

GfA Essay Contest: The Award-winning Essay

The Great Return An Investigation into Classic Maya Beliefs about the Close of the Thirteenth Bak'tun

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Abstract – Amid the global spectacle surrounding the upcoming completion of a 5125-year period in their calendar, the voice of the ancient Maya often goes unheard. Two Maya scholars explore the hieroglyphic and ethnohistorical record in search of Classic Maya views of cyclic prophecy and the future and the roles of kings in maintaining world order. Two classic deep-future hieroglyphic texts—one bearing the 2012 date—will be examined as testimonies to reciprocity between kings, ancestors and gods.

Keywords: 2012 – Maya – “Mayan Prophecy” – archaeoastronomy – “Maya science” – decipherment – Bolen Yokte’ – Armageddon – apocalypse

Die große Wiederkehr Eine Untersuchung zum Glauben der alten Maya über das Ende des dreizehnten Bak'tun

Zusammenfassung – Bei all dem weltweiten Trubel um die bevorstehende Vollendung einer 5125 Jahre währenden Periode im Kalender der Maya, bleibt die Stimme der alten Maya selbst meist ungehört. Im vorliegenden Essay untersuchen zwei angesehene Maya-Experten die hieroglyphischen

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und ethnohistorischen Aufzeichnungen auf der Suche nach den klassischen Auffassungen der Maya über zyklische Prophezeiungen und über die Zukunft und die Rollen der Könige bei Aufrechterhaltung der Weltordnung. Zwei klassische, weit in die Zukunft reichende hieroglyphische Texte – von denen einer das Datum 2012 enthält – werden als Zeugnisse der wechselseitigen Wirksamkeit von Königen, Ahnen und Göttern untersucht.

Schlüsselbegriffe: 2012 – Maya – “Maya-Prophezeiung” – Archaeoastronomie – “Wissenschaft der Maya” – Entschlüsselung – Bolen Yokte’ – Armageddon – Weltuntergang

Introduction: The Maya, Savages or Savants?

Sunlight breaks through the morning mist, illuminating the splendor of a ceremony atop the garishly painted pyramid. Chanting and sweet incense fill the air, mixed with the vile redolence of blood, adrenaline and vomit. A struggling peasant lies pinioned across the intricately-carved altar, his wrists and ankles brutally gripped by impassive henchmen; the coarse granite scrapes and bruises his back. A hideously-masked priest raises a long obsidian knife, its facets glittering in the rays of *K'inich Ajaw*, the Sun. He plunges it into the victim's chest, blood spurts; he plucks out the still-beating heart and elevates it to bathe in the sunlight. A unanimous roar erupts from the throng in the plaza below as the priest beheads the body and the henchmen hurl it down the steps. Another dazed victim is roughly stretched across the altar, and another, and another.

Fear ripples through the crowd as they realize that the Sun is entering eclipse. A terrified minute passes. Then, to everyone's relief, *K'inich Ajaw* reappears. The blood-spattered priest declares the god satisfied, and the ceremony halts. A solar catastrophe has been averted in true Hollywood tradition; never mind astronomical accuracy.

This bloodthirsty portrayal of Maya religion has been imprinted into our collective consciousness by Mel Gibson's popular film *Apocalypto* (2006). His is merely the most vivid of many images of the “mysterious Maya” in our culture.

It coexists with a dramatically contrasting picture: priests steeped in esoteric wisdom. An ancient, wise, peaceful people, informed by travelers from distant galaxies and other dimensions, vouchsafed to understand not just the intricate dance of the stars and planets, but the resonances of the galaxy itself. Watchers of the skies, shamanic psychonauts of the cosmos, emissars of hidden esoteric truths regarding global and individual transformation. Prophets and seers who created an extraordinarily precise calendar, tuned to a moment 2100+ years in their future, when the Winter Solstice Sun would line up with the Galactic Center, an event not seen since the last Ice Age. These Maya were privy to knowledge unknown not only to their contemporaries, but unknown to almost everyone else until the Modern era. One must

go to Tibet, to the *Upanishads*, to ancient Egypt, to find other humans with that kind of wisdom.

While this vignette is a synthesis and not an accurate synopsis of a specific viewpoint, the “2012 Galactic Alignment” has rippled through popular culture with many such notions attached.³

Both of these portrayals of the Maya are a disservice. The ancient Maya were neither ignorant, bloodthirsty savages baying terrified at an eclipse, nor superhuman beings privileged with interstellar insight. They were extraordinary, it is true, and they were both brilliant and savage, as are we. They, their culture, their discoveries and their living descendants are fascinating, beautiful, patient, and worthy of our deep respect.

*The 2012 Meme*⁴

While one of the authors of this essay has been anticipating the 2012 event for nearly forty years⁵, as a very few academics had done for a decade or two before, scholars in general began paying attention to the “2012 Phenomenon” only in the last fifteen years. We have watched with fascination, dismay and amusement as the Chiliastic New Age community cast their nets ever wider, well beyond dubious “Ancient Mayan Prophecies of 2012” to include the *I Ching*,

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- 3 The Galactic Alignment and associated theory was proposed and popularized by writer and Maya researcher John Major Jenkins (1998), though Raymond Mardyks (p.c. 2010) also claims credit for its origin. In fairness to Jenkins, we recognize (1) that his work has developed in a more scholarly direction over time (p.c. 2009, 2010); (2) that he has an excellent grasp of the phenomenon termed “the precession of the equinoxes” and associated astrological ages, and has never said that the Alignment falls *only* on the Winter Solstice of 2012—though early enthusiastic statements might suggest this and many 2012ers mistakenly believe this; (3) that he has made some important contributions to the field of Maya studies; (4) that having taken his inspiration from Schele *et al.* in *Maya Cosmos* (1993) he has made no greater leaps in iconographic / astronomical interpretation than they, but takes far more heat because he is a popular author, an advocate of shamanic practice and entheogens, and a target of debunkers; and (5) that to our view, it cannot be either proven or disproven that the alignment of the solstice Sun with the Galactic Equator (technically, per the IAU, the Equatorial Plane of the Galactic Reference System), could have been anticipated by the creators of the Long Count; all we can do is be amiably skeptical until persuaded otherwise.
 - 4 meme/mēm/Noun. 1. An element of a culture or behavior that may be passed from one individual to another by nongenetic means, esp. imitation. (From *Wikipedia – Dictionary.com – Answers.com – Merriam-Webster*); e.g., <http://dictionary.reference.com/browse/meme>.
 - 5 MacLeod celebrated the 12.18.0.0.0 *katun* ending at the Maya city of Tikal in July, 1973, burning copal incense on the summit of the tallest temple. No one else among the visitors and staff seemed to know or care about 2012. She also collaborated with Father Robert Williams—a Mixtec scholar—to produce two carved stone monuments celebrating the arrival of 12.19.0.0.0.

Atlantis, “Hopi Prophecies”, “Planet X”, “Timewave Zero”, galactic astrology, entheogenic shamanism, and more. At this writing, there are over 1000 books in print on various aspects of the “2012 Meme” and its auguries.⁶ Websites on the subject are beyond counting.

As scholars of anthropology and art history, we view this global phenomenon as both interesting and worthy of scholarly scrutiny. The 13-Bak’tun ending of December 21 (or 23), 2012 operates as a lightning rod, attracting fervent projections across cultural and ethnic boundaries. Not only has it been appropriated by followers of European, Native American, and Asian metaphysical and religious traditions, but the modern Maya themselves have—or some have—taken it as heralding a revival of their ontological legitimacy. In the midst, the ancient Maya are often lost amid elaborate and fantastic schemas. And not surprisingly, some academic Mayanists have chosen to sweep the whole mess under the rug with dismissive pronouncements and a reluctance to inquire how the ancient Maya might have perceived this great calendric milestone.

For modern world-citizens, understanding this phenomenon serves several ends. First, any motivation that enhances our understanding of indigenous people is a good thing; even this meme’s outrageous distortions spotlight a fascinating, rich culture, and stretches our minds and our hearts. Most importantly, the end is indeed near. We have exceeded our environment’s carrying capacity, pathological concentration of wealth rises exponentially... The list is lengthening. The “Mayan Prophecies” are a popular metaphor for this self-inflicted Armageddon; focusing attention on our folly may yet inspire real solutions for it.

But the focus of our quest here is that most-rarely-asked question: what exactly *did* the ancient Maya say about this event? Did they make a prediction at all? Can we cast wide our own nets and begin to reconstruct what they *might* have said, were we able to ask them directly?

We will explore a bit of the Mayas’ extraordinary calendar, astronomy, and prophecies. We will offer a very new—yet reasonable—interpretation of the one Maya text which mentions the date, and we will ground it as best we can in Classic Maya mythic geography. Perhaps we can also redress some of the misconceptions and fictions that have been promulgated in their name.

2012 and Classic Maya Astronomy

Were the ancient Maya the superlative astronomers that some consider them to be? The answer should be: yes, if we do not ascribe to them either a deep metaphysical sensitivity to unseen

6 This is according to Prof. John Hoopes (personal communication), an expert on the modern 2012 phenomenon. A young colleague of his, Kevin Whitesides, has been keeping track of the publications on 2012. As of February 2011, the tally was at 1067, and now he reports that the books on 2012 are continuing to appear at breakneck pace, about one a day. (See the article by Whitesides & Hoopes in this issue; eds.)

galactic tides or a capacity beyond what is possible with careful observation, precise means of transmission, and a stable society over generations.

We have ample evidence from the Postclassic that Maya priests could predict eclipses accurately.⁷ The Dresden Codex, one of the four surviving original Maya books, contains Eclipse Tables. They go back centuries (see Fig. 1). They are complete and comprehensive enough to extrapolate eclipses backward or forward to any age. The Maya would have been about as surprised by an eclipse as Christians would be by Easter.

The Dresden Codex also has other, even better astronomical tables. One plots the movements of Venus so accurately that it has been used as evidence to ascertain the date of the book's composition (see Fig. 2 and Note 6). Some of these, too, refer back centuries, *millennia*, to the primordial era *before* the "Era Date" 4 Ajaw 8 Kum'ku. They refer to that date—the date of the most recent Creation—repeatedly (as in Fig. 2, p. 51, last double-column). It is 13.0.0.0.0, either 11 or 13 August⁸, 3114 BCE, beginning the era in which we are living.

7 It is known that they knew the precise dates of eclipse *stations*—when the moon's path crossed that of the sun's, about every six months—but not necessarily which ones would result in visible solar eclipses.

8 Scholars are divided regarding the two alternatives of the "Goodman-Martinez-Thompson Correlation" between the Maya and Christian Calendars. We owe clarification of the following data to Michael Grofe (personal communication, 2011). There are conflicting statements over which of these should be called "GMT" and which "modified GMT", so we will not distinguish them in this manner. The original (1927) Thompson "GMT" employs the 584285 correlation constant, from the Julian Day Number which it assigns the "Era Date" 13.0.0.0.0 4 Ajaw 8 Kum'ku. This beginning date falls on 13th August, 3114 BC, while the "end" of this "Great Cycle"—the approaching 13.0.0.0.0 4 Ajaw 3 Uniiw (*K'ank'in*)—falls on 23rd December 2012, two days after the solstice.

The *adjusted* (our term) GMT employs the correlation constant 584283, with the "Era Date" falling on 11th August 3114 BC and the "End of the Great Cycle" on 21st December 2012. The adjustment by Thompson resulted from the recognition that the 260-day cycle still in use in Highland Guatemala would, employing 584283, now show continuity with the Classic counterpart. This date appeals to astrologers and the great mass of "2012ologists" and prophecy-buffs because it falls on the December Solstice, a zodiacal milestone. It also happens that on that day—and on the winter solstices of ~ 18 years both prior to and following 2012, the Sun, as observed from the earth, "crosses" the Galactic Equator near the "Dark Rift", the shadow of an interstellar dust cloud that some interpreters compare to a womb, others to the mouth of a celestial Crocodile. (See Fig. 3.).

The -285 correction was resurrected by Floyd Lounsbury of Yale University in the 1970's, and accepted at first by Thompson, though he later recanted. The *Dresden Venus Pages* provide the main basis for Lounsbury's correction. (Ancient Maya astronomical calculations—like all such calculations—were slightly imprecise. When their prognostications turned out to be a day or two off, they corrected their tables. The corrections continue up to the late 10th century AD; thereafter the tables strictly follow the calculations.) Dr. Robert Wald (personal communication, 2007) has analyzed this data, and informed Van Stone that it isn't as exact as Lounsbury asserts. Wald believes, based on his calculations with the

Note that the Maya astronomers here charted the movements of a planet all the way back *before* Creation, during an era in which it supposedly *did not yet exist*. This conundrum reminds us how little we know about actual Maya science and beliefs. What we *are* aware of is but a splinter, compared to the vast repository that has been lost due to the impermanence of the material on which it was recorded—screenfold bark-paper books—amid a tropical rainforest environment.



Fig. 1. Closing pages of “Eclipse Tables”, *Dresden Codex*, pp. 59-61, Yucatán, ca. 1500-1520, copied from a tradition possibly dating back a 10th-century exemplar (see note 4). Note the frequent “eclipse” glyphs: ‘winged’, with one ‘wing’ white and the other black. The illustrations echo their dark-light duality. At right, an enlargement from p. 61 shows two pairs of “eclipse” glyphs, one containing the sign for “sun”, the other the sign for “moon”. The large descending personification occupying the lower third of the picture has the glyph “star” replacing his head. It illustrates the first glyph at upper left: a stylized, inverted headless human figure (his head replaced by the glyph for “rubber”[?]) attached to the glyph for “star”. (The final two columns, separated from the “Eclipse Tables”, represent a new section; the blue- and yellow-boxed dates include (left) the Era Date “4 Ajaw 8 Kum’u”). Now in Sächsische Landesbibliothek, Staats- und Universitätsbibliothek, Dresden. Courtesy SLUB. <[www.slub-dresden.de/index.php?id=5363&tx_dlf\[id\]=2967](http://www.slub-dresden.de/index.php?id=5363&tx_dlf[id]=2967) >

Dresden, that 584284 (originally proposed by Beyer in 1937) is more accurate than 584285, though 584283 is almost as likely as ‘284.



Fig. 2. Two pages of “Venus Tables,” *Dresden Codex*, pp. 50-51. Yucatán, ca. 1500-1520, copied from a tradition possibly dating back a 10th-century exemplar. The warlike imagery on each page (ruler on throne in image above, soldier brandishing spear in middle, fallen, speared god below) indicates the bellicose character of Venus, the “Wasp Star” or “Great Star.” At right, four sentences enlarged from p. 50 tell us that on certain dates, the “Great Star” “ties” or “wraps” specific gods at the four cardinal directions. (The final glyph in each sentence shows two forms of the glyph “Star,” which also appear on the descending god in Fig. 1, and the first glyph of the enlarged text above him.) Now in Sächsische Landesbibliothek, Staats- und Universitätsbibliothek, Dresden. Courtesy SLUB. <[www.slub-dresden.de/index.php?id=5363&tx_dlf\[id\]=2967](http://www.slub-dresden.de/index.php?id=5363&tx_dlf[id]=2967)>.

While they feature dates in a 365-day cycle approximating the solar year (the *Haab*)⁹, the Classic period stone monuments do not regularly encode precise astronomical information, with one exception: the 29.53-day lunar cycle.¹⁰ The “Lunar Series,” found on numerous stelae and lintels, has been understood since the early decades of the twentieth century to document

9 There is ample evidence that the Classic Maya had a precise value of 365.2422 days for the solar tropical year; in one deep-time count at Quirigua, Guatemala, a monstrous Distance Number of over 90 million years was found by MacLeod to be an even multiple of 365.2422. It also commensurated the tzolk'in or 260-day cycle.

10 The pioneering research on the Maya Lunar Series was carried out in the early 20th century by John E. Teeple (1930).

the moon's age in the current lunation, the number of days assigned to the lunation (29 or 30), the name of the lunation and its count in the current bundle of six. These bundles of six lunations (totalling 177.18 days) closely approximated the eclipse half-year of 173.31 days, and it is evident from surveys of all known Lunar Series that the Classic Maya were not only documenting eclipses, but had developed a means of correction whenever the accumulated disparity was too great.¹¹ Additionally, that the moon-age records of the Classic closely match data in modern ephemerides for those dates is evidence not only that the Maya were excellent naked-eye astronomers but that the widely-favored GMT correlation (either variant) is likely correct.

But what about the proposed astronomical underpinnings of the 2012 date? Are they real or coincidental? Let us begin to explore this.

A plurality of ancient Maya stelae portray a ruler standing and holding a "Serpent Bar" tightly against his chest. This is a ceremonial object carved with the extravagant head of a celestial snake, jaws agape, disgorging deities at each end. Often marked with X-shaped "sky signs" and sometimes glyphs reading "Sky", "Darkness", "Sun", "Star", and so forth, it purportedly represents the path across the heavens of the Sun and visible planets known as the ecliptic¹², while the ruler stands for the Milky Way, also a sacred tree and *Axis Mundi*.

Most of these stelae show the king in a symmetrical pose, the bar held horizontally across his chest (as at Copán). However, a substantial number (e.g., at Naranjo and Seibal) portray him holding the bar at a jaunty angle, often about 60° from the vertical. (See Fig. 3.)

This pose was assumed by David Freidel, Linda Schele *et al.* (1993) to represent the ecliptic (path of the Sun, Moon and visible planets) as it crosses the Milky Way galaxy. In Mayan languages, the words for 'snake' and 'sky' are homophonous (*kaan* and *ka'an* respectively in the Yucatecan languages and *chan* for both in Ch'olan), supporting the identification of serpent and sky as a single entity.

Nonetheless, in recent years Maya scholars and astronomers have increasingly disputed the claims by Freidel and Schele that the king saw himself as the Milky Way, or that the Classic texts and iconography encode bounteous astronomy (Stuart, 2011:298-303). On close scrutiny, the claims seemed to barely distinguish the signal from the background noise, and astronomical

11 Research in progress by MacLeod and Michael Grofe will demonstrate that the dates of recent solar eclipses were occasionally tied to the Lunar Series of stelae and lintels of the site of Yaxchilan, Mexico.

12 Both skyband and double-headed serpent represent the ecliptic, according to Linda Schele, *Maya Cosmos* pp. 82 and 100. Often, as at Seibal, the former adorns the latter like a label. In its most simplified form, the marks on the central part—the 'bar'—of the serpent bar are repeated X's, the oldest and most essential sign in the skyband. The king in ceremony as an *Axis Mundi*, equivalent to the Milky Way, is another well-known trope in Maya iconography (*Maya Cosmos*, *passim*).

significance could be found everywhere. New and better iconographic analyses have also been published. This has resulted in a backlash against astronomy, wherein some Mayanists have retreated from archaeoastronomy altogether. Concomitantly, a more optimistic, careful, even provocative, course of astronomical investigation has arisen amid the ashes.¹³

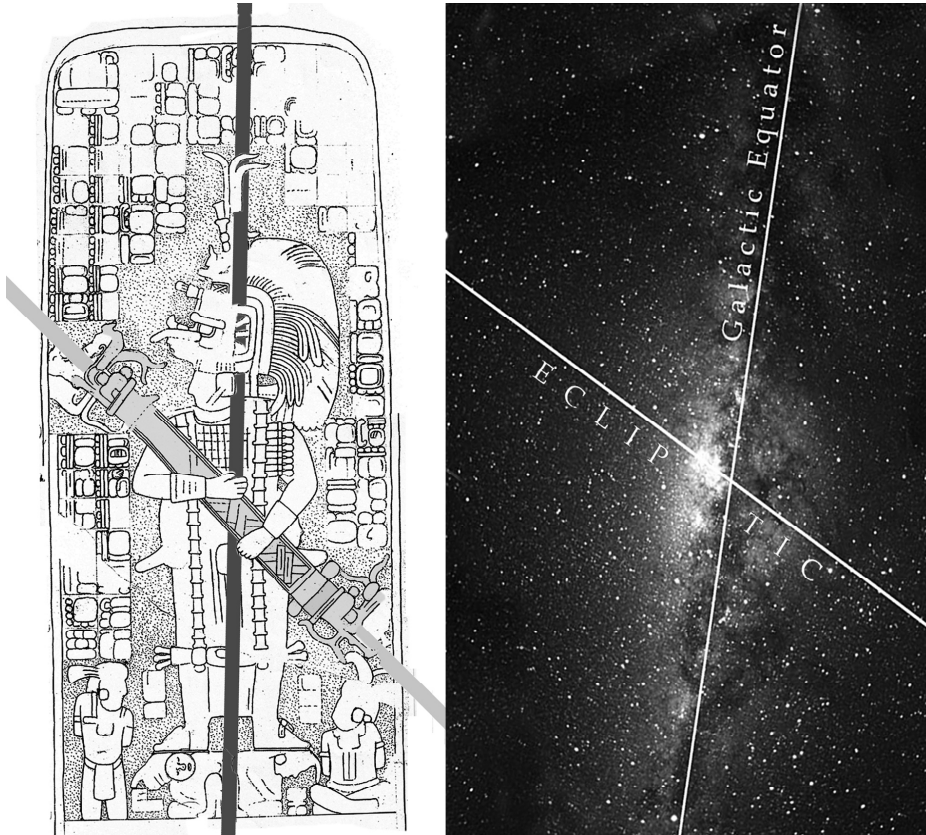


Fig. 3. Cobá Stela 27, late 8th Century AD, showing a ruler holding a “Serpent Bar” at approximately the same angle to his body as the ecliptic forms with the Milky Way. Drawing by Ian Graham. Used by permission, *Corpus of Maya Hieroglyphic Inscriptions*, Harvard University.

¹³ We refer specifically to the recent work on sidereal observations by the anthropologist / archaeoastronomer Michael Grofe (2007, 2011), but investigations into sidereal time and the Maya by archaeoastronomers Harvey and Victoria Bricker and Anthony F. Aveni (2001) have also been highly germane.

The “Equatorial Bulge” and the “Dark Rift” of the Milky Way are visible on a clear night in an unpolluted sky, and they lie near the equatorial plane of our spiral galaxy, a fact the ancient Maya could not have appreciated. This area will be transited by the Sun as it rises on 21st (or 23rd) December¹⁴ 2012. But due to the slow precessional creep of the background stars against the solstices and equinoxes, this visible alignment occurs throughout a roughly thirty-six-year interval, with the precise midpoint having already passed in 1998. The coincidence of this alignment with the winter solstice on the 13.0.0.0.0 rollover date of the Long Count has fueled speculation that the Maya or their forebears aimed their Long Count¹⁵ Calendar to *end* on this date. First, we dispute that any “end” was intended; then, to have set this alignment in place¹⁶, the Late Preclassic Maya or Mixe-Zoque who created the Long Count would necessarily have had an accurate understanding of *precession*—requiring precise values for both the solar sidereal

14 Many Maya scholars correlate the Maya Calendar with ours using the so-called “GMT+2” correlation (actually Thompson’s original proposal): Julian Day Number 584285 = the Maya “Era Day” or “Creation Date” 13.0.0.0.0. (=August 13, 3114 BC. After this date, the Maya Long Count reset like a clock at midnight, and for the past 5000 years has been counting up from “zero”... and is approaching 13.0.0.0.0 again.) Others prefer the other GMT correlation of JDN 584283, in part because the 260-day almanacs of modern Mayan groups in Guatemala are in step with it. This alternant of the GMT correlation places the next 13.0.0.0.0 date on 21st December 2012, while the GMT+2 corresponds to two days later, the 23rd of December. Naturally, on the 23rd, the sun will be two degrees farther from the galactic equator, and it is also not the solstice.

15 For more on the Long Count, please consult any of several books about the Maya Calendar. We recommend Eric Thompson’s *Maya Hieroglyphic Writing*, Linda Schele *et al.*’s *Maya Cosmos*, or Coe & Van Stone, *Reading the Maya Glyphs*. We will here give a skeletal summary:

The basic Long Count tallies accrued time since the Era day, which fell on 13.0.0.0.0 4 Ajaw 8 Kumk’u. These units operate rather like an odometer. The smallest (farthest to the right) in standard (scholarly, modern) Long Count notation is 1 day (K’in) ; the next to the left (Winal), 20 days. The next unit to the left (Tun) is 360 days, or 18 x 20. The next unit (K’atun) is 20 x 360, or 7,200 days, and the largest unit in the basic count (the Bak’tun, or *pik* in the Classic language) is 144,000 days or 400 Tuns. The day following 13.0.0.0.0 would be 13.0.0.0.1, and twenty days after that, we would have 13.0.0.1.1. In addition, there were two other major cycles: a 260-day cycle called the *Tzolk’in* consisting of 13 numbers and twenty day names (as in 4 Ajaw) and a 365-day “vague year” (because it only approximates the solar tropical year) called the *Haab*, made up of eighteen “months” of 20 days plus a short interval of five days at the end, termed ‘the bed of the year’. 8 Kumk’u exemplifies a *Haab* position. These two cycles together make a Calendar Round; it is 52 *Haabs* in length. That said, let us not forget that the Classic Maya had a value for the tropical year as accurate as ours: 365.2422 days, and they knew the true length of the lunar month. But because they did not use fractions, they had ingenious ways of generating averages.

16 There is an ongoing debate over whether the Long Count could have been positioned by its creators to begin on the second solar zenith passage in 3114 BC and end on a winter solstice in 2012.

and solar tropical years, a highly controversial supposition.¹⁷ Precession is often described in terms of a 26,000-year cycle reflecting the slow wobble of the earth about its axis, such that at the poles, the reference stars slowly drift as the shifting axis describes a circle. We would not expect ancient, tropical Mesoamericans to have seen it this way, but rather to have noted a one-day shift in the position of a solstice against its starry back-curtain after just over 71 tropical years. It should thus not have been difficult for literate skywatchers in stable cities to document sequential one-day shifts and arrive at a value for the sidereal year; the question is: *when* did they become sufficiently attentive, stable and literate? *We don't know.*

Original Sources: Mesoamerican Creation and the Calendar

We have only two Maya sources that prophesy about the future 13.0.0.0.0 4 *Ajaw* date at all: the contact-period books of *Chilam Balam* ('Interpreter Jaguar'), and Tortuguero Monument 6. The former materials contain much of Prehispanic origin which was recopied from older hieroglyphic sources. These manuscripts reference recurring prophecies for future *k'atuns* (intervals of 7,200 days) ending on the date 4 *Ajaw*; the *k'atun* in which we now live is one, because its closing date will be 4 *Ajaw* 3 *K'ank'in*.¹⁸ The statements about 4 *Ajaw* pertain largely to the immediate circumstances of the Postclassic Maya of Yucatan, and are cosmogonic, historical, and not dire.¹⁹ Tortuguero Monument 6 will be considered below. We also know of more

17 Although we think the Classic Maya likely knew of precession, we question whether their Preclassic forebears had such a precise value for the solar sidereal year that they could have predicted the sun's position more than two millennia forward to set the 13-*Bak'tun* "return date" to fall in the Dark Rift. A related question is whether they had a sufficiently precise value for the *tropical* year to position the start date at a zenith passage and the end date on a solstice. We have little direct evidence that they valued solstices as checkpoints in human narratives—i.e. no coronation or building dedication seems to have been scheduled for a solstice or equinox during the entire span of Maya Classic history. That said, we have almost none of the Classic astronomical record, and there is no doubt that they *observed* the equinoxes and solstices, even if these had little political protein. By the 584285 GMT Correlation, the *beginning* of the Long Count in 3114 BC falls on a Solar Zenith Passage (+/- one day) at Izapa, where this day *is* likely to have been significant (per Malmström), even if recognized only after the fact. We have mentioned in Note 1 the work of John Major Jenkins, one of the original proponents of the "intentional end-date" thesis, and the writer who has successfully disseminated the idea within the global 2012 literature.

18 The Yucatec month name *K'ank'in* is established in the literature. We know that the Classic Maya called it *Uniiw*.

19 Not dire with the exception of "blood-vomit", mentioned in passing. *K'atun 11 Ajaw*, in contrast, was indeed dire, and within it are sounded the drum and rattle of *Bolon Yokte'*. It is a time when the people must find their food among the trees and rocks, when the rains are scanty and the *k'atun* niggard. It is also the *k'atun* in which the Spaniards arrived. (Roys, 1933).

than fifteen references to the 13.0.0.0.0 4 *Ajaw 8 Kum'û* "Creation/Era Date"²⁰; from these we have glimpses of the ancient Maya conceptions of that date.

These sources of Maya religious and prophetic thought fall into a handful of categories. Following a statement about each of these, we'll expand the most important items with more detail.

1. Classic Maya hieroglyphic monuments, mostly carved in stone, a very few in stucco (Classic period, ca. 300 – 900 AD/CE).
2. The Maya book *Popol Vuh*, (Postconquest or Colonial period, ca. 1700 AD/CE, probably copied from an early Colonial exemplar, ca 1540). This is our only remotely-complete indigenous Maya account of the Creation(s). Some of the incidents described therein appear in much earlier contexts, such as stelae at Izapa (non-Maya? Late Preclassic, ca. 100 BC/BCE – 100 AD/CE), and Late Classic vase paintings (next item).
3. Classic Maya vase paintings (Late Classic period, ca. 600 – 900 AD/CE).
4. The very early Murals of San Bartolo (late Preclassic period, ca. 50 BC/BCE).
5. The four surviving Maya books (codices), particularly the Dresden Codex (late Post-classic period, ca. 1500-1520 AD/CE). This codex preserves recopied sections from the Classic Period.
6. The Books of *Chilam Balam* (Yucatecan Maya Colonial period, ca. 1570-1790 AD/CE).
7. The Caste War counsels (Yucatecan Maya documents associated with the Caste War rebellion of the mid-nineteenth century).
8. Modern Maya leaders and calendar-keepers in the Guatemalan Highlands.

The *monumental record* consists of several thousand stone inscriptions carved by the Classic Maya at the height of their civilization (and, presumably, the height of their prophetic powers). These historical or mythic accounts provide surprisingly specific temporal information. Often they precisely calculate the number of days between events, in addition to giving their exact dates. The Maya were obsessed with the temporal placement of events such as births, coronations, building dedications, battles, deaths, etc. Floyd Lounsbury (1978) and more recently Gerardo Aldana (2007) have demonstrated that many of these time-intervals (called "Distance Numbers") were numerologically important, such as even multiples of 4, 5, 9, 13, 83, 260, and 365 days, and the approximate synodic periods of Venus (584 days) and Mars ($3 \times 260 = 780$ days).

20 Personal communication 2010 and 2011 from Carl Callaway, a doctoral candidate at La Trobe University in Melbourne, who has written his dissertation on Maya Creation events.

The Classic Maya Creation or Era Day

We open this section with a quote from our colleague Carl Callaway (2011), regarding Maya Creation—that day in 3114, BCE when the Long Count reached 13.0.0.0.0 and reset to zero.

“Prior to modern science and the Age of Enlightenment, a major task of myth and religion was not only to convey an understanding of self but also give meaningful order to the world (Assman, 2006:35). From our small glimpse of Maya Era Day activities, we see that the establishment of order at the start of the era stands at the very core of the cosmogonic act. The ordering of the gods is paramount—especially of gods related to the sun. <This> ordering coincides with other related first day events, such as the organization of space-time via the threatened destruction and renewal of the *Bakab* sky-bearers... and the marking off of the footsteps of the gods. Era day acts echo what will happen near the close of the next 13 *Bak'tun* period in the year 2012 when the primordial gods return again to reset the count of days in conjunction with the *Kalabtun* cycle. As the writings of the *Chilam Balam of Chumayel* dictate (Roys, 1967:109): ‘whatever has occurred in the past ...*k'atun* is expected to recur in the future ... *k'atun*’. Past is very much prologue.”

Some fifteen stone inscriptions, mostly public²¹ (dating from 680 – 800 AD/CE), refer to events of the 13.0.0.0.0 4 *Ajaw* 8 *Kum'ku* Creation (3114 BC/BCE), notably the detailed

21 Originally from a list compiled by Linda Quist (personal communication, 2008); Carl Callaway has found additional examples.

Coba Stela 1 (= *Maxcanxoc Stela 1*): very long date, badly eroded text;

Coba Stelae 5 and 27 (added by Carl Callaway, personal communication, 2009), also very long dates, badly eroded texts;

Quirigua Stela C, with the most detailed surviving account of the “Changing of the Representatives;”

Copan St. 11: “Paddlers celebrated the Period Ending, Set up a stone; & *Ak Yax K'ul Ajaw* saw an image”

Dos Pilas Panel 18;

Piedras Negras Altar 1;

Chichén Itzá Caracol Stela;

Palenque Tablet of the Sun C14 – D16, N1 – N3: someone “set up 3 stelae; era event referenced”

Palenque Tablet of the Cross C3 – D8: “GI’ celebrated the Period Ending, mentions details surrounding the Era event.

Tonina Mathews’ Monument p3: “GI’ creation;”

Tres Islas Monument: “Paddler Gods approved;”

Tortuguero Monument 6: “will be completed 13-*Bak'tuns*; will occur this display of 9-*Okte*’ in the great return/investiture.” (examined below);

The “Jerusalem Panel” (fragment in a private collection): “He witnesses it, *Yax K'oj Ahk* (a royal name)”. Probably refers to a historical event on the date 4 *Ajaw* 8 *Kum'ku*, rather than the Era Date.

Carl Callaway informs us (personal communication, 2011) that he has found more, and will be scrutinizing the whole lot in his doctoral dissertation.

Quirigua Stela C (Figure 4a). In the literature the Creation or Era event has been known as “the changing of the hearth at the edge of the sky”, but we will argue for ‘representative’ rather than ‘hearth’, as new spelling evidence suggests a word meaning ‘representative’, ‘mask’, ‘one who stands in for another’ in relevant languages.²²

Several texts at Palenque mention events that *preceded* 4 Ajaw 8 Kumk’u. These distant-past events are performed by gods anticipating later historical events, and the two are often connected by numerologically-significant intervals.²³ Thus the Creation was not perceived as

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- 22 Quirigua Stela C gives the most elaborate statement regarding the Creation event. Here we are told of the “planting” (inserting into a foundation) of three separate stones, also called ‘thrones’, each associated with specific deities and a tier of the cosmogram (sky, earth, watery underworld). This depiction of Creation on QRG C was first identified by MacLeod (1991) and was subsequently developed by Freidel, Schele, & Parker (1993). As on other Creation monumnets, the event was said to have taken place at “the edge of the sky”(B13) at “First Three Stones Place” (A14). The initial verb *jehlajiy* (B6a) ‘was changed’ was proposed independently by MacLeod and David Stuart in the mid-1990s, and they also both suggested that the usual **k’o-ba** (B6b) spelling which followed spelled *k’o:b*, a word for hearth or kitchen. However, several **k’o-jo-ba** spellings have come to light Stuart, (2011, Callaway, p.c.2011). In April, 2011, Carl Callaway (personal communication) said (of a small altar with a Creation-like text on it):

“This small circular altar makes an ideal platform on which the effigy indicated most probably sat. Notice how scribes spell the term at Copan and on the Yaxchilan steps by adding the interior syllable -jo-: CPN Str.30 Altar 19469 (A1-A6): u-JEL k’o-jo-b’a u yak’u CHAAK-ki yi-ta-ji ya-ha-wi-li. . . YAX Stairway 5 Step 16: . . .k’o-jo-b’a-li? . . .

These cases spell the term with the interior -jo- syllable indicating that the word may be under-spelled when written as k’o-b’a. The Copan example is especially telling since it occurs in phrase that uses the same verb JEL as in the Era Day expression saying that k’ojob of Uyak’u Chaak is “changed/renewed”. The item possessed by Uyak’u Chaak is the kojob or the round flat-topped altar itself on which the inscription is written. So, the question arises as to the intended meaning of k’ojob’. In Classic script, does the term name a particular flat-topped stone altar? One more example of the term k’ob comes from the site of Joyanca where it is part of a standard dedicatory phrase for another circular altar (very similar in shape and size to the previous Copan altar) from Structure 6E-12 thought to be used as an incensario stand (Formé 2006:06). David Stuart in 2001 transcribed the glyph blocks A2-C1 as: T’AB’AY u-k’o-ba TUN-ni-li? (ibid.). Here again the item indicated by the k’o-b’a spelling is most likely the altar stone itself. The Joyanca stone, with its flat top, is ideal for a stand...Based on the current evidence, the proper spelling of the term is k’o-jo-b’a for kojob and may translate as a flat-topped, circular stone altar ...” (cf. Andrews, 2005 and Ferme, 2006).

- 23 Lounsbury (1976) and Aldana (2009) discuss in detail the numerology of intervals between contemporaneous events and others in the deep past or deep future.

A few monuments, such as at Cobá, cite provocatively long dates, with many higher-order digits reaching back octillions of years, indicating a concept of Time much grander than our humble Creation. David Stuart (2011: 240-242), presents a new analysis of the structure of time which he terms The Grand Long Count. He proposes that the Bak’tuns, having reset from thirteen to one (it seems to us that they reset to

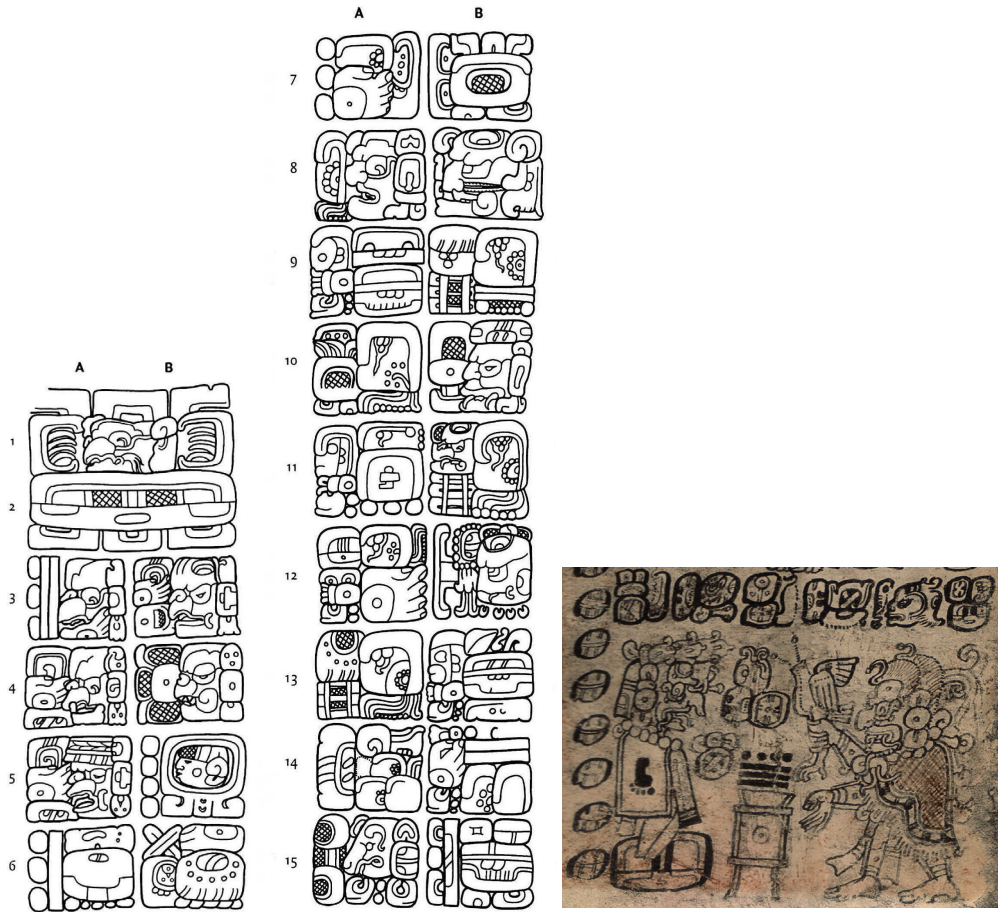


Fig. 4. (a) Quirigua Stela C., east text.
Drawing by Matthew Looper.

(b) Dresden Codex p. 25.
<http://www.mayacodices.org>

the absolut beginning of everything, but rather the *beginning of the current era*. This is also apparent from the repeating formulaic statement itself: ‘was changed the representative at the edge of the sky at the First-Three-Stones place’. If something is *changed*, it must have existed in

zero) in 3114 BC, will now proceed forward to 4772 AD and the close of the current Piktun, at which time the Piktun coefficient (now at thirteen) will reset to one—as recorded in a text at Palenque. The idea is a provocative one, and the subject of much debate among Mayanists. There is no doubt that the Bak’tuns will count forward to One Piktun from the calendric information given at Palenque.

another form prior to its changing. It has proven a challenge to name it, but, in collaboration with Callaway, and taking into consideration Stuart's insights (2011 and personal communication), we feel we are close to doing so. Note 17 provides the textual data supporting the assumption that a *k'òjob* (later shortened to *k'ò:b*) could in the physical realm²⁴ have been a type of small, flattened altar stone designed to support an effigy of a god. Speculatively, we suggest that the example in Fig. 4b might show the full constellation: a *haab* ("year") altar beneath an effigy of a "representative" of one of the cardinal points. This is not a Creation passage, but rather one describing the Postclassic (and likely Classic) New Year rites.²⁵

We suggest tentatively that 'the edge of the sky' describes the cusp of Creation itself.²⁶ The First Three Stones Place is undoubtedly a descriptor for the three tiers of thrones "planted" in the sky, earth, and watery underworld by Creator gods (the so-called "Paddlers", a unique fellow, and *Itzamnaah*, respectively²⁷). From the syntax, one must conclude that these stones are the *k'ò:b* (as it is spelled here) which are changed.²⁸ They are jaguar, snake, and water thrones.²⁹

There remain numerous unanswered questions. Was the world necessarily destroyed before it was created anew, as Callaway considers possible? Will this recur at the next 13.0.0.0.0 position, or will human intervention and appeasement of the gods have forestalled it? Did the Maya even consider that this "great return" (as we suspect they called it) would be a re-enactment of the events of Creation?

24 In the metaphysical realm, this object—described as a throne—was perhaps viewed as a locus of Creation and a station in the cosmic order held by a god.

25 This section of the Dresden Codex closely parallels the description of early Colonial-period Yucatec Maya New Year Rites given by Diego de Landa (1978).

26 Within the 365-day *haab*, the first day of a twenty-day "month" is termed either 'seating of (month name)' or 'edge of (preceding month name)'; the numeration makes clear where it lies mathematically. So there is a cusplike quality to the "edge of the sky", and furthermore, Long Counts referring to events before Creation typically employ a "Sky" glyph for the *Bak'tun* period.

27 The Paddlers appear at **A8-B8** on QRG C, while *Itzamnaah* is seen at **B12**.

28 There is a tantalizing entry in the *Chilam Balam of Tizimin* linking *k'òj* (the root of *k'òjob* and *k'ò:b*) to *bakab*—one of four atlantean beings located at the cardinal directions who were venerated during the New Year rites, according to Landa:

TIZ0357a *uatal u caah ah koh bacab, ah can tzic nal*, stands up, he the *k'òj bakab*, *Aj Kan Tziknal* (one of the Bakabs mentioned by Landa). Source: Bricker, 1990. This passage in the *Tizimin* features the New Year installation of 'our priest of the mat, our priest of the throne'—clearly the *K'òj Bakab Kan Tziknal* (MacLeod's translation).

29 While Stuart (2011) continues to argue for the 'hearth' identification of the "Three Stones Place" and the hearthlike plan of the Group of the Cross at Palenque, we hesitate to support this, given the reassignment of the *k'òjob* term.

Other Sources of Knowledge about Cycles and Prophecy

The Maya mythic-historic book *Popol Vuh*, written down in highland Guatemala about 1700, was doubtless copied from much older sources. It includes the Maya story of Four Creations, and the later history of the Quiché Maya people. Most importantly, it has a quite long account of events *in between* Creations, the Hero Twins' exploits preparing the way for this Creation. The Hero Twins, children of the Maize God, frequently appear in mythical scenes painted on Classic Maya vases, circa the 7th-8th centuries AD/CE. Their exploits appear as early as the 1st century BC/BCE on Late Preclassic monuments at Izapa.

Unfortunately, there is no correlation between these narratives and the monumental texts. Moreover, there are *no dates whatever* in the *Popol Vuh*, a puzzle considering how important timekeeping was—and still is—to the traditional Maya. Further, the Hero Twins were so important to Maya mythology that their faces became common hieroglyphs for the word *Ajaw* 'lord' and the numeral 9—yet the Twins are explicitly mentioned only *once* in the entire monumental record. Provocatively, this reference is in the short base texts of Quirigua Stela C, apparently unrelated to the nearby 13.0.0.0.0 Creation texts on the *same stone*.³⁰ Why the Twins, obviously crucially important personages, should have been excluded from mention on monuments is a mystery.

Paintings on thousands of Classic Maya vases tantalizingly illustrate otherwise-unrecorded mythic and historic events.³¹ Some of these have dates and other laconic texts, but only two, the *Vase of 11 Gods* (K7750) and its copy the *Vase of the 7 Gods* (K2796) are dated 4 *Ajaw* 8 *Kumk'u*.³² These portray a moment during Creation when a host of gods is set in order in the underworld, or in the primordial soup before Creation. None of the gods mentioned are the same as the five involved in the Planting of the Three Stones, and Callaway (quoted above) believes at least four to be solar, as they have sun god facial features. None except the presiding

30 The terse, five-glyph text on the north side of Stela C is dated 9 *Ajaw* (not 4 *Ajaw*). This may be 11 August 775, a historical rather than a mythic time frame (and, provocatively, a solar anniversary of the 4 *Ajaw* Creation 11 August 3114 BC/BCE), but the verb is frustratingly undeciphered. The text's relation to the image above it, or the Creation account on the sides of the monument, is also unknown. It seems to connect to the matching text on the south side base of the stela, which refers to the dedication and naming of the monument itself, on 6 *Ajaw*.

31 The first publication to treat these mythic illustrations in a coherent way was Robicsek & Hales (1981). The second is the vast *Maya Vase Database* by photographer Justin Kerr <mayavase.com>. Aside from the two we describe, none of them appear—yet—to relate to Creation. The *Popol Vuh* stories are well-represented.

32 See the *Kerr Maya Vase Database* at <http://research.mayavase.com/kerrmaya.html> and search “K2796” and “K7750”.

god (God L) are prominent elsewhere. However, a pair of them, “Sky-God” and “Earth-God,” also appear on the Santa Fe Mask. One mentioned in the text of this vase is the 2012 protagonist on Tortuguero Monument 6. This god of war and transition (or a constellation of avatars of this god?) is called *Bolon Yokte’ K’uh* (“Nine-Wooden-Legs [or Supports]-God;”) and is the centipede-solar deity seated to the far left on the bottom row on the Vase of the Seven Gods (Figure 5). More will be said of him.

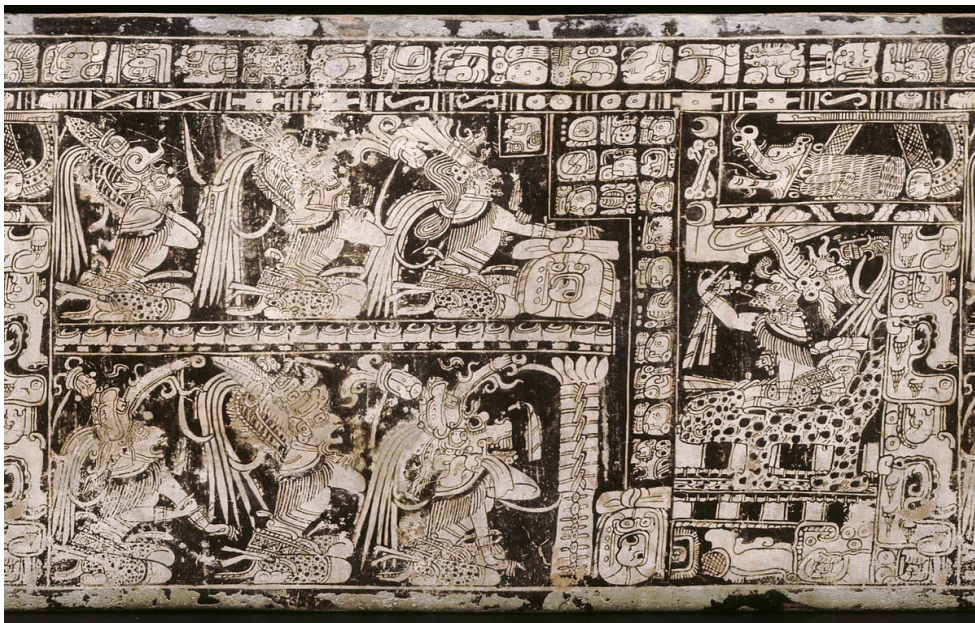


Fig. 5. The Vase of the Seven Gods. Rollout Photo by Justin Kerr.

The astonishing and exquisite early murals recently discovered at **San Bartolo**, Guatemala date to the Late Preclassic (ca. 100 BC/BCE), and illustrate some remarkable antecedents to later Mesoamerican Creation myths. There are gods striding out of a cave, blinking in the sunlight; a *quincunx* of babies erupting in a fountain of blood from a split gourd; and a quintet of gods performing complex and bloody auto-sacrifice before Trees of the Cardinal Directions. There are no dates, unfortunately.³³

33 No-one has proposed a believable explanation for the *Popol Vuh*'s singular lack of dates and distance numbers. This is in stark contrast to the Classic period habit of structuring entire narratives within a temporal framework. Perhaps at the time of writing, the local Catholic priests were particularly firm about prohibiting the pre-Christian Calendar, as it was closely bound up with “pagan” religious

The Postclassic **Dresden Codex** is the most attractive of the four surviving Maya books (dating from just before the Conquest, ca. 1500-1535 AD/CE). Like the others, it consists mainly of *auguries*—horoscope-like instructions for various days—and other astrological information. It also contains, as mentioned above, Eclipse Tables and Venus Tables. The latter seem to have been composed originally during the early Postclassic—precisely recording Venus’ movements for the era around 934 AD/CE— and they contain observational corrections up to about 1350 AD/CE. The Eclipse Tables are not so precise, extrapolating forward and backward in time by strict calculations. The Serpent Number pages are the most difficult to interpret and perhaps the most intriguing: they describe Creation in terms of the renewal of Time itself (Callaway, 2009), and connect 4 *Ajaw* 8 *Kum’u* to a date 9 *K’an* 12 *K’ayab* some 34,000 years earlier.³⁴

For various sequences of calendar days—dates at four-day intervals, five-day intervals, seven-day intervals, and so on—the auguries of the *Dresden*, *Madrid* and *Paris* Codices describe the days in terms of specific acts performed by various gods, and whether this bodes good or ill. For example, on *Dresden* page 13b, “Death God eats bread: Death,” and “Maize God eats bread: Royal succession.” These formulaic auguries are not unlike the daily horoscopes we find in the morning newspaper, and presumably had the same use; that is, to guide one’s daily activities. In this sense, the codices can be said to contain “prophetic” texts. But these guides are cyclical, like the movements of the sun and planets through the zodiac; they do not pretend to contain any End-of-the-World or other one-of-a-kind predictions.

The **Books of Chilam Balam**, (Colonial period, ca. 1570-1790 AD/CE) are collections of historical and prophetic texts which survived in half a dozen Yucatec Maya communities. Attributed to a religious leader called *Chilam Balam* (‘Interpreter Jaguar’), they were written in Maya using the Spanish alphabet, mostly in the 18th century. Each has information specific to its home community. Some of their content was undoubtedly retained from hieroglyphic precursors. They contain a range of information from history to recipes and herbals, but most interesting for our purposes are the Year- and *K’atun*-Prophecy sections. The latter divides into the thirteen *k’atuns*, named for their final day, forming a 260-year cycle. Each *k’atun* (approx-

ideas. Strikingly, the *Popol Vuh* features several Twin-protagonists with Calendrical names, such as 1-Death and 7-Death, 1-*Ajaw* and 7-*Ajaw*, and 1-Batz’ and 1-Chuwen. (These twins had the same date, 1-Monkey, but stated in different languages [Cholan and Yucatecan], as if they were specific to different regions....) Strikingly, the *Tzolk’in*, the sacred 260-day cycle, is structured in such a way that, if a daysign with coefficient 1 *begins* a 260-day cycle, then the same daysign with coefficient 7 will be the last appearance of that daysign in that cycle. In other words, 1-Death and 7-Death, as well as 1-*Ajaw* and 7-*Ajaw*, serve to bracket their respective *Tzolk’ins*. Any freshman calendar-novitiate would know this. The Twins’ names indicate that they enclose calendar-cycles.

34 They contain long distance numbers which Grofe (2007) considers evidence for an accurate solar sidereal year. This is much debated, but we feel that a number of Grofe’s proposals have merit.

imately 20 years) is described in an augury of several sentences. They are as vague and as accurate as the sayings of Nostradamus: of the thirteen, six are positive and seven negative. We have previously mentioned the prophecies for *K'atuns 4 Ajaw* and *11 Ajaw* (Note 17).

Maya Cruzob Caste War counsels (19th century AD/CE)³⁵ are formulaic oral narratives of the Caste War preserved and transmitted by the modern heirs (*Cruzob*) to the oracular Talking Cross of the rebellion. During the 19th and early 20th centuries, the Maya of Yucatan rose up and took control of large parts of Yucatan, evicting some of the most egregious exploiters and instituting a revivalist religion. We haven't space to consider their fascinating and tragic history; what concerns us is the prophecies they made. These pronouncements exemplify the kind of millenarian hope arising in other movements of the oppressed: God will return, bringing the peace and justice so long denied, the prosperity stolen from us. It will happen soon! Get ready! The British will give us guns! And so forth. The prophecies bear a striking resemblance to some of the statements made by modern writers about 2012. They also recall the prophetic writings of persecuted early Christians, who composed the *Book of Revelation* during comparable intervals of doubt and faith.

Regarding **Modern Mayan leaders and calendar-keepers**, we owe most of this information to the efforts of Dr. Robert Sitler (2006, 2010). He has spent many years among the modern Mayan people of Guatemala, interviewing community leaders, speakers, shamans, poets, and the knowledgeable village healers-and-advisors called calendar keepers. Despite centuries of repression, they preserve embers of ancient Maya esoteric knowledge, but the Long Count was not among them. Some of their leaders have taken portions of the 2012 meme to heart, and now interpret the 13.0.0.0.0 day's portent amid advocacy for their communities within a syncretic revivalist fusion of traditional religion with New Age beliefs.

The Deep Future of the Classic Maya: 2012 and Beyond

We now turn our attention to texts known to cast forward long distances. It is not uncommon for a monumental narrative to count forward to the close of the current *k'atun* in order to anchor contemporaneous events in time. It is even more common for texts to move backward to preceding Period Endings, again to anchor events on the timeline. Some monuments, as we will see, feature prodigious leaps backward millions, trillions and more years to highlight the actions of deities and mythological beings. The ancient Maya preoccupation with their past is obvious. We can only assume from the epigraphic record that they were not as interested in, nor as confident of, the future.

35 Reed (1964), Rugeley (2001).

There are three noteworthy monumental texts (among others) which move into deep future time; these are the West Tablet of the Temple of the Inscriptions at Palenque (counts forward to October 13, 4772), Monument 6 of Tortuguero (counts forward to December 21, 2012), and Altar 1 of Naranjo (counts forward to March 13, 830).³⁶ The latter will be discussed briefly in connection with Tortuguero 6 due to its parallel discourse structure.

The West Tablet of Palenque's Temple of the Inscriptions

This is the third of three tablets found inside the mortuary temple of Palenque's greatest king—*K'inich Janaab Pakal*. The first of these reviews the history of the Palenque dynasty before *Pakal*—who was not in the royal succession—rose to power; he did so amid great strife as the city was subjugated and her royalty slain during the belligerent imperial campaigns of Calakmul (Campeche, Mexico). The second tablet details Palenque's recovery under his aegis: prosperity is restored and the patron gods of the city are once more adorned and celebrated. The metaphorical trees of the lineage, having withered in the conquerors' grip, now grow and flower again. The narrative of the third tablet picks up with the aging king still alive and pleasing the hearts of his gods,³⁷ having started construction on this temple which was to house him for posterity in a sarcophagus deep in its interior. The transition into the *k'atun* of his death is deliberately understated in this text, but his death date is well-known from other texts. What is fascinating is that the 'appeasing of your heart' thereafter specifies (via titles) the deified *Pakal* himself, who has now passed into Primordial Time. Guenter (2007: 43-44) summarizes:

Just as earlier in Passage 5b we saw a Distance Number lead from the birth of *Pakal* to his accession, here we have a Distance Number from his birth to the anniversary of his accession in 4772. However, in Maya belief, not only was this the anniversary of *K'inich Janaab Pakal*, but it was probably also conceived in some manner that he would become king again. One recalls that the East and Central Tablets recorded the accessions of various gods of time on or shortly before or after the major *K'atun* Endings. The Palenque scribes may well have intended the reader to know that in 4772 their king, *K'inich Janaab Pakal*, would reign again. And, if our understanding of the time gods is correct, that they are universal time gods who reign over the entire Maya world, *Pakal* would become god of time and the world itself in 4772.

Indeed, following these appeals to the deceased, deified king, the text makes a dramatic leap forward in time to the date 1.0.0.0.0 10 *Ajaw* 13 *Yaxk'in* (13 October, 4772 AD). This

36 These Gregorian dates are based on the 584283 GMT correlation.

37 *Utimiw yohl uk'uhil* 'he pleases his gods' hearts' (the Palenque king)—a phrase first deciphered in 1996 by MacLeod. Subsequent exhortative variations on the phrase follow *Pakal*'s death: *ich naik utimajel awohl* 'may it pour out, the appeasement of your heart'.

will be the rollover of the *Piktun* (the unit representing 20 *Bak'tuns*). The text now plunges into the deep past to tie the king's accession to the rule of the mythological Square-Nosed Beast,³⁸ and then counts forward from *Pakal's* birth to a day eight days after the rollover of the *Piktun*, highlighting this as a Calendar Round anniversary of his accession!³⁹

But what is *more* intriguing from our perspective is that soon after this, the text mentions the close of *Bak'tun* 12,⁴⁰ whereupon *Pakal* and his "great serpent companion" engage in an obscure quadripartite ritual and give the sky and earth gods their proper places.⁴¹ And if that isn't enough, the text then *breezes right past* the upcoming 13.0.0.0.0 date of our rapt attention, and mentions 14.0.0.0.0⁴², whereupon one of the "Paddler Gods"—who placed the Jaguar throne on Quirigua C on the Era Day—witnesses the event along with one of the "gods of time"⁴³ and *Pakal* in a passage which is as tantalizing as it is difficult, due to both erosion and simple inscrutability. The rest of the tablet concerns a major military victory of *Pakal* in his lifetime, naming captives from an arch-enemy site to the east who, in the end, become the feast of the gods.

This amazing testimonial to the Mayas' view of the future has repercussions for our understanding of the 2012 passage of Tortuguero Monument 6. But it testifies as well to the fact that, when the political and historical agenda of the future did not require a bow to 13.0.0.0.0, the date—here pregnant in its absence—could be bypassed.

38 "K'inich Janaab Pakal, King of Palenque, acceded 455,393,641 days (1,247,652 years) after the 'Zip Monster' <Square-Nosed Beast> acceded." (Gunter, 2007: 43)

39 Both dates have the Calendar Round position 5 Lamat 1 Mol.

40 12.0.0.0.0 5 Ajaw 13 Zotz': 18 September, 1618 AD.

41 Recall that sky and earth gods were set in order on the 4 Ajaw 8 Kumk'u. Era Day. The translation of **u-tu-ta-li**: *ututal* (or *ututil*) 'their proper places' was suggested by MacLeod in 2009.

42 14.0.0.0.0 3 Ajaw 8 Zek: 26 March, 2407.

43 *Bolon Tz'akbu Ajaw*, who with two other entities presides at several historical k'atun endings on the earlier tablets.

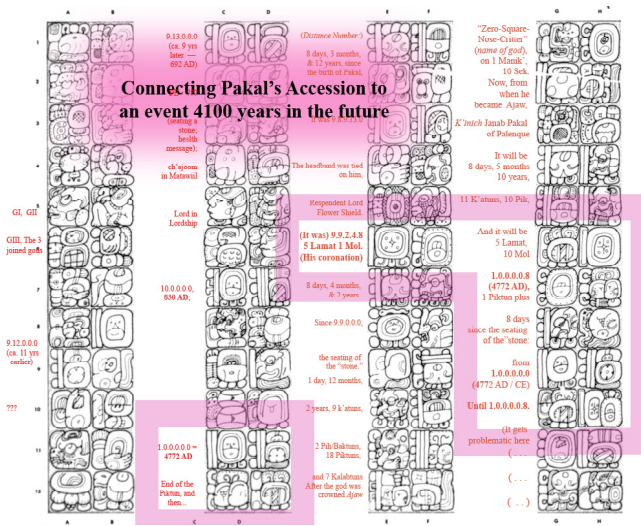


Fig. 6. Palenque Temple of the Inscriptions, West Tablet.

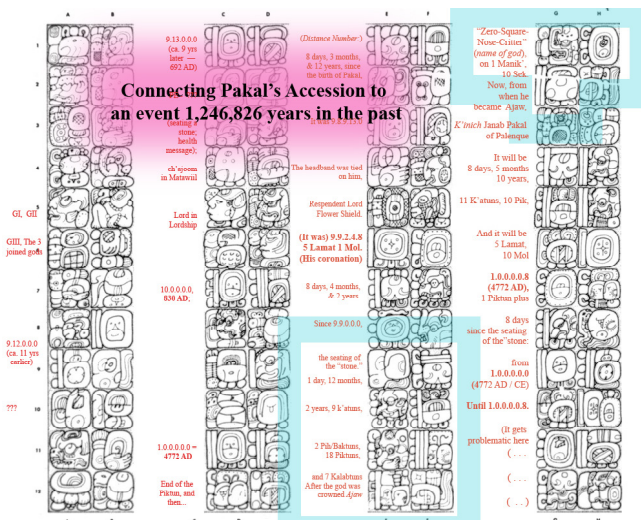


Fig. 7. Palenque Temple of the Inscriptions, West Tablet. Fig. 6 (upper) connects Pakal's coronation with its 80-Calendar-Round anniversary (a numerologically-significant number), which falls only 8 days after the very important period-ending 1.0.0.0.0.0. Fig. 7 (lower) highlights a connection back to the Holocene epoch. Neither text specifies the events on these distant dates. Drawings by Linda Schele, Courtesy David Schele and FAMSI.com archive. Color added by Van Stone.

Tortuguero Monument 6

The event corresponding to December 21, 2012 which Tortuguero Mon. 6 records is damaged (see Fig. 8), but we can reconstruct a part of it with confidence. The rest, reflecting an educated guess, was subjected to rigorous scrutiny during 2009 and 2010, amid a group collaboration prior to publication (Gronemeyer & MacLeod, 2010). The count forward to the 2012 date begins at the bottom glyph block of the first column, having originated with a contemporaneous date in the seventh century when an important building was re-consecrated by the king *Bahlam Ajaw* following his successful war campaigns against neighboring cities. Here is that final count and event as we understand it:

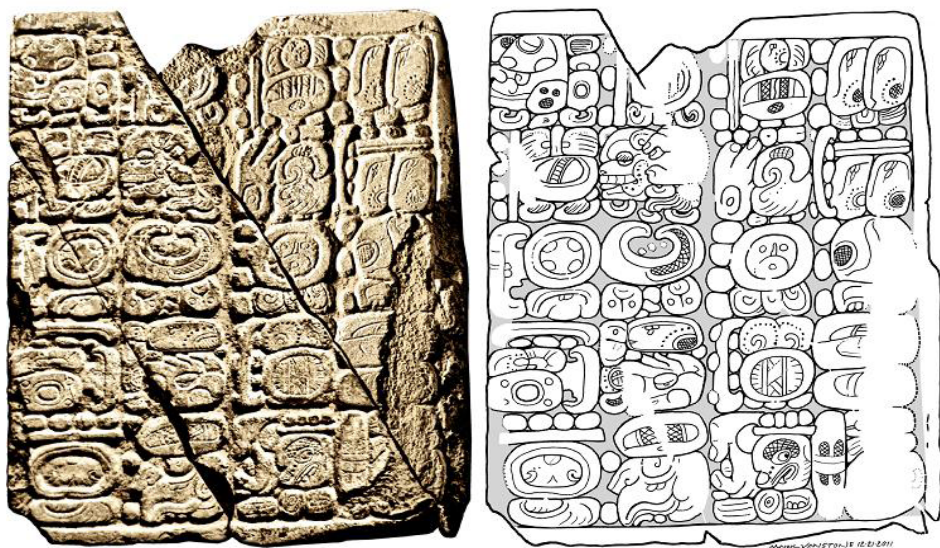


Fig. 8. *Tortuguero Monument 6*, right panel, with the closing passage. The 2012 date 4 Ajaw 3 K'ank'in is in the third row, right two columns. The phrase meaning 'display (of) *Bolon Yokte*' appears at the bottom of the third column. The eroded block meaning 'this' is second from the bottom, fourth column. Photos by Donald Hales & Elisabeth Wagner. Photo-collage of three fragments by Paul Johnson. Drawing by Mark Van Stone. Two fragments on left in private collections, right fragment in the Carlos Pellicer Museum in Villahermosa.

cha' k'i:n, bolon winikij, u:x ha'ab,
waxak winikha'ab, u:x pik,
tzuhtzjo:m uyu:xlaju:n pik
(ta) Chan Ajaw, U:x Uni:w.
uhto:m ili
ye:n Bolon Yokte' ta chak joyaj.

two days, nine-score days, three Tun,
 eight K'atun and three Bak'tun (forward),
 will be completed the thirteenth Bak'tun;
 (on) 4 Ajaw, 3 K'ank'in. (Dec. 21, 2012)
 will happen, this
 Bolon Yokte' display in the great return.⁴⁴

Although this laconic prediction will disappoint prophets of doom, TRT 6 is actually unusually forthcoming. Nearly all of the temporal connections the Maya cited on their monuments are terse, serving perhaps as mnemonics for a parallel oral or codical narrative full of sound and fury. That is, they rarely tell us more than that the current or distant date is an anniversary of a ceremony, birth, or accession.

There is more to be described in the narrative of the right panel, necessitating an examination of the whole text of Tortuguero 6.⁴⁵ That research is beyond our scope here, but we can share insights about the protagonist of two events—(1) the seventh-century building dedication as **this** '*Bolon Yokte*' display' and (2) the 13.0.0.0.0 date as both an anticipated recurrence of the display of this god and a 'great return' (Note 43).

44 Sven Gronemeyer and Barbara MacLeod (2010) published a meticulous decipherment of the entire monument. A recent re-evaluation of this text by MacLeod proposes 'this' for *ili*, which opens the possibility that the verbal noun *joyaj* 'wrapping' and 'traveling in a circle' refers specifically to the return of the 13.0.0.0.0 date. This view amends the previous proposal, wherein the sign at P4 was considered as 'il' 'see' and *joyaj* to be 'investiture'—which it certainly is in accession rites. See Gronemeyer & MacLeod (2010): www.wayeb.org/notes/wayeb_notes0034.pdf.

45 MacLeod in 2011 (in press) has proposed that the full text of this monument places its building dedication within a broad mythic and religious landscape focused on the balance between war and sacrifice on the one hand, and lineage and agricultural prosperity on the other. On this stage stands *Bolon Yokte*' as a central protagonist. The three famous tablets of the Group of the Cross at Palenque feature the lineage charter, the divine spark of growth and regeneration, and the obligations of war. MacLeod views Tortuguero 6 as a distillation of this same mythic point-counterpoint: the king, in fulfilling his obligation to conduct war, orchestrates balance.

Bolon Yokte' is a god of war. This has been proven by Erik Boot in a recent study (Boot, 2000) including a polychrome ceramic image of this god as an underworld solar deity with a jaguar cummerbund and centipede headdress (noted above on the Vase of the Seven Gods), named as *Huk Tz'ikin Chapat K'inich Ajaw Bolon Yokte'* ('Seven Eagle Centipede Sun Lord Nine Wood Supports'). This identification is vital.⁴⁶ Callaway's work, cited above, takes the analysis of Eberl & Prager (2005) squarely into the Creation milieu, suggesting that this bellicose deity was responsible for toppling the supports of the sky at the cusp between destruction and renewal.⁴⁷ We speculate that the *k'ojob*—which were 'changed' at the 3114 BCE Creation—are akin to these supports in some way.



Fig. 9. Comparison of *Bolon Yokte'* spearpoints. (a) the centipede-framed point from the Palenque Tablet of the Sun (Linda Schele photo); (b) the same object held by a *Bolon Yokte'* impersonator (Eberl & Prager, 2005).

46 The identification of *Huk Tz'ikin Chapat K'inich Ajaw* as a war god has long been accepted. This juxtaposition brings *Bolon Yokte'* into sharp focus.

47 Callaway states: "My over-arching idea of era day events is one of the ordering of the cosmos (the only exception being the frenzied disorder wrought by the attack of *Bolon Yokte'* on God N <seen in the Dresden Codex> in possibly the nocturnal hours before the first dawn). In all other era day passages order is somehow reaffirmed. I really think that the 'totality of meaningful order' is embodied in the godly action of TSAK and how it describes the sequential order of gods, space, time and ritual actions that were first set by the gods and then later given to man to maintain and replicate. TSAK then is on similar level to the Greek *kosmos*, the Chinese *tao* and the Indian *dharma* and the Egyptian concept of *maat*." (Carl Callaway, personal communication, June 2011)

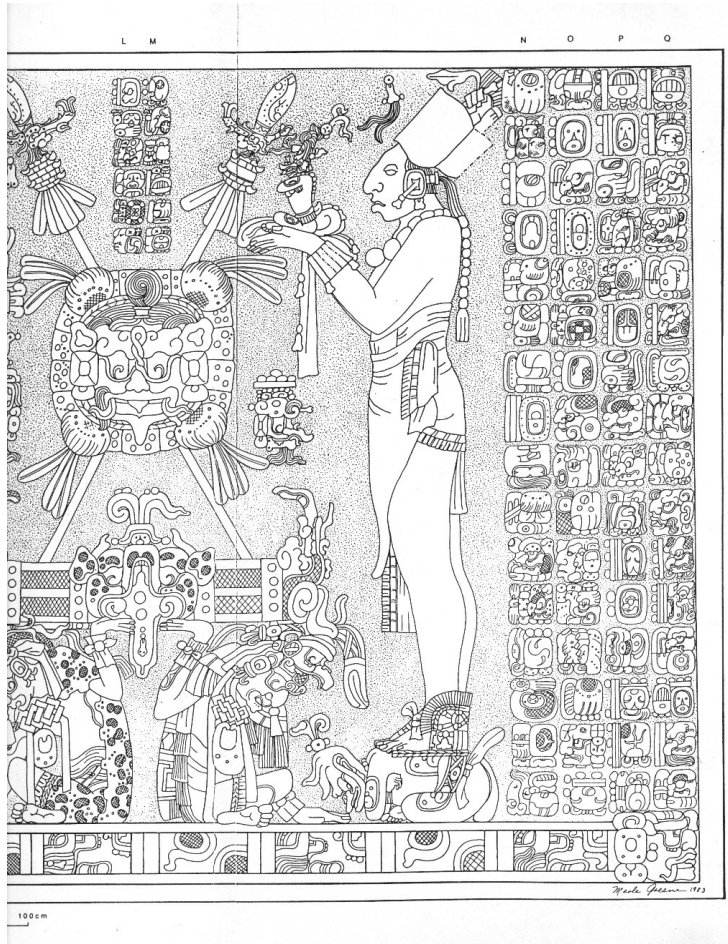


Fig. 10: Right half of the *Tablet of the Sun, Palenque*. Note the crossed spears with flint blades surrounded by centipede jaws, the shield featuring the Jaguar God of the Underworld, and the 'okte' 'support gods' acting as legs ('okte') for the war-complex throne. These all signal the presence of *Bolon Yokte'*, an underworld solar deity with jaguar and centipede attributes. The deified seed *baak* 'regenerative bone' serves as a pedestal for the king. At P3-Q3 we read *kalwani:y ta okte'el* 'he was bound into 'okte'-ship' followed by the king's name, suggesting the king's formal induction into the obligation to conduct war. Drawing by Merle Greene Robertson.

We hold that *Bolon Yokte'* is the war constellation depicted on the Tablet of the Sun (TS) at Palenque (Figures 9 and 10). His signature icon is the pair of centipede jaws wrapped around a flint spearpoint (Figure 9); these are prominent on the TS (Fig. 9a) and on an unprovenienced monument (Fig. 9b) wherein the text states that a ruler impersonates this god. The warrior title '*okte*' (without *bolon*) occurs five times in the texts of this Palenque building—and only five other times outside Palenque. The "*Bolon Yokte'* display" mentioned in the closing passage of Tortuguero 6 is embedded in an ingenious discourse device designed to place this event in two places at once.⁴⁸ Given what we have learned from the West Tablet of the Temple of the Inscriptions, it is not unreasonable to suggest that both the Naranjo king and the Tortuguero king expected to officiate at these future Period Endings in alliance with their gods and lineage ancestors, who reside in primordial time. Carl Callaway (personal communication, 2011), whose dissertation explores this, says:

In the mythic mindset, primordial acts... are replayed in the circular course of time so that in the past and in the distant future there is only primordial time with its initial acts being repeated again and again (Van der Leeuw, 1958: 36). At Quirigua, even death does not bar the now dead ruler *K'ahk' Tiliw Chan Yopaat* from performing his future calendar rites. Scribes on Zoomorph G—the king's death monument—clearly... record his death date. In the very next passage they count forward to the 10th *Bak'tun* and explicitly state that [*K'ahk' Tiliw*], the 5 *K'atun* Lord, is there to commemorate the 10th *Bak'tun* period rites with a *kal* binding event.⁴⁹

48 A couplet is seen in this text—and on Naranjo Altar 1—in which two future verbs are followed by their subjects. We do not accept the proposal by Houston (2008) and Stuart (personal communication, 2011) that the second future verb meaning 'will happen' is also part of the previous clause. Their view is fundamental to an argument that there was no event recorded for the 2012 date. On syntactic grounds alone, we find this improbable, as argued first by Gronemeyer & MacLeod (2010), and as ratified in recent personal communication (June, 2011) with Nicholas Hopkins, a specialist in the Ch'ol language and Classic discourse structure. We further believe that NAR Altar 1 places the king in two places at once: at the monument dedication and twelve *katuns* into the future. We recognize that the 'will happen' verb indeed ends a clause at D12 on the west panel of the Tablet of the Inscriptions where, citing Hopkins, "there is no available subject other than the date preceding the verb." *Not so in the Tortuguero and Naranjo cases.*

49 "Historical kings not only went as far as to dress in the garb of the gods but they sought to replicate the archetypal acts of remote ancestors *in illo tempore*; by doing so, they showed that the ancient acts were not only renewed in a new time and place (Girard, 1979: 8) but their earthly deeds replicated that of a higher, more divine order. On the Temple 19 Panel, one sees a glimpse of how myth just is not merely a story but a 'living reality' (Malinowski, 1971: 18) that is legitimizing the right to rule and acting as guarantee for the life of the participant—so that long as "he performs the rites correctly, he creates his world anew each day, in the manner *creatio continua*. The creative word of myth renews the world for him . . . [and the myth] is just as much alive today as it was yesterday." (Callaway, p.c. 2011, citing Van der Leeuw, 1958: 337).

We propose that the aforementioned monuments—as well as Naranjo Altar 1—which counts forward a “mere” twelve *katuns* from the dedicatory date as well as (earlier on the monument) into the deep past to the rule of the Square-Nosed Beast—partake of both historical time and primordial time. And in primordial time, a king—now immortal—may act in concert with immortal deities. The deceased king *Pakal* is addressed as a living entity in the future whose heart will be appeased. The king of Naranjo cleverly employs a syntactic double-entendre to place himself in the present *and* some 240 years in the future. And *Bahlam Ajaw* of Tortuguero uses the *same* syntactic device to inform his audience that this ‘*Bolon Yokte*’ display’ of the seventh-century building dedication will happen (again) in the future ‘in/at the great return.’

Before we leave Tortuguero 6, it behooves us to briefly mention the possibility of an intentional sidereal interval between the king’s birth date and the 13.0.0.0.0 date. While *Bahlam Ajaw*’s birth date can only be reconstructed to within five days due to a damaged Distance Number coefficient, that date would nonetheless have also placed the Sun at the Dark Rift very close to the December 21, 2012 position.⁵⁰ There are, incidentally, two other dates in this text which fall—sidereally speaking—within a day or two of the above pair, and for these, there seems no rationale at all. Our position⁵¹, and that of Grofe (personal communication, 2010, 2011) is that the Maya of Tortuguero likely had the astronomical sophistication not only to notice that the 13.0.0.0.0 date would fall on the winter solstice, but that this solstice would fall within the Dark Rift somewhere past the midpoint of the solstice Sun’s slow transit.

This raises two questions: (1) did the Maya tweak the king’s birth date? And (2) does this demonstrate that the Preclassic creators of the Long Count set the 13.0.0.0.0 date intentionally? Our answers would be: (1) Possibly, because they contrived certain other dates, but it still seems a stretch, and (2) No; it would be illogical to invoke hindsight as proof of original intent.

In conclusion, taking the narrative of this monument and those of Palenque together with these considerations of immortality and primordial time, and joining them with what we have learned from many years’ study of the Classic Maya, we offer this suggestion: In the ancient Maya view, the preservation of the world and the prosperity of the lineage depended upon the fulfillment by men of obligations to the gods. The gods had reciprocal obligations. By these

50 Proceeding from this discovery by Michael Grofe, John Major Jenkins (2010) presented a paper at the annual meetings of the Society for American Archaeology on the astronomical implications of the monument, including these four dates and other dates related to Jupiter. An energized, sometimes heated online discussion took place thereafter which brought to the table a number of disagreements—not only between Jenkins and academic Mayanists, but significantly, between academics—on the subjects of precession, pseudoscience, and archaeoastronomy. One view—amid a wide spectrum—seemed to marry these all together. One of the authors took part, as did Michael Grofe.

51 Specifically MacLeod’s position.

means, the world was held in balance and the forces of chaos held in check. Even though recurring cycles carried recurring portent, Maya kings and ritual specialists had the capacity to mitigate; nothing was inevitable. Nowhere was the relationship more apparent than in the dialectic between war and sacrifice on the one hand, and agricultural fertility and lineage power and prosperity on the other. Importantly, the system appears—at least for the elite—to have been amenable to adjustment in accordance with local political priorities. While there was a shared Creation mythos, and likely a shared cosmogony and view of the afterlife, there was no overarching “ancient Maya religious doctrine”. The common themes played out in myriad variations, all subject to agenda and interpretation, as kings, priests and scribes selected from a vast, common repertoire.

Did *Bahlam Ajaw* expect *Bolon Yokte'* to turn up on the Big Day and wreak havoc? We think not, because the day of the great return of 13.0.0.0.0 would be a reiteration—including his presence—of a contemporaneous day on which the god was properly celebrated and his building re-dedicated. His hieroglyphic record testifies that from his accession forward, the king had honored the obligations of his office.

Did *K'inich Janab Pakal* or his heirs expect anything cataclysmic to happen on that day? Apparently not, because according to his eloquent record, he had served and honored his tutelary gods, avenged the violation of his city and reversed its fortunes into peace and abundance. In that distant future, the re-affirmation of world order will be carried out by the gods and the king himself during the thirteenth *Bak'tun*—the one in which we now are living—and the march of time will be witnessed with approval by the king and the Creator Gods during all those *Bak'tuns* which will follow.

Hearts will be appeased; all will be well.

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