WHAT COULD HAPPEN IN 2012: A RE-ANALYSIS OF THE 13-*BAK'TUN* PROPHECY ON TORTUGUERO MONUMENT 6

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*"…great floods have flown*
*From simple sources; and great seas have dried,*
*When miracles have by the greatest been denied.*
*Oft expectation fails, and most oft there*
*Where most it promises…"*
Helen in William Shakespeare's "All's Well That Ends Well", Act II, Scene I

## Introduction

The so-called "end of the world" – scheduled for the winter solstice of 2012 by certain groups of people – is moving rapidly into public focus. The topic receives ever more publicity in the media; Hollywood has even jumped in with Roland Emmerich's disaster film "2012". There is a burgeoning fascination with this event in the literature and on the internet – most of it arising outside the scientifically-based field of pre-Columbian studies, instead approaching the topic from an esoteric or New Age point of view. In 2006, Robert Sitler examined the esoteric side of the "2012 Phenomenon" and its (pseudo)-religious impact (Sitler 2006), so we will not put further attention on this aspect of the date. But since it is inevitable that our conclusions will find their way into the apocalyptic current, we hope they will not be excessively misconstrued.

Apart from the influential prophecies for the *K'atun* 4 *Ajaw* in the *Chilam Balam* of Tizimín (MS pp. 19-20, Edmonson 1982: 168-171) and other sources, the main and most cited source for this "millennial current" (Sitler 2006: 33) in the popular perception is the right panel of Tortuguero Monument 6 (Gronemeyer 2006: 157-161, pl. 12, Figure 1).

Several scholars have previously contributed to our understanding of the inscriptions of TRT Mon. 6 (Riese 1978, 1980: 10-16, Arellano Hernández 2006: 100-111)[1], including specific focus on the phrase involving the *Bak'tun* ending of 13.0.0.0.0 (Eberl & Prager 2005: 32, Gronemeyer 2006: 45, Arellano Hernández 2006: 107, fig. 55,

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[1] See Gronemeyer (2006: 137) for a comprehensive compilation of references to TRT Mon. 6 in the literature.

Houston 2008, Van Stone 2009, 2010). This will occur on the 21st of December, 2012, according to the (584.283) GMT correlation. The most recent and complete study of the Tortuguero corpus has been conducted by Sven Gronemeyer (2004, 2006). It has become clear that new information from the passage dealing with the *Bak'tun* ending (blocks O2-P5) can be retrieved which was not considered in previous analyses.
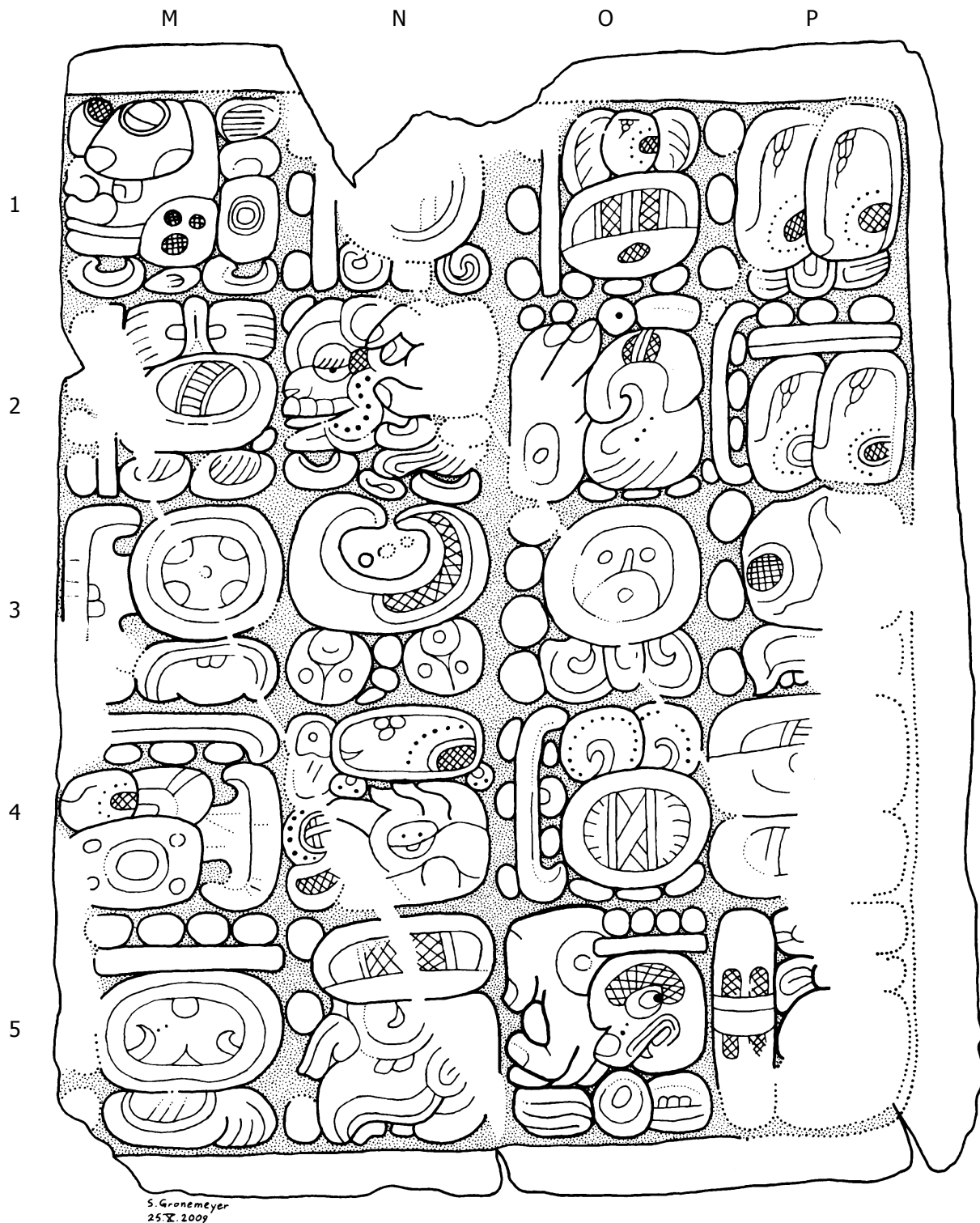


**Figure 1a:** Tortuguero Monument 6, Right Panel. Drawing by Sven Gronemeyer, 25th Oct 2009. Including revisions by Barbara MacLeod, Hutch Kinsman and Erik Boot (executed 13th Apr 2010).

**Figure 1b:** Tortuguero Monument 6, Right Panel. Photo mosaic assembled by Paul Johnson (Van Stone 2010). Based on photographs by Donald Hales and Elisabeth Wagner.

This is partly due to the fact that the existing drawings of the side panel were based on dispersed photographs. With the aid of the main photographic sources (Donald Hales for the monument fragments E and F and Elisabeth Wagner for fragment G, (cf. Gronemeyer 2006: pl. 13), Paul Johnson has assembled a high-quality photo mosaic (Figure 1b) that served as the basis for the new line drawing shown in Figure 1a.

More importantly, fruitful discussions with fellow epigraphers and Maya scholars during 2009 and 2010 have enabled us to narrow down what events may be related to the 13.0.0.0.0 period ending. This paper will offer the substance of these discussions and provide new options for the understanding of this text.

The first part of this endeavour will provide an epigraphic and grammatical analysis of the right panel of TRT Mon. 6. A following synopsis will offer a comprehensive discussion and a glimpse of what the Maya of seventh-century Tortuguero expected to happen on the occasion of the 13th *Bak'tun* ending.

The decision to commit these new data on Monument 6 to publication was that of Sven Gronemeyer. Drawing upon his extensive research on Tortuguero, he has provided in large measure the background data on the site, its hieroglyphic texts, and its external political affiliations. He wrote a lengthy first draft with all the initial epigraphic and grammatical identifications as well as pertinent ethnographic material. Barbara MacLeod, via the 2009 and 2010 group discussions and her subsequent contributions, offers the final grammatical analyses, an overview of the entire Monument 6 text, and some new hieroglyph readings – both hers and others'. She also edited and proofread the manuscript prior to submission. As co-authors, we generally do not distinguish between individual positions throughout the article unless a distinction is necessary for argument's sake.

Before we begin our analysis, some introductory remarks are in order so that we may embed the discussion about the *Bak'tun* ending in a greater context. The basics of calendrical mechanics and the Mayas' reckoning of time are a necessary prerequisite to any testimony regarding "what will not happen in 2012" (Houston 2008).

### The Calendrical Framework

While the Calendar Round is a repeating cycle of 18,980 days, the Long Count is a continuous reckoning of days from a certain zero point forward (Morley 1915: 60). Arithmetically it is 0.0.0.0.0, 4 *Ajaw* 8 *Kumk'u* (11th Aug 3114 BC). This day is known as the beginning of the current creation (cf. Schele 1992). In Classic inscriptions, however, the Long Count for this event never appeared in its mathematically "correct" form with zero coefficients for the period denominators. On QRG St. C, A1-A5, we have the Long Count noted as 13.0.0.0.0. Even when the Classic Maya recorded the creation date with period bases not less than the *Bak'tun*, these are noted not with the coefficient zero, but with 13. On COB St. 1, M1-M13 we thus have the huge notation of 13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.0.0.0.0. On p. 52 of the Dresden Codex (Carl Callaway, w.c., 21st Apr 2010) we also find an era date 13.13.13.13.13.13.13.13.13.13.13.13.13 (thirteen times a coefficient 13).

As the Calendar Round proves in all cases, it is nevertheless the same 4 *Ajaw* 8 *Kumk'u* date. These kinds of notations are not an arithmetical date, but are rather symbolic and heavenly, as the number 13 suggests. There is another reason why the coefficient 13 was employed, as will be explained below. The enumeration of all these (theoretically infinite) period bases above the regular five-digit Long Count was a means to convey the extensiveness of time. Even historical dates utilise this kind of notation, as on YAX HS. 2 Step VII, I1-P2, where we have 13.13.13.13.13.13.13.13.9.15.13.6.9, 3 *Muluk* 17 *Mak*, or simply 9.15.13.6.9. It seems that this notation was only conventionalised during the Late Classic. A different system is visible on TIK St. 10, A7-B13 with 1.11.19.9.3.11.2.?, dating to January 506.

Within this system, the period ending of the 13th *Bak'tun* mentioned on Tortuguero Monument 6 shares the same notation as the creation event. Nevertheless, it is not a repetition of the creation and certainly not the end of the Maya calendar. As the *Tzolk'in*, the *Ha'ab* and the Long Count all have a different calculation basis (260, 365 and multiples of 360 days, respectively), it is mathematically impossible that they will again recur in a configuration identical to that of the creation date (cf. Morley 1915: tab. XVI). Hence we have the Calendar Round 4 *Ajaw* 8 *Kumk'u* at the beginning of the Long Count and 4 *Ajaw* 3 *K'ank'in* for the 13th *Bak'tun* ending.

The linear nature of the Long Count can also be demonstrated by Distance Number calculations which either count to a position before the creation date or exceed the usual five-period notation that was deemed sufficient for most narrative counts into the future. One example comes from CPN St. N, B10-B14; it provides a Distance Number of 14.17.19.10.0.0. The existence of a coefficient 17 for the *Bak'tun* long ago led Sylvanus Morley (1915: 166) to consider that periods with coefficients higher than 13 must be possible, as the 14 coefficient for the *Piktun* also shows. From the base date 9.16.10.0.0, 1 *Ajaw* 8 [sic!] *Sip*, we must count backwards, as the ADI in block B15 indicates, to arrive at −14.8.3.0.0.0, 12 *Ajaw* 13 *Pax* (28th Dec 16,719 BC), which does not match the given Calendar Round of 1 *Ajaw* 8 *Ch'een* (cf. Goodman's discussion in Maudslay 1974: VI 132). Not infrequently, mythological Calendar Rounds pre-dating the current era either fail to fit among themselves (i.e. *Tzolk'in* and *Ha'ab* don't match) or they do not correspond to the Long Count position. In fact, the number 20 (as the basis of the period units) seems only to have been formed during the creation, as Carl Callaway (2009) demonstrated by means of pp. 61 and 69 of the Dresden Codex.

The inscriptions of Palenque feature several pre-era Long Counts, notably the Initial Series on the three Panels from the Cross Group and that of the south side of the bench from Temple XIX (Stuart 2005a: 60-62). We will consider the Temple XIX dates as an example, as they nicely show the calculation of pre-era dates across the zero point. The Long Count opening the inscription is given as 12.10.1.13.2, 9 *Ik'* 5 *Mol* (PAL T. XIX Hbh. S, B1-A4, 8th Mar 3309 BC). The first distinction to notice is that the *Bak'tun* glyph is rendered by sign XH3 /**CHAN**/, commonly used in pre-era dates (Stuart 2005a: 62, although LAC P. 1, A3 is an exception). The second is that the coefficient is 12. Were the creation date simply 0.0.0.0.0, we would arithmetically arrive at −0.9.18.4.18, which is exactly the difference between the Long Count given in the text and the zero position. Since the Maya only calculated with natural numbers including zero, they had to find a method to denote negative pre-era dates[2].

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[2] See Lounsbury (1976: 211) for a discussion of this necessity. From the Western point of view, we can arrange integers $\mathbb{Z}$ on a number line that is symmetrically divided into two halves by the number zero. Therefore, -10 represents the same distance from zero as 10. The same is applicable to dates, if expressed by a continuous count of days as in the Julian Day Number or the Long Count. Mathematically, a date in a pre-era and current era division could be expressed by plus and minus. The Gregorian calendar uses BC and AD (or the secular BCE/CE) to distinguish dates before and after the birth of Christ. The Classic Maya understood negative numbers in terms of subtraction, as the many Distance Numbers counting back in time demonstrate.

From a cognitive point of view, it is interesting to see that the Classic Maya still operated only with natural numbers $\mathbb{N}$ to calculate pre-era dates. They did not use mirror-image Long Count positions accompanied by special terms to indicate whether the date is positive (current) or negative (pre-era). In the calendrical nexus of the south side of the bench from Temple XIX, we have a Calendar Round 9 *Ik'* 15 *Keej* (blocks G6-H6) that corresponds to 1.18.5.3.2 (19th Oct 2360 BC, the birth of GI of the Palenque Triad, Stuart 2005a: 77). A Distance Number of 2.8.3.8.0 (blocks G2-H3) leads to this cur-

The use of the number 13 as a datum served this purpose, and a count back into mythological times was managed via the subtraction of a Distance Number from 13.0.0.0.0. This way, a calculation to the "real" 0.0.0.0.0, 4 *Ajaw* 8 *Suutz'* (2nd Apr 8239 BC) was possible. But in fact, this is also not an absolute zero, as the use of periods higher than the *Bak'tun* would still have pushed the timeline into an infinite past.

The maximum limit of 13 for the *Bak'tun* coefficient applied only to the creation date. Moving forward in the current era, we will arrive at numbers higher than 13. The day following the period ending mentioned on Monument 6 will certainly be 13.0.0.0.1, 5 *Imix* 4 *K'ank'in* and at the eve of the next *Bak'tun* ending, the count unambiguously moves from 13.19.19.17.19, 2 *Kawak* 7 *Sek* to 14.0.0.0.0, 3 *Ajaw* 8 *Sek*, and so on. It will not be possible for the *Bak'tun* position to return arithmetically to zero (as it did on the creation date), as this contradicts the infinite enumeration of days on the narrative line. No further equation of zero with 13 is necessary to count forward.

This is mathematically proven by an enormous Distance Number in Palenque counting far ahead in time. On PAL TI-W, E6-F6 we have a Calendar Round 5 *Lamat* 1 *Mol* that equals 9.9.2.4.8, the accession of *K'inich Janaab Pakal*. The first Distance Number 7.18.2.9.2.12.1 leads 1,246,826 years into the past to a date associated with the Calendar Round 1 *Manik'* 10 *Sek*. The narrative continues with *ajawnijiy* (block H2) and a Distance Number of 10.11.10.5.8. The reconstruction shows that it is not the accession which is the pivotal date as the verbal statement suggests, but rather the birth of *K'inich Janaab Pakal* on 9.8.9.13.0. The far-future date is given as the Calendar Round 5 *Lamat* 1 *Mol* (blocks H6-G7); this corresponds to 1.0.0.0.0.8 (21st Oct 4772)[3]. With the addition of 10 *Bak'tun* of the Distance Number to the 9 of the base date, we get 19 which turns into zero, plus a carry-over of one into the next higher position – that of the *Piktun* – by adding the lesser period numbers. Whether the *Piktun* coefficient mathematically changed from zero to one or was counted from the symbolic basis of 13 *Piktun* to 14 cannot be determined (Van Stone 2009), as the Palenque scribes only noted the associated Calendar Round.

As these examples have shown, the *Bak'tun* ending from Tortuguero Monument 6 has nothing special about it in terms of arithmetic. Nevertheless, two features may have made this date conceptually extraordinary for the Classic Maya: (1) it replicates the notation format of the creation date, and (2) it also repeats the cycle of thirteen *Ajaw* days in the *Tzolk'in*. As in the *K'atun* round that Landa described (Landa 1959: 103) or the *K'atun* prophecies from the Books of *Chilam Balam* – which all follow the formula n = n-2 {n ∈ ℕ | 1 ≤ n ≤ 13} – each *Bak'tun* closes with an *Ajaw* date with

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rent era date from the initial pre-era date 12.10.1.13.2. If we had another period with a coefficient 13, the *Piktun*, at the next level up (or to the left in our Long Count notation), we would not leave the space of natural numbers ℕ, as we would simply add the Distance Number to 13.12.10.1.13.2 to arrive at 13.1.18.5.3.2. We need only to accept that the carry-over of this calculation does not make the *Bak'tun* coefficient 14 but rather 1, as the creation date equates 13 with zero.

[3] The entire narrative must be seen in one context: The accession date and the prospective date share the same Calendar Round, but the future date is counted from a birth which is expressed by the antipassive form 'lord-becoming' or 'ruling'. In that way, the birth is already registered as the beginning of a tenure that is only formalised by the act of accession. The massive Distance Number reaching into the remote past targets the accession (via the same antipassive *ajawni*) of a mythological being dubbed the "Zero-Square-Nose Beast", and thus it also places *K'inich Janaab Pakal* into the dynastic line of this numen.

the coefficient n = n-1 {n $\in \mathbb{N}$ | 1 $\leq$ n $\leq$ 13}. In that respect, the 13th *Bak'tun* ending mentioned in the Tortuguero text represents a jubilee of a double nature which deserved special mention and narrative embedding. We will also argue that this event was foreshadowed by earlier events in the main text.

## Epigraphic Analyses

We will conduct the epigraphic discussion of the right-panel passage elaborating the events of the 13th *Bak'tun* ending with a detailed analysis of each statement. Each of these statements, often corresponding to one glyph block, is presented with a grid position (following Gronemeyer [2006: 69]) and an image of the block(s). The analysis features:

(1) a sign classification using the catalogue by Macri & Looper (2003),
(2) a sign-by-sign transcription,
(3) a transliteration with lexical and morphological segmentation,
(4) a morphosyntactical analysis using the Leipzig glossing rules (Comrie, Haspelmath & Bickel 2004), and
(5) a paraphrasing in English.

The analysis of each statement is followed by a detailed discussion and reading along with the rationale for our preferences. As is the case with an epigraphic analysis and its interpretation amid its cultural background, results may be ambiguous. Reasonable alternatives will be juxtaposed to reflect a comprehensive view of the possibilities. All statements from the passage under scrutiny will be given grammatical and syntactic context.

Here is an overview of the immediately preceding narrative of the text, which is also partly visible on the right panel in Figure 1. From the date 9.11.16.8.18, 9 *Etz'nab* 6 *K'ayab* (14th Jan 669, blocks I7-J7 in the main text), a large distance number 3.8.3.9.2 (M5-P1) leads directly to the 13th *Bak'tun* ending, implying a narrative link of an earlier event to the period ending. The event of the earlier date is a house dedication (Stuart 1998: 389-390) in which fire is ritually imported into a structure (*el[-e]-na:h-aj* "burn-house"). However, the Long Count position of this date can only be deduced by the monument's internal mathematics, as these two events parenthesise another historical occasion. On the still earlier date 9.3.16.1.11, 8 *Chuwen* 9 *Mak* (7th Dec 510, blocks N1-N3) the text specifies the positioning or placing of something[4] in a dedication ritual for the "steambath" (*pibna:h*) or temple sanctuary (Houston 1996: 133), of a person named *Ahkal K'uk*[5], an early ruler of Tortuguero (Gronemeyer 2006: 43, 48). The object placed has a proper name with several interpretations[6].

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[4] N2: /**e-ke-wa-ni-ya**/ > *[h]ek-wan-i-Ø-[iji]y*, analysed as 'be placed/enclosed-POS-COMPL-3SG.ABS-TEMP'. We now view this as the placement of a foundation cache (see Appendix 1).

[5] M4-N4: /**u-pi-bi-NAH a-ku-la-K'UK'**/ > *u-pibna:h a[h]k-al k'uk'*, analysed as '3SG.ERG-steambath ahk-ABSTR k'uk' '.

[6] M3-N3: /**NAH-K'AN-ja-la**/ which the authors both prefer to read as *nah k'an-(a)j-al*, analysed as 'first precious-INCH-ABST', or 'The First Precious-Becoming'. Interesting is the use of the sign 1G2 /**NAH**/, which can either stand for *nah*, "first" or *na:h*, "house". Because of its prefixed position, we consider it to likely be 'first' as the 'house' usage is expected when it is postfixed. Here, this assumption is supported by the extension over two blocks. Houston, Robertson & Stuart (2001: tab. 13) have considered the 'house' alternative with a sign transposition read as *k'an-jal-na:h*, 'yellowing house'. A recent suggestion by Erik Boot (w.c., 20th Oct 2009) sees the syllabic /**ja-la**/ as a substitution for the

Here is a brief reading and free paraphrase of our preferred analysis:

| | | |
|---|---|---|
| **tzu²-jo-ma u-13-PIK** > | *tzuhtzjo:m uy-u:xlaju:n pik* | It will be completed the thirteenth *Bak'tun*. |
| **4-AJAW 3-UN-wi** > | *chan ajaw u:x uni:w* | It is 4 *Ajaw* 3 *K'ank'in* |
| **u-to-ma i-li?** > | *uhto:m il?* | and it will happen a 'seeing'. |
| **ye-ni-9-OK-TE'** > | *ye'ni/ye:n bolon yokte'* | It is the display of *B'olon-Yokte'* |
| **ta-CHAK-jo-JOY[ja]** > | *ta chak joyaj* | in a great 'investiture'. |

## The Completion of the Bak'tun

O2-P2
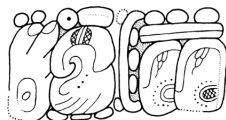
22A:MRB.ZUF:33K HE6.013:ZC5
**tzu²-jo-ma u-13-PIK**
*tzu<h>tz-j-o:m-Ø u[y]-u:xlaju:n pik*
complete<PASS>-THEM-FUT-3SG.ABS 3SG.ERG-thirteen Pik
It will be completed the thirteenth *Bak'tun*.

Following the distance number of 3.8.3.9.2 leading from the 9.11.16.8.18 dedication event, we have a period ending statement for the 13.0.0.0.0 date. The completion verb *tzutz* (Stuart 2001) is here used in passive voice (Lacadena 2004). As we are dealing with a far-future event from the perspective of the monument's creators, the *-o:m* suffix of the future participle (cf. Grube 1990a: 16-17) has been attached to the syncopated passive stem ending in *-j*. It is typical in these period ending expressions for the denominator of the period being completed to follow. It is preceded by a co-efficient specifying how many have elapsed; this is made into an ordinal number by the third person ergative pronoun.

It is interesting to note that the hand sign MRB is used here with the diacritic "doubler" sign (Stuart & Houston 1994: 46-49). As noted by Marc Zender (1999: 128), logographs do not usually occur with this diacritic, so it has been suggested that the hand sign, normally being /**TZUTZ**/, also has an acrophonic syllabic value /**tzu**/ in this case (Hruby & Robertson 2001: fig. 4a).

Whereas the vast majority of period endings in Maya inscriptions deal with the completion of X *Tun* or *K'atun* (either in retrospective or prospective contexts), *Bak'tun* endings are much less often recorded. TRT Mon. 6, NAR Alt. 1 and possibly a brick from Comalcalco (Figure 2) are the only texts known so far which refer to a *Bak'tun* ending in the (far) future at the time the inscription was commissioned.

This brick from Comalcalco (Figure 2) was brought to our attention by Erik Boot (w.c., 5th Dec 2009, 2010: fig. 8); he tentatively considered this short text as another possible reference to the 13th *Bak'tun*. However, Marc Zender (w.c., 17th Jul 2010) has shown that the *ak'ab* element in its month name argues against it being the head variant of *K'ank'in*, as noted in Thompson 1950: 113, fig. 18 (cf. PNG Alt. 2 Support 2, D2, CNK Trn. 1, B1). He alternatively suggests *Xul* and *Suutz'* and proposes a date 9.16.18.5.0, 4 *Ajaw* 3 *Xul*.

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logographic reed sign 33C, which he suggests is read as /**JAL**/. Full substitution patterns can be found on CPN T. 11 South Door West Panel, A3; PAL TFC Alfarda, H1; PAL TFC Tablet, C14; PAL T. XXI Bench, H10. Boot therefore reads this as *na:h k'an jal*, 'house (of) the yellow reed'.

Reading and translation:

| | |
|---|---|
| A1: | **4-AJAW** > *chan ajaw* |
| | 4 *Ajaw* |
| A2: | **3-TZIKIN/SUTZ'/UNIW?** |
| | > *u:x tzihkin/su:tz'/uni:w?* |
| | 3 *Xul/Suutz'/Uniiw?* |
| A3: | **hu-li** > *hul-i* |
| | he/she/it arrives (at?) |
| A4: | [2]**tzu-?-K'AK'?** > *tzutz ? k'ahk'?* |
| | Tzutz ? K'ahk'? |

**Figure 2:** Comalcalco brick II A4 TI-452 R16. Drawing by Rafael Quevodo B. (Steede 1984: 40). Reading and translation by Marc Zender (w.c., 17th Jul 2010).

As some dictionaries give the translation 'to end' for *tzutz* (cf. Stuart 2001: 19), this may have led certain authors to believe the calendar will end on that date (cf. Boot 2010 for a discussion), since the coefficient 13 is the highest known from inscriptions for a *Bak'tun* or higher-order period in Long Count dates. Although we can arithmetically demonstrate (see above) that higher numbers must be possible, they are never expressed except in Distance Numbers.

## The Calendar Round

O3-P3  004.ZZ1°AMB 003.ZS4:1S1
**4-AJAW 3-UN-wi**
*chan ajaw u:x uni:w-Ø*
four ajaw three uni:w-3SG.ABS
It is 4 *Ajaw* 3 *K'ank'in*

The Calendar Round associated with the period ending of the 13th *Bak'tun* is unambiguous. Whereas the previous era event, the famed "creation date" of 13.0.0.0.0 (cf. COB St. 1, M1-N18, QRG St. C, A1-B15, K2796, K7750) is tied to 4 *Ajaw* 8 *Kumk'u*, the monument-internal nexus of distance numbers and the association with 4 *Ajaw* 3 *K'ank'in* makes it clear that the dates are different, and we must seek this one in the future and not in the mythological past.

Naranjo Altar 1 (Figure 3) employs a similar but much shorter count into the future, but then anchors the final statement in current (rather than future) time by means of a Calendar Round.

A Distance Number commonly leads to a target date that is optionally introduced by a Date Indicator (ADI, PDI, FDI), realised by specific inflections of the verbal root *uht* 'happen' (Stuart 1990: 221-222). A typical example would be TRT Mon. 6, L16-M2 (cf. Figure 1) where the ADI in M1 introduces the Calendar Round in N1-M2 before the actual event(s) of that date are detailed. The 4 *Ajaw* 3 *K'ank'in* Calendar Round

directly follows the clause informing us of the completion of the 13th *Bak'tun*, whereas the *uht* 'happen' verb follows in block O4 (see below). This is an uncommon variant of the usual structure as e.g. on YAX Lnt. 31. The NAR Alt. 1 example is almost parallel to the Tortuguero passage, but is different in a critical way.

Reading and translation:

| | |
|---|---|
| J5: | **mi-K'IN** > *mi[h] k'in* <br> 0 *K'in* |
| K5: | **mi-WINIK-mi-HAB** > *mi[h] winik mi[h] ha'ab* <br> 0 *Winik* and 0 *Tun* |
| J6: | **12-WINIKHAB** > *lajcha' winikha'ab* <br> 12 *K'atun* |
| K6-J7: | **TZUTZ-jo-mo** > *tzu[-h-]tz-j-o:m* <br> it will be completed |
| K7: | **u-10-PIK** > *u-laju:n pik* <br> the 10[th] *Bak'tun* |
| J8: | **7-AJAW** > *wuk ajaw* <br> 7 *Ajaw* |
| K8: | **18-CHAK-AT** > *waxaklaju:n chaka:t* <br> 18 *Sip* = 10.0.0.0.0 |
| J9: | **u-to-ma** > *u[h]t-o:m* <br> it will happen |
| K9: | **u-CHOK-wi** > *u-chok-[i]w /-wi* <br> his scattering |
| J10: | **AJ-wo?-sa** > *aj wos[al]?* <br> Aj 'Wosal' |
| K10: | **5-AJAW** > *ho' ajaw* <br> 5 *Ajaw* |
| J11: | **3-IK'-SIHOM** > *u:x i[h]k' siho:m* <br> 3 *Ch'een* = 9.8.0.0.0 |

**Figure 3:** Naranjo Altar 1 closing passage, J5-J11. After a drawing by Ian Graham (1978: 103).

It appears that in both the Naranjo and Tortuguero passages, more emphasis is put on the fact that a period will be ended than that a specific date will happen or did so in the past. The latter would be the normal structure as in the abundant *uht* + CR constructions[7] (Thompson 1950: 162-164, Stuart 1990: 213-214).

Instead of considering the Calendar Round as a time adverbial (as a preposition *ti* or *ta* is absent), we would opt for it to constitute a stative sentence (in which no copula is present), as in 'it will be 4 *Ajaw* 8 *K'ank'in*[8]. In this case, 'it' refers to the comple-

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[7] A normal construction involving the completion verb comes from YAX Lnt. 31, K3-L5. Here we have a Distance Number 7.0.0 followed by the Future Date Indicator *u[h]t-o:m* telling us that the Calendar Round 13 *Ajaw* 18 *Kumk'u* will happen, and finally the period ending expression *tzu[-h-]tz-j-o:m u*-17 *winikha'ab*.

[8] The unusual construction of this passage (and also that of NAR Alt. 1) makes a secure grammatical analysis challenging. These ambiguities are enhanced by the shortness of the statements and their "telegraphic style". To evoke Berthold Riese's (1980: 4) definition, a clause is homogeneous and states one issue or circumstance.
A possible parallel to this case would be the initial Calendar Round on TRT Bx. 1, A1-B1 (Figure 4). Here, the Calendar Round is directly followed by a distance number of two days (A2) that does not lead, as expected, to the Calendar Round of this date, but to the event that took place two days later (B2), while the Calendar Round pinpointing the date actually follows the description of the event (C1-D1) and is further specified by a more detailed description of the circumstances of this event (C2-F1).

tion of the thirteenth *Bak'tun*. It is clear by its text structure that the unusual final Calendar Round on NAR Alt. 1, K10-J11 must also be a stative sentence, whose prior referent is the scattering of *Aj Wosal*.

### The "Happening"
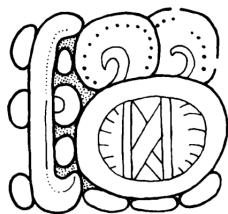
O4    HE6.33A:33K
**u-to-ma**
*u[h]t-o:m-Ø*
happen-FUT-3SG.ABS
(and) it will happen

As has been observed, the root *uht* occurs after the Calendar Round. As a future event is mentioned, the word is, as the preceding period ending expression *tzutz*, also inflected with the future participle *-o:m*. This is additional linguistic proof that the 3114 BC creation date of 13.0.0.0.0 cannot be meant.

If we consider the entire statement of this passage thus far, it becomes even clearer that the placement of the *uht* verb after the Calendar Round intends that the reader focus is on what will happen on the period ending. The narrative gradually builds: the termination of a period is announced, the day is mentioned on which it will take place, and then *uhto:m* in this glyph block serves as an introduction to the events to come. In that sense, *uht* would less function as a date indicator (Stuart 1990), but more as an auxiliary statement.

### The "Witnessing"
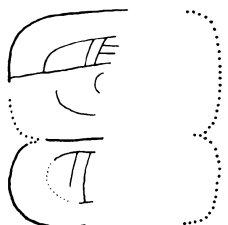
P4    YM1:1M0
**i-li?**
*il-?*
see-?
(a) 'seeing'.

Here we are told what will take place on the occasion of the *Bak'tun* ending. The popular adage of Murphy's Law now comes into play, as this statement is badly eroded and parts of the carving are chipped off.

Sufficient details have remained to permit informed speculation – employing graphical and structural parallels in other Tortuguero inscriptions[9] – about the lexeme written here. While the morphosyntax remains a challenge due to the eroded or missing information, we make the assumption first proposed by Sven Gronemeyer that we have an inflection of the root *il* 'to see' (cf. Stuart 1987: 25-28), given the presence

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The initial Calendar Round that only receives meaning in the later discourse (namely in blocks C2-F1) can therefore be seen as a single clause wherein the *Tzolk'in* and *Ha'ab* notation make up the predicate, while the subject is realised by the zero morpheme – hence conforming to the structure of a stative sentence.

[9] We will use material from the site's internal corpus, as local traditions in both the style of writing and speech best underscore the argumentation. Of course we will also consult inscriptions from other sites.

of the sign YM1 /**i**/[10]. The subfix bears a strong resemblance to either 1M4 /**li**/ or 1M1 /**ji**/, which suggest /**i-li**/ or /**i-la-ji**/ respectively. We shall note certain concerns with respect to graphotactics and sub-graphemic details.

One can distinguish several sculptural styles on Monument 6 (Mark Van Stone, w.c., 9th Aug 2009). This is most apparent in comparing the main text with the right panel. But consistently – within this text and across all the inscriptions from Tortuguero – both 1M4 /**li**/ and 1M1 /**ji**/ show the inner oval with the three or four internal curved lines adjoining the outer edge of the sign[11], while here the oval is isolated inside. It furthermore appears off-centred in contrast with a typical 1M4 /**li**/ and common examples of 1M1 /**ji**/, but it tempts one to consider the latter as the better candidate by virtue of palaeographical evidence. Morphosyntactic options then generate an even more problematic proposition – that we might here have /**i-la-ji**/: *ilaj*. For reasons soon to be detailed, this is not our preference.

It behoves us demonstrate the presence of the root *il* 'see/attend/witness' in this position. This root figures in three other period endings in the inscriptions of Tortuguero (Figure 4). While this root has the literal meaning 'see', in the script it is employed metaphorically to describe the witnessing or attendance of protagonists at period ending rituals. A few examples (among many) from other sites include PAL TI-W, J1-J2 in connection with the 12th *Bak'tun* ending, PMT Mon. 8, pD2, the Sotheby's Chinikihá Panel (K6593, Mayer 1991: pl. 96) celebrating 9.9.16.0.0, and likely also the Comalcalco Stone Urn that mentions 11 *K'atun* on its rim.

The first mention of *il* at Tortuguero is on Monument 1 in reference to the *Tun* ending of 9.10.13.0.0; this is described as "the first in order." The Tortuguero king *Bahlam Ajaw* had already acceded to the throne on 9.10.11.3.10, and although the dedication of an object is mentioned on TRT Jd. 1, A5-A11 for the 12-*Tun* ending, the *il* example under discussion is the first that is correlated to the erection of a stela[12] (Grube 1990b) and the so-called stone-binding event (Stuart 1996: 154-158). The "seeing" here is realised as an antipassive (Lacadena 2000).

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[10] Some remarks about the history of sign identification are also appropriate. In the 1970s, Peter Mathews and Berthold Riese both made drawings of Fragment G. While Mathews correctly recognised the main sign as YM1 /**i**/ (Mathews 1975), Riese's drawing from the original in Villahermosa (dating to 22nd Aug 1974) features a XG8 /**IK'**/ (Riese 1978: fig. 3). Riese (1980: 15) classified that sign accordingly as T95, but used Mathews' drawing (Riese 1980: fig. 3). That was, to our knowledge, the first time Mathews' drawing was published. Some publications (e.g. Arellano Hernández 2006: fig. 24, Grube, Martin & Zender 2003: II-64) continued to use Mathews' rendering, while others (e.g. Gronemeyer 2004: II pl. 12, Grofe 2009: fig. 14) included a redrawing of Riese's original done by Sven Gronemeyer in January 2003. This version was also integrated into the online Wayeb Drawing Archive (http://drawings.wayeb.org) and has received much wider distribution since then. The 2003 version was later amended on the basis of photographs to now correctly represent the sign YM1 and was used for publication (Gronemeyer 2006: pl. 12), and also uploaded into the Wayeb Drawing Archive. As detailed above, further recognition of details led to a completely new drawing in 2009. This was then revised in 2010 in keeping with communications between Barbara MacLeod, Hutch Kinsman and Erik Boot.

[11] For 1M4 /**li**/ cf. TRT Mon. 6, E1, J12, K10, TRT Mon. 8, A24, B20, B40, B41. Note that in many instances, the inner oval can be embellished with cross-hatching, so some other instances might therefore represent the shiny "mirror sign". Grube (1990a: 110) first proposed an equivalence between the two signs (cf. Macri & Looper 2003: 274 for more evidence). Elisabeth Wagner (w.c., 6th Aug 2009) also proposed the same for block P4. – For 1M1 /**ji**/ cf. TRT Mon. 6, L6, M5 (cf. Figure 1), TRT Mon. 8, A10, B43, B56, B67, TRT Bx. 1, A2, D2, F2.

[12] This action is recorded as /**i-WA'-la-ja u-LAKAM-TUN-ni**/ > *i wa'-laj-Ø u-lakam-tu:n*, analysed as 'then erect-POS-3SG.ABS 3SG.ERG-banner-stone' on TRT Mon. 1, A3.
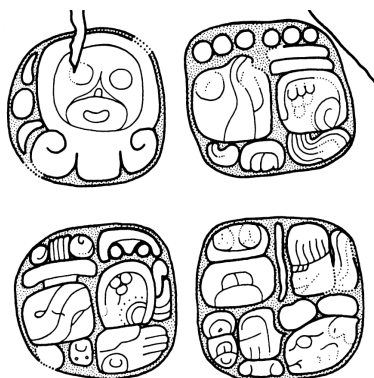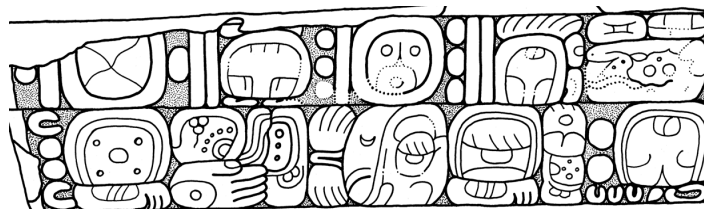
TRT Mon. 1, A1-B2:

| | |
|---|---|
| A1: | **1-AJAW** > *ju:n ajaw* |
| | 1 *Ajaw* |
| B1: | **3-UN-wa 13-TUN-ni** > *u:x un[i:]w u:xlaju:n tu:n* |
| | 3 *K'ank'in*, 13 *Tuun* (= 9.10.13.0.0) |
| A2: | **u-NAH-TAL-la u-K'AL-TUN-ni** > *u nahtal u k'al tu:n* |
| | it is the first in order, his stone-binding |
| B2: | **AK'?-CHIT IL-ni YAX-CHIT-TAN-na BALAM-AJAW** |
| | > *ak'? chi:t ilani yax chi:t tahn ba[h]lam ajaw* |
| | Dark Companion was seen, |
| | First Companion[13] before *Bahlam Ajaw* |

TRT Mon. 1, A4-B4:
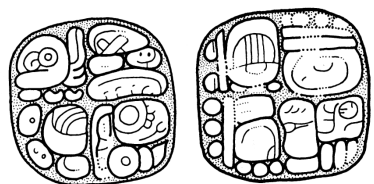


| | |
|---|---|
| A4: | **… u-UH-ti** > *uht* |
| | it happens |
| B4: | **7-HAB 12-AJAW 8-CHAK-SIHOM IL-li-a-ji** |
| | > *wuk ha'ab lajcha' ajaw waxak chak siho:m ilaj* |
| | 7 *Tun* (later) –12 *Ajaw* 8 *Keej* (= 9.11.0.0.0) is seen |



TRT Bx. 1, A1-E1:

| | | | | |
|---|---|---|---|---|
| A1: | **6-ETZ'NAB** > *wak etz'nab* | | C1: | **8-AJAW** > *waxak Ajaw* |
| | 6 Etz'nab | | | 8 *Ajaw* |
| B1: | **11-ka-se-wa** > *buluch kase:w* | | D1: | **13-ka-se-wa** > *u:xlaju:n kase:w* |
| | 11 Sek (= 9.12.6.17.18) | | | 13 *Sek* (= 9.12.7.0.0) |
| A2: | **2-bi-ji** > *cha'biij* | | C2: | **ma-a** > *ma'* |
| | two days later | | | not |
| B2: | **K'AL-ja-TUN-ni** > *k'ahlaj tu:n* | | D2: | **IL-a-ji** > *ilaj* |
| | was bound the stone | | | witnessed/attended |
| | | | E1: | **BALAM-AJAW** > *ba[h]lam ajaw* |
| | | | | *Bahlam Ajaw* |

**Figure 4:** Another example of a 'seeing' or 'witnessing' event in connection to period endings in the inscriptions of Tortuguero. All drawings after Gronemeyer 2006: pls. 5, 1.

The second mention – also on Monument 1 – concerns the *K'atun* ending 9.11.0.0.0, rendered as a passive form (Lacadena 2004). In fact, these two records show some parallels to Monument 6. The example from the Tortuguero wooden box is even more intriguing. *Bahlam Ajaw* had died just two days before the 7-*Tun* ending on 9.12.7.0.0, and while he had presided over multiple past period endings, the text

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[13] We take the phonetic reading of the sign XGA as /**CHIT**/ as first proposed by Stuart, Houston & Robertson (1999: 56) but view its meaning differently for the moment. Gronemeyer prefers 'patron god', suggested by Pierre Robert Colas (p.c., March 2003), who noted the occasional co-occurrence with *k'uh* (cf. TRT Mon. 6, F2). MacLeod argues that Yucatec *ke:t* 'pair, one of a pair, companion, and co-X' is the more likely cognate. The identification of the signs in the bottom left corner as /**YAX-CHIT**/ was made by Michael Grofe (w.c., 29th Dec 2009).

explicitly tells us that he did not attend this event[14]. It was obviously so important to mention *Bahlam Ajaw*'s presence at major period endings that the craftsman who executed the wooden box over eight years after his death found it necessary to explain that the king was not in attendance on that occasion.

By these examples, we hope to demonstrate that the presence of an otherwise unexplainable /**i**/ sign reasonably anticipates the word *il* in this syntactic position.

An /**i-li**/ spelling would be simple and straightforward, and we think it the most likely. If we argue that the subfix is /**ji**/, we must presume a third and effaced morpheme. In all, there are four potential possibilities.

(1) The block records /**i-li**/ > *il* ; this would be a nominalised root, and would be part of the subject of the clause with *uhto:m* as its predicate. A purely nominal use of *il*, albeit in the position of the predicate, is known from SBL St. 9, B1 in /**IL-u-ba-hi**/ as Robert Wald (w.c., 4th Aug 2009) pointed out. This is a nice example of an uninflected form of the root as *CVC*, rather than *ila*, the usual form in Ch'olan languages.

(2) Stemming from the previous analysis, the same collocation /**i-li**/ > *il-i* is analysed as an imperative form. Such *CVC-V* imperatives have been discussed for direct speech on K1398 (Beliaev & Davletshin 2006: 25) and were first presented by Kerry Hull (w.c., 7th Aug 2009) at the 2003 Crabs and Glyphs Seminar hosted by Hutch Kinsman. As such, the imperative can be seen as an exhortative act for the witnesses of this future event, either honouring the long-deceased *Bahlam Ajaw* or a far-future Tortuguero king. But the use of an imperative outside direct speech is not attested elsewhere in Maya writing, and not at all in monumental inscriptions, and the discourse makes its use rather unlikely. So it only remains as a theoretically possible construction.

(3) Another proposal pursues a reconstruction /**i-la-ji**/ > *il-aj* as a nominalised antipassive. While the morphosyntax of such a form (cf. Lacadena 2000) would provide no complications for the analysis, there is one pragmatic obstacle: where to locate the assumed /**la**/ sign in the collocation? An /**i-la-ji**/ reading therefore must remain very speculative, even if one assumes the unlikely possibility that we have an underspelled /**i-ji**/ here, as the classification of the subfix as 1M1 falls short of solid identification.

(4) The subfix is regarded not as one of the syllabic signs discussed above but as the "mirror sign", for which David Stuart (2007) recently proposed the logographic value /**LEM**/. The block could thus spell /**i-LEM**/ > *il-em* as a perfect participle[15], with the "mirror sign" used logosyllabically[16]. However, this option would require a revision of the clause statement from footnote 8 above, and this putative participle would constitute the predicate of a new clause with the following blocks O5-P5 as its subject. Furthermore, the concerns about the off-centred inner oval raised for the /**ji**/ and /**li**/ identifications are also applicable to the "mirror sign" 1M2.

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[14] This idea goes back to discussion of the phrase by Markus Eberl (1999: 43) and earlier Matthew Looper (1991). In their opinion, this passage refers to a burial and the circumstance that *Bahlam Ajaw* "was not seen" as he had been interred by the time of the period ending. We now prefer a nominalised antipassive analysis of *il-aj*, as in *ma' ilaj-Ø*, analysed 'see-NAP-3SG.ABS, 'he did not attend'.

[15] If the identification as a perfect participle is correct, this would only be the second known occurrence of such a form in the entire corpus. The other comes from CPN 39, I1 – the altar associated with Stela 1 and is spelled as /**TZUTZ-he-ma**/ (Prager 2006).

[16] Such uses are rare but not entirely unknown from the Maya script, as, for example, in certain spellings of the derived adjective *k'uh-ul* < /**K'UH-HUL**/ show, e.g. SBL St. 8, A5a.

As these four options demonstrate, there is still some uncertainty. Each has its pro and contra arguments; therefore we offer all these options for the reader's evaluation. In our opinion, the best candidate is the first, as it neatly fits the grammar and needs not invoke any invisible affixes. But the best support for the identification as *il* does not come from the spelling itself, but rather from parallel passages in other inscriptions. Perhaps relevant also is the spelling /**ti-yi-li-li**/ > *ti y-il-il* 'in his seeing' on CHN FL, Lnt. 2 demonstrating that for some Ch'olan speakers, the root was classed and derived as a *CVC* transitive (that is, *il*) rather than as the irregular but more common *ila* – noted, for example, in the spelling /**IL-li-a-ja**/ > *ila-j-Ø* 'he attended/visited' at NTN Dwg. 66, B1 (Stone 1995: fig. 7-12). Also noteworthy is an example from NTN Dwg. 29, A3 (Stone 1995: fig. 7-8) which reads /**yi-IL-wa**/; this seems likely to be *y-il-iw*.

It should also be noted that Stephen Houston (2008) has taken this /**i**/ to be the discourse marker *i-* '(and) then'. Because of the parallels from other Tortuguero texts and for graphotactical reasons, we are not persuaded by this suggestion. It seems doubtful that the greatest part of a block should be consumed by the focus marker, leaving only a small subfix for the predicate of a new clause.

### *The Role of* Bolon Yokte' K'uh
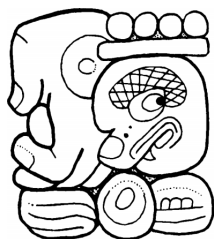
O5　　　　MZR:1S2.009:AP5:2G1
**ye-ni-9-OK-TE'**
*ye:n bolon-[y]okte'-[k'uh]-Ø*
adornment Bolon-Yokte'-K'uh-3SG.ABS
adornments (of) *B'olon-Yokte'-K'uh*

While the preceding blocks anticipate the actual event, the prophecy itself culminates in this and the following block. This block represents an interpretive pivot, but it is also syntactically entangled with the preceding block, which we prefer to read as *il* 'a witnessing'. Paradoxically, the diverse lexical properties of the likely roots in both blocks present competing, yet related, options for our understanding and therefore – if we may put it this way – hold the "secret" of the *Bak'tun* ending.

It has long been thought (less so by the original proponents than by subsequent interpreters and especially those in the "2012 movement") that the left half of the block includes the verbal root *ehm*[17], meaning 'descend' (cf. Gronemeyer 2004: I 92-93, II 86, 2006: 159, Eberl & Prager 2005: 32, Houston 2008, Grofe 2009: 14). This suggestion was based on the suggested spelling /**ye-ma**/, first read as *y-ema(l)* and translated as 'his descent(?)' by Stephen Houston and David Stuart (1996: 301, fn. 7). That this interpretation is not far-fetched is demonstrated by the instances

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[17] pCh: *ehm*: bajarse // go/come down (Kaufman & Norman 1984: 119); CHL: *ejmel*: derrumbe (Aulie & Aulie 1978: 43); CHR: *ehm*: a descent, a going down (Wisdom 1950: 457); *ehmaih*: go down, let itself down (Wisdom 1950: 457); *ekmay*: se bajo (Kaufman 2003: 1279); CHT: *#em*: bajarse (Kaufman 2003: 1279); YUK: *emel*: descender o abaxar de donde se avia subido (Ciudad Real 1995: f. 164v); *emaan*: cosa cuesta abaxo o ladeada (Ciudad Real 1995: f. 164r); *emel*: descender de alto; decrecer; bajar (Barrera Vásquez 1993: 153); *em*: bajar (Barrera Vásquez 1993: 153); ITZ: *emi*: se bajo (Kaufman 2003: 1279); MOP: *eem*: bajarse (Kaufman 2003: 1279). Language abbreviations here and in other lexical references follow Kaufman (2003: 38-43), the original orthography is retained.

Marc Zender (2005: 8-14) summarised regarding the descent of a variety of deities[18], especially the avian manifestation of God D. The sign under the hand sign MZR has therefore been taken as 32A(3), a not uncommon half-split /**ma**/ sign equalling T70 in the original Thompson catalogue (Thompson 1962).

As has been noted by various epigraphers, the small central arch typical for /**ma**/ (also seen in the split-/**ma**/ allograph) is missing and the inner lines are mismatched. Barbara MacLeod first proposed 1S2 /**ni**/ for this sign[19]. She based the resulting reading *ye:n* on entries from the Yucatec language:

| | |
|---|---|
| *yeen* | [aderezar] |
| *yeen u ba "misa"* | aderezos de la misa |
| *yeen u bail k'atun* | los aderezos de la guerra |
| *yeenba* | herramienta, aderezos, armas e instrumentos para algún oficio; aderezos de alguna cosa |
| *yen u ba* | [armas, aderezos] |
| *yeen* | armar |
| *zac bac yen* | convalesciente, que va tomando fuerzas [display or signs of physical strength] |

**Table 1:** Records of *ye:n* in Yucatec Maya. Compiled after Barrera Vásquez (1993: 974) and Ciudad Real (1995: 216). The original orthography is retained.

Overt cognates of this set of entries are absent in other lowland Mayan languages. Problematic in terms of palaeography is the relatively casual rendering of the /**ni**/. We have other examples of small and compressed variants of this sign in the corpus of Tortuguero that are diligently executed;  the same is true for the /**ma**/ sign[20]. This /**ni**/ appears truncated; interestingly, it is the only example of this sign in the corpus of Tortuguero wherein the inner curves go from top left to bottom right.

As the right half of block O5 (the name of the deity *Bolon Yokte' K'uh* [Eberl & Prager 2005]) appears to be the possessor, questions arise regarding the morphosyntax of *ye:n*, as one would expect a third person ergative binding together either predicate and subject or possessed noun and possessor in a stative construction. But the Yucatec evidence suggests that the /y/ does not serve this purpose.

A different approach to this block is both possible and complementary. In this case, we may view the /**ye**/ syllable as the transitive root *ye(')* 'display', followed by the antipassive morpheme /**ni**/ (Lacadena 2000). The lexical support (Table 2) shows that cognates from different Mayan languages all represent activities done with the

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[18] An interpretation for this block based on a 'descent' was also propagated by Eberl & Prager (2005: 32). Further exacerbating this misunderstanding was the descent of heavenly items in connection with the 11 *K'atun* prophecy from the *Chilam Balam* of Chumayel, f. 73 (Miram 1988: I 96) in which *Bolon Yokte'* is also named.

[19] There was an earlier suggestion by Erik Boot (w.c., 15th Oct 2009) that this sign might be 33B /**je**/ ~ /**he**/, in that the same inner features that were proposed for /**ma**/ could also be indicative of /**je**/. The proposed spelling therefore was *y-eh[t]* – "together with". Sven Gronemeyer argued that taking just one of the three oval elements that constitute /**je**/ and rotating it by 90° would be unique. In the script, tripartite and more complex signs like /**ma**/, /**ya**/, /**ji**/, /**je**/ are always reduced to a minimum of two elements, except those signs that already have a special singular variant like /**la**/. In any case (w.c., 13th April, 2010), Erik Boot now supports us on the /**ni**/ identification and has helped us with digital enhancements of the sign.

[20] For /**ni**/: cf. Mon. 6, J11, N2 (cf. figure 1), for /**ma**/: cf. Mon. 8, A7, A23.

hand, primarily "show, present, take[21], give", plus derivative meanings. This would in our understanding explain the Yucatec entries (Table 1) as a nominalised and fossilised lexicalisation of that morphology which underwent a semantic split and drift process. It seems reasonable that this lexicalisation was already in place in Classic times. Proceeding from this, we are inclined to view *ye:n* as a fossilised nominalised antipassive forming part of a larger nominal compound. We will return to this matter shortly.

| WM | *ye7 | - | Kaufman 2003: 180 |
|---|---|---|---|
| pCh | *yeʔ | agarrar en la mano // take in the hand (Chl); enseñar, mostrar // show (Chn) | Kaufman & Norman 1984: 137 |
| pCh | *yeʔ-b'e | indir dar // give (Chl) | Kaufman & Norman 1984: 137 |
| pTz | *-ʔeh.an | acarrear | Kaufman 1972: 102 |
| YUC | ye | tambien significa. mostrar o poner delante o presentar y ofrecer algo o ponerlo delante | Ciudad Real 1995: f. 217v |
| YUC | ye ba | mostrarse presentarse y ofrecerse | Ciudad Real 1995: f. 217v |
| YUC | yee | amagar como guerra | Barrera Vásquez 1993: 973 |
| YUC | yee k'ab | amagar con la mano; mostrar, amagar o asentar | Barrera Vásquez 1993: 973 |
| YUC | yee' k'ab | ofrecer y dar don | Barrera Vásquez 1993: 973 |
| YUC | e'tesah | mostrar | Barrera Vásquez 1993: 973 |
| YUC | yéʔes | he shows, demonstrates it | Bricker et. al. 1998: 315 |
| ITZ | tuye7tesaj | lo mostró; lo señaló | Kaufman 2003: 180 |
| MOP | uye7aj | lo mostró; lo señaló | Kaufman 2003: 180 |
| POP | xsye | lo mostró; lo señaló | Kaufman 2003: 180 |
| POP | yeb'al | seña, señal | Kaufman 2003: 180 |
| MCH | ye7.An | open-handed | Kaufman 2003: 180 |
| TZE | ye | publicar mostrando, poner en almoneda | Ara 1986: f. 52r |
| TZO | ye | reveal, show, proclaim wedding banns (as when they display those who are getting married) | Laughlin 1988: 335 |
| TZO | yeʔ | show, display or offer (merchant walking about with his or her wares) | Laughlin 1975: 384 |
| TZO | yeʔ | be proclaimed (wedding banns) | Laughlin 1975: 384 |
| TZO | yeʔ ba | offer self (woman, worker) | Laughlin 1975: 384 |
| TZO | yeʔan | show or display | Laughlin 1975: 384 |
| TZO | yeʔet | showing, offering, menacing | Laughlin 1975: 384 |
| CHT | yee. tuchu | mostrar | Morán 1935: 46 |
| CHT | yeel | mostrado | Morán 1935: 46 |
| CHL | ye' | coger (en la mano) | Aulie & Aulie 1978: 158 |
| CHL | ye'el | agarrado (en la mano) | Aulie & Aulie 1978: 158 |

**Table 2:** Cognates of the root *ye(')* in various Mayan languages. The original orthography of the Mayan entries from the dictionaries is retained.

The deity *Bolon Yokte' K'uh* was first discussed by Eric Thompson (1950: 56) as a patron of *K'atun* 11 *Ajaw* in the books of *Chilam Balam* of Chumayel, Perez and Kaua and connected to the same *K'atun* in C. Dr. p. 60. David Stuart (1987: 39-41) also discussed this theonym in connection with his decipherment of the /**yo**/ syllable. The first synoptic work on the epigraphy and iconography of this deity was achieved by Markus Eberl and Christian Prager (2005). Later, Michael Grofe (2009) discussed the

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[21] It is interesting to note in this context the observations that Nicholas Hopkins made (w.c., 20th Oct 2009) when Ch'ol speakers were asked to act out the verb. According to him, their actions were "always with the fingers pointing down and curling up, and the prototypical act is holding a bucket by its handle, i.e., dangling from the fingers, just like the image in the glyph."

name of *Bolon Yokte' K'uh* in correlation with God L. As Eberl & Prager (2005: 28-29) showed, the /**K'UH**/ sign is optional and if absent, the deity's name is also missing the /**yo**/ sign indicating the prevocalic ergative *y-* prefixed to *ok*, as is also the case on Monument 6. We, however, disagree with the authors that the name represents "an ancient spelling that was no longer completely transparent to the Classic Maya scribes" (Eberl & Prager 2005: 28), because of the spelling variants. We also question whether it subsumes a totality of gods when the *k'uh* part is present (Houston 2008). It rather seems that the reduced spelling is simply that, as we have numerous examples of shortened names or facultative elements in the corpus of inscriptions (cf. Colas 2004: 57-61). It also appears that the abbreviation was done to comply with the name's internal syntax (cf. Colas 2004: 62-65). We will further consider the reading and implications of the presence of *Bolon Yokte' K'uh* in this passage.

### *The Final Event*

P5
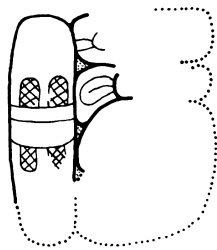
1B1.1B9:ZUF^ZB1
**ta-CHAK?-jo?-JOY[ja?]**
*ta chak joy-aj?*
in great wrapping/encircling-NOM?
in (the) great investiture (dressing and parading of a newly-installed official).

As with the suggested *il* spelling in block P4, block P5 of the passage contributes important information about the event. And like the block above, it is badly affected by chipping and erosion. But unlike P4, enough detail remains to allow a reasonably straightforward reading.

In tandem with the original and tentative suggestion of block O5 as *y-ehm*, it was supposed that the preposition *ta* introduces the location into or onto which *Bolon Yokte' K'uh* descends (Gronemeyer 2004: II 86, 2006: 159, Grofe 2009: fig. 14). Now that we are considering the /**ye-ni**/ component as an adornment or display, it is clear that the preposition contextualises the action involving *Bolon Yokte' K'uh*. We feel it best to read *ta* as 'in, for, with'. Though we lack absolute grammatical transparency throughout the final passage, this block is fortunately a simple prepositional phrase.

It was Michael Grofe (w.c., 1st Aug 2009) who first identified the superfix as 1B9 /**CHAK**/ for *chak* 'great', although other interpretations[22] were also under consideration. Elisabeth Wagner (w.c., 6th Aug 2009) then integrated this identification into meaningful context within the rest of the block; her proposal served as the point of departure for the reading presented here.

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[22] In the analysis, we have retained question marks for the superfix and for the main sign. Even though we have excluded other possibilities from this discussion for various reasons and promote a preferred reading, this does not mean that options we have not thought of are impossible.

| WM | *joy | - | Kaufman 2003: 1525 |
|---|---|---|---|
| pCh | *joy | rodear, dar vueltas // turn | Kaufman & Norman 1984: 122 |
| pTz | *-xoy | dar vueltas | Kaufman 1972: 123 |
| YUC | Hoy.ah.ob | derramar en el suelo algun licor | Ciudad Real 1995: f. 189v |
| YUC | Hoy.tah | regar | Ciudad Real 1995: f. 189v |
| YUC | Hoyhaa.tah | prover la orina | Ciudad Real 1995: f. 189v |
| YUC | Hoyan | poco, cosa poca. o pequeño en calidad | Ciudad Real 1995: f. 189v |
| YUC | Hoyacah | gente comun y plebeya | Ciudad Real 1995: f. 189v |
| YUC | hoy | regar con líquidos | Barrera Vásquez 1993: 236 |
| YUC | hoy | irrigar | Barrera Vásquez 1993: 236 |
| YUC | hoy | dilute, dissolve; prepare/coffee/ | Bricker et. al. 1998: 112 |
| YUC | hóoy | avoid, evade, detour; dissolve | Bricker et. al. 1998: 112 |
| YUC | Hoy beçah | [h][23] atolar o embetunar con atol olla o cantaro o tinija para que no se salga ni reçuma | Ciudad Real 1995: f. 207v |
| YUC | Hoybeçah | [h] Estrenar alguna cosa y probarla la primera vez | Ciudad Real 1995: f. 208r |
| MCH | joy | arrear | Kaufman 2003: 1525 |
| MCH | jo:y-i' | dar vuelta a todo (el pueblo) | Kaufman 2003: 1525 |
| TOJ | joy | dar vuelta | Kaufman 2003: 1525 |
| TZE | ghoiolom | estar alderredor sentado | Ara 1986: f. 42r |
| TZE | joy | voltear | Kaufman 2003: 1525 |
| TZO | joy | cut off one's escape, encircle, enclose, surround | Laughlin 1988: 214 |
| TZO | joy be | go a roundabout way | Laughlin 1988: 214 |
| TZO | joy-te' | enclosure, fence, stockade | Laughlin 1988: 214 |
| TZO | joyet | whirl around | Laughlin 1988: 214 |
| TZO | joyijel | procession | Laughlin 1988: 214 |
| TZO | joynej ta naklej | seated in a circle | Laughlin 1988: 215 |
| TZO | hoy | encircle, fence; be encircled or surrounded | Laughlin 1975: 159 |
| TZO | hoyan | fence a large area of one's land | Laughlin 1975: 159 |
| TZO | hoyet | walking around in circles or in small radius (person, ship, pig) | Laughlin 1975: 159 |
| TZO | hoyobah | go in circles around /wedding godfather/ | Laughlin 1975: 159 |
| TZO | hoyol | surrounded. Ritual speech, prayer, addressing tutelary gods; circle | Laughlin 1975: 159 |
| CHT | xoii | haser prosecion | Morán 1935: 36 |
| CHL | joy | rodear | Aulie & Aulie 1978: 58 |
| CHL | joy | dar vueltas | Kaufman 2003: 1525 |
| CHR | hoyi | make fitting, make proper, make satisfactory | Wisdom 1950: 468 |

**Table 3:** Cognates of the root *joy* in various Mayan languages. The original orthography of the Mayan entries from the dictionaries is retained.

Clearly visible at P5 is a knot-like sign that was first considered as 32K /**hi**/[24] (cf. Gronemeyer 2004: II 86, 2006: 159). But Van Stone's new photo mosaic provided sufficient details to permit revision of both the drawing and the reading. The dan-

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[23] The Calepino de Motul clearly distinguishes between two sounds represented by the letter /H/. The first list of entries is described as "De los que comiençan. En. H. rezia y la H. simple esta adelante." and the second as "De los comiençan en. H. simple. que hiere muy poco y aun se pierde en muchos quando se les antepone pronombres." This exactly mirrors the /h/ and /j/ distinction in the Classic script (Grube 2004). We will nevertheless also provide examples with the velar [h] sound, as some meanings are mirrored in other languages (compare to the Ch'orti' example), indicating a simplification into one or the other. Modern Ch'orti' only has the glottal [x] or /j/ sound.

[24] It should again be noted that this reading arose from the (then) new drawing done in January 2003 (cf. footnote 10) when the available photography supported this identification. Thus far, neither Berthold Riese nor Peter Mathews included subgraphemic details in their drawings.

gling ends of the knot on the left clearly support its identification as ZB1 /**JOY**/. A similar knot can be seen in other Tortuguero examples (cf. Mon. 6, G5, K4) where the central loop points to the left, with the dangling ends of the loop to the right; this reversal (which does not affect the reading) may reflect a difference in scribal preferences also seen with the /**ni**/ at O5. The inscrutable main sign "tied up" within /**JOY**/ allows just a few educated guesses based on frequent patterns[25] (cf. Proskouriakoff 1960: 455, fig. 2, Thompson 1962: 290) in the corpus. These are AM8 or 2M1 /**AJAW**/, ZU1 /**ja**/ or ZUF /**jo**/ (cf. Schele & Mathews 1993: 19). Sven Gronemeyer first considered the full rendition of /**AJAW**/ with the superfix (= T168) present where we now see ZB1 /**CHAK**/ and with the main sign (= T518) overlain by /**JOY**/. A related expression is visible on Mon. 6 at K4 in a passage concerning Tortuguero's tutelary gods. Elisabeth Wagner (w.c., 6th Aug 2009) proposed the reading /**jo**/ (functioning as a phonetic complement) for the main sign, based on the outline of the main sign, suggesting a still-visible bulge of the shell sign (also cf. Figure 1, block O2), although all subgraphemic details are deteriorated. In Wagner's proposal, the root *joy* is used in a nominal way. MacLeod prefers that the main sign be understood as ZU1 /**ja**/ representing the ubiquitous nominalising -*aj* morpheme. Indeed, this is the most common central sign in the numerous examples of /**JOY**/ stems in the corpus.

The reading /**JOY**/ for ZB1 was first proposed by David Stuart (cf. Martin & Grube 2000: 231). Although we have a number of instances where this root is used to describe the accession of rulers (cf. Schele & Miller 1983: 61-92, MacLeod 1989: 4), much has remained unclear about this expression. The lexical options (Table 3) cover a broad range of semantic domains including turning in circles, encircling, circumambulation, secluding/enclosing, dispersing liquids, and making proper. Judging by the contexts where /**JOY**/ occurs, there is a semantic intersection at 'circling' and 'encircling', but the iconographic evidence points to usages that are not transparently supported by the dictionaries. Pinpointing a meaning for *joy* in this glyph block is crucial for the understanding of the whole event. We will separate this into two tiers. Within the epigraphic analysis, we will consider the dictionary entries. In the following discussion, we will scrutinise a number of iconographic contexts where *joy* is embedded or describes the activity in question. We will thereby approach its meaning from both the discourse and the iconography.

Yucatec has the greatest diversity of entries; these require further segregation into formerly /j/-initial and /h/-initial roots. There are various ways to accomplish this, both internal to Yucatec and outside it. Within the body of Ch'olan and Tzeltalan entries, semantic overlap with the Yucatec entries can be observed.

### *Further Grammatical and Syntactic Considerations for the Closing Passage*

There seems little controversy in our understanding of the portion of the right panel of Tortuguero Monument 6 until we reach the Calendar Round 4 *Ajaw* 3 *K'ank'in* at O3-P3. Here the questions are: how is this date operating within the syntax of the passage? Is a prepositional phrase to be understood here, even though there is no *ta* preceding the Calendar Round? Is this instead a stative sentence – i.e. is the date

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[25] We will exclude XH3 /**CHAN**/, although known from Tortuguero. As *Joy Chan* is the main component of the toponym or emblem for the site of Comalcalco (Martin & Grube 2000: 19), it is unlikely to be mentioned in this passage.

4 *Ajaw* 3 *K'ank'in* equated in a copulaless construction with the completion of 13 *Bak'tun*? We have previously indicated this to be our preference. Or is this a rare type of focus construction wherein the expected Verb-Subject syntax of Mayan intransitive sentences is turned on its ear, yielding *chan ajaw u:x uni:w uhto:m* as '4 *Ajaw* 3 *K'ank'in* will happen'? This is the interpretation advocated by Houston as noted above, and which one may argue is supported by a similar construction on NAR Alt. 1 (Figure 3). We will reconsider this comparison.

An examination of the poetics and discourse structure of the closing passage of TRT Mon. 6 yields a couplet, whose first component is the future passive participle *tzuhtz-j-o:m* plus its subject *u-u:xlaju:n pik*, and whose second component is the future participle *uht-o:m* plus its complex subject *il ye:n bolon yokte' [k'uh]* followed by the prepositional phrase *ta chak joyaj.* As a stative sentence, the Calendar Round is inserted parenthetically into this construction. But were we to suggest that a *ta* is to be supplied by the reader before the Calendar Round, we would then have two complex and parallel components, each of the form *future participle-subject-preposition-object.* This has obvious appeal, but mere appeal does not confirm the analysis.

Within the discourse structure of the entire text of Tortuguero Monument 6, certain devices are apparent. As discussed in an earlier section of the paper, the ADI, PDI and FDI accompany Distance Number counts, which move the story forward or back to new Calendar Rounds by tallies of days, *Winal*, *Tun* and so on. The morphemes employed in these strategies consist of the root *uht* plus a variety of suffixes (*-i, -i:y, -ij-i:y, -o:m*) and one pre-posed particle (*i-*, meaning 'and now'). There is another item in the Tortuguero inventory – a focus marker spelled /**a-(A)LAY-ya**/ for *alay* meaning 'here (is)' (MacLeod & Polyukhovich 2005). It appears several times in the main text when a count in either direction arrives at a new Calendar Round date. One sees it, for example, at E6 between *si(h)y-aj-i:y* 'since he was born' and the Calendar Round *1 Ok 3 Kumk'u*, the date of *Bahlam Ajaw*'s accession. The accession statement follows. Its purpose is to return the reader to the text's narrative progression, essentially to say "we counted from way back there and now we are here", or "we are moving forward by increments, and now we are here". *Alay* may co-occur with *i-* in this format: Distance Number-*alay*-Calendar Round-*i*-Verb, or *i-* may be absent. *Alay* is used following a count of 1.8.18 back to the Calendar Round of the 9.10.15.0.0 period ending; here it serves to orient the reader in a retrospective count while the narrative timeline moves from the accession to a new anchor at 9.11.16.8.18, the house dedication involving fire. Given the large area of missing text traversing the lower portion of the monument, one may assume that the constellation of ancestors and gods which dominates the final two columns is still tied to the *Hotun* ending. Even so, the final Distance Number of the main text counts not from the *Hotun* ending but from the house-dedication of 9.11.16.8.18 back to a distant-past Calendar Round and an earlier *hekwani* cache-placing ritual. This opens the text of the right panel and is preceded by *uht-i:y*, translated as 'it happened (back then)'. What becomes clear that this retrospective event, while reached from the 9.11.16.8.18 *el-(e) na:h* date, echoes the *hekwani* rite of the *Hotun* ending, signalling a strong link between the caching and the fire-dedication (1.8.18 apart) as a sequence in the structure's empowerment, and likely in its construction as well.

## **Further Thoughts on Calendrics and Discourse Structure**

We now return to the calendric and narrative structure of the inscription. Stephen Houston (2008) has noted parallels between the Tortuguero inscription and the closing passage from NAR Alt. 1 (Figure 3) as well as that of a recently discovered panel from La Corona (Figure 5).

As stated earlier, the key difference between TRT Mon. 6 and NAR Alt. 1 – which employs a similar, shorter count into the future – is that the Naranjo passage unequivocally returns the reader to current time by means of a Calendar Round. This is true of the La Corona example as well.
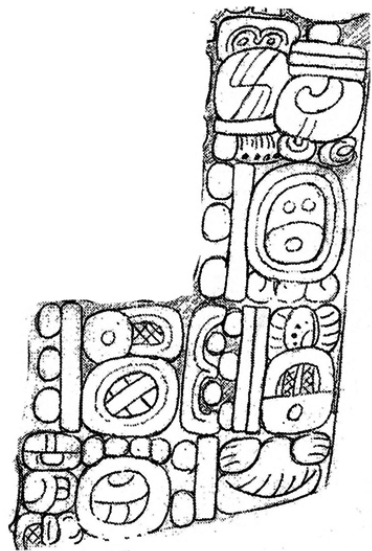
Reading and translation:

V5:     **u-TZ'AK-AJ 16-he-wa** > *u-tz'ak-aj waklaju:n he:w*
          its count (is), 16 days
U6:     **10-WINIK-ji 14-HAB**> *laju:n winikij chanlaju:n ha'ab*
          10 *Winal*, 14 *Tun* (forward) [NB: block not in drawing]
V6:     **8-AJAW** > *waxak ajaw*
          8 *Ajaw*
U7:     **8-IK'-AT** > *waxak i[h]k'at*
          8 *Woh* = 9.13.0.0.0
V7:     **u-13-WINIKHAB** > *u-u:xlaju:n winikha'ab*
          the 13th *K'atun*
U8:     **i-u-ti** > *i uht*
          it happens
J8:     **4-OL** > *chan ohl*
          4 *K'an*
K8:     **7-ma-ka** > *wuk mak*
          7 *Mak* = 9.12.5.7.4

**Figure 5:** La Corona Panel 2, V5-V8. Drawing by David Stuart (Houston 2008: fig. 3).

In all three instances, a Distance Number leads into the future from the contemporary date. The future dates are what Houston and Stuart (1996: 301, fn. 7) call "impersonal temporal events that are safely predictable" – namely period endings in the calendar. In the case of TRT Mon. 6, the contemporary datum is 9.11.16.8.18, 9 *Etz'nab*  6 *K'ayab* (I7-I8) – a building dedication (Stuart 1998: 389-390)[26], likely for the structure that once housed Monument 6. But unlike the other two examples, Monument 6 displays no return to a contemporary date at its closing.

Let us review the narrative features of this section. This house dedication (*el-e-na:h-aj*) is first introduced by a Distance Number that counts forward from the accession of *Bahlam Ajaw*. From there, another Distance Number counts back to the Period Ending statement for 9.11.15.0.0 4 *Ajaw* 13 *Mol* (J8- J10). The *alay* 'here (is)' focus marker is followed by the placement (*hekwani*) of what we now suggest was a cache. Unfortunately the passage following its name (at I12-J12) is missing, but the name itself is suggestive of a cache of celts (*le:m*). Their possessor is *Bahlam Ajaw*, as indicated by his emblem glyph at I16. This in turn is followed by parentage statements for his mother (*u-ba:h u-chi:t-ch'ab* '[he (the son) is] the person/body of her co-creation') and for his father (*u-nich u-kotz'o:m* '[he (the son) is] the flower of his [the father's] winder'). More will be said about this unique expression in Appendix 1.

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[26] I6-J6: /**i-EL-le na-hi-ja**/ > *i el-e na:h-[a]j-Ø*, analysed as 'then burn-house-INTR-3SG.ABS'.

Thereafter, further information is given concerning the lineage and patron deities of *Bahlam Ajaw* and the tutelary gods of Tortuguero. Also referenced at K15 is a sculptured stone (*k'an tu:n*) that is likely to be Monument 6 itself (Gronemeyer 2006: 156, fn. 14).

Whereas the Naranjo and La Corona inscriptions place another Calendar Round at the end of the text which coincides with the contemporary base date, the Tortuguero text terminates with the events of the 13.0.0.0.0 Period Ending without a return to present time. That said, we agree with Houston (2008) that the purpose of this great leap forward is to contextualise the celebrations of 9.11.16.8.18. He stated: "[w]hatever Monument 6 has to tell us pertains to the dedication of the building associated with the sculpture." Indeed, the discourse supports this by tying events together in a manner making the contemporary date pivotal. But we contend that the contemporaneous dedication and its corollaries serve a grander agenda of lineage power and legitimacy over a vast span of time.

Setting aside for the moment the birth, accession and prior warfare and court ceremonial events of *Bahlam Ajaw*, the earliest event in the ritual constellation is the caching (*hekwani*) of a first consecrated (or consecrating) object (*nah k'anjal*) for the *pibna:h* of *Ahkal K'uk'* on 9.3.16.1.11, followed at considerable distance by the period ending of 9.11.15.0.0. This locks the contemporaneous events into the framework of the Long Count. On this date another caching rite (*hekwani wak ha'ab na:h wak-mul baj-le:m*) occurs. Soon after, on 9.11.16.8.18, we have the *el-e-na:h-aj* house-dedication. From this point the grand leap of 3.8.3.9.2 leads to the *Bak'tun* ending featuring *Bolon Yokte' K'uh*. Period endings, while often not the central events of this monument, punctuate its narrative. This does not mean that the investiture of *Bolon Yokte' K'uh* is a contemporaneous event. Instead, we consider this to be a genuinely prophetic statement, albeit not one of either planetary catastrophe (we hope) or the usual humdrum offerings of incense and blood.

It is common for Maya kings to reference like-in-kind earlier events – thus the mention of an Early Classic building consecrated by the ancestral ruler *Ahkal K'uk'* . It may or may not have been noteworthy that the parenthetical 15-*Tun* ending falls on a 4 *Ajaw* day. Since the narrative is centred on the building, the gods, the lineage and associated relationships, the purpose of the count forward to the 13th *Bak'tun* ending seems clear: the lineage of *Bahlam Ajaw* and its patron deities is to orchestrate the future welcoming of *Bolon Yokte' K'uh* – perhaps with this very building serving as the stage for the event. If the celebration is not to be supervised by the king himself (but it may be, posthumously), then his heirs will do it; thus the event is not so impersonal as previously assumed.

We stress the significance of a *future* event in contrast with Houston's argument for a circular calendrical nexus returning to current time – the latter being exemplified by the Naranjo and La Corona inscriptions. Another Tortuguero text manifesting an intentional forecasting is TRT Mon. 1 (Figure 4). Its contemporary date is the period ending 9.10.13.0.0, 1 *Ajaw* 3 *K'ank'in*, said to be *u-nah-tal* 'the first in order' of the *k'al-tu:n* ceremonies of his companion gods (*u-chi:t*) seen at A1-B2a. The witnessing of the patron gods "in front of" *Bahlam Ajaw* follows at B2-A3a and then we have the erection of a *lakam-tu:n* – which is Monument 1 itself (A3b). As on Monument 6, a Distance Number leads back to *Bahlam Ajaw*'s accession before another Distance Number connects the 13-*Tun* ending to the prospective *K'atun* ending 9.11.0.0.0 12 *Ajaw* 8 *Keej* (A4b-B4). This future event is simply specified as *il-aj-Ø* 'he is (will

be) in attendance'. And as on Monument 6, the *alay* focus marker keeps the narrative straight.

It does seem unexpected that this 13-*Tun* ending was considered *u-nah-tal*, the first in order. *Bahlam Ajaw* acceded to the throne on 9.10.11.3.10, and had already celebrated his first *Tun* ending as king on 9.10.12.0.0 – specified on TRT Jd. 1 (A9-A11). Perhaps we can glimpse a clue in Houston's (2008) suggestion that the 13th *Tun* ending was a more vivid time "because of its evocation of a 13th cycle". Perhaps the "first in order" refers to the first erection of a *lakam-tu:n* or stela on the occasion of a period ending. Equally likely is that the *Bak'tun* completion of Monument 6 is the end point of a bundling of time that began with Monument 1. One notes that the Calendar Round of the 13-*Tun* ending (1 *Ajaw* 3 *K'ank'in*) is, except for the *Tzolk'in* coefficient, identical to that of the 13-*Bak'tun* ending (4 *Ajaw* 3 *K'ank'in*). Taking into account the importance of the number 13, it may have been *Bahlam Ajaw*'s intention to connect these two events[27] and to see the completion of the 13th *Bak'tun* as a logical consequence of events set in motion at the 13-*Tun* ending, near the beginning of his tenure. If this is the case, then we might also speculate that in his view, he himself (albeit posthumously) was to celebrate the 13th *Bak'tun* ending. This concept of eternal rulership may be observed in the narrative of the Temple of the Inscriptions of Palenque, where the huge Distance Number connects the accession of *K'inich Janaab Pakal* with the vastly distant Calendar Round jubilee on 1.0.0.0.0.8.

### *The Investiture of* **Bolon Yokte' K'uh**

It is now time to address the event featuring *Bolon Yokte' K'uh*. Markus Eberl and Christian Prager (2005: 31) have described this numen as a "deity of transition" who is associated with period endings "and the 13.0.0.0.0 *Bak'tun* ending in particular." Although he is not abundantly tied to period endings in the epigraphic record, this deity is associated with the termination of Long Count cycles on MAR St. 1, ALS St. 8, ALS St. 9, on pp. 7 and 8 of the Paris Codex, and he is linked most notably with the 13.0.0.0.0 events that began the current era on 4 *Ajaw* 8 *Kumk'u* depicted on the ceramics K2796 and K7750. As emphasised above, the Tortuguero example is clearly not the end of the current era, although the recurring Long Count position may evoke a re-enactment of the creation events in which *Bolon Yokte' K'uh* plays a major role. We assume his connection to the 13th *Bak'tun* ending is so intimate that his mention on Monument 6 supersedes mention of the usual celebrations (erection of stelae, scattering of incense) accompanying calendrical milestones.

His event is detailed in blocks O5a and P5 of the inscription. Vital to the understanding of the *ye'-n-i* (verbal) / *ye:n* (nominalised) statement is the semantic denouement of the *chak joy(aj)* component. It is not unambiguous. While we may approach

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[27] We can also observe in Tortuguero's corpus that the number seven has a similar importance and is featured on several occasions. First of all, *Bahlam Ajaw* was born on a date (9.8.19.9.16) that coincides with G7 from the "Lords of the Night". The same G7 is also explicitly mentioned for the house dedication event and contemporary date of Monument 6 (9.11.16.8.18). There is a 7-*Tun* Distance Number on TRT Mon. 1, B4a that connects the its contemporary date 9.10.13.0.0 to the subsequent *K'atun* ending 9.11.0.0.0. On TRT Mon. 8, A18 we have the completion of *Bahlam Ajaw*'s 7 *Tun* in rulership on 9.10.18.3.10; this also involved the re-enactment of the accession with elements of a local myth (Gronemeyer 2006: 173, fn. 3, 174, fn. 6). A 7-*Tun* Distance Number (TRT Mon. 8, B77) also connects this anniversary with his accession (B78-B81). As stated above, the deceased *Bahlam Ajaw* was not present to celebrate the 9.12.7.0.0 *Tun* ending (TRT Bx. 1, C1-F1). Furthermore, there are two possible 7-*Tun* statements on TRT Mon. 9, A8 and C8.

the meaning from the lexical entries, we have elected to pursue the *joy(aj)* events throughout the hieroglyphic corpus. We will now share some of the forensic details of this process.
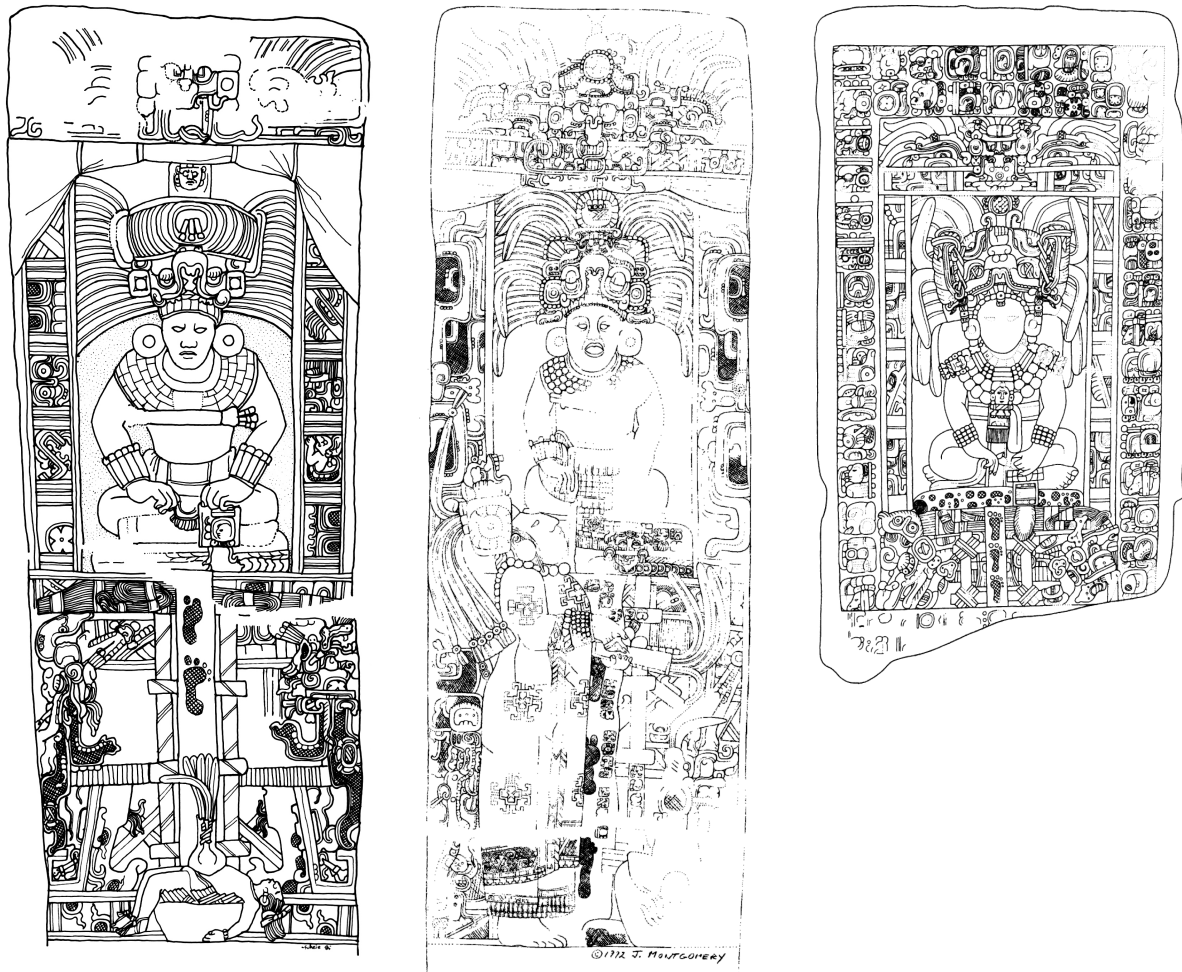


**Figure 6:** The "ascension motif" in Piedras Negras. Left: Stela 11 (drawing by Linda Schele). Middle: Stela 14 (drawing by John Montgomery). Right: Stela 25 (drawing by David Stuart).

The most common occurrence is in accession events, as first noted by Tatiana Proskouriakoff (1960). While the phrase *joy(aj) ti ajawlel* is commonly glossed as 'he was bound into rulership[28]', one must ask (1) whether "binding" is the right word in this context, and furthermore, (2) whether this is a passive verb of the form *johy-aj* or is it instead *joy-aj*, a nominalisation of a CVC transitive root. The relation of the phrase to the accompanying iconography is not free of ambiguities. For example, PNG P. 2 shows the king in warrior dress receiving devotion from vassal lords, and BPK St. 2 displays the ruler flanked by two women holding bloodletting paraphernalia. The latter led Peter Mathews (1978: 61) to state that "the ruler Chaan-Muan underwent a rather painful ceremony before posing for his portrait", although it is not clear at what stage the bloodletting took place.

Some useful evidence is found at Piedras Negras. A common accession motif at this site is the image of the newly inaugurated king seated in a scaffold or palanquin

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[28] Theoretically, a diversity of offices may appear in these collocations, as in *joyaj ti sajalil* on CAY Lnt. 1, E4-F4 and *joyaj ti sajal* on LTI P. 3, D1-E1 show. Regardless of what specifics the inauguration of superior and subordinate rulers involved, there was at least this common element.

(Figure 6), as Proskouriakoff (1960: 455) first noted. Often, as on PNG St. 11, C7, PNG St. 14, B11 and PNG St. 25, A15 this "ascension motif" is accompanied by the *u-ba:h ti joy(aj)* expression. Linda Schele (Schele & Miller 1986: 111) considered this to be the last step of an accession and sacrifice narrative, while a pot from the Chicago Institute of Art (Schele & Miller 1986: pl. 92) displays an intermediate step wherein a captive is brought forward in a litter to the ruler and sacrificed. The new king then "will step over the victim's body, ascend into the scaffold structure and receive the insignia of office" (Schele & Miller 1986: 228). Taking into consideration the lexical entries, the evidence here suggests that *joy(aj)* may refer either to the enclosure of the ruler in the structure or to his being carried around in a celebratory procession[29].

Of particular interest are those glyphic captions that involve the phrase *u ba:h*, '(it is) his image/person' (Houston & Stuart 1998: 73-77) and which refer to the accompanying iconography (Proskouriakoff 1968: 247). One is the ceramic vessel K1463 (Figure 7) that was brought to our attention by Christian Prager (w.c., 13th Aug 2009). The *u-ba:h ti joyaj* event is here connected to the portraiture of the Motul de San José ruler *Yajaw Te' K'inich*, dubbed the "Fat Cacique". Barbara MacLeod initially speculated that the second person from the left was engaged in bloodletting and that the Fat Cacique (who wears a *Tlaloc* pectoral) is about to begin a dance (cf. vessel K1452) previously connected to bloodletting (Schele & Miller 1986: 181, 193, pl. 71, 71a). In that case, *joyaj* might either refer to a twirling around of the dancer or the spilling of liquids (e.g. blood), as some of the Yucatec lexical entries suggest.
A connection to bloodletting may also be found on a jade celt from Costa Rica (Grube & Martin 2001: II-37). The inscription mentions *u ch'ab ti joyaj*, 'his creation at the *joy*ing'. The connection of *ch'ab* 'penance', 'creation' with bloodletting has long been noted (Proskouriakoff 1973: 172, Winters 1986: 234, also Schele, Stuart & Grube 1991: 6-7), as on TIK T. 1 Lnt. 3, C3-C4 (Stanley Guenter, w.c., 7th Jan 2001) where we have *u tzak tu ch'ab ti yak'abil*, 'he conjures the god in his creation, in his darkness.'

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[29] If Schele's interpretation is correct, we may be able to determine a sequence of rites involved in the inauguration of Classic Maya rulers. It is unlikely that the most common expressions – *joyaj ti ajawlel*, *chum(-laj/-wani) ti ajawlel*, *k'al hu'un* and *ch'am K'awi:l* – are interchangeable terms as their substitution patterns (Mathews & Schele 1974) may suggest, but rather represent *pars pro toto* details of discrete and sequential steps in an accession. The act described by *joy(aj)* may thus be a part of that sequence. As BPK ScS. 1 shows, a ruler seated on a throne is about to receive the Jester God headband, whereas the text (A2) provides *chum hu'un? ta ajawlel*. Perhaps he has been brought back in his scaffold to the palace where he is seated as a ruler to receive the headband as part of his insignia. Or it may be that these rites were somewhat different within different polities.
Another interpretation of *joy(aj)* in the context of accession may be that of an encircling by other nobles. The most exquisite examples of office-taking while surrounded by nobles are found at Palenque, specifically on the benches from Temples XIX and XXI. Although the scenes are not qualified by *joy(aj)* in the accompanying texts, we see *K'inich Ahkul Mo' Nahb* III in the centre of each scene, and we agree with Stuart (Stuart 2005a: 113) that the setting is almost like a "roll-out" representation of the king encircled by his subordinates.
There are also a couple of paired accession expressions, although it is unclear whether they are just couplets or actually indicate some action sequence, e.g. TIK St. 4, B4-B5 with *k'ahlaj u:x hu:n tu ba:h joyaj ti ajaw Yax Nu:n Ahi:n*, PAL ISV, G1 with *i joy hu'un k'ahlaj* (Michael Grofe, w.c., 13th Aug 2009, with the reading order not beyond doubt) and a fragment from CLK HS. with *joyaj ti ajaw ch'amaw K'awi:l U:x Te' Tu:n*. The Tikal example reverses the suggested sequence. Unfortunately, it is outside the scope of this paper to further investigate the topic of accession rites.

**Figure 7:** Top: Ceramic vessel K1463. The phrase *u ba:h ti joyaj* can be seen in front of the seated ruler's head. Rollout © Justin Kerr/FAMSI. Below: Details of the glyphic caption and the headdress of the "Fat Cacique".



**Figure 8:** Ceramic vessel K1454. The phrase *u ba:h ti joyaj ti ahk'ot* is referring to the dancing person second to the right. Rollout © Justin Kerr/FAMSI.

However, the scene on K1463 shows the Fat Cacique on the occasion of his accession (McBride 2003: 16), so the phrase may just be a shortened variant of the usual *joy(aj) ti ajawlel* phrase. Further evidence may lie in a possible connection of the Fat Cacique with *Bolon Yokte' K'uh*, while not contributing any further to our understand-

ing of the word. As noted, the Fat Cacique wears a *Tlaloc* pectoral[30]. The war associations of this Central Mexican deity have long been known (Schele & Miller 1986: 213), as has the connection of *Bolon Yokte' K'uh* with war (Eberl & Prager 2003: 29-31). He furthermore wears the headdress of a screech owl with three large, protruding feathers. This particular headdress is intimately connected with God L (Taube 1992: 79) and is also connected to *Bolon Yokte' K'uh* on K1368 (Grofe 2009: 1-4, figs. 1, 4b) and in the Dresden Codex (Figure 12), which we will consider a bit later.
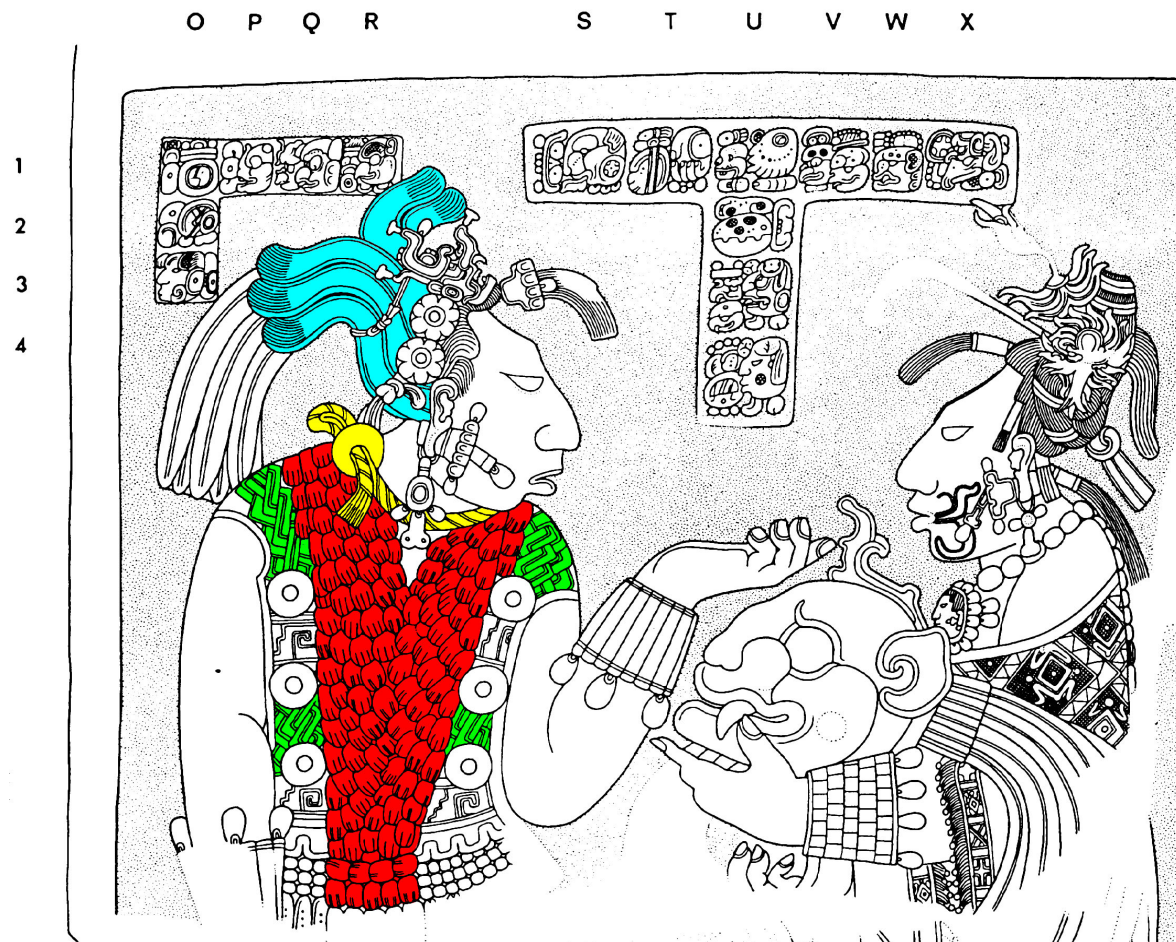


YAX Lnt. 26, S1-X1:

| | |
|---|---|
| S1: | **u-BAH** > *u ba:h*<br>it is his image |
| T1: | **ti-jo-JOY-ye-la** > *ti joyel*<br>whilst *joy*ing |
| U1: | **ti-xi-ki-ba-le** > *ti xik-bale[l]*<br>with the *Xik-Balel* |
| U2: | **ICH'AK?-HUN-na** > *ich'a:k hu'n*<br>*Ich'a:k? Hu'un* |

| | |
|---|---|
| U3: | **7-CHAPAT-?-K'INICH-AJAW-wa**<br>> *wuk chapaht ? k'inich ajaw*<br>Seven Centipede ? 'Sun God' |
| U4: | **4-WINIKHAB-AJAW-wa** > *chan winikha:b ajaw*<br>4-*K'atun*-Lord |
| V1: | **u-CHAN-nu AJ-BAK** > *u cha'an aj ba:k*<br>the captor of *Aj Baak* |
| W1: | **ITZAMNAJ-BALAM** > *itzamna:j ba[h]lam*<br>*Itzamnaaj Bahlam* III |
| X1: | **K'UHUL-AJAW-wa** > *k'uhul ajaw*<br>Holy Lord (of Yaxchilan) |

**Figure 9:** The upper part of Yaxchilan Lintel 26 with colour indication of iconographic features. Blue: owl feathers in headdress, yellow: cord or rope around neck, green: garment with *Pohp* pattern, red: feather-work. Based on a drawing by Ian Graham (1977: 57).

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[30] On BPK *St.* 2 mentioned above, we also find *Tlaloc* motifs on the hem of the left female's skirt. As on K1463, the iconography features the accession of a ruler.

A kindred scene to that of K1463 appears on the ceramic K1454 (Figure 8). The caption says *u ba:h ti joy(aj) ti ahk'ot* and accompanies the second person from the right, who is depicted in the act of dressing in a costume. One attendant shows him a mirror while another holds his monstrous mask. The wings around his body indicate that he has partially donned his costume. In our opinion, it is scenes like this one which give the best indication of the primary meaning of *joy(aj)*.
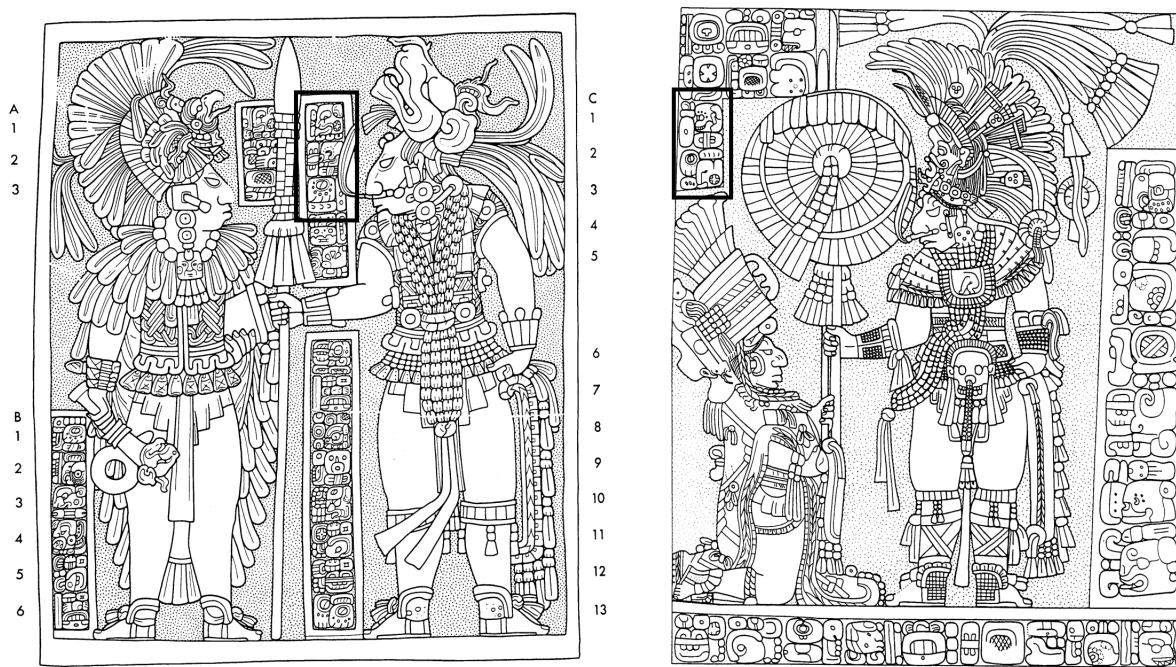


**Figure 10:** The expression *xik-bal-el* on Site R monuments. Left: Lintel 1 (drawing by Peter Mathews, Mayer 1995: pl. 254). Right: Lintel 3 (drawing by Stefanie Teufel).

A very telling representation of a *joy* event comes from YAX Lnt. 26 (Figure 9). On this lintel, we see the ruler *Itzamnaaj Bahlam* III in a garment bedecked with feathers, holding a knife in his right hand and stretching his left arm towards his wife *Ix K'abal Xook*, who holds a jaguar helmet or headdress against her body with her left hand. From her right hand hangs a long tasselled cord which does not appear to be part of her own garment. It appears the king is poised to wear these two items. The glyphic caption reads *u-ba:h ti joy-el ti xik-bal-e(l)* with the latter visible in block U1.

This *xik-bal-el* collocation also appears on Lintels 1 and 3 from Site R (Figure 10), as pointed out by Christian Prager (w.c., 21st Aug 2009). The substitution patterns indicate the suffix sequence -*bal-el* via the spelling /**ba-le-le**/; thus the final morpheme is underspelled on YAX Lnt. 26.

Neither of these inscriptions specifies a *joy* event. On Site R Lintel 1, *Itzamnaaj Bahlam* III is shown in a costume similar to that on YAX Lnt. 26, including the same feather garment and feline headdress. Where the Yaxchilan example shows the dressing act in progress, as supported by the *u ba:h ti joyel ti xik-bal-e[l]* construction with the nominalised *joy-el* verb, Lintel 1 depicts the result of this act, hence the caption *u ba:h ta xik-bal-el*. The text from Lintel 3 specifies *sak xik-bal-el* and refers to the kneeling figure in front of the Yaxchilan lord. As Christian Prager (w.c., 21st Aug 2009) proposed, this person has an object around the neck that resembles the cord that impersonators of *Bolon Yokte' K'uh* wear.

The garment of *Itzamnaaj Bahlam* III on YAX Lnt. 26 (Figure 9) also has striking similarities to the iconography of *Bolon Yokte' K'uh* impersonators. This item features the feathers which the god in the Dresden Codex (Figure 12) has in his headdress, recalling the headdress of the Fat Cacique on K1463. The mat design of the headdress (Eberl & Prager 2005: 29) is possibly reproduced on the garment, and one can make out a cord or tie around his neck, another diagnostic feature (Eberl & Prager 2005: 29). An alternative possibility (Michael Grofe, w.c., 21st Aug 2009) is that this cord is not specifically connected to *Bolon Yokte' K'uh*, but may be a strap to tie[31] the feather garment. Nonetheless, his wife holds a long cord in addition to the feline headdress.
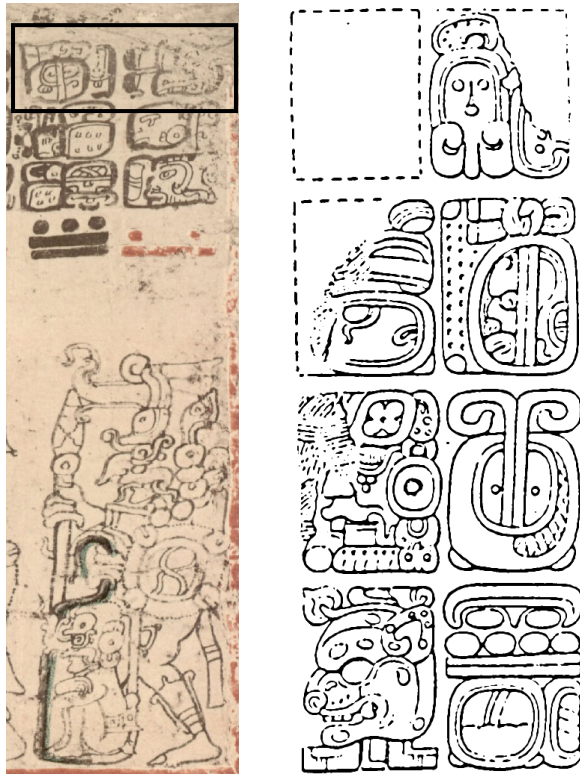


**Figure 11:** Tied up gods. Left – Dresden Codex, page 67a. After the facsimile edition of Förstemann (1880). Right – Copan Stela 9, E2-F5 (drawing after Maudslay 1974: I pl. 110 in Schele 1987).

The action described by *joy* on YAX Lnt. 26 could refer to the winding of an object (whether it be a simple rope or a feather garment) around[32] the neck, but it seems more likely that *u-ba:h ti joyel* here refers to the process of dressing, adorning or wrapping someone in special garments. Thus a meaning 'encircle' is preserved.

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[31] In Grofe's opinion, this may explain the presence of the word *balel*. YUC: *bal*: corchar así cordeles, doblarlos y torcerlos, juntar hebras para torcer, juntar hilo o cuerda para torcer (Barrera Vásquez 1993: 31); CHL: *bʌl*: enrollar [tela o papel] (Aulie & Aulie 1978: 9). This might refer to the utilisation of twines to assemble and attach feather-works. He further bases an interpretation of *xik* on the presence of feathers; in many Mayan languages *xik* means "hawk". Alexandre Tokovinine (2005: 38-40, 42) in contrast has considered *xik-bal-el* as a reference to the feline headdress. MacLeod prefers to relate this word to the Yucatec and Lacantun entries *xikul* and *xikur* 'shirt', 'tunic' (or by extension, a specific costume), with *-bal* to be understood as a nominal suffix. The same morphology is seen in *xi:k* 'wing' and *xi:k'bal* 'flight, flying'.

[32] There is another interesting parallel from page 55a of the Madrid codex. The illustration shows God M with a pack strap tied around his head, grasping the rope with the bundled merchant's wares. The glyphic caption starts with *joyel* and possibly continues with *u pat*, then naming God M as the possessor.

The idea of tying (up) or encircling something is also evident on page 67a of the Dresden Codex (Figure 11). On the right, the caption of the vignette starts with *johy-aj k'awi:l* and names God B as the actor. The image shows *Chahk* (God B) holding what appears to be a sack containing *K'awi:l* (God K), apparently to offset famine from loss of the crop[33]. Here the *johy-aj* (now a passive, rather than nominalised) verb must signal the surrounding or enclosing of the god in a bag: *jo<h>y-aj-Ø chahk* 'is enclosed, *Chahk*'.

Another and perhaps similar instance appears on the now scattered CPN St. 9 (Figure 11). The subject is the tenth ruler "Moon Jaguar" (blocks E4-E5); the predicate can be read as *joy k'uh*. Interesting is the graphemic rendering, as the god's head is not just strapped by the /**JOY**/ logogram, but surrounded by a cartouche that resembles the bag from the Dresden Codex, much like an "X-ray" image. Unfortunately, the context in which that god is *joy*ed is unavailable.



**Figure 12:** The attack of God N by *Bolon Yokte' K'uh*. Dresden Codex, page 60a. After the facsimile edition of Förstemann (1880).

Another fine example of a *joy* verb was pointed out to us by Christian Prager (w.c., 17th Aug 2009) on page 60a of the Dresden Codex (Figure 12, cf. Eberl & Prager 2005: 32-33). This also has a connection to events on Tortuguero Monument 6.
Only faintly visible, the text starts with the creation date Calendar Round 4 *Ajaw* 8 *Kumk'u*. The verb is unfortunately destroyed, but is still discernible as a passive form with God N as the subject. The next glyph (*u kab-ch'e'en [i]tz'at*) 'adept of the earth-cave' appears as an epithet of God N. The following *tu ba:h chahk* is puzzling, although it may refer to the illustrated attack upon God N's head with a spear and *atlatl* darts. In fact, the earlier facsimile edition of the codex by Kingsborough shows streams of blood trickling down God N's cheek (Carl Callaway, w.c., 18th Aug 2009). The text then names *Bolon Yokte'*, depicted in the scene attacking an unarmed

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[33] The name of *K'awi:l* is followed by *mih k'ahk'* and we base our interpretation on the appearance of the Maize God in the last glyph block.

God N. As mentioned in the prior discussion of K1463 and YAX Lnt. 26, one can recognise in the headdress the (three) screech owl feathers typical of this deity and of God L (Grofe 2009: 1-4, fig. 4b). The rest of the text is somewhat elusive and partly effaced, but a war and destruction reference is deducible from the penultimate glyph block (*to:k' pakal*) and the preceding block containing *xu(l) k'i:n* 'end of days'. Here we have direct evidence that *Bolon Yokte' K'uh* is a deity of both war and transition (Eberl & Prager 2005), and as such, he apparently attacks and destroys the supports (*pawahtu:n*) which hold up the sky (Carl Callaway, w.c., 18th Aug 2009).

God N and *Bolon Yokte'* stand on a platform or foundation beneath which a deer is lying, accompanied by the passive *johyaj*. Christian Prager has suggested (w.c., 17th Aug 2009) that the deer may be seen as a hunter's prey, equating with a captive destined for sacrifice. On monuments depicting human captives, they lie or crouch beneath the feet of the victors, bound ("encircled") with ropes.



**Figure 13:** Trapped animals, bound by an rope, Madrid Codex, page 91a. After the Graz facsimile edition (Anders 1967).

A link between *joyaj* and hunting is also visible in a couple of passages from the Madrid Codex (Christian Prager, w.c., 21st Aug 2009), where animals are bound to a rack by a snare (Figure 13). The images appear in an almanac showing a variety of game (cf. von Nagy 1997: 68-71). Most of the hunted animals are introduced by the possessed nominalised form *u-joyaj*; the text accompanying the turkey on page 91a is of particular interest, as it specifies the tool and possessor of the *joy* action as *u le' k'utz* – 'the lasso of the turkey'. One *joyaj* scene on this page shows what appears to be an armadillo beneath a platform akin to that discussed above.

The applications of *joy* in the codices are again ambiguous. The word may refer to the tying of a rope around a prey animal's body, the throwing of a lasso, or may describe the state of being trapped, as the Tzotzil entry of "cut off one's escape" suggests.

One final example of *joy* occurs on CPN Alt. F' (Figure 14). It cannot be associated with any iconography, but perhaps we may close the circle in a return to the accession expression. This somewhat problematic text is loaded with grammatical peculiarities (Wald 2000: 143-145) and contextual problems (cf. Schele 1993), no doubt because it had an antecedent portion on another monument, now lost. The reading of blocks A2-B2a was first suggested by Linda Schele (1988) and further developed

by Barbara MacLeod (1989) who ponders the phrase as the placement of an offering in a foundation cache. The text continues with the arrival of a previously fashioned clay object termed *u-y-ahk'u chahk* (a *Chahk* effigy) and the passing of 24 *Tun* (block A3a, cf. MacLeod 1989: 3, Schele 1993: 2). It was first suggested (MacLeod 1989: 4) that after this time elapsed, the effigy was removed from safekeeping and relocated as specified by the spelling /**JOY-ji-ji-ya**/ > *jo<h>y[-a]j-ijiy* – an anomalous form with a surfeit of temporal deictic clitics attached to the verb (cf. Wald 2000: 143). The Distance Number in A3a places the *joy* event some years after the initial manufacture of the object. In consideration of the entire semantic discussion of *joy* in this paper and the lexical entries presented above (Table 3), Robert Wald's suggestion (w.c., 11th Aug 2009) that we consider a circular transporting of the *Chahk* effigy around the "holy place" in a procession or circumambulation is attractive. But we cannot exclude the possibility that the effigy was removed from its previous location, wrapped with clothing and enclosed in a shrine of the Earth God. If the latter, it would nicely parallel the example from YAX Lnt. 26, and either way would find ratification in ethnographic records describing the dressing and parading of effigies. Both proposals are equally supported by the closing of the text with *yichnal Yax Pahsaj Chan Yopaat* – 'in the presence of' the Copan ruler.
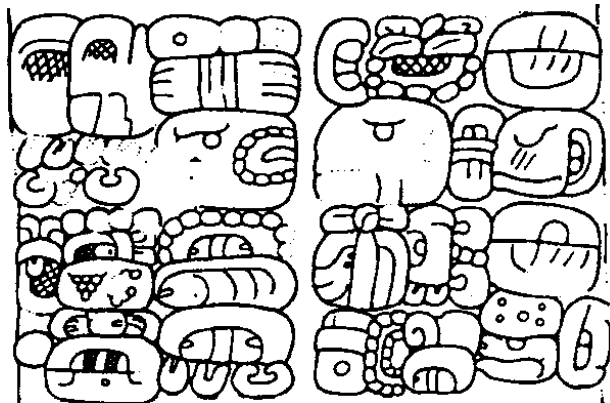


**Figure 14:** Copan Altar F', A2-B3. After a drawing by Barbara Fash (Schele 1993: fig. 1).

Reading and translation:

A2a:  **pa-k'a-ji-ya** > *pa[h]k'ajijiy*
      was molded
A2b:  **ti-tz'i-ku** > *ti tz'i[h]k*
      from clay
B2a:  **u-ya-k'u-CHAK-ki** > *U Ya[h]k' Chahk*
      the gift? of *Chahk*
B2b:  **i-CHAM?** > *i cham*
      then it died? (hidden / ritually interred?)
A3a:  **tu-4-tu-TUN 1-WINIKHAB**
      > *tu chan tu:n ju:n winikha'ab*
      on the 4[th] *Tun*? of 1 *K'atun*
A3b:  **HUL-le-li-ji-ya** > *hulelijiy*
      since having arrived
B3a:  **jo-JOY-ji-ji-ya ti K'UH-NAL-li**
      > *joyjijiy ti k'uh[ul] nal*
      it was taken around (or it was dressed
      or enclosed) in the holy place of
B3b:  **i-bi-na** > *i[h]bi:n*
      the Earth God

It may be inferred that the *Chahk* effigy takes the epithet *ihbi:n* – 'Earth God' – a reading suggested by MacLeod (1989: 2) based on examples[34] from Ch'orti.

In summary, an iconographically-aided epigraphic survey of the root *joy* still leaves us with ambiguity, reflected in selected lexical sources. This led Christian Prager (w.c., 17th Aug 2009) to think we are dealing with a general ritualistic topic spanning

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[34] CHR: *ihben*: earth god (protector of milpas, houses, and property; Sp. (San Manuel), spirit of maize (male consort of spirit of beans); *ihben winik*: male aspect of maize spirit; *ihben ixik*: female aspect of maize spirit (Wisdom 1950: 476). If the /**i-bi-na**/ spelling from CPN Alt. F' is in fact a Classic rendering of the Ch'orti' word, as seems likely, understanding this an epithet of God B seems reasonable in view of the fertility aspects of this deity (cf. Taube 1992: 17, 19).

certain actions which are emically perceived as one. For us, three likely meanings are discernible:

(1) enclosure (containing or surrounding something/someone),
(2) wrapping (applying cloth, ropes/robes or costume to something/someone),
(3) encircling motion or travel (as in a circular procession or public display).

There is a fourth less likely meaning:

(4) sprinkling (shedding liquids/blood or pouring out something).

### Ye:n Bolon Yokte' Ta Chak Joyaj: *What Does It Mean?*

Going forward, we will explore how the *ye:n* expression from O5a interacts with these options for *joy*, hoping to arrive at the best solution for the entire closing passage. Because *ta chak joy(aj)* is the milieu in which *ye:n* appears, and because we have been able to map the behaviour of *joy* in the corpus and whittle down its semantic range, we intend to arrive at a complementary companion for *ye:n*.

Let us first consider 'enclosure' as a contextual companion to the /**ye-ni**/ spelling. We will then explore 'tying, wrapping and binding' as well as 'circular movement'. These meanings of *joy* all find resonance in Allen Christenson's descriptions of the Easter rituals involving the *Rilaj Mam* (or *Maximón*) of Santiago Atitlán in Highland Guatemala. As Michael Grofe (2009: 15) has argued, it is quite possible that *Bolon Yokte' K'uh*, as an aspect of God L, can be connected to the *Mam*. Allen Christenson (2001: 62) describes the *Mam* being carried "in triumph to a small chapel near the church" during Easter observances by the *telinel*, where the image is hung in a shrine (2001: 93-94, 182). He continues (2001: 62):

> "There he presides over the death of Christ while receiving offerings of incense, money, and copious amounts of liquor. In this role, Atitecos sometimes address him as Judas Iscariot or Pedro de Alvarado[35], both archetypal god-destroyers. Most traditional Atitecos, however, call him Mam ("grandfather" or "ancient one") because they say he is older than Christ and the saints, having been born before the first of dawn."

When the *Mam* is being assembled the night before he is relocated to the mayor's office on Holy Wednesday, he is accompanied by members of the *cofradía* while the *telinel* assembles and dresses him (Christenson 2001: 182):

> "Once the framework is assembled, the *telinel* then dresses the Mam in layers of clothing […]. The entire process takes about a half an hour, and is carried out mostly in silence, with an occasional joking comment passed between the *telinel* and other members of the cofraternity."

Then having been brought to the office, he is guarded by certain people (Christenson 2001: 183):

> "For two to three hours, the Mam lies in state in the mayor's office flanked by a line of young men that represent his "soldiers or policemen." Before him a circle of women kneel, alongside piles of ripe fruit […]."

One sees that an enclosure is featured with encircling carried out by the devotees of the *Mam* and the attendees in the procession. When the *Mam* is brought to his

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[35] Christenson (2001: 178-179) further elaborates that he is also sometimes referred to as Simon Peter who denied Christ after Mark 14:66-72 (also cf. Tedlock 1997: 213-227). It was also suggested, that the name *Maximón* may derive from a contraction of *Mam* and Simon (Erik Boot, w.c., 6th Jan 2010) that got reinterpreted as "MaXimón" – "the knotted one" (Stanzione 2000: 54-56).

chapel, Christenson (2001: 185) notes that during Easter week, "the Mam is constantly attended by his followers and receives offerings."

One hopes to transpose such activities back into Classic times, though it must be done with caution. *Joy* might refer either to the enclosing of an effigy of *Bolon Yokte' K'uh* by ritual attendants who surround him in a shrine, or to an ensuing celebratory procession. The enclosure or enwombing might include dressing or enrobing of the effigy, as described for the *Mam*. One finds compatibility in the Yucatec word *ye:n* 'adornment', 'finery' (*aderezos*) and its proposed etymology from *ye(')* 'display'.

Houston (2008) argues that the closing text of Monument 6 refers to an event planned for the now-lost edifice that once housed the inscription. As with the proposed installation of a *Chahk* effigy mentioned on CPN Alt. F' (Figure 14), one might consider that the seventh-century Maya planned to place *Bolon Yokte' K'uh* in the sanctuary of the Monument 6 temple. Was this to happen summarily upon completion of the sanctuary, or was it instead to occur upon the termination of the 13th *Bak'tun*? The contemporary date 9.11.16.8.18 commemorating the house dedication (footnote 26) is directly connected by a Distance Number to the *Bak'tun* ending, as if it were intended that the building house this event. Certainly the Monument 6 structure may have functioned in Classic times as a *wayib* or 'sleeping place' (Houston & Inomata 2009: 200). While we concur with Houston that the house dedication of 9.11.16.8.18 is the peak event of the text and its sanctuary probably was the intended venue for the investiture of *Bolon Yokte' K'uh*, we do not interpret that as a seventh-century celebration, but rather one intended for 2012.

There is more to say regarding 'adornment' as a companion to the *joy* verb. As one observes in the iconography, impersonators of *Bolon Yokte' K'uh* are often displayed with a rope around the neck (Eberl & Prager 2005: 29-30, cf. figure 9). We propose that an image of *Bolon Yokte' K'uh* – or perhaps an impersonator – would be draped with certain regalia[36], including a rope[37], for the celebration of the 13th *Bak'tun* ending.

The *Maximón*, believed to be a contemporary equivalent of God L (and thus perhaps of *Bolon Yokte' K'uh*, Grofe [2009]), is dressed (Christenson 2001: 178) with several layers of traditional Mayan and western clothes, including two Stetson hats. But there may be yet another angle which explains the Classic verb *joy* in relation to the *Maximón*. Allen Christenson (2001: 181) quotes from the story of how the *Mam* was created:

> "So Francisco Sojuel cut away his head, arms, and legs to stop him from wandering everywhere and to make him more obedient. He then tied the pieces back together again with cords. That is why he is called Maximon, which means "He Who is Bound," but his real name is Mam [Grandfather]."

In connecting the *Mam* with pre-Columbian beliefs, Christenson (2001: 189) adds another interesting detail about the carrying of figures when the ballgame against the Lords of the Underworld was re-enacted:

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[36] The adornment of images or statues of deities or humans with specific dress or regalia for a momentous occasion is a widespread phenomenon outside the Maya area. For example, in Pharaonic Egypt (Bonnet 1952: 186), statues of the gods were newly-clad on the "Day of Clothing" or on the occasion of their birthday, as is well-known from the *ḥb=f n mnḫt m ḏw Ỉnp.w*, the "Feast of the Clothing of Anubis on his Mountain".

[37] Michael Grofe (2009: 15) also considered that the effigy of *Bolon Yokte' K'uh* may be hung by such a rope, as the *Mam* is today in the chapel (cf. Christenson 2001: 93-94, 182).

> "While the kings were symbolically in the underworld, carved images representing underworld gods wrapped in richly decorated mantles were brought forward and honored as temporary kings, […] the Maya gave them offerings and carried them through the streets to the accompaniment of music. Being usurpers of political authority, the images represented the reversal of the customary order of society and therefore functioned much as the Mam does in Santiago Atitlán during Easter Week."

In this respect, we can understand why the prepared and draped *Mam* is first carried to the mayor's office on Holy Wednesday: it is to dissolve all municipal authority and have the *Mam* take charge (Christenson 2001: 182-183). On Good Friday, when Christ symbolically defeats the *Mam*, the coffin containing the image of Christ is carried in a counter-clockwise procession around Atitlán's centre, preceded by the *Mam* (Christenson 2001: 186-189). Considering the etymology of the name *Maximón*, one can understand why Atitlán citizens refer to this procession as the "following the path of the rope" (Allen Christenson, p.c., 10th Nov 2009).

The name *Maximón* can be analysed as *ma*, 'he' and *ximon* 'to tie up' (Stanzione 2000: 54). This may refer not simply to the assembly of the body parts by the *telinel* in the night before Holy Wednesday (Christenson 2001: 182), but also to another intriguing detail. The body of the *Mam* consists of a framework of *palo de pito* wood that is wrapped by a tightly coiled rope (Andrew Weeks, p.c., 10th Nov 2009). This wrapping is executed in a crosswise manner resembling a *Pohp* woven-mat pattern. We note that the mat design is a recognised attribute of *Bolon Yokte' K'uh* impersonators. According to Allen Christenson (w.c., 5th Jan 2010), this coiling of rope around the *Mam*'s body, as carried out by the *telinel* , is the most sacred ceremony of the ritual year. It occurs on the same night as his assembly and is part of the renewal of the world. In Tz'utujil belief (Stanzione 2000: 54), the hanging of the *Maximón* symbolises the binding of the years and "[i]n this way he is the bundler of years as he himself is a bundle of time". Although this is tied to the ritual solar year (as the five days of the *semana santa* equal the days of *Wayeb*), there is a reasonable chance that these practices are a reflex of ancient rites for *Bolon Yokte' K'uh* as a deity of transition (Eberl & Prager 2005: 31-32).


Certain images from the *Chilam Balam* of Chumayel may further elucidate this complex. In the series of thirteen *K'atun* prophecies (MS f. 47r-53v, Roys 1933: 147-163), each is accompanied by a vignette featuring the portrait head (*uuich*) of the *K'atun*. It is possible that these Europeanised "faces of the *K'atun*" contain a substratum of older beliefs having their origin in the Classic *Bolon Yokte' K'uh* as a deity of transition, connected to important period endings. Mark Van Stone (w.c., 25th Oct 2009) has noted that some of these "*K'atun* faces" show a coiled rope-like element around the neck (Figure 15), much like Classic impersonators of *Bolon Yokte' K'uh*. Admittedly, this proposal is very tentative, and an alternative proposal – that the expired *K'atun* are "bound" – is equally likely. While one might argue that the portraits are simply Colonial representations of the *K'atun* deities, as Diego de Landa (1959: 104) mentions, there is no explanation for the ropes other than that they encode Prehispanic beliefs.

Considering the above images of dressed and bound deities and supernaturals, the Yucatec meaning 'adornments' for *ye:n* (Table 1) invites us to consider a meaning 'to wrap' – as an act of enrobing – for *joyaj*. This would thus focus on the insignia and clothing of the effigy at his ceremonial installation, including also the preparation. Speculating from the ethnographic record, this 'wrapping' might refer to cord for coil-

ing the body, to its jacketing with garments, and given the pre-Hispanic evidence, perhaps to the placement of a rope or cord around his neck. In all of this, *ye:n* (in the Yucatec sense) is complementary.
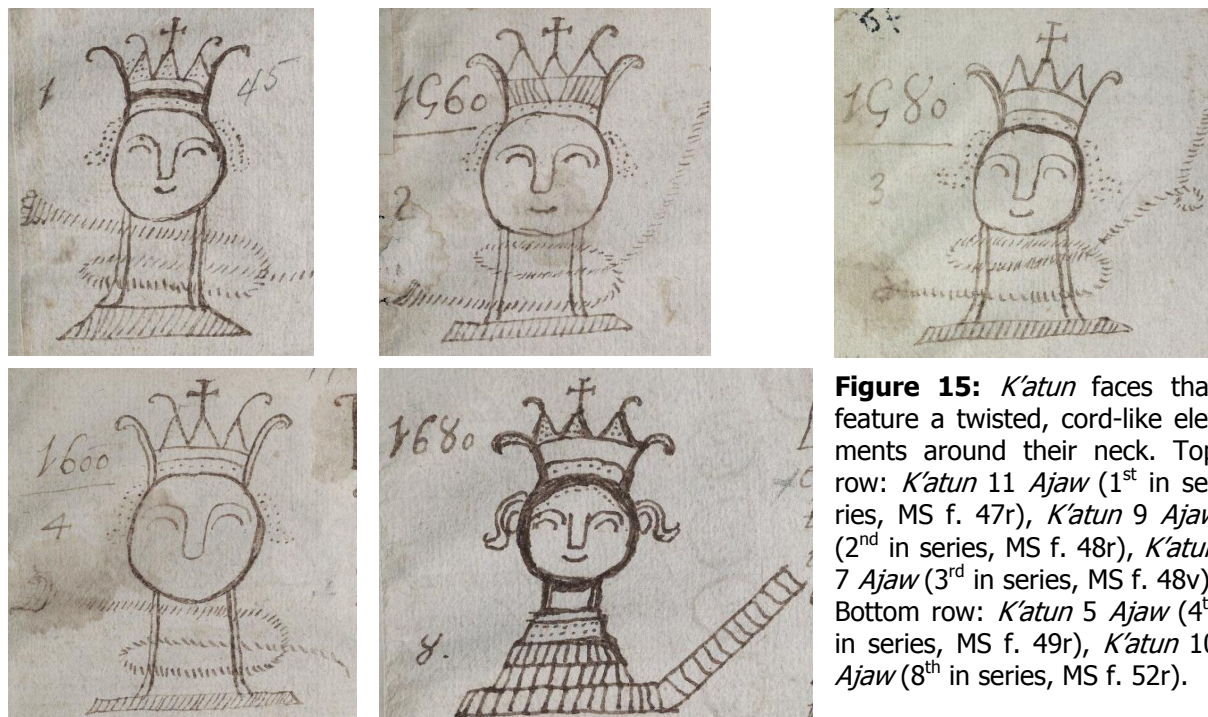


**Figure 15:** *K'atun* faces that feature a twisted, cord-like elements around their neck. Top row: *K'atun* 11 *Ajaw* (1st in series, MS f. 47r), *K'atun* 9 *Ajaw* (2nd in series, MS f. 48r), *K'atun* 7 *Ajaw* (3rd in series, MS f. 48v). Bottom row: *K'atun* 5 *Ajaw* (4th in series, MS f. 49r), *K'atun* 10 *Ajaw* (8th in series, MS f. 52r).

Taking these two semantic fields as a pair, we strongly favour the interpretation of *il ye:n Bolon Yokte' ta chak joyaj* as 'the seeing of the insignia/adornments of the god' in a public display of office-taking, wherein the office is itself signalled by the attire and accessories of the god.

Let us also consider the aspect of circular movement. Many lexical entries support this interpretation of *joy*, as does evidence from Classic iconography (as in images of palanquins) and from ethnohistory and ethnography. In the early phase of our group discussion, *joy(aj)* was first hypothesised to be a ritual circumambulation or a procession conducted by the king. A provisional consensus was reached that this is also a component of this event, considering not only the ethnographic evidence cited above, but also the abundant lexical parallels from Tzeltalan and Ch'olan languages. With the example from Copan Altar F' it is possible that we have a Classic account of such a practice, though this is not the only interpretation, as noted. Compelling support comes from Colonial accounts and modern ethnography, from which we will cite some examples.

Diego de Landa reports in detail on the ceremonies that took place on the "New Year", corresponding to one of the *Tzolk'in* days *K'an*, *Muluk*, *Ix*, or *Kawak* that can co-occur with the start of the *Ha'ab* on 1 *Pohp* (Landa 1959: 63-70)[38].

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[38] Landa's descriptions cannot be taken as a direct parallel due to a number of factors, among them the geographic and diachronic separation of the *Relación* to Classic inscriptions. The 13th *Bak'tun* ending on Monument 6 does not coincide with one of these New Year ceremonies, as its *Ha'ab* position of 3 *K'ank'in* still is far-removed from 1 *Pohp*. But in Landa's time, furthermore, the Long Count notation was long out of use, as were the rituals connected to its period endings.

According to Landa, each of these day signs was paired with a specific *Bakab* associated with a cardinal direction and the corresponding colour (Landa 1959: 62-63). During the New Year ceremonies, ritual activities were carried out across a couple of days showing a formulaic pattern of movement. Among them is the relocation of an effigy of the *Bakab* from a stone cairn at a cardinal point on the settlement's border to the house of a noble; therein further activities took place. Landa (1959: 63-64) describes:

> "El año cuya letra dominical era *Kan*, era el agüero *Hobnil*, […] elegían un príncipe del pueblo, en cuya casa se celebrara estos días la fiesta, y para celebrarla hacían una estatua de un demonio al que llamaban *Bolondzacab*, la que ponía en casa del príncipe, […]. Hecho esto se juntaban los señores y el sacerdote, y el pueblo de los hombres y teniendo limpio y con arcos y frescuras aderezado el camino, hasta el lugar de los montones de piedra en donde estaba la estatua, iban por ella todos juntos, […]. Hecho esto metían la images en un palo llamado *kanté* poniéndole a cuestas un angel en señal de agua, […] y así la llevaban con mucho regocijo y bailes a la casa del principal donde estaba la otra estatua de *Bolondzacab*."

From there, this effigy was brought to another cairn at the cardinal point which followed, moving counter-clockwise. There it was deposited, and the effigy for the next New Year feast was brought to the same station on the next eve, according to Landa (1959: 64-65):

> "Pasados estos días[39] aciagos llevaban la estatua de demonio *Bolondzacab* al templo, y la imagen a la parte del oriente para ir allí al otro año por ella, […]. El año en que la letra dominical era *Muluc* tenía el agüero de *Canzienal* […] y después hacían la imagen del demonio como la del año pasado, a la cual llamaban *Chacuuayayab*, y llevánbanla a los montones de piedra de hacia la parte del oriente, donde habían echado la pasada."

Thus the quadripartite *Bakab* (although not each single effigy) circulated around a village's borders once in four years.

Having already touched upon the procession of the *Rilaj Mam*, Christ and other Catholic saints in Santiago Atitlán, we will mention another example with abundant ethnographic data.

The Tzotzil of Zinacantán have an elaborate cargo system in service to the Catholic Saints. During Lent (Vogt 1970: 87-89), a crucified Christ image is taken out of the church and carried in a slowly-executed circuit around the church, and on the last Friday before the *semana santa*, is carried across the churchyard. On Good Friday, the crucifix is placed in front of the church and venerated by the citizens with candles, flowers and prayers before being brought back to the altar.

On the occasion of the feast for Zinacantán's patron, San Lorenzo, Vogt (1970: 89) also mentions the "visiting" of saints from other villages who "return to their homes" at the end of the five days of the *fiesta*. In October, on the saint's commemoration day, the image of the *Virgen del Rosario* is brought from her chapel at Salinas (Vogt 1970: 89-90) into the center of Zinacantán before being relocated to the chapel, where further ceremonies take place.

Apart from these festivals, we have an interesting account (Vogt 1970: 92-97) of curing ceremonies which also involve a ceremonial circuit of the town and a visit to numerous shrines around the center. This serves to sustain the animal spirit companion (known as *way* in Classic texts, cf. Houston & Stuart 1989). Although this visit to

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[39] Landa refers to the five days of *Wayeb* just before the beginning of the new *Ha'ab* year.

churches and shrines can be viewed as a religious pilgrimage, it is notable that this pays homage to a supernatural concept of Prehispanic origin.

The "Year Renewal Ceremonies" (Vogt 1970: 98-99) can also be considered in this sense, as they involve a pilgrimage to the ceremonial center of Zinacantán and to the shrines "at the foot and top of the sacred mountains around the Center". As Vogt notes "[t]he ceremony appears to be a symbolic way of relating the outlying hamlets to the tribal ancestral gods in the Center" and to relate the cargoholders and shamans "to the all-important Ancestral Gods in the supernatural world."

The parading of a god-image in Classic times likely was not only a religious observance, but also served the elite in a symbiotic reciprocity of power. Stephen Houston and Takeshi Inomata (2009: 201) recently observed:

> "To have such an effigy of renown and might, to house it in a special facility, and, at times, to parade it in public view were, one presumes, rare privileges for a particular dynasty."

It does seem reasonable to imagine that the Tortuguero ruler intended to play a role in the execution of the 13th *Bak'tun* ending. As the living representative of his lineage, he was laying the groundwork for its future well-being, and – who knows? – perhaps he expected to supervise it from the afterlife in the style of his contemporary *K'inich Janaab Pakal* of Palenque.

The fourth possibility for *joy* as the sprinkling of liquids or bloodletting (Table 3) was particularly considered in the discussion of K1463 (Figure 7) above, and bloodletting at times appears to be a component of accession, as in the aforementioned Bonampak case. In this respect, we can speculate that the effigy of *Bolon Yokte' K'uh* was to be sprinkled with precious liquids, or to receive a libation. For the early Colonial period Landa (1959: 64), in connection with the New Year ceremonies, states:

> "Había muchos que derramaban sangre cortándose las orejas y untando con su sangre la piedra que allí tenían de un demonio que llamaban *Chacacantun*. Aquí tomaban muchachos y por fuerza les sacaban sangre de las orejas, dándoles cuchilladas en ellas. Tenían esta estatua e imagen hasta pasados los días aciagos y entretanto quemábanles sus incencios."

Similar application of blood is also reported for the creation of effigies in the month *Mol* (Landa 1959: 101-102).

The investigation of Classic Maya blood offerings from the body is mostly restricted to the treatment of the human body itself (cf. Boone 1984, Gronemeyer 2003) together with its associated iconography and epigraphy. Even David Stuart's detailed analysis of blood symbolism (1984) does not provide a clear bridge to the Colonial accounts. And of course the Yucatec 'sprinkling' for *joy* entries is not restricted to blood. Often Classic texts suggest that it was not blood, as the act of sprinkling and spilling of 'drops' is termed *(u-)chok(-ow) ch'aj* '(he) throw(s) drops (of incense)' (Stuart 1984: 184-188; Love 1987: 7-16).

While the precise details remain veiled and the role of *Bolon Yokte' K'uh* as anticipated by *Bahlam Ajaw* must be inferred from his other appearances and his warlike and destructive nature, this paper has nevertheless taken several steps forward toward an understanding of the "2012 passage". We have in fact come closer than anyone has yet done.

The heart of Classic Maya religion is still only fragmentarily palpable. Recent epigraphic and iconographic breakthroughs have begun to lead to a Maya "theology",

even though there is no evidence that it was ever canonised in the Occidental sense (Houston & Inomata 2009: 195, 200). Emic conceptions of "gods" and "divineness" are clearer than ever before, and we are approaching a grasp of their ritualistic milieu. We are moving toward portions of a Classic "liturgy". These texts do not expound on emic concepts for the sake of the etic epigrapher, but rather speak with both parsimony and elegance to a contemporaneous readership steeped in Classic Maya lore. But our efforts can break new ground and offer new assertions. For example: we ratify Christian Prager's idea (w.c., 17th Aug 2009) that *joy* is a "container concept" that embraces several complementary actions. Thus *joy(aj)* may refer to the enrobing and adorning of an image of *Bolon Yokte' K'uh*, its circumambulation around the town, and its enshrinement – all as sequential steps in a single ceremony. We have thus chosen the broad term 'investiture' as the best single-word translation, noting Webster's (Woolf 1973: 608) definitions of *invest* as 'to array in the symbols of office or honour' and 'to furnish with power or authority', and of *investiture* as 'the act of establishing in office or ratifying' and 'something that covers or adorns'.

One cannot help but wonder how the seventh-century Maya anticipated this investiture, given the evidence that this god specializes in mass destruction. Might this be the stuff capitalised on serendipitously by Roland Emmerich and the 2012 doomsayers? Indeed it might, when one examines the god's early colonial counterpart *Ah Bolon Yocte* in the *Chilam Balam* of Chumayel (MS f. 40r, Roys 1933: 133). There and in other parallel manuscripts he presides over *K'atun* 11 *Ajaw* (Table 4) in the lists of *K'atun* prophecies. As Roys notes, this *K'atun* when "the drum and rattle of *Ah Bolon Yocte* shall resound" is a time when people will be driven from their homes, just as they were in the earlier times of "the green turkey … *Zulim Chan* … (and) *Chakanputun*." People will lose their crops, and be forced to "find their food among the trees (and) find their food among the rocks". And while there is evidence that the Maya took advantage of hindsight to update their cyclical *K'atun* prophecies, the role of *Ah Bolon Yocte* as master-of-ceremonies in desperate times was surely foreordained.

| | |
|---|---|
| *Buluc Ahau u hedz katun Ichcaanzihoo. Yaxhaal Chac u uich. Emom canal ual, emom canal udzub. Pecnom u pax, pecnom u zoot Ah Bolon-yocte. Tu kin yan yax cutz, tu kin yan Zulim Chan; ti kin Chakanputun. Uilnom che, uilnom tunich, ah zati uil ichil Ah Bulu Ahau Katun lae.* | Katun 11 Ahau is established at Ichcaanzihoo. Yax-Haal Chac is its face. The heavenly fan, the heavenly bouquet shall descend. The drum and rattle of Ah Bolon-Yocte shall resound. At that time there shall be the green turkey; at that time there shall be Zulim Chan; at that time there shall be Chakanputun. They shall find their food among the trees; they shall find their food among the rocks, those who have lost their crops in Katun 11 Ahau. |

**Table 4:** The prophecy for *K'atun* 11 *Ajaw*, following Roys (1993) for the Yucatec text (p. 47) and English translation (p. 133).

One may observe that the main text of Tortuguero 6 foreshadows the close of the *Bak'tun* and lays the foundation for its proper and perhaps precarious ritual observation. In this regard, the focal house-dedication event (beginning at I6-J6) in the main text was a node in a vaster dialogue between the *Baakiil* kingdom, its deceased and vigilant ancestors, its tutelary gods, and the gods of time itself. Glimpses of that dialogue are seen throughout the main text of the monument, presented in Appendix 1 as a block-by-block transcription, transliteration, and translation based on a prior

analysis by Gronemeyer (2006: 139-159) and updated by us. The main text – which continues from its lost left panel – opens with what might have been a paean to the king's supernatural patrons of *pulque* and chocolate – said at F2 to be *chi:t k'uh* 'a pair of gods' of the king. From this point forward, *Bahlam Ajaw's* birth (undoubtedly recorded on the lost panel) is the datum for his accession on 9.10.11.3.10, 1 *Ok* 3 *Kumk'u* (F7-F8), and from this event various others are now reckoned. His aggressive military campaigns are prominently featured from the beginning of his reign, with attacks on three neighbouring cities beginning (E10) four months after he takes the throne. The text's narrative makes plain the divine charter which he assumes in receiving his *to:k' pakal*, and the divine obligations to the gods and to the lineage which he shoulders. Blood is pooled and skulls are piled (G6-H6) and the 'force and breath' (*sak-ba:k ik'-il*) of the ancestors overflows in their *Yax Chan* layer of heaven (G7-G8). A long-impenetrable and impersonal event at H11-G12 – discussed in detail in Appendix 1 – brackets the 9.10.15.0.0 *ho'laju:n tu:n* ending at G14-H14. An identical event from three hundred years prior (falling on 8.15.16.0.5 11 *Chikchan* 13 *Muwa:n*) is recalled; no actors are named but it takes place in the plaza of *Ba:ki:l*.

We have provisionally deciphered this statement as /**k'a-xi(-ya) T'AN-ni**/: *k'ahx-i[ji:y] t'a:n* 'is/was bound the word(s)' in reference to the formation of an alliance (sealed with a marriage, as will be explained) between Tortuguero and a neighbouring city or cities in service to the perennial desiderata of safety, reciprocity, control of resources, and, as deemed necessary, military actions. Two wars soon follow the alliance.

The recall of that long-ago alliance (G17-I2) consummated in the plaza of *Baakiil* now heralds a time of peace, prosperity and building construction, as a count of 1.5.6.8 (although 1.5.5.8 was intended) leads from *Bahlam Ajaw's* accession to the *el-e-na:h* house dedication on 9.11.16.8.18, 9 *Etz'nab* 6 *K'ayab*. A count back to the intervening *ho'laju:n tu:n* ending marks the placement of the structure's foundation cache, and a long exegesis concerning ancestors and deities follows. We surmise, as did Houston, that this sanctuary housed Monument 6.

Without any count forward or back, the theme shifts to the king's lineage; his mother (J16-K1) and father (L1-K4) – known from other monuments (Gronemeyer 2006: 43, fig. 4) are named with some unique and rare descriptors (discussed in Appendix 1). An exquisite piece of foreshadowing (and a lovely focus antipassive) follows, as we read *ha' pikul ajaw joynijiy* 'that one (referring to *Bahlam Ajaw's* father, just named) invested many lords' (see Appendix 1). Continuing in the tradition of his father – who bestowed insignia, vestments, and authority on many representatives and tutelary gods – *Bahlam Ajaw* intends to do the same for *Bolon Yokte' K'uh*. Now the truly esoteric segment of the narrative opens, starting at L4. Again we are told of the blossoming or strengthening of ancestral 'force and breath' (the new decipherment *sak-ba:k ik'-il* by MacLeod will be clarified in Appendix 1), but this time, the 'Precious Maize Lord 'and a deep-time being (K5-L5) associated with lineage charter accompany that force and breath and are strengthened also. In attendance *(y-ita:j,* at L6) are the patron gods (L7, K8) who, in turn, awaken the hearts of what could be understood as the "gods of time" (K10-L10) who may 'set in order' (*u-tzol-ow*, a suggestion by David Stuart [2008]) the first *Kalabtun* (interval of twenty *Bak'tun*) at a place called *Yax Pet Kab Nal*, which we translate as 'First Round/Circumscribed Earth Place'.

Following the break caused by the unfortunate loss of part of the text, we note at K15 a reference to the *k'an-tu:n* (the monument itself), termed *u-ti' u-y-o:n* 'the

mouth (voice) of his lineage', and then a Distance Number 8.0.7.7 takes us back in time to 9.3.16.1.11 8 *Chuwen* 9 *Mak*, an earlier *hekwani* cache placement in a sanctuary (*pibna:h*) on the part of *Ahkul K'uk'* – a lineage predecessor. This count moves the reader to the right panel and into a part of the narrative we discussed near the beginning of this paper.

While the main text of this monument is deserving of its own detailed analysis and interpretation (a task we hope to undertake in the future), we have highlighted in the foregoing paragraphs the coordinates of a system both esoteric and pragmatic which, we surmise, assured *Bahlam Ajaw* and his lineage a secure spot in his known universe, come what may at the close of the current era. Since *Bolon Yokte' K'uh* on the Copan Hieroglyphic Stairway is said to bestow his benediction on acts of war and sacrifice (Erik Boot, w.c., 2nd Dec 2009); it can be no accident that the first half of the main text of Monument 6 features the king's military victories and copious offerings of sacrificial blood, while the rest of it commemorates the installation of a *sanctum sanctorum* housing the monument and then pays homage to the lineage and to a complex hierarchy of supernaturals ranging from the patron gods to the divine "Square-nosed Beast" to the beings who order the great cycles of the Long Count. In this scheme, the 13.0.0.0.0 date with its investiture of *Bolon Yokte' K'uh* is a waypoint – a highly significant one for which the king will prepare throughout his reign.

In the Classic Maya inscriptions there are precious few of these deep-future forecasts; the only other which comes to mind is that of the West Tablet of the Inscriptions at Palenque, which outdoes Monument 6 – neither in elegance nor in mystery, but in scale – by counting forward to the close of the *Piktun* or cycle of 20 *Bak'tun* lying some 2700+ years beyond 2012. In that text, a repeated and varying invocation to the gods of the future (deciphered and presented by MacLeod at the 1999 Austin Maya Meetings) prays (in one variant) 'may the appeasement of your hearts pour out' (*ich-naik-Ø u-tim(a)j-el aw-ohl*). This prayer reflects both hope and confidence that *K'inich Janaab Pakal* and his ancestors and heirs will sustain the balance of reciprocity and favour between humans and gods in the long, long run ahead. In that spirit, it seems reasonable that *Bahlam Ajaw* expected his heirs to host a grand costume ball for *Bolon Yokte' K'uh* which he himself might manage to attend.

### Final Remarks

The passage in question from Tortuguero Monument 6 is rather short; in contrast, this analysis and discussion has been rather lengthy.

We believe that a meticulous presentation of all arguments was necessary for several reasons. We do not understand Classic Maya religion well enough to be absolutely certain of what the Maya of Tortuguero prophesied for the 13th *Bak'tun* ending. We have selected the best options arising from our collective discussion and have stated our preferences. One aim of this paper was to share the full range of possibilities regarding this passage, at the risk of leading to a "clutter" of opinions. The reader may review all arguments, judge their validity, toss one or more, and perhaps develop others further.

As is generally true of the stone inscriptions, Monument 6 must be viewed as a sketch or outline of the weighty events it describes. A reader seeking depth of detail and breathtaking drama will be disappointed. In that sense – and only that – can the passage be considered a "bit boring", as Stephen Houston stated.

The 2012 phenomenon operates as a symbolic lightning rod in the culture at large, and it is inevitable that some will seize upon a part of this investigation and launch into liminal space with it. That this has happened in the past can be demonstrated by the repercussions extending from a previous erroneous drawing of block P4 as /**IK'**/ (see footnote 10) with the result that those who invoked Monument 6 for their esoteric agendas saw their "darkest" expectations fulfilled. The present approach does not necessarily solve this problem, but it lays bare the subtext of progress toward the best analysis possible.

Shakespeare's Helena muses about the disappointments which inevitably follow great expectations; we, with a salute to *Bahlam Ajaw* and a toast to *Bolon Yokte' K'uh* and to Shakespeare, have offered our best interpretation of a singular, beautiful, prophetic text and find that it tells us much about what will not happen in 2012 so long as humans continue to honour the gods and the ancestors. The burden of the *K'atun*, and indeed of the Great Cycle, is upon our shoulders.

### *Acknowledgements*

## *Appendix 1: Tortuguero Monument 6 Analysis*

To aid understanding of the passage featuring the 13th *Bak'tun* ending, we provide a condensed analysis of the complete text of Tortuguero Monument 6 (Figure 16).
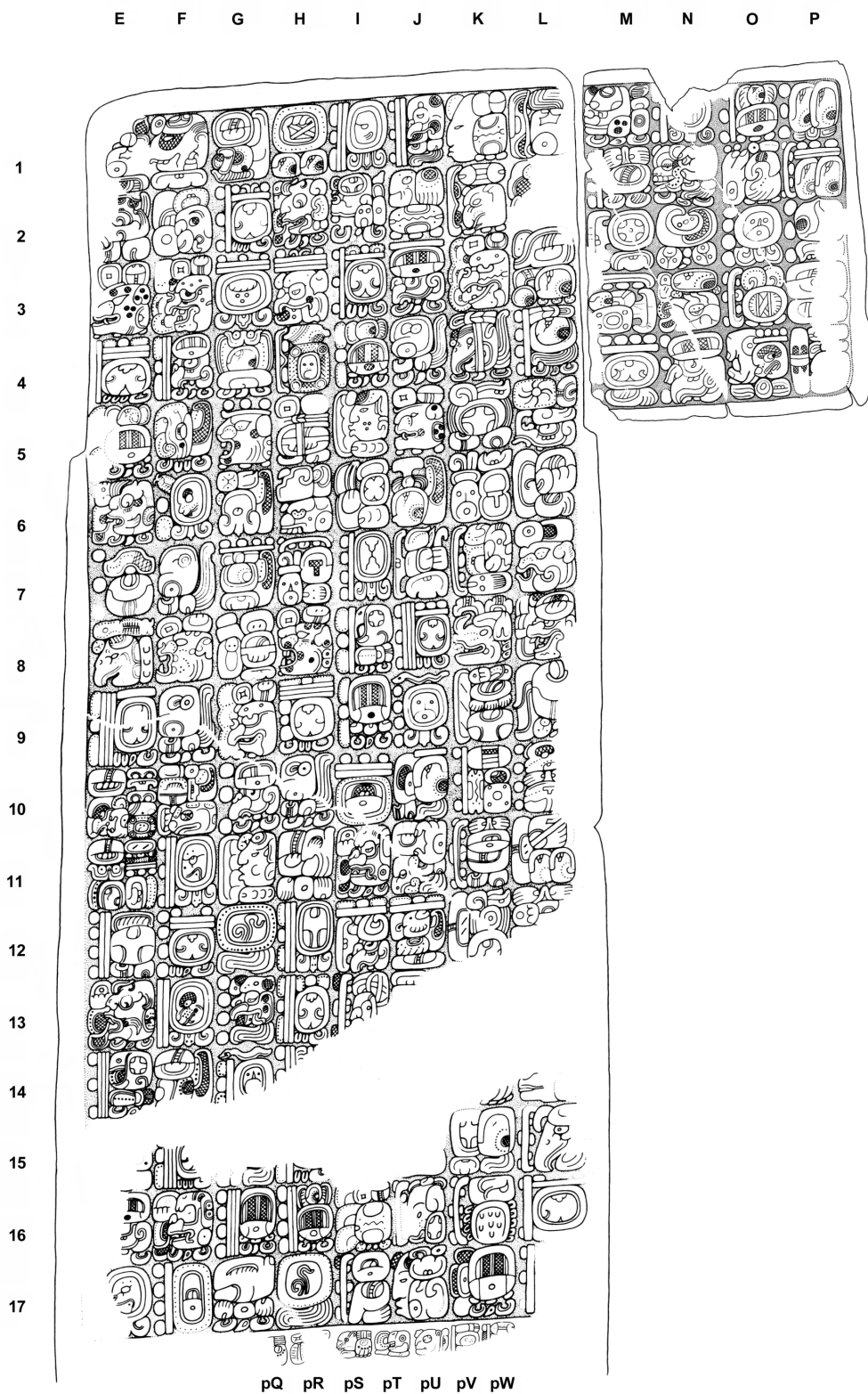


**Figure 16:** Tortuguero Monument 6. Drawing of the main panel by Ian Graham, drawing of the scribal signature and the right panel by Sven Gronemeyer.

This will be presented in a block-by-block format similar to that in the body of the paper, but reduced to an outline with ample footnotes. A number of breakthroughs were achieved in the joint discussion among fellow epigraphers, and other very new or little-circulated readings will be debuted as well. We offer our best current understanding of the entire text, supplemented by comments as space allows. In contrast with the last full epigraphic analysis of Monument 6 (Gronemeyer 2006: 139-159), we will structure the text in deference to narrative considerations, as first proposed by Hutch Kinsman (w.c., 21st Apr 2010), rather than via structural premises (cf. Riese 1971: 25-31, 155-196). This has the advantage of clearly delineating events in the main text which foreshadow the 13th *Bak'tun* ending. For this reason, we will not include the scribal signature.

We divide the text into six major segments, each of which is subdivided into smaller statements. Except for the first and second segments, which refers to *Bahlam Ajaw's* accession, and the last, which is the *Bak'tun* ending itself, all open with a distance number that counts from his accession[40].

First Segment: This concludes a longer passage begun on the now-missing left panel of the inscription. It includes the name of God A' and probably the god of cacao. The former is named with his intoxicant attribute; as a pair, these are termed 'companions' pertaining to *Bahlam Ajaw*.

| E1 | **CHIH-chi-hi-li** | *chih-il* <br> maguey-ADJ | … the *pulque*-like |
|---|---|---|---|
| F1 | **AKAN-na** | *akan* <br> Akan | God A' (and) |
| E2[41] | **ka?-wa** | *[ka]kaw?* <br> cacao | (deified?) Cacao |
| F2[42] | **CHIT-K'UH** | *chi:t-k'uh-Ø* <br> companion-god-3SG.ABS | the companion/paired gods (of) |
| E3 | **BALAM-ma-AJAW** | *ba[h]lam ajaw* <br> Bahlam Ajaw | *Bahlam Ajaw*, |
| F3 | **K'UHUL-BAK-AJAW** | *k'uh-ul ba:k ajaw* <br> god-ADJ *Ba:k* lord | (the) Holy *Ba:k* Lord. |

Second Segment: A back-reference to the birth and first mention of *Bahlam Ajaw's* accession.

| E4-E5 | **+ 1.11.11.14** | | 1.11.11.14 (days later) |
|---|---|---|---|
| F5[43] | **SIH-ja-ya-ji** | *si[h]y-aj-Ø-[i]jiy* <br> gift-INCH-3SG.ABS-TEMP | (after) he was born, |

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[40] The second segment is nevertheless parallel in structure, as it uses the birth as the starting point, before the accession becomes the pivotal point.

[41] Michael Grofe (w.c., 2008) first suggested to us that this was a fish sign, likely indicating 'cacao'.

[42] Barbara MacLeod has read the /**CHIT**/ sign as 'companion, one of a pair', based on a likely Yucatecan cognate *keet*, found as *ket* in modern Yucatecan languages with the meaning 'pair, one of a pair, companion, and co-VERB'.

[43] The phonemic reading of AL8 is still under discussion. The initial sounds [si] are ensured by phonetic complementations with /**si**/ on PNG St. 12, pB17a and UXM St. 17, E2 and there is a likely syllabic substitution /**si-ji**/ on YAX St. 7, pD8, where it represents *sih* 'gift', recalling that Yaxchilan spellings often ignored the [x] / [h] contrast. While Wald (2000: 130) considers the suffixes /**ji-ya**/ as a spelling for the temporal clitic, he analyses the frequent /**ja**/ as a thematic suffix: /**SIY-ya-ja**/ > *si<h>y-aj* for the passive. Following a suggestion from MacLeod, we will consider /**ja**/ as the gram-

| | | | |
|---|---|---|---|
| **E6**[44] | **a-(A)LAY-ya** | *alay-Ø*<br>here-3SG.ABS | here (is) |
| **F6** | **ta-1-OK** | *ta ju:n ok*<br>on one Ok | on 1 *Ok*, |
| **E7** | **3-BIX-OL** | *u:x bix-o[h]l*<br>three *Bix-Ohl* | 3 *Kumk'u*<br>(= 9.10.11.3.10) |
| **F7** | **CHUM-mu-wa-ni** | *chum-wan-i-Ø*<br>sit-POS-COMPL-3SG.ABS | (that) he sat |
| **E8** | **ta-AJAW-le** | *ta ajaw-le[l]*<br>into ruler-ABSTR | into rulership, |
| **F8** | **BALAM-AJAW** | *ba[h]lam ajaw*<br>*Bahlam Ajaw* | *Bahlam Ajaw*. |

<u>Third Segment:</u> The war campaigns of *Bahlam Ajaw*. Except for the statement about the Comalcalco war, each piece of the quintuplet describing individual belligerent actions is introduced by the focus marker *i*.

**After he sat…**

| | | | |
|---|---|---|---|
| **E9** | **+ 5.16** | | 5.16 (days later) |
| **F9** | **CHUM-mu-wa-ni-ya** | *chum-wan-i-Ø-[iji]y*<br>sit-POS-COMPL-3SG.ABS-TEMP | (after) he was seated |
| **Then descended (or arose)…** | | | |
| **E10**[45] | **i-EM-ye / i-ch'o-ye** | *i['] e[h]m-[e]y-Ø / ch'oy-Ø*<br>then descend-INTR / rise-3SG.ABS | then descended / arose |

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matical indicator for an inchoative, suffixed to the nominal root *\*sih* 'gift'. The resulting *\*sih-aj* became *siyah* through reduction of the final [h] to zero. The /**ya**/ is present to support this realisation.

Per Gronemeyer's preference, we have elected to retain Wald's spelling of the temporal deictic clitic as /**ji-ya**/ (representing *-ijiy*) in this and other verbs on this monument. MacLeod's understanding of this deictic is that it is simply *-iiy*, while the /**ji**/ syllable cues the presence of a perfect morpheme.

[44] The /**ALAY**/ reading was reached independently in 2004 by Barbara MacLeod and Yuriy Polyukhovich, who presented the argument together at the 2005 Maya Meetings at Texas. The outline is published in the 2005 Maya Meetings Sourcebook (MacLeod & Polyukhovich 2005).

[45] The identification of this animal head has been a matter of ongoing controversy. Gronemeyer considers that the grapheme written here has some differences from the one for which Stuart (cf. Zender 2005) proposed the reading /**EM**/ or /**EMACH**/ (cf. TRT Mon. 6, L10, PUS St. N, B9), but MacLeod regards it as belonging unequivocally to the set. Marc Zender (2005: 15) recently read the passage as the 'descent of *Bahlam Ajaw* from an armoury ' in preparation for the war against *U:x Te' K'uh*. MacLeod accepts the /**EM**/ reading and a resulting intransitive verb *ehm-ey-Ø* 'descends' (noting that *CeC* roots, both transitive and intransitive, often take *-e(C)* suffixes in Ch'orti', as does the *el-e* 'burn' verb at I6) but does not accept the rest of Zender's gloss involving a 'building/house/armoury' interpretation of *u-na:h*. She prefers 'first' as in 'the first of his *to:k'-pakal* or 'the first of his wars' – something which can apparently 'descend' in the general manner of calamities, or which comes down from the gods. Gronemeyer prefers instead a proposal by Sanz González (2006: 465-468), which considers the animal head as syllabic /**ch'o**/, also noting that the /**ye**/ hand contains an (overlooked) infixed AM1 (= T533) which the latter reads as /**la**/, yielding *ch'oyel*. While Sanz González reconstructs the verbal root as *ch'oyel* 'mover' in service to a "movement of troops" (as from a building [*na:h*]), Gronemeyer prefers an entry *ch'oye(l):* 'levantarse' from modern Chontal (Keller & Luciano, 1997: 109). Thus the passage might refer to the 'rising up' of 'his first' (*u-nah*) *to:k' pakal* or military campaign. The semantics of *ch'oy* have obvious appeal, but MacLeod takes issue with the implications of a *CVC-el* form (with no ergative pronoun) operating as the predicate here, not to mention the /**la**/ identification. But neither of our interpretations regards the difrasismo *to:k'-pakal* as an army, but rather a divinely-mandated charter to conduct war – an obligation manifested as an icon to be transferred to acceding rulers (see the Palenque Tablet of the Slaves) – as well as war itself. Later in the text (block H4), we find mention of the collapse of the enemy's *to:k'-pakal*. Admittedly, we still do not understand the full semantic range of *to:k' pakal*, and until we do, competing interpretations of its contexts will endure.

| | | | |
|---|---|---|---|
| E10 | u-NAH-u-TOK'-PAKAL | *u-na:h u-to:k' [u-]pakal* <br> 3SG.ERG-first 3SG.ERG-flint [3SG.ERG-]shield | the first his flint (and) shield |
| F10 | nu-pu-TE'-ja ta AYIN | *nu\<h\>p-[a]j-Ø te' ta ayi:n* <br> join\<PASS\>-THEM-3SG.ABS lance in *Ayi:n* | (and) lances were joined at *Ayiin*. |

**Then war erupted...**

| | | | |
|---|---|---|---|
| E11[46] | i-STAR WAR | *i['] STAR WAR[-i]-Ø* <br> then destroy[-COMPL]-3SG.ABS | Then it was destroyed |
| E11 | xa-ma-AJ-3-TE'-K'UH | *xam aj u:x-te' k'uh* <br> *Xam* he of *U:x-Te' K'uh* | *Xam*, He of *U:x Te' K'uh*. |
| F11 | 13-KIMI | *u:xlaju:n kimi* <br> thirteen *Kimi* | 13 *Kimi* |
| E12 | 13-ka-se-wa | *chanlaju:n kase:w-Ø* <br> fourteen *Kaseew*-3SG.ABS | 14 *Sek* it was. <br> (= 9.10.11.9.6) |

**Then was chopped...**

| | | | |
|---|---|---|---|
| F12 | + 4.12 | | 4.12 (days later) |
| E13 | a-(A)LAY-ya | *alay-Ø* <br> here-3SG.ABS | here (is) |
| F13 | 10-OK | *laju:n ok* <br> ten *Ok* | 10 *Ok* |
| E14 | 18-K'AN-a-si-ya | *waxaklaju:n k'anasi:y* <br> eighteen *K'anasiiy* | 18 *K'ayab*. <br> (= 9.10.12.3.10) |
| F14 | i-CH'AK-ja | *i['] ch'a\<h\>k-[a]j-Ø* <br> then chop\<PASS\>-THEM-3SG.ABS | Then it was chopped |
| E15 | ?-? | *?* <br> *?* | ?. |

**Then was chopped...**

| | | | |
|---|---|---|---|
| F15-E16 | + 4.16.9 | | 4.16.9 (days later) |
| F16 | a-(A)LAY-ya | *alay-Ø* <br> here-3SG.ABS | here (is) |
| E17 | 8-KIMI | *waxak kimi* <br> eight *Kimi* | 8 *Kimi* |
| F17 | 9-mo-lo | *bolon mol* <br> nine *Mol* | 9 *Mol*. <br> (= 9.10.16.13.6) |
| G1 | i-CH'AK-ka-ja | *i['] ch'a\<h\>k-aj-Ø* <br> then chop\<PASS\>-THEM-3SG.ABS | Then it was chopped |
| H1[47] | yo-mo-pi | *yo[h]m pi[C]* <br> *Yohm Pi* | *Yohm Pi*. |

**War against Comalcalco – and the replenishment of divine force and breath**

| | | | |
|---|---|---|---|
| G2 | + 8.7 | | 8.7 (days later) |
| H2 | a-(A)LAY-ya | *alay-Ø* <br> here-3SG.ABS | here (is) |

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[46] The "Star-over-Earth" sign was originally read by Erik Boot (w.c., 5th Nov 2009) as /**HAY**/ 'destroy' back in 1995. This value has been extensively scrutinised in follow-up communications between several epigraphers, including Erik Boot, Barbara MacLeod, Michael Grofe, and Christian Prager. While we may not have reached absolute consensus, MacLeod and Boot agree that the reading has considerable merit from a morphosyntactic and semantic perspective. An alternative proposal of /**NAY**/ 'bend', 'fall' was put forth by Christian Prager (w.c., 4th Nov 2009). Although we have a preference for the /**HAY**/ reading, we will still gloss the verb as "Star War" until more consensus is reached.

[47] An alternative we have considered is *yo' + mop* with *mop*: 'palma de cocoyoles' – the *cocoyol* palm – which, along with the *corozo* palm, is indigenous. The adverbial root *yo'*, as a common reduction of *yok'* in Yucatec, means 'sobre', so in theory *yo'mop* would be 'above the *cocoyol* palms' – perhaps a place overlooking a plantation or natural expanse of these palms, which are common in forested areas of the coastal plain.

| G3 | **13-HIX** | *u:xlaju:n hix*<br>thirteen *Hix* | 13 *Hix* |
| H3 | **17-MUWAN** | *wuklaju:n muwa:n*<br>seventeen *Muwaan* | 17 *Muwaan*.<br>(= 9.10.17.2.14) |
| G4 | **Star War-yi-ya** | STAR WAR-Ø-[iji]y<br>destroy-3SG.ABS-TEMP | It was destroyed |
| H4 | **u-TOK'-PAKAL** | *u-to:k' [u-]pakal*<br>3SG.ERG-flint [3SG.ERG-]shield | (the) flint, (the) shield (of) |
| G5 | **3-BALAM-ma** | *u:x ba[h]lam*<br>*U:x Bahlam* | *U:x Bahlam,* |
| H5 | **JOY-CHAN-AJAW-wa** | *joy chan ajaw*<br>*Joy Chan Ajaw* | (the) *Joy Chan* Lord. |
| G6 | **NAB-ja-CH'ICH'** | *na[h]b-[a]j-Ø ch'ich'*<br>lake-INCH-3SG.ABS blood | Blood became a lake |
| H6 | **WITZ-ja-JOL** | *witz-[a]j-Ø jol*<br>mountain-inch-3sg.abs skull | (and) skulls became a mountain |
| G7[48] | **9-IP-na-ja** | *bolon ip-n-aj-Ø*<br>nine strength-PASS-THEM-3SG.ABS | nine (times) were strengthened |

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[48] The numeral nine is straightforward, except that we must clarify its use as 'nine times' rather than as 'many', as others do. There are examples in Yucatec wherein numerals precede verbs and are translated as 'X times VERB-ed'; the most common of these forms involves *ka'a* 'two', but examples with 'three' are known, e.g.: *ox lotkinah*: doblar juntando de tres (Barrera Vásquez 1993: 612); *ox hatse*: hazlo en tres partes (Barrera Vásquez 1993: 611). Hutch Kinsman (w.c., 19th May 2010) added: "I found a number of examples in Laughlin ([1988] p. 182-184) of *cha'* plus transitives and intransitives, like *cha' -'kux*, 'revive'; *cha' -chuk*, 'tie again'; *cha' -pas*, 'redo, repair'. This makes me wonder about Quirigua St. C, where the **3-K'AL-TUN-ja** phrase is usually translated '3 stones are bundled'. Maybe it should be '3 times a stone was wrapped/bundled'."
The main sign is problematic for several reasons. We have both interpreted it previously as a /**hi**/ syllable, spelling perhaps *hinaj* 'seed' (cf. Eberl 1999: 77, Gronemeyer 2006: 148), but it is an uncharacteristic /**hi**/ in that the knot looks more like that of /**HUN**/ and the 'stone' sign in it is inverted with a surrounding wrapping. And it seems improbable to transitivise and then passivise a noun meaning 'seed'. Thus we give serious consideration to Michael Grofe's (w.c., 29th Oct 2009) suggestion, in which he said: "I'm also now wondering if the collocations in G7 and L4 might be a parallel with the **9-ii-pi-na-ja** and **9-ii-pi-la-ja** statements we find in Copán Stela A, C6, and Palenque Temple XIV, A6 and E2 [...]. I think Dave [David Stuart] translated these as having to do with 'strengthening". In CPN Stela A, C6, we find this collocation in association with the blood and bones of *K'ak Ti' Chan*, 18-*Ubaah-K'awiil*s grandfather. Similarly, we see in TRT 6, G7 an association with blood and bones (albeit pooled and piled), as well as the 'white flower soul' of *Bahlam Ajaw*."
Furthermore, David Stuart (p.c., 15th May 2010) told MacLeod that he has been wondering whether this main sign might be a logogram for /**IP**/. Both suggestions seem supported by the deep-time event reading *bolon ip-naj sak-ba:k na:h chapaht* on the Tablet of Temple XIV of Palenque wherein *Bolon Yokte'* has an immediate overseer role. We observe common themes (of blood and bones and the centipede maw) shared between this passage and those of CPN St. A and PAL T14P.
Questions will inevitably arise concerning the grammatical status of the rare *ipnaj* verb, if that is what we have here. The syllabic spellings on PAL T14P twice (blocks E2, I2) indicate that it is a passive of a derived transitive spelled /**i-pi-na-ja**/ > *ip-(i)-n-aj*, which we gloss as 'be strengthened', and once (A6) it is spelled /**i-pi-ja**/, employing the passive *-aj* suffix reserved for root transitives, raising questions concerning its productivity. Historically, the transitive stem appears to be *\*ip-i* 'use as/take for strength', but it is possible that it is *\*ip-a* 'make strength' (MacLeod 2004: 311). Either way, its spelling exactly parallels that of /**tz'i-bi-na-ja**/ *tz'i<h>b-n-aj* 'is painted' in the Primary Standard Sequence, identified as the passive of a derived transitive stem by MacLeod (1990: 265-270) and further elaborated by Lacadena (2004: 179-190). This well-understood verb 'be painted' is likewise based on a noun root *tz'ihb* 'painting'. From this parallel structure, we assume a gloss 'is strengthened'. Of interest is the form on CPN St. A, C6 cited by Grofe above: /**i-pi-la-ja**/: *ip-l-aj*. The suffix corresponds to an *-r-aC* inchoative in Ch'orti' (MacLeod 1987: fig. 5), deriving an intransitive verb 'become strong' from a noun 'strength'. All of these examples support an understanding that the subject(s) of the *ipnaj* verb are themselves strengthened, and are not strengthening something else. This under-

| H7[49] | **u-SAK-BAK-IK'-li** | *u-sak-ba:k [y-]ik'-[i]l*<br>3SG.ERG-force [3SG.ERG-]wind-ABSTR | the force (and) breath (of) |
|---|---|---|---|
| G8[50] | **tu?-YAX?-CHAN-na** | *t[i] u-yax chan*<br>for 3SG.ERG-first heaven | in (the) first heaven (of) |
| H8 | **BALAM-AJAW** | *ba[h]lam ajaw*<br>*Bahlam Ajaw* | *Bahlam Ajaw*, |
| G9 | **K'UHUL-BAK-la-AJAW** | *k'uh-ul ba:k-[i:]l ajaw*<br>god-ADJ *Ba:k*-LOC lord | (the) Holy *Ba:ki:l* Lord. |

<u>Fourth Segment:</u> Political events centred around a *Hotun* ending.

| **After he sat...** | | | |
|---|---|---|---|
| H9-G10 | **+ 3.16.1** | | 3.16.1 (days later) |
| H10 | **CHUM-mu-wa-ni-ya** | *chum-wan-i-Ø-[iji]y*<br>sit-POS-COMPL-3SG.ABS-TEMP | (after) he sat |
| G11 | **ta-AJAW-le** | *ta ajaw-le[l]*<br>into ruler-ABSTR | into rulership. |
| **A political/military alliance** | | | |
| H11[51] | **i-k'a-xi** | *i['] k'a<h>x-i-Ø*<br>then tie<PASS>-COMPL-3SG.ABS | Then was tied |

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standing motivates our interpretation of the verb at L4 as a syncopated passive suffixed by the anterior deictic clitic.

[49] Most of this phrase has long been understood (cf. Kettunen 2005). The sign AM1 (= T533) has been an especially difficult one to decipher, given the scarcity of phonetic complements and the seeming absence of both substitutions in the script and unequivocal linguistic support. During July 2010, MacLeod discovered both: there are substitutions with skulls likely reading *ba:k*, as on C. Madrid, p. 63c, where a skull with /**ka**/ suffixed (signalling /**BAK**/ 'skull') substitutes for AM1 with /**ka**/ suffixed. This led immediately to other pertinent skull signs in the corpus, as well as Yucatec and Ch'orti' dictionary entries strongly favouring a reading for AM1 as **BAK**: *ba:k / bak* 'bone' (and 'seed' by implication), 'captive', 'young ear of maize', 'young child' (Barrera Vásquez 1993: 27); and for *sak-baak* 'force, vigour, strength of body' (cf. Barrera Vásquez 1993: 710) and for *bak* 'pour liquids' (Barrera Vásquez 1993: 27). This also may be the root of *bakab* 'representative' and 'atlantean support'. A detailed investigation and manuscript on AM1 and pertinent iconography is in progress. Here we interpret the "soul-stuff" as 'force and breath' – in this case a presumed heavenly repository of it belonging to *Bahlam Ajaw* and his lineage which is augmented by the piling and pooling of warriors' skulls and blood.

[50] The identification of this eroded sign as /**tu**/ was made by Michael Grofe (w.c., 29th Oct 2009) and was independently verified by Hutch Kinsman during multiple email communications in May 2010. Carl Callaway (w.c., 20th May 2010) brought to our attention another example of *Yax Chan* from QRG Alt. P', M2, N1 (noted in Looper [2003: 170, 177]) concerning the cords that descend from the heavens. Here *Yax Chan* seems to be a supernatural location associated with the descent (expressed by /**ju-bu-li**/) of the cords. The image on QRG Alt. P' is that of a warrior dancing out of the mountain, nicely having an *ik'*-shaped slot in it. The *sak*/cord/breath/AM1 constellation discussed by Looper is likely to be the same which one sees on CPN St. H and in association with the shell of the *Mat* lineage on PAL TFC. These are, MacLeod argues, *sak-baak ik'il* 'force and breath' in a state of abundance and growth.

[51] This sentence and its earlier-in-time citation at G17-H17 have long eluded decipherment. Two correct hunches about Mayan CVC root-structure prohibitions and scribal syllabic repertoire led MacLeod (w.c. August 2008) to propose that this verb is *k'axi* 'tie, bind', but confirmation was lacking, and the noun of its subject was still wholly unknown, making a trustworthy interpretation next to impossible. Although she recognised several environments in which a /**xi**/ value for the rare sign 32E is productive, substitution with a widely-accepted /**xi**/ sign SC5 was unknown. The key evidence was supplied by Michael Grofe and Peter Biro during an extensive collaboration between them and MacLeod on the alternative values of the *Kumk'u* superfix 1SJ (multiple w.c. during June and July 2010) – one of which was determined to be /**BIX**/, and in which the needed substitution appeared (e.g. TIK Hombre, E7,

| **G12**[52] | **T'AN-ni** | *t'a:n*<br>word | (the) word. |
|---|---|---|---|

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RZA Jade Celt, A1, Randel Stela, B3). Armed with confidence in a /**k'a-xi**/ spelling for the verb, MacLeod, Biro and Grofe together resumed the quest for 1G8.

[52] The main sign at G12, classified as 1G8, is identical to that of the *Piktun* superfix but is not read as such. It is also the emblem of El Chorro, and it appears in a title on several vases (e.g. K534, K1399) in the sequence /**AJ**-IG8-**K'UH**/, in which the elaborately-costumed performers so named are engaged in penis bloodletting; they often hold rattles. It also occurs in various elite nominal phrases on stone monuments. Often it has a /**ni**/ suffix, and in the El Chorro cases, /**ni-la**/ and /**a**/ occur. Overall, it is also a rare sign. In the early phases of our efforts to crack it, Christian Prager was especially helpful in providing feedback and documentation of all known examples.

In the TRT Mon. 6 case, the quest was complicated by multiple candidates in Ch'olan and Yucatecan for an intransitive verb (cued by the /**CV-Ci**/ spelling) of the form *k'ax*. Whatever the final proposal, it had to work not only in this case – making sense of these events 294 years apart, with the earlier one taking place in the plaza of *baakiil* – it had to explain the others. The impersonal nature of this event constrained it and also made it hard to grasp.

Ultimately the solution lay in revisiting all the *k'ax* dictionary entries in a search for applicable contexts, and serendipitously, MacLeod discovered the following Yucatec entries on 6th Aug 2010: *k'ax t'an*: […] contratar algo, concordarse, […] conjurarse con otro y hacer concierto de amistad (Barrera Vásquez 1993: 390); *kax than*: aliarse confederarse hazerse a una y concertarse y el tal concierto. en que muchos conforman y hazer monipodio y el tal monipodio (Ciudad Real 1995: f. 242v).

Other entries (Barrera Vásquez 1993: 387-389) demonstrate that the primary meaning of *k'ax* is 'liar, ligar, atar, vendar' ('tie, fasten, bind, bandage'), and that in *k'ax t'an* we find a metaphor employing the primary meaning of *t'an* (Barrera Vásquez 1993: 832-833) as 'palabra(s)' ('word[s]'). This root has a long vowel with low tone (*t'àan*) in modern Yucatec.

This discovery brought into focus all prior avenues of inquiry regarding 1G8, the *Piktun* superfix, and led immediately to the proposal that it is /**T'AN**/ for *t'àan* 'word'. It is employed as a rebus for *t'an* 'big, thick, fat' in the *Piktun* glyph.

Noteworthy compounds (all after Barrera Vásquez [1993]) include *t'ankabal (ahaw)*: cartel u orden real (royal agreement or regime) (834); *ah t'an*: el que habla (one who speaks, spokesman) (833). These meanings would work well in the titles on the vases discussed above: the individuals are termed *aj t'aan k'uh* 'spokesman for the god(s)'. The elite titles presumably contain a term 'speaker' or 'spokesman'. The El Chorro emblem glyph may refer to those kings as *t'aan ajaw* – a lord governing an alliance; there are a number of smaller sites in the area near the eastern shore of the Usumacinta upstream from Yaxchilan.

Yucatec also has a homophonous root *t'an* with the meanings 'grande, grueso, grosor, anchura' (Barrera Vásquez 1993: 833-834) as well as the compounds *t'an lu'um*: todo tierra (all soil); *t'an bak'*: todo carne sin hueso (all meat without bone); *t'an bak*: hueso macizo (dense or massive bone). We observe that these meanings nicely fit the concept of *Piktun* or twenty *Bak'tun* as *t'an pik* 'big/thick/massive *Bak'tun*'. This in turn complements what may be observed in yet higher-order superfixes on the periods of the Long Count: 'completion' and perhaps 'great completion' for the *Kalabtun* and *K'inchiltun* respectively.

Hence we understand this long-baffling phrase to be *k'ahx-i(jiy) t'aan* 'was tied the word(s)' or 'was bound an alliance'. We regard it as a *\*CVhC* passive of a type discussed in Kaufman & Norman (1984: 107-108), whose modern reflex (lacking the thematic *-aj* found in Ch'orti' and Ch'olti') is the Ch'ol *CVjC* passive, inflected with *-el*, *-i*, and *-ik* as root intransitives are. For the Classic *CVhC* form, the rules for special suffixes for *CVx*, *CVs*, *CVj* would not apply.

In support of the /**T'AN**/ reading, MacLeod has suggested that the image of 1G8 is a speech scroll surrounded by a "flower" cartouche, as in "flowery speech".

Understood thus, this event orchestrated by *Bahlam Ajaw* and his allies would help explain the success of his aggressive military actions. Such an agreement must have been infrequent and significant enough, however, to motivate a count back to a similar event nearly 300 years prior (H15-H17).

| H12 | **11-CHUWEN** | *buluch chuwen*<br>eleven *Chuwen* | 11 *Chuwen* |
| G13 | **4-MUWAN-ni** | *chan muwa:n-Ø*<br>four *Muwaan*-3SG.ABS | 4 *Muwaan* (it was).<br>(= 9.10.15.1.11) |

| **The *Hotun* ending** | | | |
|---|---|---|---|
| H13 | **- 1.11** | | 1.11 (days earlier) |
| G14 | **CHAN-6-AJAW** | *cha'an wak ajaw*<br>on six *Ajaw* | on 6 *Ajaw* |
| H14 | **13-ma-ka** | *u:xlaju:n mak*<br>thirteen *Mak* | 13 *Mak*, |
| G15 | **WI'-5-TUN-ni** | *wi'[il] ho' tu:n-Ø*<br>last five *Hotun*-3SG.ABS | (it is the) last *Hotun*.<br>(= 9.10.15.0.0) |

| **The earlier alliance** | | | |
|---|---|---|---|
| H15-<br>H16 | **- 14.19.1.6** | | 14.19.1.6 (days earlier) |
| G17 | **k'a-xi-ya** | *k'a\<h>x-Ø-[iji]y*<br>tie\<PASS>-3SG.ABS-TEMP | it was tied |
| H17 | **T'AN-ni** | *t'a:n*<br>word | (the) word. |
| I1 | **11-CHIKCHAN** | *buluch chikchan*<br>eleven *Chikchan* | 11 *Chikchan* |
| J1 | **13-MUWAN-wa-ni** | *u:xlaju:n muwa:n*<br>thirteen *Muwaan* | 13 *Muwaan*<br>(= 8.15.16.0.5) |
| I2 | **UH-ti-ya** | *uht-i-Ø-[iji]y*<br>happen-COMPL-3SG.ABS-TEMP | it happened |
| J2 | **TAN-HA'-BAK-la** | *tahn ha' ba:k-[i:]l*<br>amidst water *Ba:k*-LOC | amidst (the) plaza of *Ba:ki:l* |

Fifth Segment: Dedicatory rituals and *Bahlam Ajaw*'s genealogy.

| **After he sat…** | | | |
|---|---|---|---|
| I3-<br>I4[53] | **+ 1.5.5.8** | | 1.5.5.8 (days later) |
| J4 | **CHUM-mu-wa-ni-ya** | *chum-wan-i-Ø-[iji]y*<br>sit-POS-COMPL-3SG.ABS-TEMP | (after) he sat |

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Our research into the other texts of Tortuguero has yielded evidence that this alliance may have been anticipated (amidst a royal visit from a *Hixnal* king) by the date of *Bahlam Ajaw*'s accession nearly four years prior, but not finalised until his marriage to *Ix Witz Chan* on the *same* 9.10.15.1.11 date as the contemporaneous *k'ahxi t'a:n* event on TRT Mon. 6. Gronemeyer found new evidence on TRT Mon. 8 that allowed him to revise his earlier reconstruction of the initial date; we now understand its Long Count to be 9.10.11.3.9, one day prior to *Bahlam Ajaw*'s accession. The glyph specifying the marriage – a partly eroded and hitherto unread sign on TRT Mon. 8, B23 – has just been deciphered collaboratively by us as *pi'al-aj* 'become a companion' (an inchoative, finding support in Ch'orti' *piaran* 'be a companion, go alongside of [cl.3]' [Wisdom 1950: 505]). Relevant entries from Ch'ol (Aulie and Aulie 1987: 93-94) are noted in *pi'len* 'acompanar, *tener relacion sexual*' and *pi'Al* 'companero, amigo, pariente, *esposo, esposa*' (italics ours). We are actively exploring the implications of all these new readings and discoveries, intending a second publication on Tortuguero in the near future. But what is most exciting about these paired statements is the epigraphic confirmation that royal marriages cement major political alliances. It stands to reason that the earlier (8.15.16.0.5) event was not simply a marriage, but rather a great political accord both worthy of distant recall, yet impersonal, and a milestone in the collective memory of the *Baakiil* lineage. Finally, amongst the many glosses for *k'ax t'aan* in Yucatec, 'marriage' does not appear, and amongst the many for 'marriage', one does not find *k'ax t'àan*.

[53] The reconstruction given here follows Riese (1980: 12) and considers the coefficient six for the *Winal* as defective and corrects to five.

| I5 | **ta-AJAW-le** | *ta ajaw-le[l]* | into rulership, |
| J5 | **BALAM-ma-AJAW** | *ba[h]lam ajaw* <br> Bahlam Ajaw | *Bahlam Ajaw*. |

**Then house-burnt...**

| I6 | **i-EL-le** | *i['] el-e* <br> then burn | Then burn- |
| J6 | **NAH-hi-ja** | *na:h-[a]j-Ø* <br> house-INTR-3SG.ABS | house (fire and/or burnt of- <br> fering ritual). |
| I7 | **9-ETZ'NAB** | *bolon etz'nab* <br> nine *Etz'nab* | 9 *Etz'nab* |
| J7 | **NAH-TI'-HUN-na** | *nah[-nal] [u-]ti' hu:n[-al]* <br> *Nah[-Nal]* [3SG.ERG-]edge <br> *Hu'n*[-POSS] | G7+F |
| I8 | **6-K'AN-a-si-ya** | *wak k'anasi:y-Ø* <br> six *K'anasiiy*-3SG.ABS | 6 *K'ayab* (it was). |

**A *Hotun* event and rituals**

| J8-I9 | **- 1.8.18** | | 1.8.18 (days earlier) |
| J9 | **CHAN-4-AJAW** | *cha'an chan ajaw* <br> on four *Ajaw* | on 4 *Ajaw* |
| I10 | **13-mo-lo** | *u:xlaju:n mol* <br> thirteen *Mol* | 13 *Mol*, |
| J10 | **WI'-5-TUN-ni** | *wi'[il] ho' tu:n-Ø* <br> last five *Hotun*-3SG.ABS | (it is the) last *Hotun*. <br> (= 9.11.15.0.0) |
| I11 | **a-(A)LAY-ya** | *alay-Ø* <br> here-3SG.ABS | Here it (is), |
| J11[54] | **i-e-ke-wa-ni** | *i [h]ek-wan-i-Ø* <br> then place-POS-COMPL-3SG.ABS | then it was placed |
| I12[55] | **6-HAB-NAH** | *wak ha'ab na:h* <br> six *tun* house | Six-*Tun*-House. |

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[54] The precise meaning of this positional verb *hekwani* has been elusive. It is unique, and the events recounted on this monument which employ it have not been well-understood beyond a general sense of house-dedication or perhaps construction. This has led to an assumption that the two sequential events are somehow the same event and that the *Hotun* ending is parenthetical. But this *Hotun* ending, with its *hekwani* 'caching' statement, is a datum for the narrative concerning the lineage, the patron gods of heaven and earth, and the gods of time. It also marks one *K'atun* since the arrival of a royal woman (on TRT Mon. 8) in anticipation of a major alliance to be sealed by her marriage to the Tortuguero king 31 days later. The other datum in this part of the text is that of the *el-e-na:h-aj* house-dedication (a ritual involving fire) from which are linked the events on the right panel. We pro-pose that *hekwani* (here spelled /**e-ke-wa-ni**/) refers to the placement of a foundation cache in a temple platform upon its completion, and that *el-e-na:h-aj* (occurring 538 days later) refers to the consecration by fire of the newly-finished sanctuary (housing Mon. 6) on its summit.

This assumption is further strengthened by the fact that the date of the *el-e-na:h-aj* event serves as a pivot connecting the placement of a sanctifying cache in the earlier *pibna:h* of *Ahkal K'uk'* with the contemporaneous caching event on the *Hotun* ending. Here we likely have the construction of a sec-ond phase of the platform and sanctuary which sealed off the earlier building of *Ahkal K'uk'*.

*Hek* in Yucatecan belongs to a large class of CVC roots in Mayan languages which can be both posi-tional and transitive. It is very productive in Yucatec (Barrera Vásquez 1993: 195-197), and while most entries are transitive, one can easily grasp the positional/intransitive sense of it. We find in these pages, among many similar entries: 'poner una cosa encima de otra', 'encajar atravesando o poner atravesada o encajada una cosa sobre otra', 'acostar(se) o recostar(se)' with meanings 'put one thing on top of another', 'encase, insert one thing through another or place inserted on top of another', 'lie or lay down', 'rest or repose'. We find it awkward to directly translate the intransitive positional verb, so have chosen what appears to be a passive: 'was placed'. These meanings suggest the excavation and construction of a cache vault in a foundation structure and the placing of sanctified objects therein. Relevant entries for *mul* in Ch'ol (Aulie and Aulie 1978: 82) include *mujlan* 'cubrir (con arena, hojas, tierra, zacate)' (cover with sand, leaves, earth, grass) and *mujlʌyem* 'sumergido' (submerged).

| J12 | **6-mu-lu-ba-ja-LEM** | *wak-mul baj-le:m-Ø*<br>six cover up hammer celt-3SG.ABS | Six Cached Hammer Celts (is) |
| I13 | **u-K'ABA'-K'UH** | *u-k'uh[-ul] k'aba'*<br>3SG.ERG-god[-ADJ] name | its holy name |
| J13 | **u-?** | *u-?*<br>3SG.ERG-? | (of) … |
| I14-I15 | **?** | *?* | ? |
| J15 | **BALAM-AJAW** | *ba[h]lam ajaw*<br>Bahlam Ajaw | *Bahlam Ajaw*, |
| I16 | **K'UHUL-BAK-la-AJAW** | *k'uh-ul ba:k-[i:]l ajaw*<br>god-ADJ *Ba:k*-LOC lord | (the) Holy *Ba:ki:l* Lord. |
| **Parentage statements** | | | |
| J16 | **u-ba-hi** | *u-ba:h-Ø*<br>3sg.erg-person-3sg.abs | He (is the) person (of) |
| I17[56] | **u-CHIT-CH'AB** | *u-chi:t-ch'ab*<br>3SG.ERG-companion-creation | her co-creation, |

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[55] The phrase at I12 -J12 has also been elusive. We are told that it is a proper name of something which follows (and which is unrecoverably lost) – assumed to be the sanctuary – but we suggest that it may specifically name both the temple platform (*Wak-Ha'ab-Na:h*, perhaps a structure taking six *Tun* to build?) and a cache of six "hammer" celts (*Wak-Mul Baj-Le:m*) placed in it. The /**LEM**/ 'shiny thing, celt' reading for the celt sign was proposed by David Stuart (2007). This action, including the naming, occurs a roughly year and a half before the dedicatory censing of the sanctuary.

[56] This expression has long been a matter of debate (cf. Gronemeyer 2004: I 81-83). The most accepted today is that *u-ba:h u-chi:t-ch'ab* is a neutral reference between the child and any parent (Schele & Miller 1983: 34-45). As we have stated above (footnote 13), *chi:t* means 'co-X', as in *chi:t-ch'ab* 'co-creation'. As for *ch'ab*, Yucatec provides *chab.tah* 'criar algo de nada. ques propio de dios (Ciudad Real 1995: f. 150r) and *ch'ab* 'criar, hacer de nada, criar de nuevo, sacar de nada' (Barrera Vásquez 1993: 120). The cognate root *\*ch'ahb* 'ayuno' is reconstructed for proto-Ch'olan and occurs in Tzeltalan also (Kaufman and Norman 1984: 118). This coupleted statement likely reflects a birth ritual (see footnote 57) – one which is known at Yaxchilan via iconography and accompanying texts and which features the parents of *Chel Te' Chan K'inich*, the newborn son of *Yaxu:n Bahlam* (Bird Jaguar the Great). Furthermore, the image on YAX Lnt. 14 depicts Lady *Yax Jal* (and not the mother Lady "Great Skull" as on YAX Lnt. 13) holding a bloodletting bowl with a /**CH'AB-AK'AB**/ sign. The vision serpent is said to be a *way* of Lady Great Skull.

We additionally have on TRT Mon. 8, A21 a more common term for a child of a woman (*u-ba:h u-juntan*, Schele & Miller [1983: 34-35]) which we understand as 'he (the son) is the person of her caregiving'. Here it refers to an individual named Lady *Nay Ak Noh* (incorporating a suggestion by MacLeod that one of the values for 32B (= T174) is /**AK**/ 'seat, arch'). David Stuart (1997: 12) considers the meaning of this relationship expression as one of "maternal care and devotion". Nevertheless, we also have instances wherein (metaphorically) deities are connected to rulers via this expression, as the Palenque Triad is to *K'inich Janaab Pakal* on PAL TI-W, E6-E9. This leads to the possibility that persons other than the biological mother (say, a foster mother or a wet nurse) might have this *u-ba:h u-juntan* relationship to the child.

Because of this statement on Mon. 8, we agree that the status of Lady *Wan K'oj* as the birth mother is not secure. But proceeding from the suggestion above, MacLeod is uncertain that Lady *Nay Ak Noh* is the birth mother, whereas Gronemeyer assumes that in the human sphere, the consanguine relation is given in *u-ba:h u-juntan*. He also finds support in the 'co-creator' attribute of Lady *Wan K'oj*, which refers more to a ritualistic birth testimony than to the mother's capacity to biologically create a child with the father. This ritual dimension is noted in the acts of Lady *Yax Jal* on YAX Lnt. 14 and Lady *Mut Bahlam* on YAX Lnt. 17 in relation to the birth of *Chel Te' Chan K'inich*.

We also need to clarify why we consider Lady *Wan K'oj* to be affiliated with Palenque rather than with Tortuguero (Gronemeyer 2006: 53-54, forthcoming). There is evidence that local women are not designated by their "home emblem" (Gronemeyer 2006: 43-44) in local inscriptions. Considering the protocols of marriage diplomacy, it is more appropriate to mention the outside origin of a woman who marries into the local ruling family. It is also interesting, in Gronemeyer's view, that the highly ritualistic Monument 6 highlights the Palenque lady in contrast with the mother. The implications for Tortu-

| J17 | **IX-wan-k'o-jo** | *ix wan k'oj*<br>F-*Wan K'oj* | Lady *Wan K'oj*, |
|-----|-------------------|-------------------------------|------------------|
| K1 | **IX-BAK-la-AJAW** | *ix ba:k-[i:]l ajaw*<br>F-*Ba:k*-LOC lord | (the) Noble *Ba:ki:l* Lady. |
| L1 | **u-ni-chi** | *u-nich-Ø*<br>3SG.ERG-flower-3SG.ABS | He (is the) flower (of) |
| K2[57] | **u-ko-tz'o-ma** | *u-kotz'-o:m*<br>3SG.ERG-wind-AGENT | his winder, |
| L2 | **IK'-MUY-MUWAN** | *i[h]k' mu:y muwa:n*<br>*Ihk' Mu:y Muwa:n* | *Ihk' Mu:y Muwa:n*, |
| K3 | **K'UHUL-BAK-AJAW** | *k'uh-ul ba:k ajaw*<br>god-ADJ *Ba:k* lord | (the) Holy *Ba:k* Lord. |
| **Replenishment of divine force and breath** | | | |
| L3[58] | **ha-i-pi-ku-la** | *ha['] -i['] pikul*<br>this-FOC many | That one (= *Ihk' Mu:y Mu-wa:n*) many |

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guero's use of the *ba:ki:l* emblem may be entangled with this question (Gronemeyer, forthcoming). The ritual participation of Lady *Wan K'oj* in *Bahlam Ajaw*'s birth demonstrates that relations between Tortuguero and Palenque must have at that time been of a friendly nature. One can guess that this friendship deteriorated at a later point in time, given that *Bahlam Ajaw* attacked *U:x Te' K'uh*, the home of Lady *Tz'akbu Ajaw*, the wife of *K'inich Janaab Pakal* of Palenque. The 9.10.15.1.11 alliance and marriage is undoubtedly a part of this story whose details must be explored elsewhere. To further add to the stew of competing theories, David Stuart (p.c. to MacLeod, 15th May 2010) has said that he considers these two female names on TRT Mons. 6 and 8 to likely refer to the same woman (also cf. Gronemeyer 2006: 35).

[57] We prefer the reading /**tz'o**/ for the sign AP7 first proposed by David Stuart (Stuart, Houston & Robertson 1999: II-52) for the "Snake Lady" conjuring scene on K5164; he reads the whole as *Ix Tzak Kotz'-om Chan*: 'she who conjures/grasps the rolled-up snake'. This *kotz'-o:m* 'winder snake' (the term we prefer) is likely to be the same being owned by *Ihk' Mu:y Muwa:n* in his parentage statement, as will be explained. The /**tz'o**/ reading for this animal head does not seem to work in all instances, as in the Codex Dresden pp. 4a-10a, where the productive reading /**pe-ka-ja**/ for *pehk-aj (t-u chich)* 'it is spoken (in his prophecy)' appears (Schele and Grube 1997: 96, who offer a translation 'he reads'). Beliaev (2004: 122, fn. 1) has proposed /**ko-pe-ma**/ for the snake in this Snake Lady scene, yielding a nearly identical meaning *kop-em* 'rolled up'. But we observe that the Ch'olan perfect participle *-em* is all but absent from the script, while the agentive *-o:m* abounds. Additionally, a participle \**u-kop-em* with no modified noun following (as we have at K2) seems unlikely, whereas a possessed agentive *u-kotz'-o:m* works well here. We speculate that two distinct signs merged creating a default bivalence for AP7.

A recent study by MacLeod (n.d., manuscript in author's possession) examines this 'winder' phrase of *Ihk' Mu:y Muwa:n* in relation to the evidence at Yaxchilan for a snake-conjuring coinciding with the birth of *Chel Te' Chan K'inich*, the son of *Yaxu:n Bahlam*. As has long been recognised, a cartouche referring to the birth of this son appears on YAX Lnt. 13 immediately before the face of a youth emerging from the mouth of the conjured snake in a dual bloodletting scene. The mother Lady Great Skull and the father Bird Jaguar IV face this being and hold blood-letters; the mother holds a bloodletting bowl containing the /**CH'AB-AK'AB**/ 'creation-darkness' sign. This Yaxchilan scene suggests that at Tortuguero, on the occasion of *Bahlam Ajaw*'s birth, *Ihk' Mu:y Muwa:n* and *Ix Wan K'oj* occupied the same roles played on YAX Lnt. 13 by the parents *of Chel Te' Chan K'inich*. The snake is the *kotz'-o:m* or 'winder' and the emerging youth the *nich* or 'flower' of the winder. This interpretation deviates from past understandings of *nich* as 'child of a man' (motivated by a now-superseded reading for AM1 [= T533]), but the Tzotzil *nich* 'flower' entries invoked to support this only do so metaphorically; the 'child of a man' root in Tzotzil is consistently *nich'* (Laughlin 1975: 253, 1978: 272).

[58] TZE: *picul*: muchos (Ara 1986: 326); YUK: *pikil*: multidud; mucho (Barrera Vásquez 1993: 653); *pikul*: numerous (Bolles 2001). Here the statement reads *ha'-i' pikul ajaw joy-n-i[ji]y* 'that one, many lords did he invest'. This is a focus antipassive, and an elegant example of the form. The reference is to *Bahlam Ajaw*'s father, who in his lifetime placed many elite representatives in office. We wonder whether gods may have been counted among the *ajaw* he invested. From the use of a *joy* 'invest' verb at this point in the text, we may infer that *Bahlam Ajaw* has followed in his father's footsteps. In particular, he plans to invest *Bolon Yokte' K'uh* at the close of the 13[th] *Bak'tun*.

| K4 | **JOY-AJAW-ni-ya** | *ajaw joy-n-Ø-i[ji]y*<br>ruler invest-PASS-3SG.ABS-TEMP | lords invested. |
|---|---|---|---|
| L4 | **9-IP-ni-ya** | *bolon ip-n-[aj]-Ø-i[iji]y*<br>nine strength-PASS-THEM-3SG.ABS-TEMP | Nine (times) it was strengthened |
| K5 | **K'AN-NAL-wa** | *k'an nal [aja]w*<br>precious maize lord | (the) Precious Maize Lord |
| L5[59] | **?-yi-?** | *?-yi*<br>?-Square-nosed Beast | (and the) Square-nosed Beast |
| K6 | **SAK-BAK-IK'** | *sak-ba:k ik'[-il]*<br>force wind-ABSTR | (and the) force and breath. |
| L6[60] | **yi-ta-ji** | *y-it-a:j-Ø*<br>3SG.ERG-accompany-PERF-3SG.ABS | They have accompanied them (the foregoing), |
| K7 | **u-K'UH-li** | *u-k'uh-[i]l*<br>3SG.ERG-god-POSS | His gods |
| L7 | **IK'-K'AK'-TI'-HIX** | *i[h]k' k'a[h]k'-ti'-hix*<br>black fire-mouth-jaguar | Black Fire-Mouth-Jaguar (and) |
| K8 | **YAX-SUTZ'** | *yax su:tz'*<br>green bat | Green Bat. |
| **Some tutelary gods** | | | |
| L8[61] | **ha-i** | *ha[']-i[']*<br>this-FOC | These |

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[59] The /XGF-**yi**/ compound is also found as /**IX-YAX-**XGF-**yi**/ on PAL PT, D15 in connection with an ancestral female and on YAX St. 7, pD6 with Lady Great Skull as /**IX-**XGF-**yi**/. As suggested by MacLeod, this term may refer to lineage authority. For XGF, a reading /**MOTZ**/ 'raices pequeñas y delgadas' in Yucatec (Barrera Vásquez 1980: 530) has been proposed by Luís Lopes (Barbara MacLeod, w.c., 4th Aug 2010). This needs further review; therefore we give it a question mark.

The /**yi**/ suffix seems unlikely to be verbal here, but might be marking a noun of the form *CVC-Vy*; an example would be *bolay* 'jaguar, gato montes, bestia, fiera' (Barrera Vasquez 1980: 62). Here one presumes the *CVC-Vy* superfix to be an attributive for the Square-nosed Beast, who is said to have 'ruled' (*ajaw-n-i[ji]y*) in deep-time statements at Naranjo and Palenque. Here this Beast appears to serve as some sort of bridge between the ancestors and the gods.

[60] The /**yi-ta-ji**/ spelling *\*y-it-a-ej-i > y-it-aj-i* literally means 'he (has) accompanied it'. It is a derived transitive stem with a fossilised perfect suffix *-ej* (MacLeod 2004: 294-295), found in sentences following a prior statement of its object, as in this case. This strategy avoids the ponderousness of two grammatical arguments in one sentence. The root is *\*it* 'companion' (Kaufman and Norman 1984: 138) reflecting a partial sound shift from *\*et* (short vowel, from pM *\*ety*) in Ch'ol and Chontal. The function of *y-it-aj(-i)* is to designate a person or deity as a cohort, supervisor, or authority in relation to an event.

Here that authority is conferred upon a pair of supernaturals about whom we have little other information: Black Fire-Mouth Jaguar and Green Bat. They are likely to be earth lords, however, and one might assume their shrines lay in caves. Numerous caves are known to exist in and near the Cerro El Tortuguero (Francisco Cuevas Reyes, p.c., 5th Jul 2010) – perhaps named *K'ahk' Witz* 'Fire Mountain' – adjacent to the site.

The flame volutes in the mouth of the jaguar were first called to our attention by Hutch Kinsman (w.c., 15th May 2010).

[61] We generally follow Zender (2005: fn. 5), who follows Stuart (2005b: 53) in his reading of this section as /**ha' i xa a-je-se yo-OHL 8-ko-BAAK-li?-bi 4 EHM-ma-cha**/: *haa' xa ajes y-ohl waxak ko[hk]? baaklib? chan-ehmach*: 'as for him, already awaken(ed) the heart(s) of eight turtle bone(?) of four raccoon(s)'. But it is possible that the /**xa**/ belongs with the preceding pronoun as *ha'-ax* 'that one indeed' (cf. Aulie & Aulie 1978: 30, under *atax*) and it also seems reasonable that, unless some other suffix follows, the form of the demonstrative pronoun in this focus construction is *ha'-i* after all (cf. Kaufman & Norman 1984: 139). This *-i* is an enclitic meaning 'relatively near to speaker'. There are likewise good reasons (Kaufman & Norman 1984) to understand the pronoun as *ha'* rather than *haa'*.

The best translation would be: 'they indeed (the aforementioned tutelary gods) awaken the hearts of (the) eight *baaklib*(s) and (the) four raccoons'.

| K9[62] | **xa-a-je-se** | *-ax aj-es-Ø*<br>indeed wake-CAUS-3SG.ABS | indeed awaken |
|---|---|---|---|
| L9 | **yo-OL-la** | *y-o[h]l*<br>3SG.ERG-heart | (the) hearts (of) |
| K10 | **8-ko-BAK-li-bi** | *waxak ko[k] ba:k-l-ib*<br>eight turtle *Bakab*?-POS-INSTR | Eight Turtle *Bakab*-? |
| L10[63] | **4-EMACH-ma-cha** | *chan e[h]mach*<br>four raccoon | Four Raccoons. |
| K11[64] | **u-tzo-lo-wa** | *u-tzol-ow-Ø*<br>3SG.ERG-set in order-ACT-3SG.ABS | They set in order |
| L11 | **YAX-TZUTZ-PIK** | *yax-tzutz-pik*<br>first *Kalabtun* | (the) first *Kalabtun* |
| K12 | **YAX-PET-KAB-NAL** | *yax pet kab-nal*<br>first round earth-place | (at the) first round / circum-scribed Earth place. |
| L12 | **ma-a** | *ma'*<br>not | Not … |
| K13-L14 | **?** | *?* | ? |
| K15 | **K'AN-na-TUN-ni** | *k'an tu:n-Ø*<br>precious stone-3SG.ABS | (The) precious stone (is) |
| L15[65] | **u-ti** | *u-ti[']*<br>3SG.ERG-mouth | (the) mouth (of)<br>(the voice of) |

[62] The reading follows Zender (2005: fn. 5), who accepts a reading /**se**/ for the sign XS3 (= T520) here, but has elsewhere implied that it should always be read as /**cha**/, since a syllable can never have more than one phonemic value (Zender 1999: 56). Sven Gronemeyer has discovered that the sign classified as XS3 actually merges two distinct graphemes that are only distinguishable by a subtle difference. The sign for /**se**/ features a diagonal curve in the oval that is positioned in the upper center, whereas this oval is empty when it is a /**cha**/ syllable. In the latter case, often, but not always, small "antennae" appear on top of the sign. We observe a similar case with another set of signs which are only discriminable via small internal distinctions, and therefore produce either /**ba**/, /**ma**/, /**t'u**/, or /**HA'**/. Other signs which resemble /**cha**/ and /**se**/ are /**bo**/ and /**NAB**/, based on the same shape but with differentiating internal details. Because of Gronemeyer's revived decipherment, we regard the spelling for the month name *Kaseew* as /**ka-se-wa**/, as we have the diagonal stroke in the upper oval of the sign XS3. We therefore do not accept Zender's (1999: 56) /**KASEW**/ reading.

One point which neither Stuart nor Zender has considered is that this sentence is a case of ergative extraction, wherein the transitive construction seen in *aj-es* 'awaken' has lost its ergative pronoun. This lovely focus strategy is extant and productive in Yucatecan languages, but appears to have been lost from Ch'olan. It is a pleasure to find it here.

[63] As for the raccoons, we provisionally agree with Zender, citing Stuart (2004: 3-4) that in spirit, they are like the four opossums in the Dresden New Year Pages, but obviously have long fur on their tails. We wonder whether the 'eight *baaklib*(s)' might also be operating in a *Bakab* function, and even whether the same root might be present, given that these are the gods who set the great cycles in order. The nested relationships between ancestors and gods in this passage is fascinating.

[64] The reading /**tzo**/ for the complex main sign has recently been proposed (provisionally) by David Stuart (2008), who sees here a spelling /**tzo-lo**/: *tzol* 'set in order' The /**lo**/ is superimposed on the /**tzo**/. We find the resulting *u-tzol-ow* intriguing, as what follows is the sign for the *Kalabtun* (not read as such), which is equal to 400 *Bak'tun*. This setting-in-order takes place at a location called /**YAX PET KAB-NAL**/: *yax petkabnal* 'first round-earth-place'. We like the term 'circumscribed', as this statement seems to echo the creation events detailed in the Creation of the *Uinal* passage in the *Chilam Balam* of Chumayel (Roys 1933: 116-119, Callaway 2009) wherein the gods walk the circle of the twenty days of the *Tzolk'in* (a handy, common neologism meaning 'set days in order') and create the world. The invocation of the gods of time at this point in the text anticipates the far-future completion of 13 *Bak'tun*.

[65] Gronemeyer's suggestion *u-ti'* 'its mouth' for the /**ti**/ or /**AJAW**/ vulture at L15 stems from his consideration that this sign is read /**ti**/ in this instance, as some vultures are. It is supported by the syntactic and semantic integrity of the sentence (or what we have of it) which begins with *k'an tu:n* at K15. There may have been a verb prior to this at L14, but the visible remains suggest that this instead

| K16 | u-yo-no | *uy-on?*<br>3SG.ERG-lineage? | his kindred. |
|---|---|---|---|

## Sixth Segment: Count back to the steambath ritual and forward to the 13th *Bak'tun*.

**The steambath ritual**

| L16-L17 | - 8.0.7.7 | | 8.0.7.7 (days earlier) |
|---|---|---|---|
| M1 | UH-ti-ya | *uht-i-Ø-[iji]y*<br>happen-COMPL-3SG.ABS-TEMP | it happened |
| N1 | 8-CHUWEN | *waxak chuwen*<br>eight *Chuwen* | 8 *Chuwen* |
| M2 | 9-ma-ka | *bolon mak*<br>nine *Mak* | 9 *Mak*.<br>(= 9.3.16.1.11) |
| N2 | e-ke-wa-ni-ya | *[h]ek-wan-i-Ø-[iji]y*<br>place-POS-COMPL-3SG.ABS-TEMP | It was placed |
| M3-N3 | NAH-K'AN-na-ja-la | *nah k'an-(a)j-al*<br>first precious-INCH-ABST | First Precious-Becoming, |
| M4 | u-pi-bi-NAH | *u-pibna:h*<br>3SG.ERG-steambath | (of the) sweatbath (of) |
| N4 | a-ku-la-K'UK' | *a[h]k-al k'uk'*<br>*Ahk*-ABSTR *K'uk'* | *Ahkal K'uk'*. |
| **The 13th *Bak'tun* prophecy** | | | |
| M5-P1 | + 3.8.3.9.2 | | 3.8.3.9.2 (days later) |
| O2 | tzu²-jo-ma | *tzu\<h\>tz-j-o:m-Ø*<br>complete\<PASS\>-THEM-FUT-3SG.ABS | it will be completed |
| P2 | u-13-PIK | *u[y]-u:xlaju:n pik*<br>3SG.ERG-thirteen *Pik* | the thirteenth *Bak'tun*. |
| O3 | 4-AJAW | *chan ajaw*<br>four Ajaw | It (is) 4 *Ajaw* |
| P3 | 3-UN-wi | *u:x uni:w-Ø*<br>three *Uni:w*-3SG.ABS | 3 *K'ank'in*. |
| O4 | u-to-ma | *u[h]t-o:m-Ø*<br>happen-FUT-3SG.ABS | (And) it will happen |
| P4 | i-li? | *il-?*<br>see-? | (a) 'seeing'. |
| O5 | ye-ni-9-OK-TE' | *ye:n bolon-[y]okte'-[k'uh]-Ø*<br>adornment Bolon-Yokte'-K'uh-3SG.ABS | (The) adornments (of)<br>*B'olon-Yokte'-K'uh* |
| P5 | ta-CHAK?-jo?-JOY[ja?] | *ta chak joy-aj?*<br>in great wrapping/encircling-NOM? | in (the) great investiture<br>(dressing and parading of a<br>newly-installed official). |

named *Bahlam Ajaw*. Therefore a stative construction to the effect that the 'precious stone' is the 'mouth of his lineage' seems the overall best suggestion. The alternative would be that the stone is *u-ajaw uy-on* 'the lords of his lineage'. As it stands, this seems awkward. If we had the missing section, it might make better sense.

The rendering of the suggested /**yo**/ syllable at K16 differs somewhat from the usual form of this sign in the corpus of Tortuguero (cf. TRT Mon. 6, L9). However, we justify the reading in viewing the inner curves as representing a more elaborate leaf. The lexical basis for *on* appears in the Yucatecan languages. YUK: *onel*: pariente en consanguinidad, progenitor (Barrera Vásquez 1993: 606); LAC: *'onen*: se usa en este trabajo como decir 'el apellido animal', o mejor dicho, como el animal que simbólicamente representa a una persona, o a una clase de personas. Actualmente, los únicos restos de asociación entre las personas de un *'onen* y el animal cuyo nombre llevan, parece encontrarse en la interpretación de los sueños, donde un hombre es representado por un animal de su *'onen* y viceversa. (Bruce 1968: 12).

**Transcription and paraphrase of the entire text by Barbara MacLeod**

*…chihil akan, kakaw,*
*chi:t-k'uh*
*Bahlam Ajaw, K'uhul Ba:k Ajaw.*

…the pulque-like God A' and deified cacao,
companion gods (of)
*Bahlam Ajaw*, Holy *Ba:k* Lord.

*chanlaju:n k'i:n, buluch winikiji:y,*
*buluch ha'abi:y, ju:n winikha'abi:y*
*siyaji:y,*
*alay ta Jun Ok, U:x Bix-Ohl*
*chumwani ta ajawlel*
*Bahlam Ajaw.*

Fourteen days, eleven-score days,
eleven *Tun* and one *K'atun* after
he was born,
here on 1 *Ok*, 1 *Kumk'u*
he was seated in rulership
*Bahlam Ajaw*.

*waklaju:n k'i:n, ho' winikiji:y*
*chumwani:y,*
*i ehmey unah uto:k'pakal;*
*nuhp-te'aj ta Ayi:n;*
*i hayi Xam? Aj U:x Te' K'uh*
*U:xlaju:n Kimi, Chanlaju:n Kase:w.*

Sixteen days and five-score days
after he was seated,
then descended the first of his flints and shields;
lances joined at *Ayi:n*;
then collapsed *Xam*? He of *U:x Te' K'uh*
it is 13 *Kimi*, 14 Sek.

*chan k'i:n, lajcha' winikiji:y:*
*alay Laju:n Ok, Waxaklaju:n K'anasi:y;*
*i ch'ahk'aj ?? .*

Four days and twelve-score days:
here is 10 *Ok*, 18 *K'ayab*;
then was chopped ??.

*waklaju:n k'i:n, bolon winikiji:y, chan ha'abi:y;*
*alay Waxak Kimi, Bolon Mol;*
*i ch'ahk'aj Yomo:p.*

Sixteen days, nine-score days and four *Tun*;
here is 8 *Kimi*, 9 *Mol*;
then was chopped *Yomo:p*.

*waxak k'i:n, wuk winikiji:y:*
*alay U:xlaju:n Hix, Wuklaju:n Muwa:n;*
*hayi:y uto:k' [u]pakal U:x Bahlam,*
*Joy Chan Ajaw;*
*nahbaj ch'ich', witzaj jol;*
*bolon ipnaj usak ba:k [y]ik'il*
*tu yax chan*
*Bahlam Ajaw, K'uhul Ba:k Ajaw.*

Eight days and seven-score days:
here is 13 *Hix*, 17 *Muwa:n*;
collapsed his flints and his shields, *U:x Bahlam*,
Lord of *Joy Chan*;
blood became a lake, skulls became a mountain;
nine times were strengthened his force and breath
in his first heaven
*Bahlam Ajaw*, Holy *Ba:k* Lord.

*ju:n k'i:n, waklaju:n winik, u:x ha'ab*
*chumwani:y ta ajawlel,*
*i k'ahxi t'a:n*
*Buluch Chuwen, Chan Muwa:n;*

One day, seventeen-score days and three *Tun*
after he was seated in rulership,
then was bound the word
on 11 *Chuwen* 4 *Muwa:n*;

*buluch k'i:n, ju:n winikiji:y*
*cha'an Wak Ajaw, U:xlaju:n Mak,*
*wi'il ho'tu:n.*

Eleven days and one score of days ago,
on 6 *Ajaw* 13 *Mak*,
it was the last *Hotun*.

*wak k'i:n, ju:n winikiji:y,*
*bolonlaju:n ha'abi:y, chanlaju:n winikha'abi:y,*
*k'ahxi:y t'aan.*
*Buluch Chikchan U:xlaju:n Muwa:n.*
*uhti:y tahn ha' Ba:ki:l.*

Six days, one score of days,
nineteen *Tun* and fourteen *K'atun* ago
was bound the word.
It was 11 *Chikchan*, 13 *Muwa:n*;
it happened in the plaza of *Ba:ki:l*.

*waxak k'i:n, ho' winikiji:y,*
*ho' ha'abi:y, ju:n winikha'abi:y*
*chumwani:y ta ajawlel*
*Bahlam Ajaw,*
*i ele-na:haj;*
*Bolon Etz'nab; Nahnal uti' hu'un; Wak K'anasi:y.*

Eight days, five-score days,
five *Tun* and one *K'atun*
after he was seated in rulership
*Bahlam Ajaw*,
then was done a fire-rite in the house;
it is 9 *Etz'nab*; *Nahnal* is the margin of the book; it
is 6 *K'ayab*.

| *waxaklaju:n k'i:n, waxak winikiji:y, jun ha'abi:y,* | Eighteen days, eight-score days and one *Tun* |
| *cha'an Chan Ajaw U:xlaju:n Mol,* | on 4 *Ajaw*, 13 *Mol*, |
| *wi'il ho'tu:n alay.* | it is the last *Hotun* here. |
| *i ekwani* | Then was placed |
| *Wak Ha'ab Na:h,* | [the] Six-*Tun* House, |
| *Wak Mul Baj-Le:m –* | [the] Six Cached Hammer-Celts – |
| *uk'uhul k'aba'* | the holy name of |
| *u ?? ??* | his ?? ?? |
| *[Bahlam Ajaw] K'uhul Ba:ki:l Ajaw.* | [*Bahlam Ajaw*] Holy *Ba:ki:l* Lord. |
| | |
| *uba:h uchi:t-ch'ab* | He is the person of her co-creation |
| *Ix Wan K'oj,* | Lady *Wan K'oj*, |
| *Ix Ba:ki:l Ajaw.* | Lady *Ba:ki:l* Lord. |
| | |
| *unich ukotz'o:m* | He is the flower of his winder [-serpent] |
| *Ihk' Muy Muwa:n,* | *Ihk' Mu:y Muwa:n* |
| *K'uhul Ba:k Ajaw.* | Holy *Ba:k* Lord. |
| *ha'i pikul ajaw joyni:y.* | That one, many lords did he invest. |
| | |
| *bolon ipni:y* | Nine times were strengthened |
| *k'an nal ajaw,* | the Precious Maize Lord, |
| *?-(Vy) (Square-nosed Beast),* | the primordial Square-nosed Beast, |
| *sak ba:k ik'.* | the force and breath. |
| | |
| *yitaj u k'uhil* | They have authorized this, their gods |
| *Ihk' K'ahk'-Ti' Hix, Yax Su:tz'.* | Black Fire-Mouth Jaguar and Blue-Green Bat. |
| *ha'ax ajes yohl* | These indeed awaken the hearts of |
| *waxak kok Baklib, chan ehmach* | eight turtle *Bakabs*? and the four raccoons |
| *utzolow yax tzutzpik* | who set in order the first *Kalabtun* |
| *Yax Pet Kabnal.* | at the First Round Earth-place. |
| | |
| *ma'* | no… |
| *?? ??* | ?? ?? |
| *?? Bahlam Ajaw?.* | ?? *Bahlam Ajaw*? . |
| *k'an tu:n uti' uyon.* | The precious stone is their voice, his kindred. |
| | |
| *wuk k'i:n, wuk winikiji:y,* | Seven days, seven-score days, |
| *mih ha'abi:y, waxak winikha'abi:y,* | no *Tun* and eight *K'atun* ago |
| *uhti:y Waxak Chuwen, Bolon Mak;* | occurred 8 *Chuwen*, 9 *Mak*; |
| *ekwani:y nah k'anhal* | was placed the First-becoming-precious of |
| *upibna:h Ahkal K'uk'.* | the sanctuary of *Ahkal K'uk'*. |
| | |
| *cha' k'i:n, bolon winikij, u:x ha'ab,* | Two days, nine-score days, three *Tun*, |
| *waxak winikha'ab, u:x pik,* | eight *K'atun* and three *Bak'tun* (forward), |
| *tzuhtzjo:m uyu:xlaju:n pik* | it will be completed the thirteenth *Bak'tun*; |
| *Chan Ajaw, U:x Uni:w.* | it will be 4 *Ajaw*, 3 *K'ank'in*. |
| *uhto:m  il* | it will happen; the witnessing of |
| *ye:n Bolon Yokte'* | the adornments of *Bolon Yokte'* |
| *ta chak joyaj.* | in the great investiture. |

The above Classic Ch'olan text with English translation has in mind the goals of accuracy, clarity, narrative continuity and ease of reading. In the translation, a few words will vary from the foregoing linguistic analysis. We offer this in an attempt to honour the extraordinary, poetic elegance of the original.

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