as a sweetener, antibiotic, and as an ingredient in the Maya version of mead, a fermented drink. Of the 500 or so species of stingless bees in the tropical world, the favorite species among Maya beekeepers has been *Melipona beecheii.* Its traditional name, xunan kab (or *kolil kab* in the Mayan language), means "royal lady."
>
> In the Maya tradition, a priest harvested stingless bee honey as part of a religious ceremony twice a year. To increase the number of hives and honey production, beekeepers would regularly divide existing nests. (Lovgren 2005)

The stingless bees (*Melipona Beecheii* and *Melipona Yucatanica*) are the only native bees cultured to any degree in Central America, have been kept by the Maya people for thousands of years, and, as mentioned, are part of their traditional religious ceremonies. The bees are kept like family pets in log hives or pots passed down from generation to generation. The religious use of the honeybee by ancient Mesoamericans and *Deseret'*s capitalized first letter is also consistent with the capitalization of the words for other religious terms in the Book of Mormon (e.g., *Liahona*, *Rameumptom*, etc.).

There is no indication in the Book of Mormon that the Jaredite honeybees were transported to the New World. *Deseret* is mentioned only in the Old World in the valley of Nimrod (Ether 2:1–3), and the bees appear to have been carried with the Jaredites only over the first leg of their journey "into the quarter where there never had man been." It is possible bees were carried as far as the stop the Jaredites made "beyond the sea in the wilderness" on their trip in barges (Ether 2:5–7), provided that they were periodically near land where the bees could successfully forage. On the last leg of their journey, consisting of a long voyage on the open sea, it is unlikely that honeybees could have survived. Notably, there is no specific reference to taking bees aboard the Jaredite ships when other animals are mentioned (Ether 6:4). The Jaredites were traveling in barges that needed to be airtight at times when the seas were rough, so swarms of bees would have been poor shipmates. Finally, Old World bees were not found in the pre-Columbian New World.

Like other Book of Mormon names, *Deseret* also seems to incorporate other elements of the Jaredite honey bee story into the Sumerian word such as "to carry," "to go," "to leave," and, perhaps, "water":

de: to carry	2500–2004 BC, 1950–1000 BC
de_6-*a-še$_3$, de$_6$-a-aš* (forms of *de*)	2112–2004 BC
sa: to sting	2500–2350 BC, 2112–2004 BC, 1950–1530 BC
eh: insect, bug	2600–2450 BC, 1950–1530 BC, 1000 BC
re, er, ere: to go	2112–2004 BC

e: to leave	2600–1530 BC
e-ta-a$_3$ (form of *e*)	2500–2350 BC
e$_3$-ta (form of *e*)	1950–1530 BC
a: water	2600–1000 BC
a-ta (form of *a*)	2112–2004 BC, 1950–1530 BC

Constructed Compound Word: *Des(a)**e**(h)re$_3$t(a)*

Ziff

I completed an extensive analysis of *Ziff* in a recent book, *Ziff, Magic Goggles, and Golden Plates* (Grover 2016), which established a likely Aramaic and biblical Hebrew etymology involving the Aramaic and Arabic word *zyf*. I determined that *Ziff* was a gold-gilded metal with religious significance, specifically because of its reddish color, likely indicative of the Mesoamerican religious significance of blood. A similar meaning is derived from Sumerian, with the condition that the "ff" is reflected as a "b" sound. Taken together, it can literally mean the color of life, which, in a Mesoamerican context, can mean blood.

zib: a mark; mark, token; color, paint

Additional etymological units for or related to the religious significance of *Ziff* from Sumerian are:

zi: life	2600–1530 BC
zi-ba, zi-bi (forms of *zi*)	1950–1530 BC
i: oil; container for oil (royal or priestly	2600–1530 BC
anointing, discussed later)	
i$_3$-be$_6$ (form of *i*)	2340–2200 BC
i$_3$-bi (form of *i*)	2500–2200 BC, 2112–1530 BC

Constructed Compound Word: ***zib***

Additional "Glossed" Words

There are certain names and words in the Book of Mormon that are "glossed," meaning that specific definitions are provided for the terms. In such cases, it is not entirely necessary to look at all possible etymologic units, just those related to the definition already given. The following are Book of Mormon, post-Jaredite words that are considered "glossed":

Rabbanah

Alma 18:13

And one of the king's servants said unto him, Rabbanah, which is, being interpreted, powerful or great king, considering their kings to be powerful; and thus he said unto him: Rabbanah, the king desireth thee to stay.

rabianum: commander, high official	1950–1530 BC
a: strength, power	2600–1776 BC
a$_2$-a (form of *a*)	2112–2004, 1950–1530 BC
he: be it, be he	2500–2200 BC

Constructed Compound Word: *Rabian(um)ah(e)*

Irreantum

1 Nephi 17:5

And we beheld the sea, which we called Irreantum, which, being interpreted, is many waters.

ir: mighty	1950–1530 BC
ir₉-ra (form of *ir*)	1950–1530 BC
re: that	1950–1530 BC
re-a (form of *re*)	1950–1530 BC
iri: high	2340–2200 BC
ene: the plural suffix marker	1950–1530 BC
anta: upper	1950–1530 BC
a: water	2600–1530 BC
a-am (form of *a*)	2112–2004 BC, 1950–1530 BC
tam: to be bright; to be pure; to be clean	2340–2200 BC, 1950–1530 BC

Constructed Compound Word: *Irreant**am***

Oneidah

Alma 47:5

. . . they fled to Onidah, to the place of arms.

The Original Manuscript and the Printer's Manuscript of the Book of Mormon both identify the correct spelling of Onidah as "Oneidah" in Alma 47:5. A very good gloss that includes meanings similar to a place of arms where the Lamanites fled is found in the Sumerian:

a: arm; strength; wage; power
a: arm; strength; wage; power
A: a weapon or a leather holder for a weapon
an: sky, heaven; upper; crown (of a tree)
        an-e, *an-ne*, *an-ne₂* (forms of *an*)
an: date spadix (shape of a javelin)
un: to arise; sky; (to be) high
        un₃-e (form of *un*)
e: estate
e: to leave, to go out; to remove, take away; to bring out; to enter; to bring in; to winnow
        e₃-i₃ (form of *e*)
da: edge, side
        he: be it

Constructed Compound Word: **One**i₃dah(e) (The unit "o" can be represented as either "a" or "u.")

Ripliancum

Ether 15:8 provides a meaning for the word *Ripliancum:* "the waters of Ripliancum, which, by interpretation, is large, or to exceed all." Sumerian provides essentially an exact etymology as specified in the Book of Mormon, with additional related terms:

ri: to be distant

> *ri-a* (form of *ri*)

ri, RI: to pour out

> *RI-a* (form of *ri*)

rib: (to be) surpassing, outstanding; (to be) strong, massive

li: branch

la: flooding

la: to stretch out

a: water

> *a-ni, a-na, a-ka, a-ke₄* (forms of *a*)

an: upper

> *an-na*, *an-ne₂*, *an-na-ke₄*, *an-e*, *an-na-ka*, *an-na-kam*, *an-kam* (forms of *an*)

ana: upper

ana: as much as

> *a-na, a-na-a*

ku: to spread, discharge

> *ku-um* (form of *ku*)

kam: to alter

kaman: irrigation work

Constructed Compound Word: **Ri**bli**a**ncum

The fact that some name forms in the Book of Ether contain the letter [H] is important for Jaredite chronology because the sounds for Sumerian [H] and the Akkadian [h], [ḥ], and [ˤ] were lost to the language by Ur III times (2119–1940 BC) at the latest (Edzard 2003, 175), meaning that the Jaredite departure would have to have been before 2000 BC. In addition, all Akkadian words that have an *m* ending (called mimmation) lost the *m* endings after 1600 BC, which is evidence of a departure prior to 1600 BC (www.personal.sron.nl/~jheise/akkadia).

Because the names almost universally have Sumerian roots, it can be assumed that the common language of the Jaredites at the time of their departure was Sumerian. Based on the dates when Sumerian was in common usage, and based on the dates of attestation of the various words identified above, a departure date prior to 2500 BC is the only viable option.

Forms of the Nephite Numbers 20, 30 and 300 in the Sumerian Proto-Cuneiform

In my translation of the Caractors Document, certain numbers found in the reformed Egyptian did not appear to have a strong base in Egyptian. Further investigation has determined that these numbers originated in the Sumerian/Elamite proto-cuneiform, and similar forms are also found in Mesoamerica. Each is discussed here. The C-# designation was the method used to identify each character in the Caractors Document.

Numbers 30 and 300

Number "30"   C-158

Number "300" C-225

This number glyph form is found in Sumerian proto-cuneiform in the Early Dynastic I Period (ca. 2800–2700 BC) in a list known as the Burrows Archaic Texts Sign List (Burrows 1935). The relevant sections are extracted and shown here.
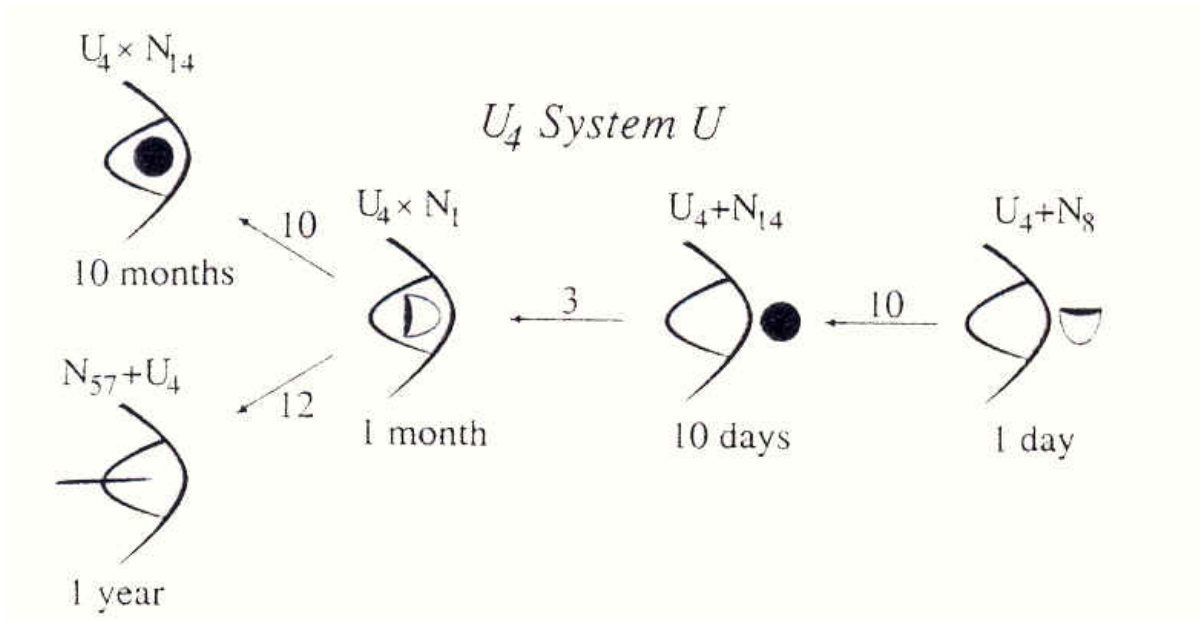

Number 20

The number 20 in reformed Egyptian has the form of the cone-shaped Sumerian proto-cuneiform number and also has the general form for the Mesoamerican "shell" glyph, which can either represent 0 or 20. In the Sumerian ŠE grain number system, 10 of the empty shells creates a number that consists of a shell with a dot in it. Ten small dots creates a large dot.
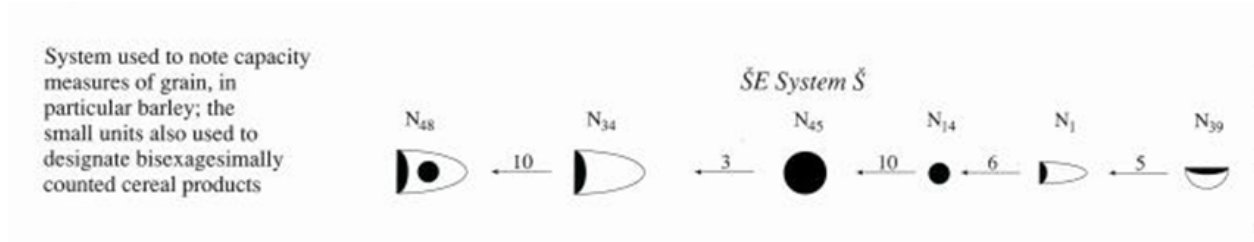
(Nissen 1993)

Sumerian Proto-Cuneiform Dots as Tens and One

Similarly, in the Sumerian U₄ calendar number system, 10 days is signified by a dot adjacent to an empty shell; ten months is the empty shell with a dot inside of it. The number 20 in reformed Egyptian consists of a shell with two dots inside of the shell.
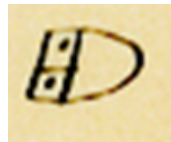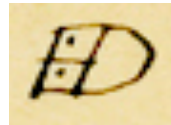
(Nissen 1993)

(Burrows 1935)

C-32   C-73   C-91

Number "20" glyphs from the Caractors Document

Proto-Cuneiform Bar Dot Number System (Elam)

The bar dot number system in Mesoamerica also has glyph forms that are found in the Elamite proto-cuneiform and documented from the Proto-Elamite Period (ca. 3100–2900 BC).

M001+M379~c

M001+M379~d

(Dahl 2006)

C-92

Caractors Document, number 9 (bar-dot)

Proto-Cuneiform Tally Number System (Elam)
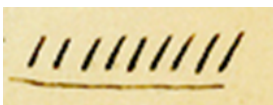

M001+M379~d MO41

M041~c

M041~d

(Dahl 2006)

C-47

Caractors Document, number 9 (rebus)

Since proto-cuneiform was not used after 2500 BC, this is a clear indicator that the Jaredite migration occurred prior to 2500 BC. The timeframe attestations of Sumerian roots of Jaredite names and words in the Book of Mormon are also consistent with a departure prior to 2500 BC.