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Jaredite Calendar and Preliminary Framework

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Chapter 2 Jaredite Calendar and Preliminary Chronological Framework

In discussing correlations between the Olmec people and Jaredites, chronology is a good place to start. Unlike other parts of the Book of Mormon, the Jaredite record in the book of Ether does not follow an obvious calendar, although there clearly is some type of timekeeping going on since the record occasionally measures the ages and reigns of kings provided in "years." One technique to possibly estimate time in the Jaredite record is to establish a framework based on the estimated reigns of the kings (or deposed kings) where specific regnal years are not actually listed. Unfortunately, the record of kings is not continuous as there is an undefined break between Riplakish and Morionton (Morianton in the current Book of Mormon text was spelled Morionton in the Original Manuscript), who is only listed at a descendant of Riplakish (Ether 1:23, 10:9). As a result, two separate chronological periods can be identified: the pre-Riplakish period and the post-Morionton period. The length of the separation between the two is not known except that it is only specified by the "space of many years" (Ether 10:9).

Before trying to establish in what years various events in Jaredite history occurred, a good starting place for this work is to determine the length of a Jaredite "year," as spoken of in the Book of Ether. There is reason to believe this "year" is not the familiar 365-day year.

Jaredite/Olmec Calendar Comparison

It is apparent that the calendar years referenced in the book of Ether are not solar or even lunar years. Ether 9:23– 25 discusses the reign of Coriantum₁, who had a wife who died at 102 years of age, after which Coriantum₁ fathered more children and finally died at the age of 142. The age 142 is 26 years older than the oldest documented male (116 years, 54 days) in the modern era, which has much longer life expectancies (www.wikipedia.org 2017b).

The Nephite measurement of years in the Book of Mormon involved calendars of both solar years of 365 days and uncorrected lunar years of 354.37 days (Spackman 1993; Grover 2015). Even adjusting Coriantum₁'s age to accommodate a shorter lunar year, he would still have been nearly 138 years old by the time he died.

There is an additional indication that the Jaredites were operating under a different calendar system: the visit of Jaredite Coriantumr₂ to the people of Mulek lasted for "nine moons."

Omni 1:20–22

20 And it came to pass in the days of Mosiah, there was a large stone brought unto him with engravings on it; and he did interpret the engravings by the gift and power of God.

21 And they gave an account of one Coriantumr, and the slain of his people. And Coriantumr was discovered by the people of Zarahemla; and he dwelt with them for the space of nine moons.

22 It also spake a few words concerning his fathers. And his first parents came out from the tower, at the time the Lord confounded the language of the people; and the severity of the Lord fell upon them according to his judgments, which are just; and their bones lay scattered in the land northward.

The term "moons" is used nowhere else in the Book of Mormon. It has been fairly well established that the people of Mulek not only hosted Coriantumr₂ but also inherited the tail end of the Jaredite (Olmecoid) culture (Sorenson 2013, 536–42). The mention of "moons" instead of "months" only at this place in the Book of Mormon record is indicative of a different calendar.

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260-Day Calendar

In basically all of Mesoamerica, the oldest widespread calendar is the 260-day calendar. Simplistically speaking, the 260-day calendar could be considered to consist of 13 months of 20 days each. This calendar system, however, is actually a bit more complex than that; the individual days in the 260-day year are each identified by one of 20 day names, accompanied by one of 13 numbers in a continuous day count. The 260-day calendar was distributed anciently as far north as Hidalgo, Mexico and as far southeast as Honduras. Among the Aztecs it was known as *tonalpohualli* (count of days). Among the Maya its name is unknown, but modern scholars have assigned it the Yucatec Mayan name *tzolk'in* (division of days).

This calendar is the only one postulated to have existed in the earlier Olmec times, with linguistic and similarities pointing to origination of the day names within the 260-day year perhaps as early as 3500 BC or as late as 2000–1600 BC (Rice 2007, 31–33). So far, the earliest example of the 260-day Olmec calendar is found on an earspool from Cuicuilco, Mexico, dated to 679 BC (see figure 5).



Figure 5. Earspool from Cuicuilco, Mexico with a 679 BC date, Al. 2 Lord (Olmec). (Edmonson 1988, 20)

The 260-day calendar is the calendar that existed during Jaredite times in the Olmec/Jaredite area. Without any other information from the Jaredite record about the Jaredite calendar, it would be appropriate to see if the 260-day calendar is evidenced in the Jaredite time frames given in the Book of Mormon during Jaredite time frames. The biologically impossible age of Coriantum₁ is, in fact, evidence of the 260-day calendar. In a 260-day calendar, the actual biological age of Coriantum₁, adjusted to our modern 365.24-day solar calendar year, is a little over 101 years, which is within reasonable biological possibility and fairly direct evidence of the consistency of the Jaredite record with the Olmec culture area.

In addition, the Book of Ether has no calendar year counts, as is found elsewhere in the Book of Mormon (e.g., "360 years from the departure of Lehi," etc.), which is consistent with the 260-day calendar, which did not count years from any base date (at least as far as is known).

Moons in the 260-Day Calendar

The mention of "moons" in relation to Coriantumr₂'s visit is also consistent with the 260-day calendar. Although the actual lunar cycle is on the order of 29 or 30 days, the 20-day period consisting of a month in the 260-day calendar is consistent with a known lunar period, since 20 days is the time that the moon is actually visible in the sky. Among the Maya, the numbers 20, 13, 7, and 9 are symbolically important numbers and correspond with lunar cycles: The moon is visible for 20 days; it is waxing (period from first visible crescent moon to full moon) for 13 days; it is waning for 7 days (period from full to the third-quarter moon); and then is not visible over the next 9 days before reappearing (Macri 2005).

Further, a nearly closed crescent-moon glyph represents the number 20 in Maya script (Glyph T683) (see figure 6).

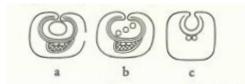


Figure 6. Maya crescent-moon glyphs (T683 a-c) signifying the number 20. (Thompson 1991)

A crescent-shaped symbol similar to the Maya glyph has been identified on the Epi-Olmec La Mojarra Stela as both "20" and "moon" (see figure 7).



Figure 7. Epi-Olmec symbols for both "20" and "moon" (Justeson et al. 1993, figs 6D, 8A, and 8B; Kaufman et al. 2001, 2.34)

The numbers 9 and 13 are important In Mesoamerican mythology. The Lords of the Night are a set of nine gods who each ruled over every ninth night forming a calendrical cycle. Each lord was associated with a particular bad or good fortune, which was an omen for the night over which they ruled. The Lords of the Night are known in both the Aztec and Maya calendars, although the names of the Maya Night Lords are unknown.

In Aztec mythology the Lords of the Day are a set of 13 gods who each ruled over a particular day corresponding to one of the 13 heavens. The 13-day periods were cyclical, so the same god recurred once every 13 days.

Coincidentally, nine 20-day "moons" is 180 days, which is half of the 360-day calendar (plus five additional days) also used in Mesoamerica. The Book of Mormon Jaredite account is precisely consistent with the expected calendars of the Olmec area in Mesoamerica.

Beginning of the Jaredite Calendar

Any attempt to determine the beginning of Jaredite history requires one to address the "great tower" at the time the "language of the people" was "confounded" and people were being driven out. Gardner duly notes that there is no mention of the tower being that of Babel (2015, 382–83 and references therein). However, the story is similar and does imply the correlation. Gardner (2015) also indicates that the context of the tower being the one where the confounding of languages, etc., it was an interpretive translation provided by Mosiah₂ when he translated the Jaredite record, from which translation Moroni₂ was working with in his abridgement (383). Before assuming translation malfeasance, it would be prudent to look at other chronological correlators to see whether the timeframe of the tower of Babel is consistent with that of the Jaredite exodus.

Chronological Correlators

Certain items from the Book of Mormon text and elsewhere are useful in better correlating Jaredite chronology to the chronological framework of the calculated reign of kings framework discussed elsewhere. These items include the following:

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- 1. Historical timing of volcanic eruptions and its comparison with incidents in the Book of Ether
- 2. Etymological sources and time depth of the Sumerian etymological units for transliterated Jaredite words or names in the Book of Mormon
- 3. Sources and timeframes of Sumerian proto-cuneiform elements from the Caractors Document
- 4. Mesoamerican archaeological and scientific evidence that correspond to chronological events
- 5. Post-Jaredite events and commentary from the Book of Mormon

Each of these will be discussed in subsequent chapters.