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Marc Zender  
Editor  
marc@ancientcultures.org

Joel Skidmore  
Associate Editor  
joel@ancientcultures.org

The PARI Journal  
202 Edgewood Avenue  
San Francisco, CA 94117  
415-664-8889  
journal@ancientcultures.org

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## Sharper than a Serpent's Tooth: A Tale of the Snake-head Dynasty as Recounted on Xunantunich Panel 4

**CHRISTOPHE HELMKE**

*University of Copenhagen*

**JAIME J. AWE**

*Northern Arizona University*

Good things come in twos or threes, or so the saying goes, and this has certainly been the case with the discoveries made during this past field season at the archaeological site of Xunantunich in Belize. In June of this year, an important hieroglyphic panel was unearthed, which we designated Panel 3. Surprisingly, this panel was not raised by the rulers of Xunantunich themselves but had been hauled from another site in antiquity. Based on the type of stone, the style, and the execution of the glyphs, it clearly once formed part of a much larger hieroglyphic stair raised by K'an II, one of the dominant kings of Caracol in the

seventh century. Considering the importance of the find, we promptly prepared a paper and were fortunate to see it rapidly to press (Helmke and Awe 2016). Just five weeks later, a matching Panel 4 was found as two conjoining fragments at the base of a pyramidal structure that concealed a large vaulted royal tomb within. As if these finds were not significant enough, the glyphs of the new panel convey vital historical information concerning the Snake-head dynasty that dominated the lowland Maya political arena in the seventh century. Here we present an analysis of Panel 4 (Figure 1), building



**Figure 1.** Detail of the newly discovered Panel 4 at Xunantunich (photo: Robert Mark and Evelyn Billo).

on the earlier study of Panel 3 (Helmke and Awe 2016). We will also review the chronology of the narrative of the hieroglyphic stair as a whole, in order to better situate Panels 3 and 4. The glyphic text of Panel 4 is analyzed, and we discuss syntactical and poetic features in relation to other similar texts in the Maya lowlands, drawing particular parallels with the texts of Calakmul. Before we do so, however, we will delve briefly into the historical background behind the hieroglyphic stair that these panels once formed a part of, the king who raised the monument, and the interactions between the site of Caracol and some of its friends and foes.

On December 7, AD 642, K'an II officiated over the rituals surrounding the half-k'atun period ending of 9.10.10.0.0. It is on this date that he dedicated the great hieroglyphic stair that committed to stone the past twenty years of his rulership. The reign of this Caracol king lasted from 618 to 658 and ushered in a period of greatness and stability for the dynasty and the site as a whole (Martin and Grube 2000:91-92). This king, much as his father before him, maintained close ties to his overlords, the kings of the Snake-head dynasty. In fact, whereas the accession of K'an II in 618 was supervised by the triadic patron deities of Caracol, it would seem that he underwent another investiture the following year, under the auspices of the Snake-head king Yuhkno'm Ti' Chan (Simon Martin, personal communication 2005; Martin 2009). The accession of the successor of the Snake-head dynasty, Tajo'm Uk'ab K'ahk' is also dutifully recorded in 622, as is the receipt of a gift, possibly a headdress or deity effigy, from the same king in 627 (Martin and Grube 2000:92; Grube and Martin 2004:70-71). These diplomatic ties were closely followed by offensive actions against the city of Naranjo in both 626 and 631, her monarch having repudiated fealty to the Snake-head kings. As reprisals to these martial actions, we read of reversals of fortune, with a decisive attack in 680 wherein Caracol suffered a major loss at the hands of Naranjo (Martin and Grube 2000:95; Grube and Martin 2004:107-108). It is probably as part of this attack that monuments at Caracol were splintered and obliterated, including Stela 3, also raised by K'an II, and most of his hieroglyphic stair was also dismantled and carried off (Martin 2000a:57-58, Fig.12). The majority of panels that once comprised the hieroglyphic stair found their way to Naranjo, but one panel has also been found at Ucanal and now two such panels have been discovered at the site of Xunantunich.

That the ancient Maya should dismantle a monument as a result of a successful military engagement and carry it back to the victorious kingdom may be unexpected but is in fact in keeping with practices known for many cultures, both ancient and more contemporary. To cite just a few examples, the Romans extirpated obelisks from Egypt and laboriously transported them back to their capital. In fact, Rome now ranks as the obelisk

capital of the world since more obelisks stand in that great metropolis than in Egypt itself (Sorek 2010; Clayton 1994:114). At least five Egyptian obelisks were transported to Rome in antiquity, starting with those of Seti I and Psammetichus II, shipped to Rome in 10 BC on the command of Augustus (Laistner 1921; Scarre 1995:20). Honoring this tradition, the later Emperor Constantius II had a pair of obelisks of Thuthmosis III transported to Rome and to the new capital Constantinople in AD 357 (Safran 1993; Scarre 1995:224). Interestingly, these obelisks were re-erected to commemorate the *ventennalia*, or twenty-year jubilee, of Constantius on the throne.

A particularly consequential and poignant military action is that which culminated in the despoilment of Herod's great temple in Jerusalem, the ritual objects borne into Rome as part of a triumphal procession celebrated by Titus and his father Vespasian in the summer of AD 71 (Scarre 1995:75). This triumph is celebrated on the Arch of Titus at the Via Sacra, where we can still see Roman soldiers bearing the great golden candelabrum or Menorah (Holloway 1987:Fig. 3). The plunder of Israel was eventually housed in the Temple to Mars Ultor ("Mars the Avenger"), a structure raised by Augustus to accommodate the sacred objects of conquered states, where victorious generals dedicated their spoils to Mars (e.g., Barchiesi 2002).

As is well known, victorious armies frequently resort to looting in addition to the displacement of larger monuments at the behest of their leaders. Thus Rome was not spared by the Vandal looting in the mid-fifth century, nor was Constantinople when it was sacked by the Crusaders in 1204. Moving some centuries forward, we can also cite the monuments removed to Paris during the Napoleonic wars. Prominent among these is the great bronze Quadriga that once graced the top of the triumphal arch known as the Brandenburg Gate in Berlin (ironically, it was originally named the *Friedenstor*, or "Arch of Peace"). This Quadriga represents the personification of victory riding in a chariot drawn by four horses, echoing the Roman triumphal practice. Napoleon having conquered Prussia, it was not deemed apt for the Quadriga to remain in Berlin, and in 1806 his forces dismantled the ten-ton statue and hauled it to Paris (only for it to be re-conquered and returned to Berlin eight years later, where it remained until it was mostly destroyed during the bombardments of the Second World War) (Krenzlin 1991).

Closer both temporally and spatially to Mesoamerica is the temple known as <Coateocalli> (*kōwā-teō-kalli*, lit. "snake-god-house" or 'snake temple') of the central ritual precinct of Tenochtitlan among the Aztec. This temple was raised by Moctecuzoma Xocoyotzin as a shrine that would contain the divinities and statuary acquired from conquered states and cultures (Durán 1964:237). Richard Townsend (1979:36) described it as a temple constructed "to house the captured cult effigies

and ritual paraphernalia brought home by triumphantly returning Mexica armies.” As such it served as a type of Aztec Pantheon, much akin to that built by the Romans. To this we should also add the capturing of deity effigies by the Maya during battles, as first identified by Simon Martin (1996). From both epigraphic and iconographic sources we know that the large palanquins, or litters, upon which kings were carried into battle also bore great deity effigies, serving as protective deities looking over the welfare of both the king and his armies. In humiliating defeats these palanquins were seized by victors and marched triumphantly through the capital, a foreign deity now smiling upon the victorious king. As we can see there are a great many points of equivalence here, and paramount among these is the forceful acquisition of statuary representing deities, as if the victors could accrue more divine protection by accumulating divinities in their midst and even naturalizing conquered deities. With this overview we hope to give a sense of the proclivity of victorious armies to forcibly acquire monuments of conquered states, to better contextualize the Maya instance involving the hieroglyphic stair of K’an II. Establishing this precedent, we surmise that additional instances exist that have yet to be identified.

However, we must also point out that martial action is not the only explanation for the transportation of monuments across the landscape. For instance, Stela 9 at Calakmul is made of dark gray slate, which does not occur geologically in Campeche (Ruppert and Denison 1943:Plate 48; Graham and Williams 1971: 163-165; Marcus 1987: 139) (Figure 2).<sup>1</sup> In contrast, at Caracol, located 165 km to the south, on the margins of the Maya Mountains, slate abounds and monuments made of this material were raised at the site between the sixth and eighth centuries (Beetz and Satterthwaite 1981:56, 74). Considering the close ties between Caracol and Calakmul it seems most likely that the slab of slate from which Stela 9 was carved was gifted to Yuhkno’m Ch’een II around AD 658 by the newly enthroned K’ahk’ Ujo’l K’inich II. Upon its arrival at Calakmul, Yuhkn’om Ch’een used the slate stela to commemorate the period ending of 9.11.10.0.0 (August 24, 662) and to promote the cause of his successor Yuhkn’om Yich’aak K’ahk’, whose image was carved on its front face (Martin 2009). This case makes it clear that monuments, or at least great stone slabs, were transported over large distances and represent favorable diplomatic relations. Panels 3 and 4 at Xunantunich may thus owe their presence at the site to such a gesture of political amity. Assuming their point of origin at Caracol and considering the great size of these panels we can also assume that they were rafted down the Mopan river, which may help to explain the presence of such panels at Ucanal and Xunantunich, since both are situated on



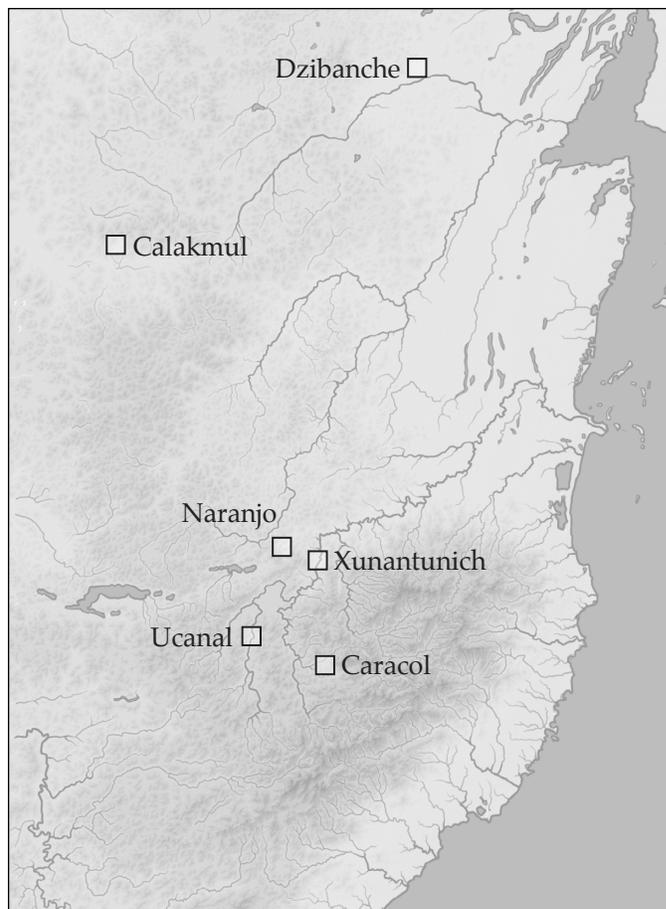
**Figure 2.** The front face of Stela 9, the slate stela of Calakmul, apparently depicting Yich’aak K’ahk’ in AD 662, well in advance of his accession, which transpired 24 years later (photograph by Harri Kettunen).

<sup>1</sup> Whereas we use the term slate, it may be more accurate to refer to the raw material as semischist with ferrous inclusions. Whereas slate stems from sedimentary stones, such as shales and mudstones, slates are actually metamorphic since they are affected by low-grade regional volcanism. This also helps to explain why the margins of the Maya Mountains—themselves a Paleozoic volcanic intrusion—exhibit several important sources of slate, since all the favorable geological conditions are found there.

the banks of this stream (Figure 3). Moreover, with such a route, the sites of Ucanal and Xunantunich appear as viable stop-off points on the return journey from Caracol to Naranjo. Irrespective of the specific processes at play, these panels speak of a close relationship maintained with Naranjo, be it the result of shared participation in a common war effort against Caracol, or as gifts bestowed on a cherished vassal. These monuments thereby make tangible the vicissitudes of alliances and royal relations in antiquity. That said, we offer these words more to provoke thought than to provide definitive answers, and we now turn to consider the context in which Panel 4 was discovered.

### Context and Circumstances of Discovery

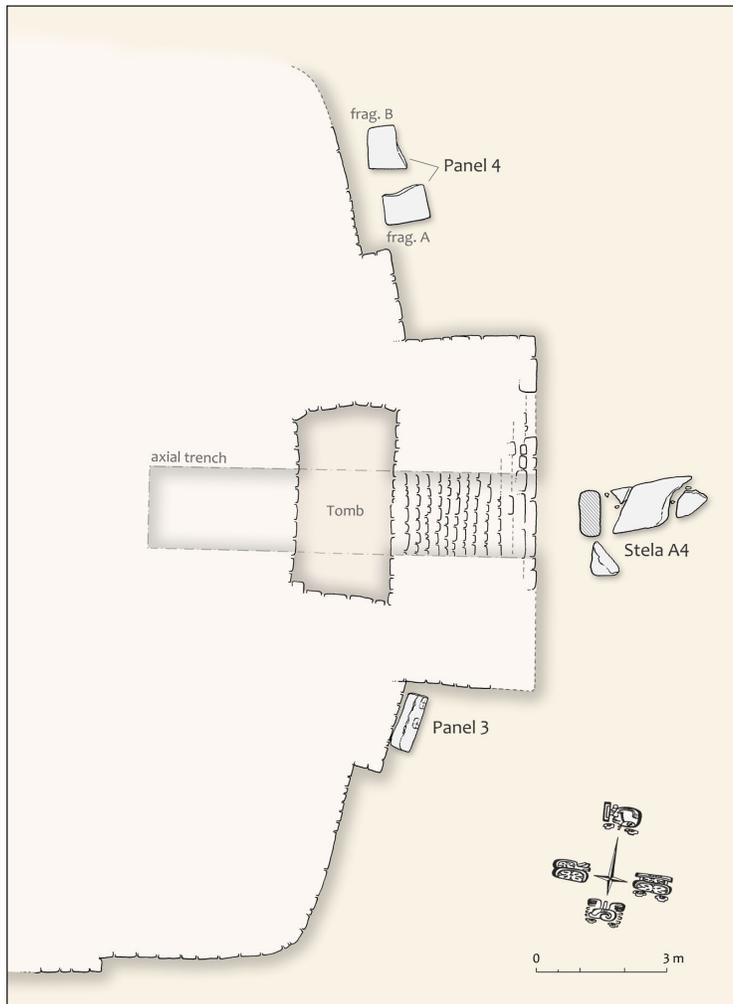
We discovered Panel 3 at Xunantunich to the south of the axial stairway of Structure A9 on June 3, 2016. The monument was found lying on its side, leaning on the stair-side outset, abutting the terminal construction phase of Structure A9. The northern stair-side outset was partially cleared and no matching monument was encountered there. As a result, and considering the secondary context of Panel 3, we moved quickly to see that first monument to press (Helmke and Awe 2016). Recognizing that other fragments of the Naranjo hieroglyphic stairway were missing, we decided to explore the north flank of Structure A9 to continue exposing the architecture and look for a matching monument. Our efforts paid off, and on July 11 of the same year we discovered Panel 4 as two conjoining fragments at the northeastern base of Structure A9 (Figure 4). Unlike Panel 3, however, the two fragments of Panel 4 were discovered lying facedown above the plaza floor. Also in contrast to Panel 3, the fragments of Panel 4 were not located in front of the stair-side outset of Structure A9, but just to the north. The first fragment (Frag. A) was actually found lying 2.7 m north of the axial stair, or 60 cm north of the northeastern corner of the stair-side outset (Figure 5), and the second fragment (Frag. B) was located 40 cm north of the first fragment. This location suggests that Panel 4 could originally have been placed in the same manner as Panel 3 to the south, leaning against the basal terrace of Structure A9, but that it was subsequently knocked over and fragmented by a combination of taphonomic disturbances, including tree fall and architectural collapse. While it remains possible that the monument was intentionally terminated by the Maya in antiquity and displaced to the context in which we discovered it, at present this hypothesis appears less likely without additional supportive evidence. Much like the previously discovered monument, Panel 4 was not associated with any artifactual materials that can be used to assist in dating its re-deposition at Xunantunich, nor inform us as to the types of activities that these monuments may have attracted. That said, monument



**Figure 3.** Location of salient archaeological sites mentioned in the text (Precolumbia Mesoweb Maps).

termination may account for the condition of the left-most portion of glyphs in the first medallion on Panel 4 that show damage and pitting. In addition, a large section of a glyph is missing from Panel 3, and it either broke off during transport of the monument or it may have been purposely spalled off in antiquity as part of a termination ritual.

During the axial trenching of Structure A9, the steps of the terminal stair were uncovered and around halfway up it was apparent that the core was collapsing inwards along with some of the steps. This was a clear indication that a tomb might be located within the structure. The capstones of the tomb were subsequently uncovered and the chamber was opened, revealing a large rectangular space measuring 4.5 m north-south and 2.4 m east-west, making it one of the largest tombs discovered in Belize to date (Figure 6). Significantly, this is also the very first royal tomb discovered at Xunantunich, a fact that created quite a stir in the international media (e.g., Forssmann 2016; Surugue 2016). The tomb and its contents will be the subject of another more detailed study and publication, but we can relate some of the more salient features. The tomb was found to



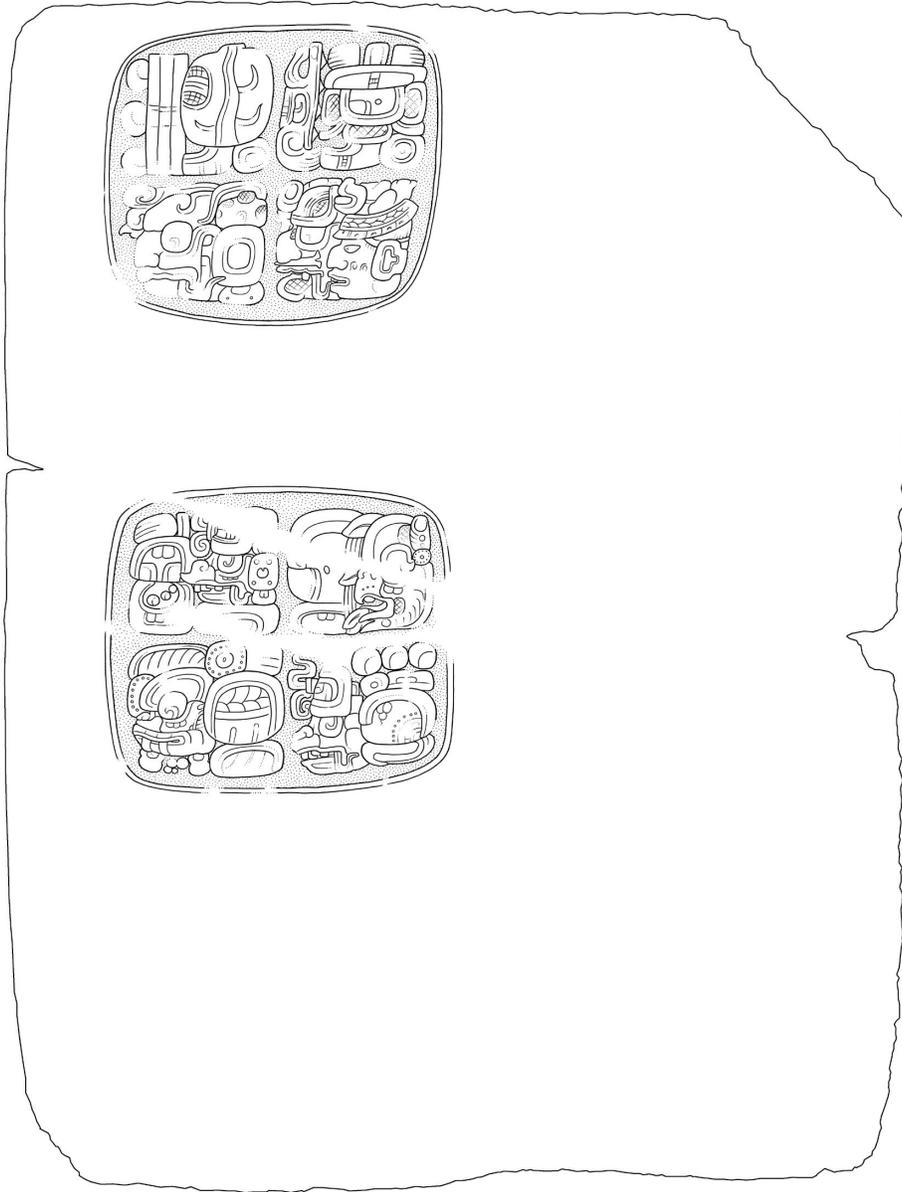
**Figure 4.** Plan of the terminal-phase architecture of Structure A9, showing the location of the axial tomb as well as the contexts in which the glyphic panels were found. Plan is aligned to terminal architecture with magnetic north indicated. Survey and plan by Merle Alfaro, Raúl Noralez, and Christophe Helmke.



**Figure 5.** The upper fragment of Panel 4 as it was being exposed (photo: Doug Tilden).



**Figure 6.** General overview of the Structure A9 tomb during excavation (photo: Jaime Awe).



**Figure 7.** The newly discovered Panel 4 at Xunantunich (drawing by Christophe Helmke).

contain the remains of an adult male, estimated to have been 20–30 years of age at death. He was lying in an extended and supine position with his head to the south as is typical for the area. Funerary offerings included an impressive array of 36 ceramic vessels, six pieces of jadeite that together may have formed a necklace, 13 obsidian blades, and what may be the remains of jaguar or deer at the northern end of the tomb. Together these objects, in combination with the size and location of the tomb, all point to the importance of the interred and strongly suggest that this is a royal individual. Why this should be the first royal tomb discovered to date is a matter of continued discussion, not least considering the number of archaeological investigations that have

been conducted at the site since the late nineteenth century. One intriguing feature is that the tomb is not intrusive into the core of Structure A9 but instead appears to have been constructed concurrently with the bulk of the structure. As such, all of Structure A9 may have been raised as part of a single major construction effort, built with the explicit purpose of housing the exalted deceased, as a type of funerary temple. The juxtaposition of the hieroglyphic panels with this structure is therefore all the more remarkable, although we need to emphasize that the panels were set in front of Structure A9 secondarily. As a result, once the tomb and Structure A9 have been conclusively dated we will be better equipped to assess the relationship, if any, that

these panels might have had with the deceased.

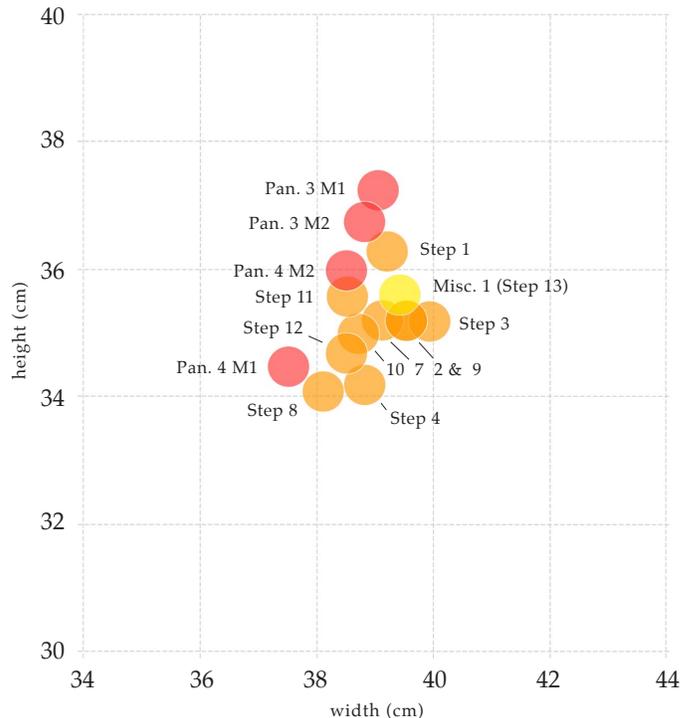
Upon joining the two fragments, we were able to determine that the total height of Panel 4 is approximately 1.41 m, whereas its maximal width is 1.07 m (Figure 7). The top and left edges are linear and formally dressed whereas the other two edges are less neatly so, with the lower base tapering to a width of 98.5 cm. This suggests that the right and bottom portions were concealed under architecture, undoubtedly below the actual steps. This duplicates in mirror image what we have observed for Panel 3, since it is the left edge and bottom that are less formally prepared, indicating that the two panels served as end pieces for the greater hieroglyphic stair. These characteristics have important implications for understanding how the entirety of the narrative on the hieroglyphic stair once started and ended, something that we will return to below. The medallions measure on average 40 cm wide and 36.5 cm high. The space between them is 25 cm from edge to edge whereas the upper edge of the monolith is only 3.5 cm above the top of the upper medallions and the left edge is on average 11.2 cm to the left of the medallions. The thickness of Panel 4 ranges between 25 and 27 cm, making it slightly thicker than Panel 3, which was 22 cm thick on average. In terms of height both monuments are quite comparable since Panel 3 also measures 1.41 m high but only 0.87 m wide. Therefore, more of the blank portion of Panel 4 must have been integrated into the architecture, but we can expect that the margin between the edge of the medallions and the steps would have been comparable on both. Based on these measurements, Panel 3 can be estimated at 0.270 m<sup>3</sup> and Panel 4 at 0.374 m<sup>3</sup>. Using an average weight for limestone (1 m<sup>3</sup> = 2,611 kg) we can convert these volumes to mass estimates, with Panel 3 weighing in at around 705 kg (1,554 lbs) and Panel 4 at 976 kg (2,152 lbs). Thus Panel 4 weighed a little under a metric ton, which may also explain why it fractured into two. The breakage undoubtedly followed an original fracture, since similar defects and hairline fractures are also perceptible in the stone of Panel 3. Alternatively, Panel 4 may have been fractured during transport, which in turn may have eased its move from Caracol to Xunantunich, not least considering that this is the single largest monolith of the hieroglyphic stair discovered to date.

### The Hieroglyphic Stair of K'an II

Whereas it remains outside the scope of this paper, we remain hopeful that a collaborative team will eventually be convened to conduct petrographic analyses and chemical assays on the various panels in order to ascertain their geological profile and to properly tie these to their place of origin, as a single hieroglyphic stair raised by K'an II. In addition, we hope that sufficient data can be gathered from the archaeological contexts in which

the various panels were eventually encountered, including Str. B5 at Caracol, Str. B18 at Naranjo, Str. A9 at Xunantunich, and the ballcourt at Ucanal, so that we can begin to define the time periods when these panels were re-erected in their secondary settings. This will help to flesh out the events surrounding their production, displacement, and eventual re-deposition. Until that time, we will content ourselves with commenting on metric attributes, as well as paleographic and calendrical features that help to establish the unity and coherence of the panels as a single monument.

To start, some comments can be made concerning the physical properties of the medallions that establish the coherence of their design and thereby confirm that the panels all originally formed part of the same monument, even though they were scattered between at least four different archaeological sites. Considering just basic metrics such as the maximal width and height of the more squared medallions, we can see that these were not laid out according to a fixed template since the widths range between 37.5 and 40.6 cm, whereas their heights range between 34.1 and 37.3 cm (Table 1). These divergences may seem significant, but if we compute their variance in terms of standard deviation we can see that the differences are quite minor, since that for widths amounts to  $\pm 0.62$  and heights to only  $\pm 0.90$  cm,



**Table 1.** Graph showing the width vs. height of the squared glyphic medallions that together comprise the hieroglyphic stair (excluding Steps 5 and 6; all are interior measurements omitting the incised outline). The width of Step 8 is reconstructed as is the height of Medallion 1 of Panel 3. Data points are color-coded by site.

on either side of their respective means. In addition, we can see that width and height are also highly proportionate since a linear correlation coefficient (a Pearson Product-Moment Correlation) for all panels has yielded  $\rho = 0.995513$ , indicating that the two variables are nearly perfectly and positively correlated.

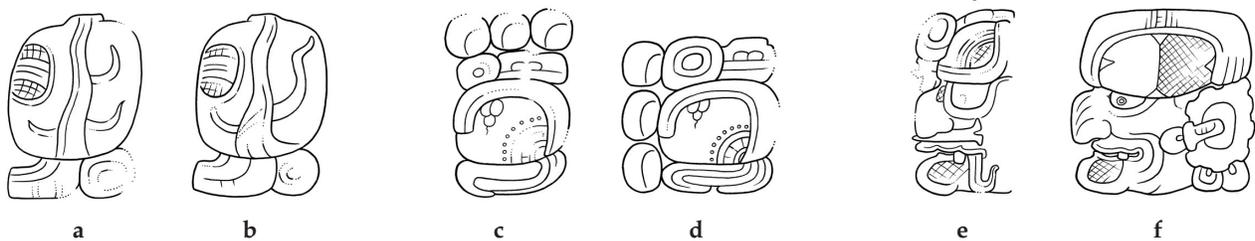
Another study that would be interesting to conduct would take into account the shape and surface areas of the medallions to determine their degree of co-variance and establish whether these are comparable to the simple linear computations presented here. We suspect that such a study would yield positive results and complement the cursory study that we have made of the width-to-height ratios of the medallions of the Xunantunich panels. Clearly the widths are larger than the heights, forming medallions that mostly conform to the shape of a rounded square, or superellipse ( $n > 2$ ) (see Gardner 1977), and from our computations we can see that these are generally disposed according to a 10:8 or 10:9 ratio. These give us a sense of how the outline or frame of the medallions was drawn.

In addition to the physical properties, there are also elements of style that are relevant to paleographic analyses, confirming the integrity of the hieroglyphic stair. In particular, the choice of signs and the specific allographs used are highly instructive. As found on Panel 4, there are several clear points of correspondence, in paleographic terms, that compare to glyphs on previously discovered panels. These include the spelling of the fourteenth month in the haab calendar, written **UN-wa**, with precisely the same type of circular mirror-like element at the top of the logogram as that seen on Step 10 (V1), both with relatively slender tree-like markings and the same short stem tip at the top, albeit pointing in different directions (Figure 8a–b). We can also look at the spelling of the toponym *Uxte'tuun* “three stones” that is tied to Calakmul. The same toponym is also recorded on Step 6 (L3a) with the same numeral, each embellished with semicircular lines and the same allograph of the **TUN** logogram (T528) that is used throughout the hieroglyphic stair, with the dashed lines within the concentric semicircles at the base (Figure 8c–d). The profile of an aged male deity on Panel 4 (pB2a) exhibits a small circular area on the chin, marked with crosshatching, presumably

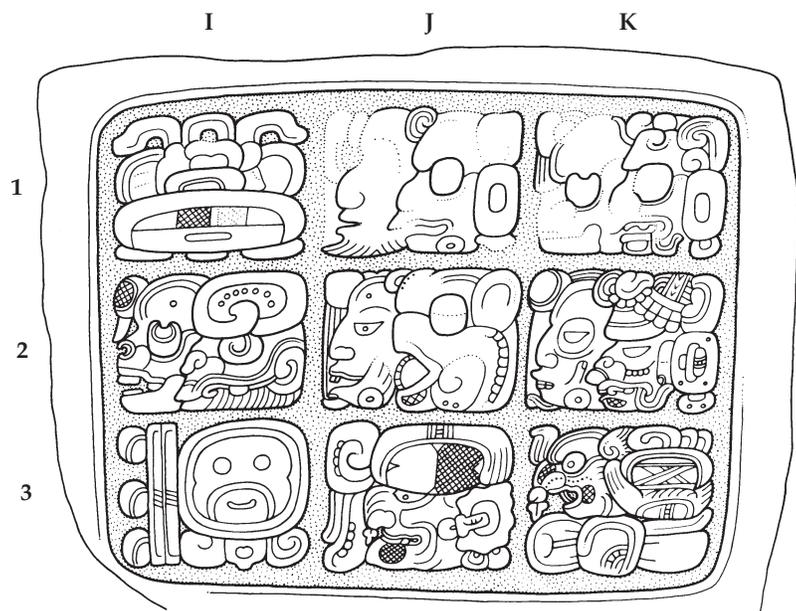
representing stubble. The same feature is found on the profile of the aged deity known as G9, a Lord of the Night, represented on Step 5 (J3) (Figure 8e–f). In addition, the owl head-variant with the distinctive trilobate eye on Panel 4 (pB3b) is also found in two other instances on the hieroglyphic stair, although neither is particularly well preserved. These include an instance on Step 6 (L2a) where it also functions as the logogram **CH'EN?** and another on Step 2 (D1) where it serves as the syllabogram **ki**, as part of the sequence **K'UH-K'AN?-tu-ma-ki**, the dynastic title of Caracol kings (Grube 1994:85). These shared features as well as those found on Panel 3 (Helmke and Awe 2016:5–6, Fig. 6) all conclusively speak of a single monument exhibiting the same degree of internal stylistic variance to be expected in any long text. As a result, based on physical and paleographic properties alone it seems clear that Panels 3 and 4 formed part of the same hieroglyphic stair. To this we can add the calendrical references that these panels exhibit, since they dovetail perfectly with former gaps, precisely filling these lacunae and weaving together a more complete narrative.

### Calendrics

All that remains of calendrical information on Panel 4 is the latter half of a Calendar Round that initiates the text. The date in question (pA1) is clearly written **18-UN-wa** for *waxaklajuun uniiw*, or “18 K'ank'in,” providing a record of the haab calendar. This date occurs among the panels that have been found at Naranjo, most notably on Step 5 that records the complete Long Count 9.10.10.0.0 (Figure 9). This date corresponds to December 7, AD 642 and closes the k'atun, or twenty-year period, that concludes the entire narrative recorded on the hieroglyphic stair. Interestingly, rather than commemorating an “even” k'atun spanning from a period ending wherein the last three digits are set to zero, both the start and end of the narrative presented on the hieroglyphic stair are marked by lahuntun period endings. This means that both the start and end dates of the narrative provide half-k'atun dates, wherein the coefficient for “years” is set to ten, which is to say half of the vigesimal unit represented by a k'atun of twenty years (Thompson 1950:30, 32, 192–193).



**Figure 8.** Shared paleographic features in the hieroglyphic stair of K'an II: (a) Xunantunich Panel 4 (pA1); (b) Naranjo Step 10 (V1); (c) Xunantunich Panel 4 (pB4b); (d) Naranjo Step 6 (L3a); (e) Xunantunich Panel 4 (pB2a); (f) Naranjo Step 5 (J3).



**Figure 9.** Step 5 of the hieroglyphic stair found at Naranjo (after Graham 1978:108; drawing by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.3.29).

The 9.10.10.0.0 date, as both a period ending and the latest date recorded on the hieroglyphic stair, has long been assumed to serve as the dedicatory date for the entirety of the monument (see Morley 1909:550-554; Graham 1978:111; Closs 1984:78, Table 1; Proskouriakoff 1993:40-41). Thus the date on Panel 4 appears to record the very end of the narrative, which is all the more surprising given that this panel must have been mounted on the very left end of the hieroglyphic stair, at the place where one expects the narrative to begin. Based on this evidence, it now seems clear that Panel 4 does indeed record part of the 642 date and that the 9.10.10.0.0 Long Count served as the dedicatory date for the whole narrative. Whereas in previous reconstructions the place of Step 5 has been assumed to be at the very end of the narrative (see Helmke and Awe 2016:Table 1), it now seems more probable that this would have initiated the entire hieroglyphic text.

In fact, the presence of an Initial Series Introductory Glyph at the onset of Step 5, the record of the entire Long Count date, and the fact that the text on this step closes with a record of the Lord of the Night<sup>2</sup> (Glyph G and an idiosyncratic Glyph F), all suggest that the entire hieroglyphic stair may once have begun on this step. Interestingly, the last glyph in the text of Step 5 is a peculiar Glyph F, which provides the title of the foregoing Glyph G9 of the Lord of the Night series. While we cannot know how much additional calendrical information was originally recorded on the hieroglyphic stair, we can expect the remainder of the Calendar Round to have appeared on the subsequent panel, and this is precisely what we see on Panel 4: the date 18 K'ank'in. Therefore, it is possible that Step 5 and Panel 4 together formed a linked set when the stairway was originally raised, with Step 5 adorning the stair-side outset of the second terrace and Panel 4 facing the stair-side outset of the first terrace (Figure 10). This

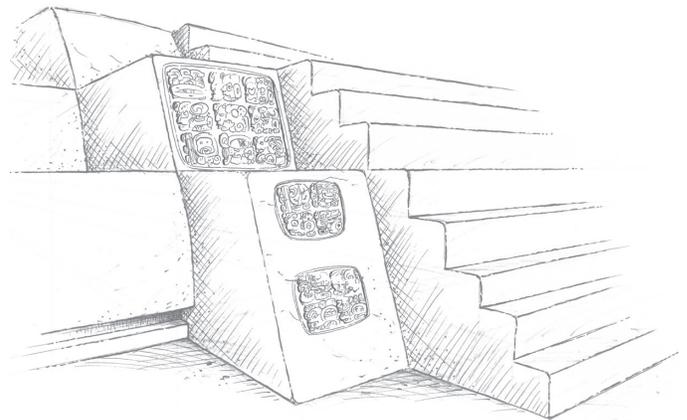
arrangement would undoubtedly have been duplicated at the extremity of the text, at the right edge of the stair, with Panel 3 occupying an analogous position to Panel 4 (Helmke and Awe 2016:7). This configuration is likely, since both are large monolithic panels bearing two superimposed medallions, and presumably another quadrangular panel once decorated the second terrace above (similar to Steps 5 and 6). Based on these observations, we have been able to integrate Step 5 and Panel 4 at the very start of the narrative and have incorporated the dates recorded on Panel 3 with those found on the steps recovered at Naranjo, allowing us to present a complete and updated chronology for the entire narrative (Table 2). The monuments discovered at Xunantunich are thus evidently helping us to close important gaps in the chronology and narrative of the stair. Although we are now more certain about the opening and closing of the narrative as a whole, the reconstruction presented below makes it clear that a series of gaps persist, including events in 626 and 638, as well as lacunae between 627–630 and 633–636.

### A Reading of the Glyphic Text

It is clear from the chronological overview presented above that some panels continue to elude us, constituting salient gaps in the narrative. Despite these lacunae, it is interesting to note that the ancient scribes made some attempts to define clauses according to the format of the hieroglyphic stair as a whole, which

<sup>2</sup> The Lords of the Night form a cycle of nine days, each presided over by different supernatural entities that are sequentially designated as G1 through G9 (see Thompson 1950:208-212). These are typically accompanied by the so-called Glyph F that provides their title. The latter is usually read *ti'-huun*, lit. "mouth-paper"; however, by extension this can be understood as "spokesperson for the crown," since certain regal headdresses were made of paper and the qualifying *ti'* "mouth" serves here by means of synecdoche to designate the office (see Zender 2004:215-221). Interestingly, on Step 5, the logogram **HUN** is surmounted not by **TI'** as might be expected, but by a rabbit bearing the logogram **SA'** in one of its paws. Together the rabbit and the logogram that it cradles spell the toponym *Pek Sa'uul*, which names the small elevation at the north of Naranjo, where a causeway terminus complex was built in the Early Classic (Helmke in press:20; cf. Tokovinine and Fialko 2007:8). Why this toponym was written here instead of the customary *ti'*, we cannot readily explain at present.

is to say to fit them within the boundaries imposed by the medallions. As such, clauses recorded on both Panels 3 and 4 can be said to be end-stopped on each monolith, implying syntactical pauses at the close of each pair of medallions. Thus, the three clauses of Panel 3 may be contained within the two medallions of the monolith, with the final subclause potentially representing the end of the entire narrative, however succinct and even anticlimactic (see Helmke and Awe 2016:11). Likewise, on Panel 4 the two major subclauses are framed within the paired medallions of the monolith. This implies that the following medallion, on another panel, must have provided a distance number or a statement of an earlier period ending, which we surmise presented a count back in time by a score of years, or a k'atun, in order for the narrative to ensue in chronological order from earliest to latest event (see Table 2). Naturally, future discoveries will make it possible to corroborate



**Figure 10.** Isometric sketch of the possible articulation of Panel 4 and Step 5 in the original hieroglyphic stairway. Together these would have formed the very beginning of the glyphic narrative presented on the stairway. Drawing by Christophe Helmke.

Long Count/DN	Day	Month	Gregorian Date	Monument
9.10.10.0.0	13 Ajaw	18 K'ank'in	7 December 642	NAR Step 5 & XUN Panel 4
- 1.0.0.0				Mon. ?
9.9.10.0.0	2 Ajaw	13 Pop	22 March 623	Mon. ?
+ 3.4.4				NAR Step 8
9.9.13.4.4	9 K'an	2 Sek	29 May 626	NAR Step 8
+ 4.0				Mon. ?
9.9.13.8.4	11 K'an	2 Ch'en	17 August 626	Mon. ?
+ 13.1				NAR Step 7
9.9.14.3.5	12 Chikchan	18 Sip	5 May 627	NAR Step 7
9.9.???.?				Mon. ?
+ 3.???				UCN Misc. 1
9.9.17.11.14	13 Hix	12 Sak	5 October 630	UCN Misc. 1
+ 1.4.9				NAR Step 6
9.9.18.16.3	7 Ak'bal	16 Muwan	28 December 631	NAR Step 6
+ 1.1.17				NAR Step 6
9.10.0.0.0	1 Ajaw	8 K'ayab	28 January 633	NAR Step 6 & ?
9.10.3.2.12	2 Eb	0 Pop	5 March 636	NAR Step 1
+ 1.13.10				NAR Step 10
9.10.4.16.2	8 Ik'	5 K'ank'in	25 November 637	NAR Step 10
+ 14.2				NAR Step 10 & ?
9.10.5.12.4	4 K'an	2 Yax	3 September 638	Mon. ?
+ 1.0				Mon. ?
9.10.5.13.4	11 K'an	2 Sak	23 September 638	XUN Panel 3
+ 1.14.13				XUN Panel 3
9.10.7.9.17	1 Kaban	5 Yaxk'in	7 July 640	XUN Panel 3
+ 2.8.3				XUN Panel 3
9.10.10.0.0	13 Ajaw	18 K'ank'in	7 December 642	[Date Implied]

**Table 2.** Chronological summary of the narrative preserved in the panels that together comprise the hieroglyphic stair discovered at Naranjo, Ucanal, and Xunantunich (using the 584286 GMT+1 correlation coefficient). Portions in gray have not been recovered and are conjectural. Note that the panel from Ucanal has also been designated as Step 13 (see Graham 1978:110).

or refute these speculations, but they provide some additional observations that may help us to understand the original sequencing of the panels that comprised the hieroglyphic stair.

Unlike the previously discovered Panel 3, where the glyphic text was divided between two medallions but bore three separate clauses each headed by a Calendar Round, the text of Panel 4 records but one lengthy clause even though it spans two medallions. That being said, the lengthy clause can be divided into two principal sentences or clauses, the latter a subordinate phrase consisting of paired secondary clauses, elaborating on the event of the initial primary clause. Thus the syntactical structure of the text presented on Panel 4 exhibits a high degree of structurality, bespeaking the use of poetic language. We will explore each of these clauses in turn.

*Primary Clause*

If the 18 K'an' in date that initiates the first medallion (pA1) was not enough to anchor its place in the larger Long Count, the second glyph block (pB1) confirms that the date is a lahuntun period ending (Figure 11). As we have already touched upon above, a lahuntun period ending means that the turning point of a particular Long Count date exhibits a major fraction at the level of the "years," representing half of a k'atun. This glyph block immediately follows the Calendar Round and is, as is to be expected by syntax, verbal in function. This expression is written u-[TAN]LAM-wa for *u-tahn-lam-aw*, involving the locative term *tahn* "middle, center," which is adverbial to the transitive verbal root *lam* that has a broad semantic domain. Reflexes in modern Mayan languages include *läm* in Ch'ol, which is glossed as "diminish," describing among other things the way in which candles burn, while the cognate *lam* in Yukatek is the verb "sink" (Wichmann 2004:329). From these entries we propose that the Classic Maya semantic domain was akin to "diminish, elapse." As such, the expression refers to a period of time that is "half-elapsed," and this is used especially for half-k'atun intervals as is the case here (although half-bak'tun intervals and relative time spans are also known; see Thompson 1950:192-193). The derivation of the verbal expression here deserves some additional comments, since the use of a third person pronoun prefix is rather rare. This implies that we may be looking at the active voice, wherein the *u-* pronoun marks the subject and the *-aw* suffix represents the active transitive inflection (see Lacadena 2010a:37). The direct object is suppressed since the remainder of the clause that follows names the subject, the agent of the action, who is responsible for the event.

The remainder of the medallion is given over to three separate head variant or portrait glyphs, split over two

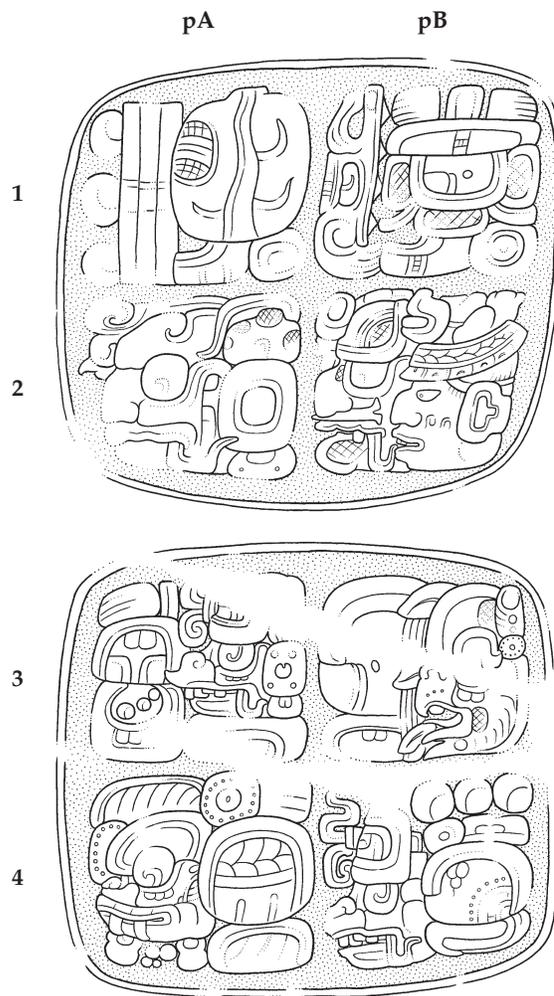
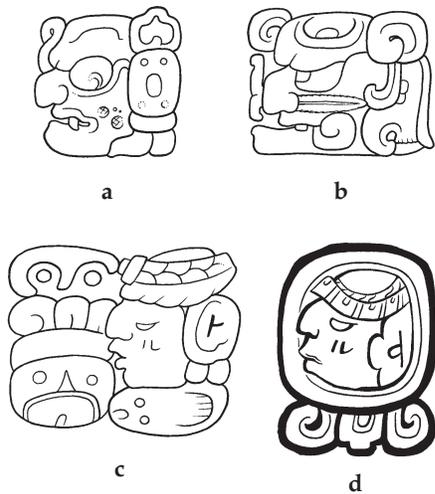


Figure 11. The glyphic medallions of Panel 4 discovered at Xunantunich (drawing by Christophe Helmke).

glyph blocks (pA2-pB2). The first (pA2) represents the profile of an aged male, as is made clear by the sunken gums and the wavy mouth. His profile with prominent Roman nose, swoop of hair at the scalloped brow, as well as the ear of the spotted feline, imply that this an anthropomorphic figure with jaguar traits. It is the pairing of this profile with the one that follows (pB2a) that clarifies their identity. This second figure is once more that of an aged male, his sunken gums, solitary molar, and wavy lips betraying his advanced age. As we have remarked concerning the paleography above, the chin is also embellished with a crosshatched patch (a feature shared with G9 the Lord of Night on Step 5; see Figure 8f). On Panel 4 this aged figure appears to have a mirror or shining element embedded in his forehead, but it is the stingray spine that perforates the septum of his hooked nose that secures his identity. Together it is clear that the aged deities are the so-called Paddler Deities, and other examples in the glyphic corpus confirm that



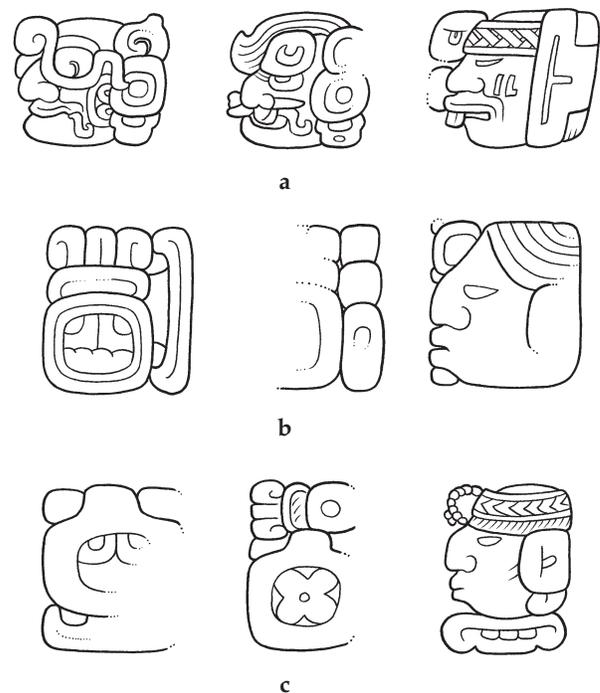
**Figure 12.** Examples of the aged deities known as the Paddlers: (a) Jaguar Paddler and (b) Stingray Paddler; Quirigua Stela C. (c) Use of the head-variant of the youthful deity as the logogram **IK'** in a death expression; fallen stucco, Temple 18 at Palenque. (d) The same deity as the head-variant of the day sign **Ik'** in the Tzolk'in calendar; south panel, Temple 19 Platform, Palenque. Drawings by Christophe Helmke.

the order in which they appear is consistent and duplicates that of Panel 4, with the Jaguar Paddler appearing first and the Stingray Paddler appearing last (Helmke 2012a:89-95) (Figure 12a-b).

It is from iconographic depictions that the order is made evident, since the Jaguar Paddler is always depicted at the bow of a large dugout canoe, whereas the Stingray Paddler is shown as the stern of the same vessel (Mathews [1981]2001:Fig. 40.4; Schele and Miller 1986:52, 270-271; Freidel et al. 1993:89-92; Stone and Zender 2011:50-51). From these scenes we can see that the paddlers ferried the deceased Maize god, their canoe eventually sinking into the watery underworld, bringing about the “water-entry” that is at the heart of a euphemism for death in Classic Maya language (Lounsbury 1974; Schele 1980:116-117, 350; Stuart 1998:388). In the glyphic texts of the Classic period, however, the paddlers do not appear in their legendary capacity, but as the patrons or as the deities that are responsible for a particular set of ritual events (Stuart 2016). These deities are said to be present and to watch over certain rituals, such as the accession referred to on Stela 8 at Dos Pilas, as well as the period endings recorded on Monument 110 at Tonina and Altar 1 at Ixlu (Mathews [1981]2001:399, Fig. 40.4; Stuart 2016). It is precisely in the same capacity that these two deities appear in the text of Panel 4, as the patrons of the lahuntun period ending and, remembering the syntax of the clause, as the subjects of the verb, the ones that

ensure that the *k'atun* is half-elapsed.

However, in addition to the Paddlers, there is one further figure. This third entity is represented by yet another profile (pB2b) and has a very distinctive aquiline nose and a prominent headdress partially made of woven material, surmounted by what may be a waft of hair wrapped in cloth. The Tau-shaped ear adornment represents what can be called a “wind jewel” and is known from archaeological counterparts as a type of adornment made of greenstone (e.g., Borrero et al. 2016) and as a type of earflare worn by a youthful deity sometimes referred to as God H (Taube 1992:57-58, 2004:73-74). Based on the studies of Karl Taube, we can see that this supernatural entity has connotations of wind but is mostly tied to notions of fragrance and music in mythological events involving aqueous environments. In one important case, the head of this divinity is used as the logogram **IK'**, “wind,” amid the fallen stuccos of Temple 18 at Palenque (Schele and Mathews 1979:Note 398; Zender 2007), in a poorly understood euphemistic expression for death, perhaps describing one’s final breath (see Kettunen 2005; Lacadena 2010b:75-76) (Figure 12c). In addition, the head variant of the day sign **Ik'** in the Tzolk'in calendar is the profile of precisely this divinity (Figure 12d). As such this deity was perhaps an analogous Maya entity to the better known Xochipilli of



**Figure 13.** The grouping of the Paddler Deities with the young wind deity in Classic Maya texts: (a) Tikal Stela 31; (b) Piedras Negras Stela 3; (c) Piedras Negras Stela 12 (drawings by Christophe Helmke, after Stuart 2016:Fig. 6).

<b>Transliteration:</b>	<b>ma-cha-ja</b> (pA3a) <b>K'AWIL-{li}</b> (pA3b) <b>TAN-na</b> (pB3a) <b>CH'EN?</b> (pB3b) <b>ka-KAN-la</b> (pA4a) <b>PAT-{li}</b> (pA4b) <b>K'AWIL</b> (pB4a) <b>3-TE'-TUN-ni</b> (pB4b)
<b>Transcription:</b>	<i>machaj k'awil[i]l ta[h]n ch'e[en] kan[u']l pa[h]t[aa]l k'awi[i]l [ta] uxte'tuun</i>

**Table 3.** Transcription and translation of second medalion.

the Postclassic Aztec, a divinity of music, song, poetry, and flowers, celebrated somewhat paradoxically by wearing the skin of flayed victims (Miller and Taube 1993:190). Importantly, despite the “wind jewel” worn by the Maya deity and the clear associations with wind and breath, the name of this deity appears to have been something other than “wind” since there are clear examples wherein his name seems to be phonetically complemented by **-na**, as seen for instance on Piedras Negras Stela 12 (Stuart 2016). As such, whereas we have some ideas pertaining to this divinity, the particulars of his identity elude us at present.<sup>3</sup>

What this youthful deity is doing on Panel 4 is unclear, but other examples are attested where the more common paddler pair are accompanied by the same youthful deity. Salient examples include Tikal Stela 31 (dated to AD 445), as well as Piedras Negras Stela 3 (dated to AD 711) and Stela 12 (dated to AD 795) (Stuart 2016) (Figure 13). In these examples, the three deities are present at important period-ending rituals, including the k'atun period ending of 9.14.0.0.0 (Piedras Negras Stela 3), the lahuntun of 9.0.10.0.0 (Tikal Stela 31), as well as the hotun of 9.18.5.0.0 (Piedras Negras Stela 12). It is therefore evident that the particular type of period ending does not condition their presence, but the types of rituals commemorated at such period endings in general. As such, the same type of supernatural agency is also commemorated on Panel 4. Conjecturally, although it may be tempting to regard these three deities as a type of triad of patron deities—as are known for other sites (see Stuart et al. 1999:57-61; Helmke 2012a:85-89)—it may be that the youthful deity was thought to oppose and contrast to the aged paddlers, these latter perhaps conceived of more as a unified dualistic set (see Velásquez García 2010) rather than as a dyad per se. If this is the case, then a set of aged deities tied to dark and watery environments and a youthful deity associated with the pleasant aspects of fragrant and melodic air may serve as complementary oppositions known to have a privileged place in

Maya ritual language and theological reasoning (see Hull 2003; Stuart 2003). Thus, more than just the divine agents of temporal events, perhaps these represent the proper perdurance of time.

### Secondary Clause

With the close of the primary clause in the first medalion, we are provided with another phrase in the second medallion (Figure 11). This secondary clause is divided into two subclauses, and since these are best understood as a set we present them together. The transliteration and transcription of the second medallion is seen in Table 3.

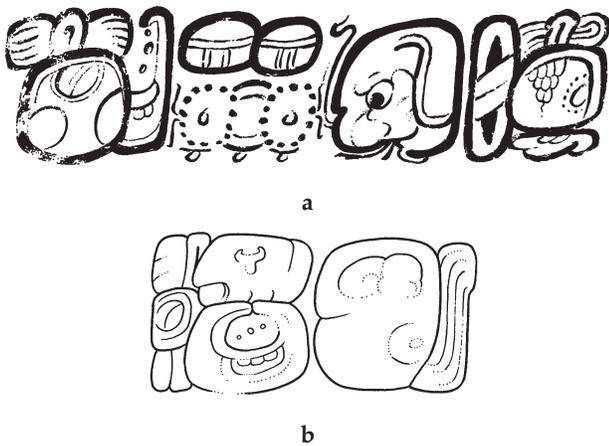
Together this segment can be analyzed in couplet fashion as a paired set of appositions, wherein each can be divided into three segments, a head, medial segment, and closure:

<b>Head</b>	<b>Medial</b>	<b>Closure</b>
<i>machaj</i>	<i>k'awilil</i>	<i>tahn ch'een kanu'l</i>
<i>pahtaal</i>	<i>k'awiil</i>	<i>ta uxte'tuun</i>

In this pair of noun phrases the medial segment is repeated and therefore serves as the syntactical pivot, the subject of these clauses. The head consists of two qualifiers to the subject, which involve derived verbal roots. Together the head and medial segments constitute the predicate of each clause. Thus we can see that these subclauses together exhibit some degree of parallelism as a rhetorical device. The closing segments in both cases are essentially prepositional subclauses involving toponyms or place names, although the first involves a spatial term (*tahn*) rather than a more typical preposition (*ti* or *ta*) and the second does not provide a preposition, requiring the reader to reconstruct it (probably *ta*). The suppression of prepositions in Maya writing is something that has been recognized for some time and is an integral part of both the writing system and the language, since these can be elided by the speaker if the context is deemed sufficiently clear (Stuart and Houston 1994:13-17; see also Soledad López Oliva 2012).

The first head is *machaj* (pA3a), which can be segmented as *mach-aj*. In some earlier studies the sequence **ma-cha-ja** was thought to record the passive inflection of a transitive verb *mach* “to take, remove with the hand,”

<sup>3</sup> In this connection it may be relevant to remark that this divinity also serves as the patron of the number three, since there are at times partial correspondences between such head variants and the numbers that they personify (see Thompson 1950:Fig. 24; Taube 1992:Fig.26c-d).



**Figure 14.** Examples of the expression *ma-cha-ja* in Classic Maya texts: (a) detail of K1389, providing part of the caption of the Sun God; (b) detail of a clause of the East Tablet (M3-N3), Temple of the Inscriptions, Palenque (drawings by Christophe Helmke).

such as in the mythic tale recounted on the so-called Regal Rabbit Vase (K1398) (see Stuart 1993; Helmke 2012b:179-184). On this vase—originally belonging to K’ahk’ Tiliw Chan Chaahk, thirty-eighth king of Naranjo (r. AD 693-728+)—we see a rabbit stealing the regalia of the underworld deity God L. Humiliated, the near-naked God L pleads his case to the Sun God (God G) and inquires as to the location of his regalia and the rabbit. It is in the Sun God’s reply that we see *ma-cha-ja* ... *T’UL ta-hi-na*—involving a segment that qualifies the rabbit in a derogatory manner (Figure 14a)—which could mean that “the ... rabbit has been taken from me” (Beliaev and Davletshin 2006:25-26, 39 n. 38), although an alternate interpretation would see the initial segment as part of a negation, as in “there is no ... rabbit with me” (e.g., Hull et al. 2009:39, Fig. 4). In another example, in the East Panel of the Temple of the Inscriptions at Palenque, we see the lament of a calendrical station that has gone uncelebrated by Ajen Yohl Mat in AD 606 as a result of wars and the turbulent times of his reign (Guenter 2007:17; Skidmore 2010:61). Thus, in this context we read *machaj chum-tuun* (Figure 14b), and here the most cogent and literal translation is “there is no stone-seating” in the sense that this date was not celebrated by a calendrical observance. Based on these examples we can see that it is best to analyze *machaj* as a negation, although as one that supplements the more common negative particle *ma’*, which is widespread in lowland Maya languages (Kaufman 2003:1531). Whereas the function of *machaj* as a negation is now clear, its etymology is perhaps less apparent. It is evidently polymorphemic, and it could still be that it involves *mach*, possibly the transitive verbal root “to take, remove,” or the adverb “not,” here suffixed by *-aj* as an archaic nominalizer. Relevant to this analysis is the

proto-Ch’olan reconstruction of *\*mach* ‘negative particle’ (Kaufman and Norman 1984:139), as well as Ch’ol *mach* ‘negation’ (Aulie and Aulie 1978:77), Chontal *mach* “no” (Keller and Luciano 1997:153), and the significant studies of negation constructions in Chontal (Knowles-Berry 1987 and Tandet 2013).<sup>4</sup>

Returning to Panel 4, we can thus see that the initial subclause is headed by a negation, meaning that the subject named in the medial portion is not present at the location indicated in the closure. The subject here is written with the profile of the deity K’awiil (God K), which interestingly is followed by a weathered syllabogram *li* (pA3b). The latter is undoubtedly a derivational suffix *-il* that marks abstractivization (see Houston et al. 2001:7-9; Lacadena and Wichmann n.d.:15), duplicating the example seen on Lintel 25 at Yaxchilan, where we see *K’AWIL[wi]-la-li*. The spellings on Panel 4 as well as at Yaxchilan probably provide a means of broadening the semantic domain and speaking of a wider concept tied to this lexeme. As such, the term here does not function as a theonym although it is introduced in writing by means of rebus, since the profile represents the head of a deity by that name. In some of the original discussions pertaining to the meaning of the term *k’awiil*, Linda Schele and her colleagues (Freidel et al. 1993:444, n. 45) remarked also on the Poqom entry *<ih cam cavil>* “one who carries the figures of the gods,” which implies that the lexeme can also refer to a tangible “idol, statue, deity effigy.” Based on this interpretation one could understand the first subclause to relate that “there is no god effigy” at the location mentioned in the closure. However, in addition to the more tangible definition of *k’awiil*, we can entertain the more abstract meaning of “authority” as in political power, as suggested by David Stuart (personal communication 2016), which may also explain the abstractivization suffix. Indeed, so-called Manikin scepters depicting this deity in diminutive form and the bicephalic ceremonial bars portraying this supernatural entity serve as the very instruments of power, marking those who wield them as kings and incumbents of authority (Valencia Rivera 2015:399-415). This may also help to explain the many examples of rituals wherein *k’awiil* is said to be conjured, perhaps as a means of reifying royal authority (see Stuart et al. 1999:51-52; Valencia Rivera and García Barrios 2010; Valencia Rivera 2015:160-189), and also why certain investiture ceremonies were called *ch’am-k’awiil*, or “*k’awiil*-grasping.” In a very literal sense this evidently refers to the taking of the Manikin scepter as part of the royal accession ceremony, but on a more intangible level

<sup>4</sup> The latter studies also report on forms that may be reflexes of Classic Mayan, such as *mach-a* for NEG-PRFV, wherein the *-a* suffix marks the perfective (Knowles-Berry 1987:338, 344-345; Tandet 2013:36, 43).

it can thus be best understood as the acquisition or the taking of authority (see Stuart 2005:277-278). Although this verb is seen elsewhere in the glyphic corpus (see Schele 1980:196, 307), this particular type of accession ceremony was of paramount importance to the Snake-head dynasty, to judge from the Dynastic King lists represented on a series of elegant Codex-style vases, where they unfailingly make use of this one verb (Martin 1997:855-856) (Figure 15). Accordingly, the first subclause informs us that there is no political authority at the location mentioned in the closure.

The toponym that together comprises the closure can be read as *tahn ch'een kanu'l* (pB3-pA4a), or literally "the middle of the Kanu'l cave." As we touched upon above, *tahn* functions as the spatial term, or locative expression "middle" specifying that we are talking about the very heart of a particular location. The term *ch'een* "cave" is here written with its owl head variant, including its distinctive feathered ear and the diagnostic trilobate eye (see Helmke 2009:544-552). The reading of this glyph was first proposed by David Stuart (see Vogt and Stuart 2005) although its logographic value remains hypothetical in the absence of clear phonetic substitution sets. In addition, the exact meaning of the term remains a matter of discussion since it both literally refers to cavernous sites but also to "settlement" or even "polity capital" by means of simile (Grube and Martin 2004:122-123), based in part on the Mesoamerican practice of ascribing caves to the sacred landscape of urban centers (see Brady 1997) and the use of metaphors for higher order sociopolitical units.

The final term is here written **ka-KAN-la**, and whereas there has been some uncertainty concerning the reading of this sequence, based on a substitution set providing the spelling **ka-nu-la** (on ceramic vessel K1901) it seems clear that the whole should be read *kanu'l*, involving the suffix *-u'l* marking a place where something abounds (see Lacadena and Wichmann n.d.:21-27; Helmke and Kupprat 2016:41-43). Thus *kan-u'l*, with its inclusion of the archaic term *kan* "snake," can be translated as "place where snakes abound." Although clearly a toponym, it served as the basis for and was eventually absorbed into the emblem glyph, or dynastic title (see Figure 15), of the royal house that eventually took Calakmul as its capital during the Late Classic (Velásquez García 2004, 2008a, 2008b; Martin 2005). It is because of the uncertainties in the reading of the toponym involved in this emblem glyph that researchers have also opted for the more descriptive designation of Snake-head dynasty (Marcus 1973:912, 1987:173-176; Martin 1997:856). However, on Panel 4 we do not have an emblem glyph, but a plain reference to the toponym, tied to the place of origin of the Snake-head or Kanu'l dynasty.<sup>5</sup> This is all the more noteworthy since the reference on Panel 4 may be the first example wherein Kanu'l is used as a place name of historic significance that is framed by contemporary events. This is all the more significant considering that all other examples of Kanu'l as a toponym refer to this locality as a supernatural place (Helmke and Kupprat 2016:43-44).

Regardless of the degree of literalness or figurativeness adopted in any given translation, we can see a great deal of overlap in emic thinking concerning both settlements and caves (Stone and Zender 2011:132-133), meaning that the term *ch'een* may embrace all these concepts within its semantic domain. There is in fact supportive evidence for both interpretations. For one, we now know that Kanu'l was the name ascribed to a mythic cave where the Maize god is said to have been decapitated and eventually resurrected, a sacred

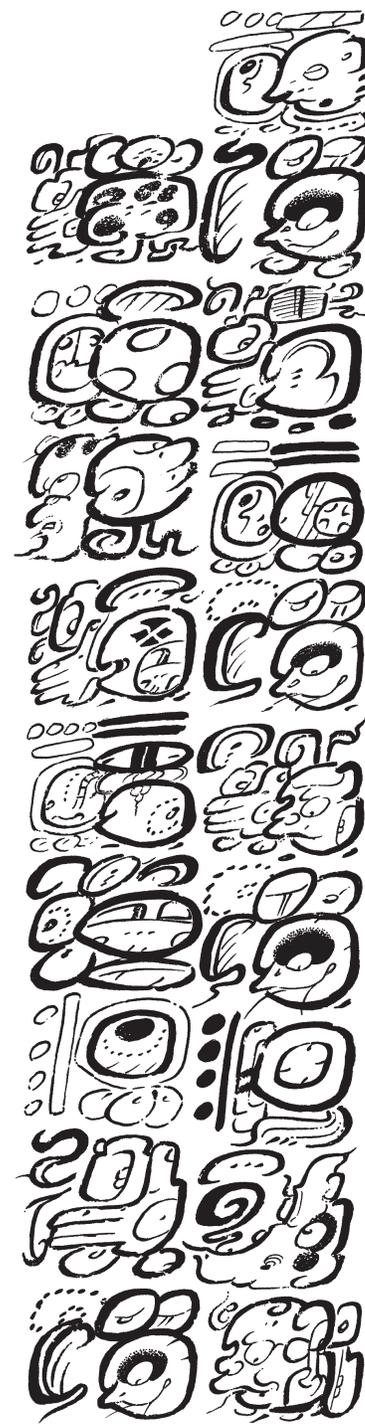


Figure 15. Excerpt of the king list presented on the longest known Dynastic Vase (K6751), showing extensive use of the verb *ch'am-k'awiil* as the accession statement for a series of different monarchs, including ones named Yuhkno'm Yich'aak K'ahk', Tajo'm UK'ab K'ahk', 'Sky Witness,' Yuhkno'm Ti' Chan, and 'Scroll Serpent' (drawing by Christophe Helmke).

<sup>5</sup> The Classic Maya term *Kanu'l* also has clear echoes with the Postclassic group known as the <Canul> that dominated the northwestern part of the Yucatan peninsula (Roys 1957:12; Barrera Vásquez 1980:299). While it is unclear if there is any relation between the Postclassic group and the dynasty of the Classic, tellingly both appear to have the /u/ vowel in the suffix.

site of paramount importance to the dynasty bearing this same name (Helmke and Kupprat 2016:57-63). In effect, the dynasty that bore the name may even have regarded such a cave as their primordial place of origin and emergence, considering the many Mesoamerican and Native American precedents for such ethnogenesis mythology (see Helmke and Kupprat 2016:57). For another, Kanu'l may well have been the original toponym of Dzibanche, the erstwhile capital of the Snake-head dynasty (Simon Martin personal communication 2009; Martin and Velásquez García 2016, see pp. 23–33 in this issue). Whether the name of the latter was derived from the mythic precedent, or whether there was an actual cave in the area that was deemed to be this place of origin and ultimately gave the settlement its name, is unknown. Irrespective of the ambiguities, this first subclause makes it clear that Kanu'l, the place of origin of the Snake-head dynasty, was entirely devoid of political authority in AD 642, when the lahuntun period ending was celebrated.

This leads us to the second subclause of the couplet, which is headed by the logogram **PAT** and subfixed by a very eroded **li** syllabogram (pA4b).<sup>6</sup> This glyphic compound provides the head of the second subclause and involves the verbal root *pat* “to shape, fashion, form, make, build” (Stuart 1998:381-384). This verbal root is used especially with regard to the production of objects made of clay and other plastic substances, but also refers to the construction of masonry buildings. The use of this verb, in connection with *k'awiil* as the second subject (pB4a), does suggest the possibility that both appositions speak of the absence of ritual statuary at one location and its production at another. It may well be that these clauses are functioning on both literal and abstract levels, on the one hand conveying the pivotal role of god effigies as a means of imbuing and sanctifying royal power in a given location; on the other it is clear that the presence or absence of political authority is the thrust of these clauses. On Panel 4, however, the verbal root **PAT** is followed by the syllabogram **li**, indicating that we are not just looking at a verbal form but a derived one. The final syllabogram **li** may prompt the derivational suffix *-aal*, which derives nouns as an instantiation of the former noun (Lacadena 2010a:37). Thus, a possible analysis is *paht-aal*, wherein the postvocalic /h/ serves to nominalize the verbal root *pat* as the noun *paht* “something that is formed, shaped, made.” Together *paht-aal* forms a specific referent that is made, shaped, or formed, thereby narrowing the original semantic domain of the root, although without any clear reflexes in Colonial or modern Mayan languages it is difficult to pin down the intended meaning.<sup>7</sup> In any case, it is clear that the second subclause refers to *k'awiil*, be it an effigy that is very much tangible or political authority that is decidedly manifest.<sup>8</sup> The second subclause may not provide

a direct antithesis of the former subclause, but certainly sets it in contrast, pointing out the divergence of states in the two places. Thus, the elegant couplet recorded in the second medallion can be said to reflect antithetical parallelism, wherein the two initial segments are reversed to more effectively convey the core meaning framed by two semantic margins (see O'Connor 1980:50; Jakobson 1987:126, 220). A more narrow definition of parallelism sees it as a rhetorical device wherein the initial segment of each clause is resolutely repeated to create the desired effect (Lacadena 2010b; Lacadena and Hull 2012:19-22). Using this definition, the paired phrases in Medallion 2 can better be said to form neatly contrasting couplets (Bright 1990:438) but do not exhibit parallelism as such.

The details of these literary devices aside, the second locality, which closes the text of Panel 4, can be read without difficulty as *Uxte'tuun* (pB4b). This place name can be translated as “three stones,” involving the numeral classifier *-te'* after the numeral *ux*, “three” and preceding the noun *tuun*, “stone.” This place name was first identified as one associated with Calakmul by David Stuart and Stephen Houston (1994:28-29) in their seminal work on Classic Maya toponyms. Based on subsequent work it is now clear that this place name is one that designates the site of Calakmul and its immediate environs (Martin 1997:852; see also Martin and Grube 2000:104). As such, in stark contrast to the first, the second subclause informs us that political authority is well established at Calakmul in AD 642. Together these two subclauses, although embedded in ritual language and poetic constructions, convey bold statements of the waning and waxing of power at two different locations. Thus these clauses provide, in emic terms, an articulate description of the dynastic re-establishment of the Snake-head dynasty from its original seat of power to Calakmul, a process that was evidently thought to be completed by the lahuntun period ending of 9.10.10.0.0.

<sup>6</sup> Despite the erosion, detailed inspection of the monument under raking light, coupled with examinations of the 3D scans, makes it clear that the final sign below **PAT** is the syllabogram **li** (T24). The form of this sign also agrees with similar allographs on Step 1 (B2b) and Step 5 (N2a).

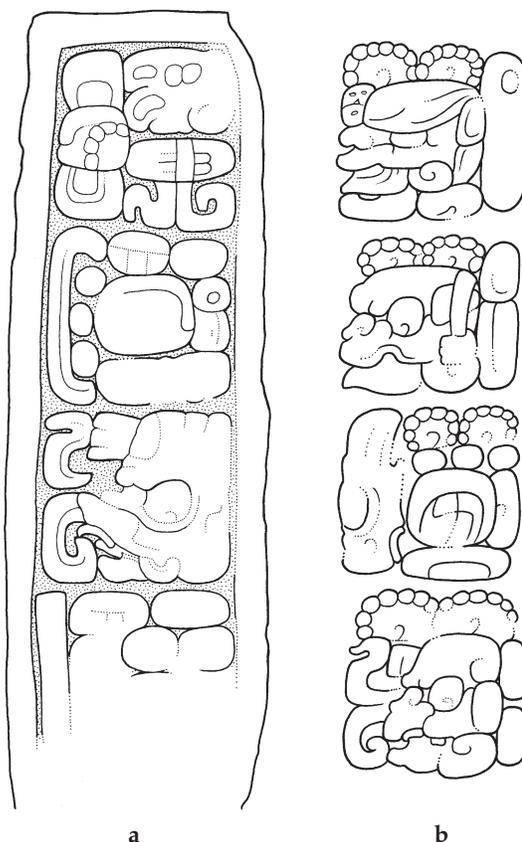
<sup>7</sup> An alternate analysis would see **PAT-li** realized as *pat-aal*, wherein we see a *-VV,l* suffix that marks attributive adverbial derivation, also seen on other verbs (Alfonso Lacadena, personal communication 2016). A possible translation would be “it is formed/made the *k'awiil*.”

<sup>8</sup> Fascinatingly, almost the same type of construction is seen in the stucco text adorning Str. 5D-141 at Tikal (David Stuart, personal communication 2016; see Schele and Mathews 1998:79, Fig. 2.20). Part of this text can be transliterated as **PAT-li-ya K'AWIL-la** and transcribed as *paht-aal-iiy k'awiil*, duplicating the head and the medial segment of this clause. Interestingly, the place that closes the segment is none other than Chatahn, a toponym that is closely connected with early history of Calakmul. Thus, the event cited on the stucco at Tikal may also refer to a type of dynastic founding.

### Discussion and Concluding Remarks

The text recorded on Panel 4 is remarkable for filling in the start of the narrative that graced the hieroglyphic stair of K'an II, but especially also for the poetic and ritual language that is employed to convey what we might call historical information. The overall construction of Panel 4 has some broad similarities to texts from other sites, and the use of the term *k'awiil* and the concepts that it embodies are of particular significance when compared to the language employed in the texts of the Snake-head dynasty.

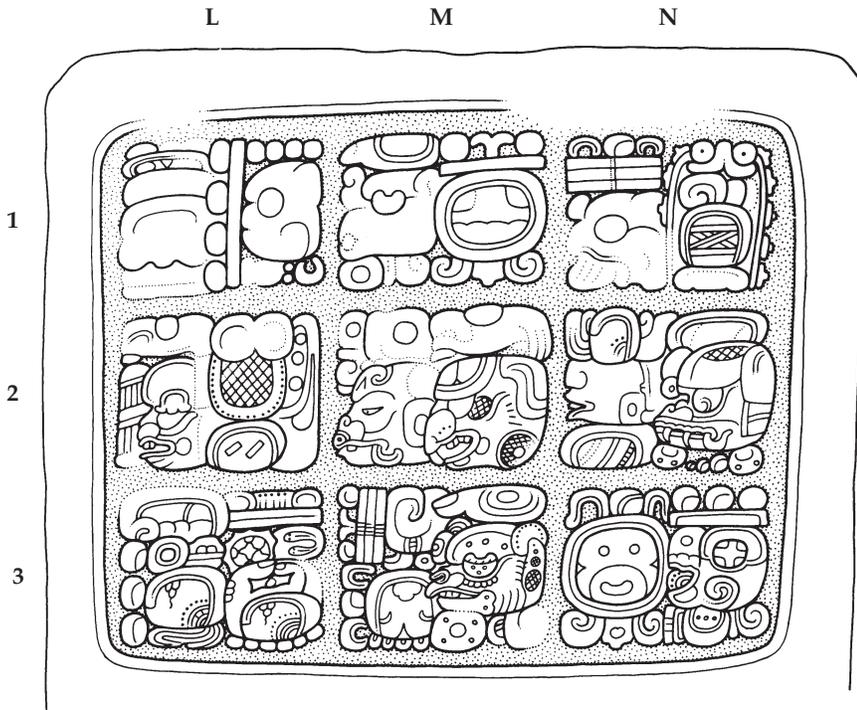
The use of the term *k'awiil* in the appositions of Panel 4 is remarkable since it anticipates a phraseology that is seen in later monuments at Calakmul. As observed by Simon Martin (2005:8), the term is seen in dynastic counts, especially in the texts of Stelae 52, 89, and 115. In these passages the names of Calakmul kings are closed with dynastic count titles, specifying their place in the dynastic sequence. From these texts we can see that Yuhkno'm Yich'aak K'ahk' (r. AD 686–697<sup>6</sup>) is listed as the successor of Yuhkno'm Ch'een II (r. AD 636–686) (Stela 115) (Figure 16a) and that Yuhkno'm Took' K'awiil (r. c. AD 702–731+) is listed as the third successor (on both Stelae 52 and 89). From this it follows that Yuhkno'm Yich'aak K'ahk' must have been considered the second successor and that Yuhkno'm Ch'een II was deemed the dynastic founder of the Late Classic Snake-head dynasty. Significantly, the term *k'awiil* follows each of the dynastic counts, although a clear explanation for this appearance has been wanting. Thus, for instance, Yuhkno'm Took' K'awiil is said to be *u-ux tz'akbuil k'awiil*, or “the third successor [of/in] *k'awiil*” (see Martin 2005:Fig. 4b-c; Stuart 2011:Fig. 2) (Figure 16b). Now, with the text of Xunantunich Panel 4 we are in a better position to tackle the wording presented in the decades to follow in the monuments at Calakmul. As we have seen, possible interpretations of the term *k'awiil* include both a literal sense of “effigy” but also a more figurative meaning of “authority” as in political power. As such, the dynastic counts are probably best understood as monarchs that are successors of the original political authority, established and reified in the reign of Yuhkno'm Ch'een II. The use of the term *k'awiil* in these texts therefore has very little to do with a theonym but quite to the contrary with more abstract conceptions of political ideology, interwoven with conceptions of divinities as personifications of natural forces (see Helmke 2012b:75-79; Valencia Rivera 2015).



**Figure 16.** Examples of dynastic counts at Calakmul involving the term *k'awiil*: (a) detail of Stela 115, side (drawing by Simon Martin, after Martin 2005:Fig. 4a); (b) detail of Stela 52, front (drawing by Christophe Helmke).

With the reign of Yuhkno'm Ch'een II we might wonder why he was considered as the starting point for the new Snake-head dynasty established at Calakmul. One possibility may be that he was the first Snake-head king to accede to power at Calakmul proper, although at present this remains conjectural. This also has to be considered in light of his predecessor, Yuhkno'm 'Head'—who reigned from AD 630 to 636 (Martin and Grube 2008:105, 106)—especially since Step 6 of the hieroglyphic stair found at Naranjo names him as *kanu'l ajaw ta uxt'e'tuun*, “the Kanu'l king, at Uxt'e'tuun” (Figure 17). The use of the toponym Uxt'e'tuun is important here since he is clearly signaled out as being a Snake-head king, but one established at an alternate location, namely Calakmul (Tokovinine 2007:19-21). What remains clear though unspoken is that Snake-head kings were originally established elsewhere. The text of Xunantunich Panel 4 makes it plain that this locality was named Kanu'l and presumably served also to designate the original capital, ostensibly the site of Dzibanche, based on current evidence (see Velásquez García 2004, 2008a,

<sup>6</sup> The 697 date presented here refers to the death of this ruler, as recorded on a recently discovered block (Element 32) of Hieroglyphic Stair 2 at La Corona (see Stuart et al. 2015). The date in question is 9.13.5.15.0 2 Ajaw 3 Pax, or December 18, 697 (using 584286 GMT+1).



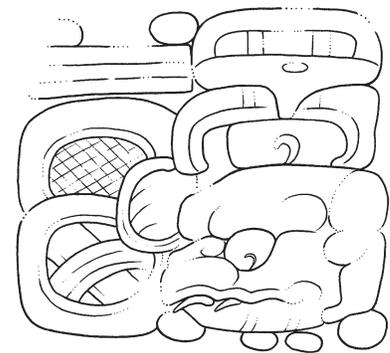
**Figure 17.** Step 6 of the hieroglyphic stair found at Naranjo (after Graham 1978:109; drawing by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.3.30).

2008b; Martin 2005; Martin and Velásquez García 2016).

Relevant to this issue is a passage recorded on Element 33 (Block 5) of Hieroglyphic Stair 2, uncovered at La Corona in 2012, which makes reference to Kanu'1 in April 635 (9.10.2.4.4) (Stuart 2012). Although the subject of the passage is clearly written as **ka-KAN-la** (Figure 18), the remainder is murky at best since it is only partially preserved. For instance, only the latter part of its Calendar Round date is preserved, but it can be reconstructed on the basis of independent texts and later distance numbers (Stuart 2012). In addition, the verb that heads the clause involves an undeciphered logogram (T550) that can be described as representing a stylized drum sign emerging from a cleft. The logogram is followed by a syllabogram **yi**, marking the  $-VV_1y$  suffix that is characteristic of intransitive change-of-state verbs, such as *k'a'-aay*, "expire, wilt," *pul-uuy* "burn," and verbs of motion such as *lok'-ooy* "flee," or *t'ab-aay* "go up, ascend" (Lacadena 2010a:49). As such, whereas we cannot be certain of the meaning of the clause on Element 33, it in all likelihood relates a change-of-state pertaining to, or affecting, Kanu'1, as subject of the sentence. Considering the contexts in which the same verb is found in other texts, frequently coupled with toponyms, David Stuart (2012) has suggested that this serves as a verb referring to the 'foundation' of particular places as dynastic centers. In light of the phrasing of Panel 4 it may be more apt to understand this verb as the establishment of a particular named dynasty at a given location—as Kanu'1 serves both to name the place of origin and the dynasty. As such, the now-missing remainder of the clause on Element 33 may have recorded the name of the place where the dynasty relocated to. These interpretations are in line with the proposal that the Kanu'1 dynasty shifted to Calakmul from Dzibanche during the reign of Yuhkno'm Ch'een II or that of his predecessor (Martin 2005:11-13). The

key passage on Element 33 therefore echoes forcefully that on Panel 4, in relating the refounding of the Snake-head dynasty in the first half of the seventh century.

At first sight the accession of Yuhkno'm Ch'een II, which took place on May 1, 636 (9.10.3.5.10), seems innocuous enough, an ordinary transition from Yuhkno'm 'Head,' whose last mention, just two months earlier the same year, recounts the decisive defeat of Waxaklajuun Ubaah Kan (Helmke and Awe 2016:9-11). Interestingly, this defeat took place less than a year after the apparent 'foundation' event cited in the text of Hieroglyphic Stair 2 at La Corona. As such, upon greater reflection, the timing of the accession may well have been prompted precisely by the defeat of Waxaklajuun Ubaah Kan on March 4, 636 (9.10.3.2.12). The defeat of Waxaklajuun Ubaah Kan is recorded on Step 1 of the hieroglyphic stair, and his eventual demise just four years later is likewise recorded on Xunantunich Panel 3 at the close of the entire narrative (Helmke and Awe 2016:10). This nemesis, this anti-king, thereby loomed large in the narrative recounting the dynastic struggles of the Snake-head kings, and it seems likely that the relocation to Calakmul was caused by conflicting claimants to the throne, each side asserting their rights of succession (Helmke and Awe 2016:11-12). As we have already



**Figure 18.** Detail of Element 33 (Block 5) of La Corona Hieroglyphic Stair 2, referring to a possible "foundation" of Kanu'1 in AD 635 (drawing by Christophe Helmke, after Stuart et al. 2015:Fig. 4).

suggested in connection with Xunantunich Panel 3, from the data at hand it seems that the Snake-head dynasty fissioned sometime after the reign of Tajo'm Uk'ab K'ahk' (r. AD 622–630), with the accession of Waxaklajuun Ubaah Kan contended by Yuhkno'm 'Head.' That the former was the more established, legitimate heir, or at least the first to accede to the throne, is implied by the use of the qualifier *k'uhul*, "godly, divine," in his emblem glyph on Panel 3, whereas Yuhkno'm 'Head' is designated as plain *kanu'l ajaw* on Step 6, without the exalted prefix. While the relationship between these two contenders remains unknown, a likely scenario would see them as agnatic or paternal half-siblings, of the same father, with different mothers. Such a model would see their strife anticipating the lengthier and more dire civil war involving the half-brothers of the Mutu'l dynasty, just two decades later (see Houston 1993; Martin and Grube 2000:42-43, 56-58).

While many queries still remain concerning the fascinating monument of K'an II, the panels discovered at Xunantunich contribute greatly to our understanding of the tumultuous decades of the Snake-head dynasty, shedding light on the pivotal role that they played in the affairs of Caracol and Maya polities generally. Panel 4, which appears to open the entire narrative that once graced the hieroglyphic stair makes a surprising statement right from the onset, clarifying that political authority had once and for all been established at Calakmul. This is a very bold statement and appears as a type of synoptic précis for the entire hieroglyphic stair, perhaps setting the stage and thereby explaining the amount of attention lavished on the Snake-head kings as overlords of Caracol. As such, the deeds of K'an II are recounted, but only to the extent that these could be interwoven with the actions of the Snake-head kings. This is why the hieroglyphic stair is such an important source pertaining to the dynastic affairs of Snake-head kings, since it tracks the rulers of the dynasty from the vantage of a vassal, as if waiting with bated breath to see who would prevail in the final outcome. Thanks to the recent discoveries made at Xunantunich many gaps have now been closed, with Panels 3 and 4 standing as substantive bookends of this great narrative. These monuments bear witness to the fissioning of the Snake-head dynasty and its eventual re-establishment at Calakmul, whence it would go on to control much of Classic Maya politics for the remainder of the seventh century.

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# Polities and Places: Tracing the Toponyms of the Snake Dynasty

SIMON MARTIN

University of Pennsylvania Museum

ERIK VELÁSQUEZ GARCÍA

Universidad Nacional Autónoma de México

One of the more intriguing and important topics to emerge in Maya studies of recent years has been the history of the “Snake” dynasty. Research over the past two decades has identified mentions of its kings across the length and breadth of the lowlands and produced evidence that they were potent political players for almost two centuries, spanning the Early Classic to Late Classic periods.<sup>1</sup> Yet this data has implications that go beyond a single case study and can be used to address issues of general relevance to Classic Maya politics. In this brief paper we use them to further explore the meaning of emblem glyphs and their connection to polities and places.

The significance of emblem glyphs—whether they are indicative of cities, deities, domains, polities, or dynasties—has been debated since their discovery (Berlin 1958). The recognition of their role as the personal epithets of kings based on the title *ajaw* “lord, ruler” (Lounsbury 1973) was the essential first step to comprehension (Mathews and Justeson 1984; Mathews 1991), while the reading of their introductory sign as the adjective *k’uhul* “holy” brought the sacral nature of Classic Maya kingship into plain sight (Ringle 1988). But this left open the question of what the variable main signs at their core represented. Insight here came with the discovery of glyphic toponyms, which demonstrated that a good number of emblems were based on local place names (Stuart and Houston 1994). Yet in other cases place names and emblem main signs differed, and in some instances identical emblems appear at different centers, whether employed sequentially or simultaneously. In still other instances, centers changed their emblems or used more than one at the same time. It is clear, therefore, that although emblems are associated with distinct political entities they could not refer to territories or polities in any direct sense (Houston 1993; Velásquez 2004b, 2008; Martin 2005, 2014; Bíró 2007, 2012; Tokovinine 2008, 2013).<sup>2</sup>

Over time we have come to realize that it is better to understand emblem main signs as the names of dynastic houses derived from genuine or claimed places of origin. They can be divided between autochthonous examples of dynasties that remained in situ, and alloch-

thonous ones that had at some point transferred their capitals or splintered, each faction laying claim to the same title. The landscape of the Classic Maya proves to have been a volatile one, not simply in the dynamic interactions and imbalances of power between polities, but in the way the polities themselves were shaped by historical forces through time.

## Placing Calakmul

The distinctive Snake emblem glyph is expressed in full as **K’UH-ka-KAAN-la-AJAW** or *k’uhul kaanul ajaw* (Figure 1).<sup>3</sup> It first came to scholarly notice as one of the “four capitals” listed on Copan Stela A, a set of cardinaly affiliated emblems that was believed to be a cosmogonic model of political authority (Barthel 1968a, 1968b). Initially lacking a site provenance, it was first linked to Calakmul due to that center’s immense size and the resulting inference of political importance



**Figure 1.** The emblem glyph *k’uhul kaanul ajaw*, La Corona Element 3 (photograph K9055 © Justin Kerr).

<sup>1</sup> See Martin 1993, 1996a, 1996b; Martin and Grube 1994, 1995, 2000.

<sup>2</sup> From what we know of the Late Postclassic polities of Yucatan, Maya notions of territoriality were somewhat looser than those familiar from a Western perspective (see Quezada 1993:38-44). In place of fixed boundaries there was an emphasis on people and their connections to ruling lords, where domains could be discontinuous and interpenetrating. It was only with the coming of the Spanish that fixed municipal boundaries were established for administrative purposes.

<sup>3</sup> There is still uncertainty regarding the vowel of the *-ul* suffix (see main text p. 27). Here *-ul* is favored due to the limited possibility of some parallel to the name of the Late Postclassic polity <Ah Canul> in northeastern Yucatan (Roys 1957:11). Yet, it is also possible that a vowel harmonic principle was at work, making *-al* an equally viable option.

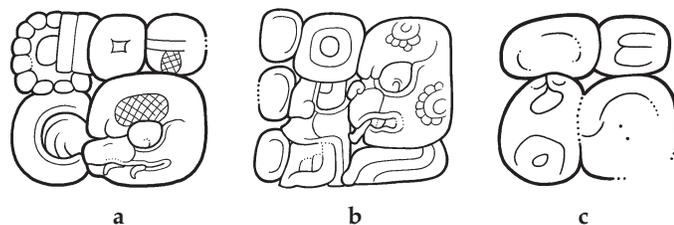
(Marcus 1973:913). Even so, continuing uncertainty kept a question mark attached to the attribution well into the 1990s and led many scholars to prefer the non-committal label of “Site Q” (see Schuster 1997).<sup>4</sup> In 1990, David Stuart and Stephen Houston (1994:28-29) released their work on glyphic place names, identifying 3-TE’-



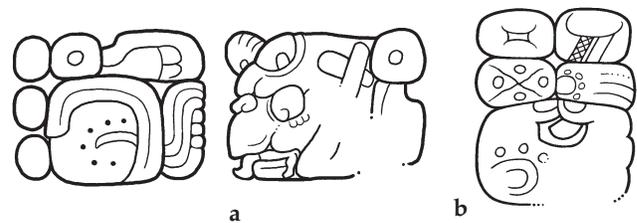
**Figure 2.** The toponyms *uxte’tuun* and *chiiknahb*, La Corona Element 13, p14 (formerly Site Q Ballplayer Panel 1) (photograph K2882 © Justin Kerr).

**TUUN-ni** *uxte’tuun* “Three Stones” and **chi[ku]-NAHB** *chiiknahb* “? Lake/Pool” as two locations where Snake rulers conducted ritual and political acts (Figure 2).<sup>5</sup> A prime example was to be found on Dos Pilas Panel 7, where the accession of the Snake king Yuknoom Yich’aak K’ahk’ is followed by the statement *uhtiiy chiiknahb* “it happened (at) Chiiknahb.” Finding examples of *uxte’tuun* and *chiiknahb* on Calakmul Stela 89 (D5) and Calakmul Stela 51 (B3b), respectively, led Stuart and Houston, with appropriate cautions, to support the Calakmul candidacy. Beginning its work in 1993, the large-scale INAH excavations of the Proyecto Arqueológico de Calakmul, directed by Ramón Carrasco, quickly uncovered buried inscriptions whose preservation far surpassed that of the site’s standing monuments, whose poor local limestone has weathered so badly that most are all but illegible. These discoveries, together with close study of the eroded stones, produced a body of unambiguous emblem glyphs and further examples of the two toponyms (Martin 1996a, 1996b) (Figure 3).

In addition to their use as locations in a direct sense, both place names appear in titular forms that were occasionally used in place of the emblem glyph. *Uxte’tuun kaloomte’* is one of very few epithets that incorporate the undeciphered but exalted *kaloomte’* status, while *chiiknahb ajaw* takes the standard royal title of *ajaw* “lord” in the manner of a minor emblem glyph (Looper 1999:270; Martin 2005:10-11, 2008) (Figure 4). Interestingly, these titles have a long history at

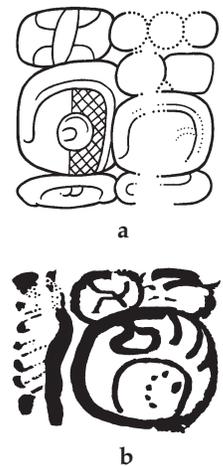


**Figure 3.** Emblem glyph and toponyms at Calakmul: (a) Calakmul Element 39, pB2; (b) Calakmul Element 37, B2; (c) Calakmul Element 24, A3 (drawings by Simon Martin).



**Figure 4.** Calakmul toponyms as the basis of personal titles: (a) *Uxte’tuun kaloomte’* on Cancuen Panel 1, D8-C9; (b) *Chiiknahb ajaw* on Calakmul Element 30, A2 (drawings by Simon Martin).

Calakmul and are first associated with its rulers during the Early Classic Period, an era in which a different emblem glyph is attested at the site (Martin 2005:10-11, Fig. 8, 2008). There are also differences in the ways the two names are described. *Uxte’tuun* is identified as a *ch’een* (a locative category we will return to momentarily) in the statement **ta-CH’EEN-na-3-TE’-TUUN-ni** (Figure 5a), but thus far *chiiknahb* lacks this designation. In a similar vein, whereas *chiiknahb* appears in the associative form **AJ-chi[ku]-NAHB aj chiiknahb** “Chiiknahb Person” (Figure 5b), *uxte’tuun* never features in such a construction.



**Figure 5.** (a) *Ta ch’een uxte’tuun* on Calakmul Stela 54, A15; (b) *Aj chiiknahb* on a Calakmul cache plate (drawings by Simon Martin).

This takes us to the thorny issue of the type and scale of each location. Figure 2 shows them as a pair, yet any assumption that their order encodes a hierarchy of size or importance is thoroughly undermined by other toponymic pairings, which we know can be reversed at will (Tokovinine

<sup>4</sup> The first epigraphic link between the Snake dynasty and Calakmul was made by Mathews (1979), who identified the birth-date of Yuknoom Yich’aak K’ahk’ on Calakmul Stela 9. The same set of notes gathered all monuments that carried the Snake emblem, together with those related to them, under the collective label “Site Q.” Marcus (1987:171-177, Fig. 65) identified several possible emblem glyphs on Calakmul monuments of which one, on Stela 51 (D2) in the Museo Nacional de Antropología, Mexico City, would prove to be correct. It consists of an open-jawed snakehead within which is set the name of Yuknoom Took’ K’awiil (Martin 1996a). The cautious “Calakmul(?)” attribution would continue to be used until the mid-1990s (e.g., Marcus 1993:149, 152; Stuart and Houston 1994:28).

<sup>5</sup> The second of these toponyms was initially read as *nab tunich*, but a spelling of **chi-ku-NAHB** on Calakmul Element 24, A3, established that it is better read as *chiiknahb* (Martin 1996a, 1997:852) (Figure 3c). The word *chiik/chihk/chik/chiku* has several possible meanings—the last mentioned is “coati”—and it is not clear which is the correct one in this context.

2013:13). It is thought that *uxte'tuun* appears on three of the badly eroded monuments at Oxpemul (Grube 2005:95-99, 2008:203-211), a neighbor of Calakmul that entered its monument-carving prime only when the *kaanul* dynasty was in steep decline (Martin 2005:12).<sup>6</sup> If so, it would suggest that *uxte'tuun* is the larger in extent and a regional descriptive of some kind. This would be among the reasons to see *chiiknahb* as a better contender for the core of Calakmul itself. This assessment is made marginally more likely by a wall mural, depicting a verdant aquatic environment, uncovered in the northern portion of the site center (Carrasco Vargas and Colón González 2005:44-45). Each of the large hieroglyphs set at regular intervals along its length read *chiiknahb kot* "Chiiknahb Wall," self-identifying the scene as a symbolic representation of this locale, which could well have mythic origins (Martin 2008). When lords of the subordinate center of La Corona travel to Calakmul for extended stays they proceed to *chiiknahb*, which could well imply that this locale encompasses the expansive palace complexes at this great city (Martin 2001:178-184). That said, descriptions of individual rituals, dances, and ballgames are said to occur *ta ch'een uxte'tuun* "at Three Stones *ch'een*" or *uhtiiy uxte'tuun* "it happened (at) Three Stones," which would be oddly unspecified locations if they do not refer to the capital in some way. Indeed, David Stuart (personal communication 2014, 2016) suggests a very different notion of scale, hypothesizing that the two toponyms refer to different portions of Calakmul itself.<sup>7</sup>

These issues are in no small way connected to the meaning of the *ch'een* term—a decipherment drawing on contextual, iconographic, and phonetic clues, though one that has still to be fully confirmed (Vogt and Stuart 2005:157-163). Although it literally means "cave, well, canyon, hole, rock outcrop," the *ch'een* of the inscriptions rarely refers to such features; the vast majority of examples appear instead within a metaphorical complex that defines places in some generic and culturally defined sense, elaborated in the forms *kab ch'een* "earth (and) cave," *chan ch'een* "sky (and) cave," and *chan kab ch'een* "sky (and) earth (and) cave" (Stuart and Houston 1994:7-13; Knowlton 2002:10-11; Hull 2003:425-437; Martin 2004:106-109; Bíró 2007:96-97, 2011:52-66; Tokovinine 2008:141-158, 2013:19-43; Helmke 2009:83-86; Lacadena 2009:40). These can be understood as diphrastric kennings, a form of couplet metaphor in which two conjoined words signify a third concept by allusive or poetical means.<sup>8</sup> Despite the close and at times overlapping relationships between these compounds, their differing applications show that they have specific fields of meaning. Importantly, most of them are also used to describe supernatural locations possessed by gods, making them, at heart, elements of a conceptual rather than physical geography. Such references survived into the Colonial era, with *kabal/*

*kabi ch'e'en Mani* used in the Chilam Balam documents to refer to the city or territory of Mani, Yucatan (Alfonso Lacadena, personal communication 2002).<sup>9</sup> These late texts in Latin script also show the pair in their possessed forms, with *<tu cab tu cheenil>* "in his earth, in his cave," direct parallels to the *tu kab tu ch'een* we see in Classic-era inscriptions. An interesting case is the Colonial phrase *<tu chi cheen itza>*, which according to Alfonso Lacadena (personal communication to Erik Velásquez García 2009) can be translated as "in the delightful cave/city of the Itzas," Ch'olan *<chi>* being a cognate of the Yukatekan adjective *<ci>* or *ki'*, "a delicious, pleasant, flavorful, or delightful thing."

Since *ch'een* is used independently of its unions with *kab* and *chan*, the main question for us is whether it acts simply as an abbreviation of those forms, or if it has some particular sense of its own. Some instances are very likely contractions of *kab ch'een* or *chan ch'een*, yet its many isolated appearances—seen in both historical and supernatural contexts—raises the likelihood that some distinction is nevertheless intended.<sup>10</sup> For this to be the case then *ch'een* must carry a metaphorical association separate, if related, to its role in the juxtapositions of *kab ch'een* and *chan ch'een*. It is interesting in this light that lone *ch'een* predominates in certain contexts, especially in episodes of warfare, often in ways that are suggestive of urban targets (Martin 2004:108-109). Alexandre Tokovinine (2013:36) links *ch'een* to *siwan* in K'iche', a word also meaning "canyon" that features in

<sup>6</sup> We are indebted to Bruce Love for sharing the nighttime photographs he took of Oxpemul monuments in 2008.

<sup>7</sup> Stuart posits that *uxte'tuun* refers to Structure I and the large plaza in front of it, noting that the latter hosts three huge altar stones. The area defined as *chiiknahb* would be associated with Structure II, the Great Plaza, and the rest of the site. At least one monument in front of Structure I, Stela 54, refers to a period-ending ceremony taking place *ta ch'een uxte'tuun* "at Three Stones *ch'een*" (Martin 2009) (Figure 5a). We should keep in mind, however, that comparable ceremonies recorded on monuments elsewhere at the site are given this same location.

<sup>8</sup> The first author to identify this rhetorical device in indigenous texts from Central Mexico and to coin the term "difrasismo" was Ángel María Garibay Kintana (1940:112), while Munro S. Edmonson (1971) was apparently the first to identify this feature in Colonial Maya documents. The most exhaustive study on this subject is the one undertaken by Mercedes Montes de Oca Vega (2000).

<sup>9</sup> Tokovinine (2013:23-24) places this use of *ch'een/ch'e'en* in the specific landscape of the northern lowlands, with its peppering of sinkholes associated with human settlements. Yet we see no reason that the *kabal/kabi ch'e'en* couplet is not instead a continuation of the same metaphor seen in the southern lowlands of the Classic era.

<sup>10</sup> Two texts at Tonina that could imply such an abbreviation feature the 'star war' verb, which is usually applied to the possessed form *uch'een* but there takes *ukab (u)ch'een* as its subject instead (Martin 2004:108, Fig. 3d). More clearly, the reduction from *chan ch'een* can be seen on the Tikal Marcador, where two references to the same event involving the Tikal toponym *mutul* are suffixed by *chan ch'een* in one case but solely by *ch'een* in the other (Hull 2003:429, Fig. 45b).

the Popol Vuh in the pairing *siwan tinamit* “canyon-citadel.” Another diphrastric kenning, this refers to constructed areas that are home to both lords and local gods, as well as to the cultivated lands and populations subject to them (Christenson 2003:264 n. 729, 2004: 237).<sup>11</sup> *Siwan tinamit* is clearly analogous to the *altepetl* “water-mountain” of Nahuatl-speaking Central Mexico.<sup>12</sup> An *altepetl* similarly consists of a central place hosting the residence of its ruling lord and the temples of its patron deities, from which settlement diffuses to a scattered rural occupation beyond. In this way the *altepetl* does not conceptually divide town and country; there was a center and a periphery but no hard division between them. The breadth of meaning ascribed to *altepetl*—which depending on context could refer to a political institution, the territory it controlled, or the population occupying it—reflects a socio-spatial consciousness shared by much of Postclassic Mesoamerica, and potentially in earlier times as well. A parallel between *kab ch’een* and the *altepetl* has already been suggested and still could serve as a general model for us (Houston and Escobedo 1997:471-472).

Caves and canyons in ethnographic and indigenous literary sources are often characterized as the abodes of the gods. To give one instance, on reaching their destination the bearers of the K’iche’ patron deities in the Popol Vuh deposit their god-effigies into canyons (Christenson 2004:182-183). Many of the shrines and temples found in Maya cities serve the same fundamental role, even if the analogy is not an overt one. By extension, it appears, the concentrations of constructed space at the heart of the polity could make it a symbolic *siwan* or *ch’een* and inspire what would otherwise seem an elliptical metaphor.

## Two Snake Capitals

The firm association of the Snake dynasty with Calakmul was barely established before new information complicated the picture. In 1994 the Proyecto Arqueológico de Dzibanche, directed by the late Enrique Nalda, uncovered a series of carved blocks featuring Snake emblem glyphs (Nalda 2004; Velásquez 2004a, 2005) (Figure 6). Each carving showed a bound captive with an accompanying text, and even though their surviving Calendar Round dates cannot be fixed in the Long Count, their style left no doubt that they were produced in the Early Classic period. A second monument, carved in a somewhat later style, names a separate Snake ruler on one block while another bears the date 9.7.0.0.0 or 573. In time, these finds at

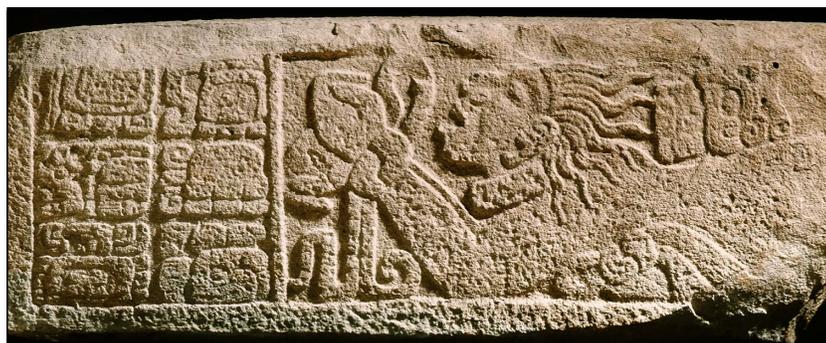


Figure 6. Dzibanche Monument 5 (photograph by Jorge Pérez de Lara).

Dzibanche brought a recognition that they were “home” references, and that this large center in Quintana Roo was a Snake capital in its own right (Velásquez 2004b, 2008).<sup>13</sup>

By now there were mounting signs that the tenure of the Snake dynasts at Calakmul was shorter than one might expect, with evidence for their occupation confined to the Late Classic period. One pointer here came in a retrospective narrative carved on the side of Calakmul Stela 8 (Martin 2005:7, Fig. 3). This cites the period ending of 9.8.0.0.0 in 593 and its celebration by the Snake king Scroll Serpent. The ceremony is given a specific location using the formula *uhtiiy tahn ch’een x*, “it happened in the midst of *x ch’een*,” where this particular “*x*” is an eroded toponym whose outlines have no known counterpart (Figure 7).<sup>14</sup> From here Stela 8 quickly recaps the 9.14.10.0.0 ceremony performed by Yuknoom Took’ K’awiil in 721, ending with the statement *tahn ch’een uxté’tuun* “in the midst of Three Stones *ch’een*.” The effect of these contrasting passages is to establish that Scroll Serpent’s performance occurred at some place other than Calakmul. This is broadly consistent with the foreign references to *uxté’tuun* and *chiiknahb*, which are linked to *kaanul* kings only from 631 onwards. Perhaps the

<sup>11</sup> Allen Christenson’s comment is worth quoting at length: “These two terms together refer to the fortified hilltop center as well as the surrounding population living in the canyons and valleys where crops were cultivated. Many contemporary Quiché towns are still referred to as *siwan-tinamit* when referring to the urban center plus its surrounding dependent communities. Bunzel notes that this phrase is always used to refer to the town of Chichicastenango in ritual contexts” (Christenson 2003:264 n. 729).

<sup>12</sup> Although we generally find this written <*altepetl*>, it is in fact a classic difrasismo, as forms such as *in atl in tepetl* reveal (Zender 2008:33-34, n. 8; Lacadena 2009:40; León-Portilla 2011:283), where the separate components *atl* and *tepetl* fulfill the semantic function of a parallelism (see Lacadena 2010b:64-66).

<sup>13</sup> It is also important to note that early Snake emblem glyphs form a cluster around Dzibanche and sites to its north, with examples seen at El Resbalon (Carrasco and Boucher 1987), Yo’okop (Martin 1997), and Pol Box (Esparza and Pérez 2009).

<sup>14</sup> This toponym is composed of three signs, of which only the last, *AJ/a*, is relatively certain. In this context it would represent *-a’* “water,” a common component of place names (Stuart and Houston 1994:28), but one that is not necessary indicative of large bodies of water.

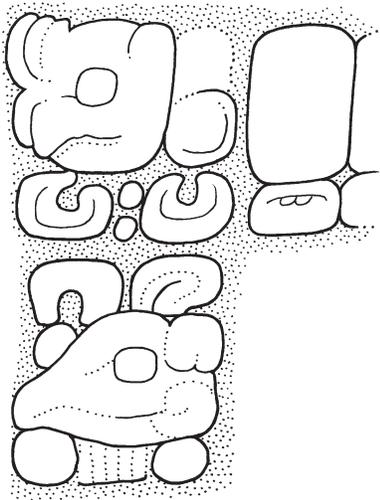


Figure 7. Calakmul Stela 8, C7-C8  
(drawing by Simon Martin).

clearest argument for a “reconstitution” of the Snake polity at Calakmul comes from the initiation of a new dynastic count there, one that sets the famed Yuknoom Ch’een II as “first in order” despite the many Snake kings that had preceded him (Martin 2005:7-8). The hypothesis advanced was that the Snake dynasty shifted its seat of power to Calakmul during, or shortly before, the reign of Yuknoom Ch’een—whether directly from Dzibanche or via some intervening center (Martin 2005:11, 2014:337-339).

Support for this idea was to emerge from a passage on Step 6 of the Naranjo Hieroglyphic Stairway, dated to 631, where “Yuknoom Head, Snake Lord,” is followed by *ta uxtē’tuun aj chiiknaħb* “at Three Stones, Chiiknaħb Person.” The event to which this statement is attached plainly took place at Naranjo, so the prepositional “at Three Stones” seems contradictory here. Yet it becomes understandable if there was a need to disambiguate Calakmul from some other, more familiar, home for the *kaanul* dynasty (Tokovinine 2007:19-21).

The transfer, or secondary foundation, of dynastic groups is already well-attested in the epigraphic record, with the clearest example being the joint use of the *mutul* emblem glyph by Tikal and Dos Pilas during the seventh and eighth centuries (Houston 1993:97-102; Guenter 2003; Martin and Grube 2008:56-57). Antagonists in a protracted civil war—almost certainly based on a fraternal dispute—Tikal had a deep

history and uses *mutul* as its local toponym, while Dos Pilas,<sup>15</sup> a breakaway kingdom based some 112 km to the southwest, employs an entirely different one. Similar developments can be recognized elsewhere, even if their historical specifics are more obscure. It is notable, for example, that the *baakal* name in the emblem glyph of Palenque is never employed as a toponym at that site, its dynasty instead describing two other centers from which they ruled: *toktahn* from 431 and *lakamha’* from 490 (Stuart 2004a:3; Tokovinine 2013:70-71). The *baakal* place name is mentioned once at Tortuguero—the seat of a separate royal house of that name—among contemporary events, and this could well suggest that it was local and constitutes a place of origin. The process of dynastic expansion and/or transfer is even more tellingly on view at Comalcalco. This most westerly Maya center was conquered by Tortuguero in 649, an event that saw Comalcalco’s incumbent *joykan* dynasty replaced by that of *baakal* (Zender 2001; Martin 2014:329-330).<sup>16</sup>

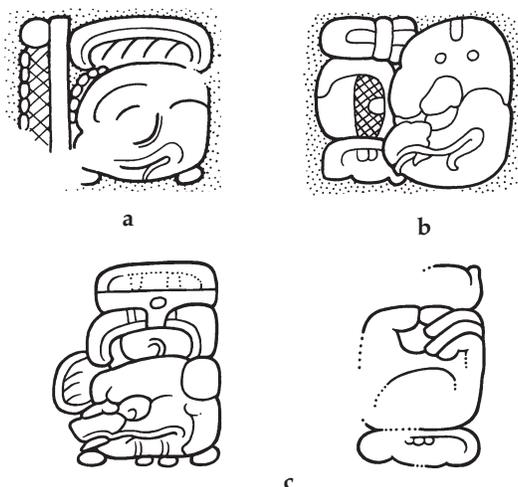
### The Place of Snakes

The shared emblem glyph of Dzibanche and Calakmul leaves us with several unresolved questions, including the exact origin of the “Snake” name and the precise manner in which it signified a political entity. In full spellings it carries a *-la* suffix that is commonly seen with emblem main signs and indicative of a class of place names ending in *-l*. Similar *-il* endings in Ch’ol (Warkentin and Scott 1978:118-119) and Itzaj (Hofling and Tesucún 1997:23) convert common nouns into toponyms with the sense of “x-place.” Alfonso Lacadena and Søren Wichmann (n.d.:16-28) suggest that the *-la* suffix generates a terminal *-V’l* in the texts and offer the gloss “where x abounds” for the resulting form. Under this interpretation the “Snake” locale would be read *kanu’l* and signify “the place where snakes abound.” It seems very clear that Calakmul, supplied with a pair of distinctive toponyms, is not this location—which is entirely to be expected in the case of a dynasty that had migrated from elsewhere.

Firstly, can we be sure that *kaanul* denotes a place in the real world, rather than one only to be found in the realm of myth? This distinction touches on deeper questions about dynastic origins and the authority embodied in emblem glyphs—whether they are derived from historical acts of foundation (Bíró 2012:59-60; Tokovinine 2013:71-79) or instead drawn from supernatural charters (Grube 2004; Tokovinine 2013:72; Helmke and Kupprat 2016). Yet this dichotomy is rather misleading, since the two categories were hardly mutually exclusive in Maya thought. We have evidence, for example, that the names of certain historical places replicate those of supernatural ones, and equally that toponyms inspired by a natural landscape were supplied with divine back-stories that embedded them in local mythologies. In a Maya worldview it seems that the physical and metaphysical worlds were entwined and in some sense

<sup>15</sup> The only proviso here is that the full Tikal toponym is *yax mutul*, which might mean “New Mutul” and indicate a still earlier forebear for that name elsewhere.

<sup>16</sup> Christophe Helmke (personal communication 2016) pointed to the likely *ka* prefix to the Comalcalco (*joykan*) emblem glyph, which is drawn into one of the bricks found at the site. This suggests a **KAN** rather than **CHAN** reading for “sky” in this context, which, as an established toponym was evidently unaffected by the *k > ch* shift going on in Western Ch’olan at that time.



**Figure 8.** *Kaanul* outside the emblem glyph: (a) Dos Pilas Panel 19, Q2 (drawing by David Stuart); (b) Calakmul Element 22, A1 (drawing by Simon Martin); (c) La Corona Element 33, B6b-A7b (drawing by David Stuart).

mutually constitutive.<sup>17</sup> Since connectedness to the divine can be taken for granted, the only question that need concern us is whether *kaanul* was ever an actual place. Three texts illustrate the issues and difficulties as we seek to resolve that question.

In a caption to the scene on Dos Pilas Panel 19 that identifies the guardian of a local prince, we find the title **AJ-KAAN-*la* *aj* *kaanul*** “Snake[-Place] Person” (Houston 1993:115) (Figure 8a). Although this might appear to be toponymic, the *aj* formula creates associations of several different kinds and is not necessarily a reference to a point of origin (see Tokovinine 2013:58). If, as seems likely given that Dos Pilas was a client of Calakmul, this visitor hails from *uxte’tuun chiiknahb*, then the reference might have the looser sense “of the Snake dynasty.” Here *kaanul* would have taken the same derived meaning it acquired in the Calakmul emblem glyph and a toponym that has come to represent a political entity.<sup>18</sup> Another potentially relevant example appears on a block excavated by Ramón Carrasco, Director of the Proyecto Arqueológico de Calakmul (Figure 8b). At first sight, the glyph here reads **tu-CH’EEN-na-KAAN[*la*]** *tu ch’een kaanul* “in the *ch’een* of the Snake[-Place].” If so, it would remain unclear if this *kaanul* refers to a physical site or simply to the *ch’een* now possessed by the transplanted faction ruling at Calakmul.<sup>19</sup> Yet there is more uncertainty here. The snake-head lacks the normal (though not essential) **ka** prefix and has an atypical motif in its forehead. Rather than a strange **la** infix, this could be the same

design we see on a snake-head on an alabaster bowl from the Copan region, which probably represents a form of the **bi** syllabogram. Very rarely *ch’een* takes a *-bV* suffix, as on K4909, and conceivably this is a variant of that form (Marc Zender, personal communication 2016).<sup>20</sup>

A third instance comes from La Corona Element 33, which shows *kaanul* as the subject of a “foundation” event, in the form **?-*yi*-ka-KAAN-*la*** (Stuart 2012) (Figure 8c). Sadly, the glyph immediately after this has completely spalled away and the following one is damaged, so we cannot appreciate its full context.<sup>21</sup> The verb in question carries a *-yi* suffix, which is characteristic of a set of roots that describe changes of state (Stuart 2005:68-69; Lacadena 2010a:16), and although its reading remains uncertain, two contenders are **KAJ** “to settle, reside” and **K’OT** “to arrive, take control over.”<sup>22</sup> Whatever the correct solution, the action evidently refers to the establishment or re-establishment of lordly power at a particular place, in which its subjects almost always consist

<sup>17</sup> According to the model proposed by Alfredo López Austin (2015a), in the indigenous cosmivision the world is constituted by an interlaced mixture of heavy and ethereal material, while the sacred sphere is constituted only of subtle/fine/delicate matter, so in reality everything has some physical character and is subject to the same laws of the cosmos. This leads López Austin to question the validity of the concepts “supernatural” and “metaphysical realm” to explain Mesoamerican religious concepts. In their place he has coined the terms *ecumene* (mundane space-time of creatures, perceptible to the senses) and *anecumene* (space-time of the sacred, beyond human perception and prohibited to dense substances). However, *anecumenical* beings also occupy the world because they constitute the interior (soul) of creatures and transit in a periodic or chance way through the *ecumene*. Hence both worlds are intertwined and mutually constitutive (see López Austin 2015b, 2016:79-83).

<sup>18</sup> The progression from toponym to patronym is a familiar one worldwide (see Bíró 2012:59-60). We do not rule out the possibility that emblem main signs developed into dynastic names that could be used outside those titles, or even evolved into ethnonyms or territorial designations in some cases.

<sup>19</sup> It might not be coincidental that another block in this series, Element 24, includes the passage **HUL-li *chi*-ku-NAHB *huli* *chiiknahb*** “arrives here (at) *Chiiknahb*.” One might wonder if the monument of which this was once part described events surrounding the break-up and relocation of the dynasty. Other constituent blocks mention various deities and could have provided information about the (re-)establishment of patron gods or their effigies.

<sup>20</sup> For K4909 see Justin Kerr’s database at [Mayavase.com](http://Mayavase.com).

<sup>21</sup> This final compound here slightly resembles *chiiknahb*. However, the prospective **chi** glyph is anomalously turned palm-side to us and lacks any sign of an infix **ku** syllable. Moreover, the hand is suffixed by **na**, with no evidence for an infix logogram (such as **CH’EEN**) to which it might be attached. Tokovinine (personal communication 2016) suggests that this glyph actually names the protagonist of this event (see Note 23).

<sup>22</sup> The Ch’olan root **KAJ** “to settle, inhabit” was proposed by Dmitri Beliaev and Albert Davletshin in 2012 (cited in Tokovinine 2013:80), based on potential complementary affixes of **ka** and **ja** at Coba and Piedras Negras respectively. Stephen Houston (personal communication 2016) prefers **K’OT** “to arrive, take control over,” which has a variety of expanded forms in Ch’olti’ and Ch’orti’ Mayan and might better fit a context like the one on Piedras Negras Throne 1, where an image or effigy is the subject rather than a location.

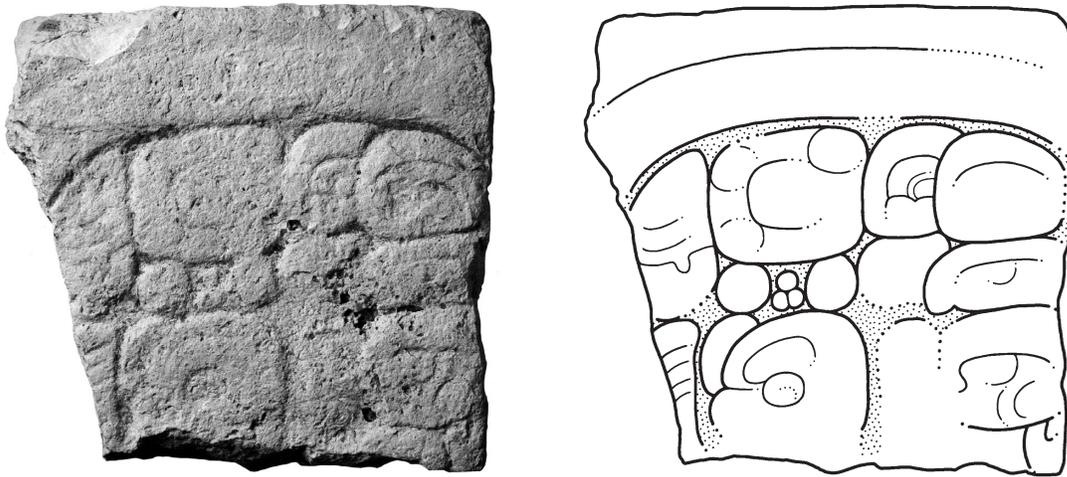


Figure 9. Dzibanche Fragment 1 (photograph and drawing by Simon Martin).

of a toponym or a possessed *ch'een* term (Stuart 2004a:3; Tokovinine 2013:79-81; Martin 2014:103-106). The historical context becomes important at this point since, transpiring in 635, a little over a year before the accession of Yuknoom Ch'een, this (re-)establishment seems to be intimately connected to the emergence of Calakmul as a Snake capital. Thanks to the discovery of Xunantunich Panel 3, we now know that this closely coincided with a “civil war” that set two bearers of the Snake title against one another (Helmke and Awe 2016a:10-11). Together with Step 1 of the Naranjo Hieroglyphic Stairway, we now understand that Waxaklajuun Ubaah Kaan, a bearer of the kingly title *k'uhul kaanul ajaw*, was defeated in 636 by Yuknoom Head, a lesser *kaanul ajaw* based at Calakmul.<sup>23</sup> This shows that the impetus for the shift was an acrimonious split. With this in mind it would be logical to suppose that the *kaanul* name on La Corona Element 33 has a dynastic significance and refers to the initiation of the new regime at Calakmul. However, since all the known subjects of these verbs are locations (except for one physical object) a strong case can be made that it is a toponym here. In this scenario, the statement refers to an event relevant to the break-up and civil war rather than to the establishment of power at Calakmul.<sup>24</sup>

Since all of these examples remain equivocal to some degree, we are still in need of a context with an unambiguous locative sense. In 2007 three additional inscribed stones were unearthed at Dzibanche, of which two were carved with roundels containing groups of four glyph-blocks, originally parts of a continuous text. One of these, Dzibanche Fragment 1, is somewhat eroded but examination with raking light reveals the sequence **TOOK'-PAKAL-la ta-na-CH'EEN-na ka-KAAN \*u-KAB-\*ji-ya** *took'pakal tahn ch'een kaan(ul) ukabjiiy* “... flint and shield in the midst of the Snake[-Place] *ch'een*,

it was supervised by...” (Figure 9). Despite missing both its opening verb and its associated agent, this is a typical historical passage describing a war or war-related ritual. Furthermore, *tahn ch'een* never occurs in supernatural contexts, strengthening the case that this *kaanul* is of an earthly character. Given the small corpus of texts we have at the site, and its direct association with early Snake kings, it is hard to avoid the conclusion that this is the toponym for Dzibanche—with all that implies about the origin of the Snake dynasty and Calakmul's rival in the civil war.

The newly discovered Xunantunich Panel 4, presented and analyzed by Christophe Helmke and Jaime Awe (2016b, see pp. 1–22 in this issue), makes a remarkable contribution to the debate. An explicit account of dynastic ascendancy passing from Dzibanche to Calakmul, it describes first the negation and then the formation of *k'awwilil*—an abstraction of power or authority—that is set in the contrasting locations of *kaanul* and *uxte'tuun*. A

<sup>23</sup> The Vase of the Initial Series uncovered at Uaxactun describes a Period Ending ceremony in 256 BCE whose presiding king is named solely by the title *k'uhul kaanul elk'in kaloomte'* “Holy Snake[-Place] Eastern Kaloomte' (High King).” One of two figures shown facing the enthroned king is named *yax ajaw aj chiiknahb* “First Lord, Chiiknahb Person.” Nicholas Carter (2015:10-13) suggests that this vessel may have been commissioned ca. AD 635 to establish a fanciful deep history of Calakmul's connection to the Snake dynasty: claiming that Dzibanche lords were already high kings of the east which counted the first ruler of Calakmul among their subjects. Erik Boot (personal communication 2016) is currently preparing a paper on this vessel, one that sees a transhistorical scene in which Yuknoom Ch'een II's reign at Calakmul is legitimated by his divinely engineered encounter with an ancient Dzibanche king.

<sup>24</sup> Tokovinine (personal communication 2016) also argues that this event took place at a named location that is not Calakmul and further suggests that it in some way precipitated Yuknoom Ch'een's rise to power, forming a backstory to the narrative of La Corona Element 33.

more deliberate and telling statement of Calakmul's Late Classic rise to prominence can scarcely be imagined.<sup>25</sup> This constitutes the underlying theme of the monumental steps that were, with little serious question, raised at Caracol in 642 (Martin 2000:57-58, Fig. 12) and are known from estranged portions distributed among the sites of Naranjo, Ucanal, and Xunantunich (Maler 1908:91-93; Graham 1978:107, 110; Helmke and Awe 2016a).<sup>26</sup>

Still left uncertain is the type and scale of the *kaanul* place. This is where the interpretation of the isolated *ch'een* becomes key. If it is indeed a metonym for urban spaces, then *tahn ch'een kaanul*—the form we find on Xunantunich Panel 4 as well as on Dzibanche Fragment 1—speaks of the central core of Dzibanche as a city. However, if *ch'een* remains an abbreviation implying a larger domain, then *kaanul* would name an area within which *tahn* works to specify its “middle” and in that manner its urban core. At this juncture we might note the presence, just 10 km or so to the east of Dzibanche, of the Preclassic center of Ichkabal. Very large temple platforms, rivaling the size of those at El Mirador, are here packed on a small “island” in the midst of a low-lying *bajo* or seasonal swamp. This great ruin would have been a looming presence for the Classic-era population of Dzibanche, and they would inevitably have understood their own identity in some relation or contrast to it. If *kaanul* describes a region rather than a specific site, we might wonder if Ichkabal was a still earlier capital and seat for precursor Snake kings.<sup>27</sup>

<sup>25</sup> We should note that Enrique Nalda Hernández and Sandra Balanzario Granados (2014:199-200) have uncovered evidence at Dzibanche suggesting that the local dynasty continued to call itself *kaanul* after the split and survived into the Late Classic period. Two items found in the Plaza Pom are relevant here, a *kaanul* emblem glyph modelled in stucco (Nalda and Balanzario 2014:198, Fig.18) and another incised on a fragment of ceramic vessel, both likely to be later seventh century by style. The latter mentions a character called *sakun winik ch'ok, kalamte', k'uuhul kaanul ajaw*, “Older brother prince, *kalamte'*, Holy Snake[-Place] Lord” (Velásquez García and Balanzario Granados 2016). His personal name of **a-sa[xi]-ji CHAN-na K'INICH** is otherwise unknown, though it slightly resembles the name of Ruler 7 from the Dynastic Vases (Martin 1997:858).

<sup>26</sup> The attribution is not only based on how the focus of the text falls on the Caracol king we know as K'an II, but on the recovery of an apparent fragment of the monument at Caracol itself (see Martin 2000:57-58, Fig. 12).

<sup>27</sup> Another, lesser, option is that the name was simply transferred to Dzibanche. However, given the association between the founding myths of the Snake dynasty and the “**chi-CHA**” place (Grube 2004; Stuart 2004b, 2014), we do not exclude the possibility that this important Preclassic toponym refers to Ichkabal. Another glyphic text from Dzibanche known as Fragment 2 mentions the capture of an individual from “**chi-CHA**” using the verb *chuhkaj* “capture, seize, take”—which is typical of historical rather than mythic events. Since the paleography of the inscription corresponds to the Late Classic period, we can speculate that sometime in the seventh or eighth century there was still an active location called “**chi-CHA**” and that it was not far distant from Dzibanche.

## Conclusion

The epigraphic record of the Snake dynasty presents data that is specific to its own case, yet also illustrative of broader sociopolitical processes among the Classic Maya. The idea that the *kaanul* dynasty was intrusive to Calakmul—something its texts do not hide so much as celebrate—is amply reflected in the divergence between the place name fixed within its emblem glyph and the two toponyms that identify the site and its immediate environs. Material presented here indicates that the house of *kaanul* took its name from the site or locality of Dzibanche, establishing a concordance between the title and the seat of its earliest known kings. Though we do not rule out additional complexities, whether it be a Preclassic heritage that prefigured this development or the involvement of other centers, the data from Xunantunich supports and enlarges upon these conclusions. These texts add substantive data on two fronts: confirming that the emergence of Calakmul as a Snake capital was a deliberate act of dynastic (re-)foundation, while supplying entirely new information that the separation from its predecessor was not a planned transfer or expansion, but rather the result of internal strife. These events cannot be classed as particularities relevant only to a small circle of the lordly elite, but instead constitute major sociopolitical reconfigurations that affected the lives of very large populations and left profound signatures in the archaeological record. To trace the trajectory of the Snake dynasty is to reveal a key dynamic that shaped Classic Maya history.

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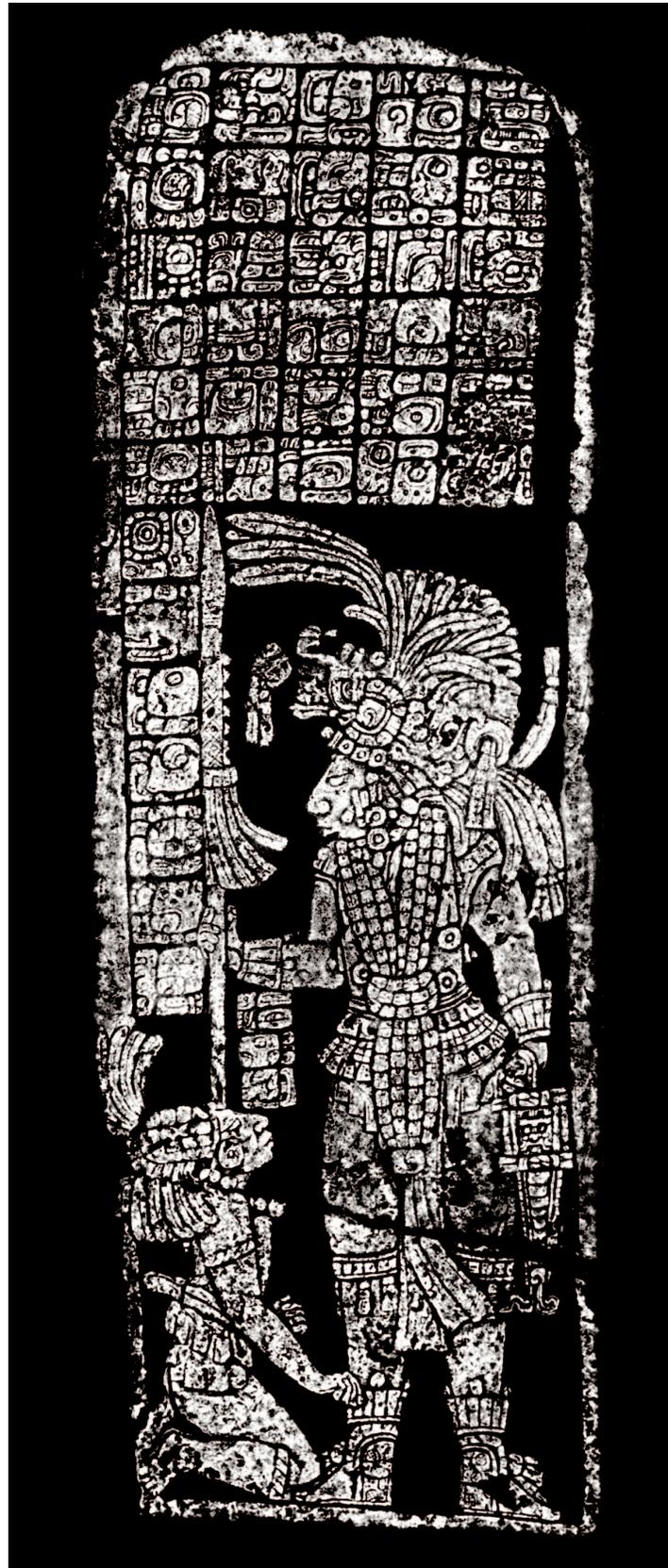
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Yaxchilan Stela 18, front (rubbing by Merle Greene Robertson).

# The Syllabic Sign *we* and an Apologia for Delayed Decipherment

MARC ZENDER<sup>1</sup>

Tulane University

DMITRI BELIAEV

Russian State University for the Humanities

ALBERT DAVLETSHIN

Russian State University for the Humanities

The principle aim of this paper is to present the evidence behind our identification of the phonetic sign *we*, and to trace some key implications of that decipherment.<sup>2</sup> Additionally, however, it is our apologia—that is, our explanation and justification of this strangely delayed discovery, now only entering the scene some six decades after Yuri Knorozov (1952) initiated the phonetic decipherment of Maya writing. It seems an explanation may be necessary since, as J. Eric S. Thompson observed just seven years after Knorozov's first publication, "if his readings are correct, the rate of decipherment should have accelerated astonishingly, for, as with a code, each new phonetic reading makes solution of the remainder easier" (Thompson 1959:362). Thompson repeated this criticism in his *Catalog of Maya Hieroglyphs* (1962:28), and once again in the third edition of *Maya Hieroglyphic Writing* (1971:vi). Each time, or so it seemed to Thompson, the still-incomplete Maya syllabary provided eloquent evidence that Knorozov's decipherment was unworkable. We needn't wonder, then, what Thompson would have made of this addition to the Classic Maya syllabary, which still contains significant gaps some forty-five years after his final rejoinder.

And yet, this criticism has always been an unjust one. Maya writing is no "code," but rather a visually complex logosyllabic script of hundreds of signs that underwent numerous changes during almost two thousand years of use. Further, Thompson reveals more than a little linguistic naïveté when he chides Knorozov for "read[ing] the glyph for dog as *tzul*, a rare term" when "it should be read *pek*, the common Yucatec word for dog" (Thompson 1959:362).<sup>3</sup> One might as well argue that Old English *hund* "dog" should be absent from Anglo-Saxon manuscripts on the basis of the rarity and specialized meaning of *hound* in Modern English. And yet, *hound* (OE *hund*) is the original term for "dog," with a long Germanic ancestry (cf. German *Hund* "dog"), whereas *dog* (OE *docga*) is of uncertain origin and not attested before the late thirteenth century (Algeo and Butcher 2014:232-233).<sup>4</sup> Similarly, lexical frequency in Modern Yucatec is simply not a reliable guide to the linguistic foundations of an ancient script, much less one that seems on present evidence to have recorded a pres-

tige form of ancestral Eastern Ch'olan (Houston et al. 2000).

In contrast to Thompson's frequently repeated assertion that the decipherment seems too long delayed for comfort, the aforementioned orthographic, paleographic, and linguistic complexities actually make it rather more likely that, as Stephen Houston (1988:126) suggests, "[t]he complete decipherment of Mayan glyphs is an event that neither we, nor perhaps our children, shall ever see." Specifically, as the senior author has had occasion to note elsewhere (Zender 2005a, 2005b, 2006b, 2014a), the difficulties inherent in maintaining a consistent visual separation of hundreds of distinct signs even as they underwent formal changes and influenced one another over some two thousand years will continue to ensure that numerous undeciphered signs remain "hidden in plain sight": routinely mistaken for other signs, even in the specialist literature, and therefore both misread and incorrectly cataloged. In this paper, we demonstrate through careful formal and contextual analysis that one such sign, long ago assumed to have been unmasked, has in fact been jealous of its real identity as the phonetic syllable *we*. Yet we also provide an apologia for delayed decipherment by exploring how the *we* sign—due to its pronounced visual similarities with T87 *TE'* and T61, 62, 65, and 339 *yu*<sup>5</sup>—came to be visually

<sup>1</sup> Corresponding author (mzender@tulane.edu).

<sup>2</sup> The *we* syllable was independently recognized by Zender and Beliaev, and all three authors have contributed to this paper. An early draft of this manuscript was circulated to fellow epigraphers (Zender 2014b) and presented in two public meetings (Zender and Stuart 2015; Zender 2015). We wish to acknowledge valuable comments from Stephen Houston, Simon Martin, David Stuart, and our anonymous reviewers. Beliaev and Davletshin's work was supported by the Russian Science Foundation (project no. 15-18-30045).

<sup>3</sup> In a critical but cogent review of Thompson's *Maya Hieroglyphic Writing* (1962), the linguist Archibald A. Hill (1952:184) noted with respect to similar statements that "Thompson is first of all unaware that his problem is essentially a linguistic one, and is moreover naively ethnocentric in his linguistic statements."

<sup>4</sup> See also "dog, n.1" and "hound, n.1," *Oxford English Dictionary*, 2nd ed., 1989 (OED Online: dictionary.oed.com).

<sup>5</sup> T-numbers refer to Thompson's *Catalog* (1962).

5-HIX-K'IN \*7-SAK-SIJOOM chu-ku-ja ba-wa-WAY-bi u-KAB-ji-ya AJ-CHAK-ma-xi  
*ho' hix k'in huk saksijoom chu[h]k[aj] ba[ah] way[i]b ukabjiiy aj chak maax*  
 "(On the) day 5 Ix 7 Zac, Baah Wayib was captured by Aj Chak Maax

3-la-ta na-wa-ja u-BAAK-ki ti-ya-AJAW  
*ux la[h]t na[']waj ubaak tiyajaw*  
 (and) three days later his captives were presented to his lord."

Table 1. The Kimbell Panel, main text.

confused with these other signs by ancient scribes and, as a result, mistakenly equated with them by modern scholars.

### "The Sun God Fills the Sky"

We begin our discussion of the **we** sign with an unprovenanced panel in the collections of the Kimbell Art Museum (Figure 1). The panel was purchased by the museum from a New York collector in 1971 and is difficult to trace prior to 1970. Nonetheless, Peter Mathews (1997:243; see also Mayer 1984:28-30) was able to demonstrate, on the basis of carving style and epigraphic content, that the panel originally came from the site of "Laxtunich," somewhere in the vicinity of Yaxchilan. The site was named by Dana and Ginger Lamb, who first explored it in the 1940s (Lamb and Lamb 1951). Although details of the site's discovery and location remain unclear, our understanding of the epigraphic and iconographic content of the Kimbell Panel is well advanced, benefiting from historical and political connections to the comparatively well-documented site of Yaxchilan and from more than three decades of study by scholars (Schele and Miller 1986:226; Schele and Freidel 1990:287; Martin and Grube 2000:135; Miller and Martin 2004:30). Dated to August 24 and 27, AD 783, the scene depicts a seated Itzamnaaj Bahlam IV, ruler of Yaxchilan between ca. 769–800 (Martin and Grube 2000:124), as he receives three evidently hapless captives from the standing figure, identified as Aj Chak Maax, a local lieutenant (*sajal*) of the king.

The monument contains captions for all of the depicted individuals, including an inventive reversed text on the throne beneath the king, sharing his orientation and giving his names and titles. There is also a sculptor's signature informing us that the panel was carved by one Mayuy Ti' Chuween of K'ina', who also signed Laxtunich Panel 4, which was photographed at the site by the Lambs (see Mayer 1995:Pl. 121). Finally, there is

a main text providing a concise explanation of the scene (Table 1).

Evidently, Aj Chak Maax had taken these captives in a military engagement on August 24, 783. All of them are otherwise unknown, probably hailing from smaller sites in the vicinity of Laxtunich (the principle captive, Baah Wayib, is said to be from a place named Chok Te'el Naah). Then, three days later, he brought them before his overlord as a gift, the presentation most likely taking place in a sumptuous throne room at Yaxchilan itself.

Let's turn now to the reversed caption text beneath the king (Table 2). Although Itzamnaaj Bahlam IV's regnal name is not present, the inclusion of his pre-accession name, customary captor title, and the twin emblem glyphs of Yaxchilan leave no doubt about his identification (Schele and Miller 1986:226). This needs to be highlighted, for although previous scholarship has accepted this panel as a depiction of Itzamnaaj Bahlam IV, and the **che-le-wa CHAN-na K'IN-ni-chi** spelling as a version of his pre-accession name (Figure 2a), there has previously been no satisfactory explanation for the otherwise unique T130 **wa** sign in the first glyph block.<sup>6</sup>

This use of T130 **wa** is significant because all of the spellings at Yaxchilan of this king's pre-accession name

<sup>6</sup> One of our reviewers suggests that the reversed text may have introduced complications into the rendering of this sign, making it merely resemble T130 **wa**. Indeed, we have considered this explanation for the divergent spelling, not least given several indications that the sculptor may have been unfamiliar with reversed texts. Note, for instance, that two of the signs in the caption have not been reversed (**chi** and the second instance of **AJAW**), unlike the other eighteen signs. That said, neither of these signs was corrupted, and there is every indication that Mayuy Ti' Chuween was otherwise fully in control of his oeuvre, as indicated by his use of novel but perfectly legible sign combinations for **K'IN-ni-chi** and **u-cha-nu**. Further, comparison of the **wa** syllable in the **che-le-wa** spelling with those in the *na'waj* verb and the two instances of Baah Wayib reveal consistent and deliberate details that lend confidence to our identification.

che-le-wa CHAN-na K'IN-ni-chi u-cha-nu TAJ-MO' K'UH-PA'-CHAN-AJAW K'UH-?KAAJ-AJAW  
*cheleew chan k'inich ucha'n taj mo' k'uh[ul] pa'chan ajaw k'uh[ul] kaaj ajaw*  
 "He is Cheleew Chan K'inich, Captor of Taj Mo', Divine Lord of Pa'chan and Kaaj(?)."

Table 2. The Kimbell Panel, text beneath ruler.

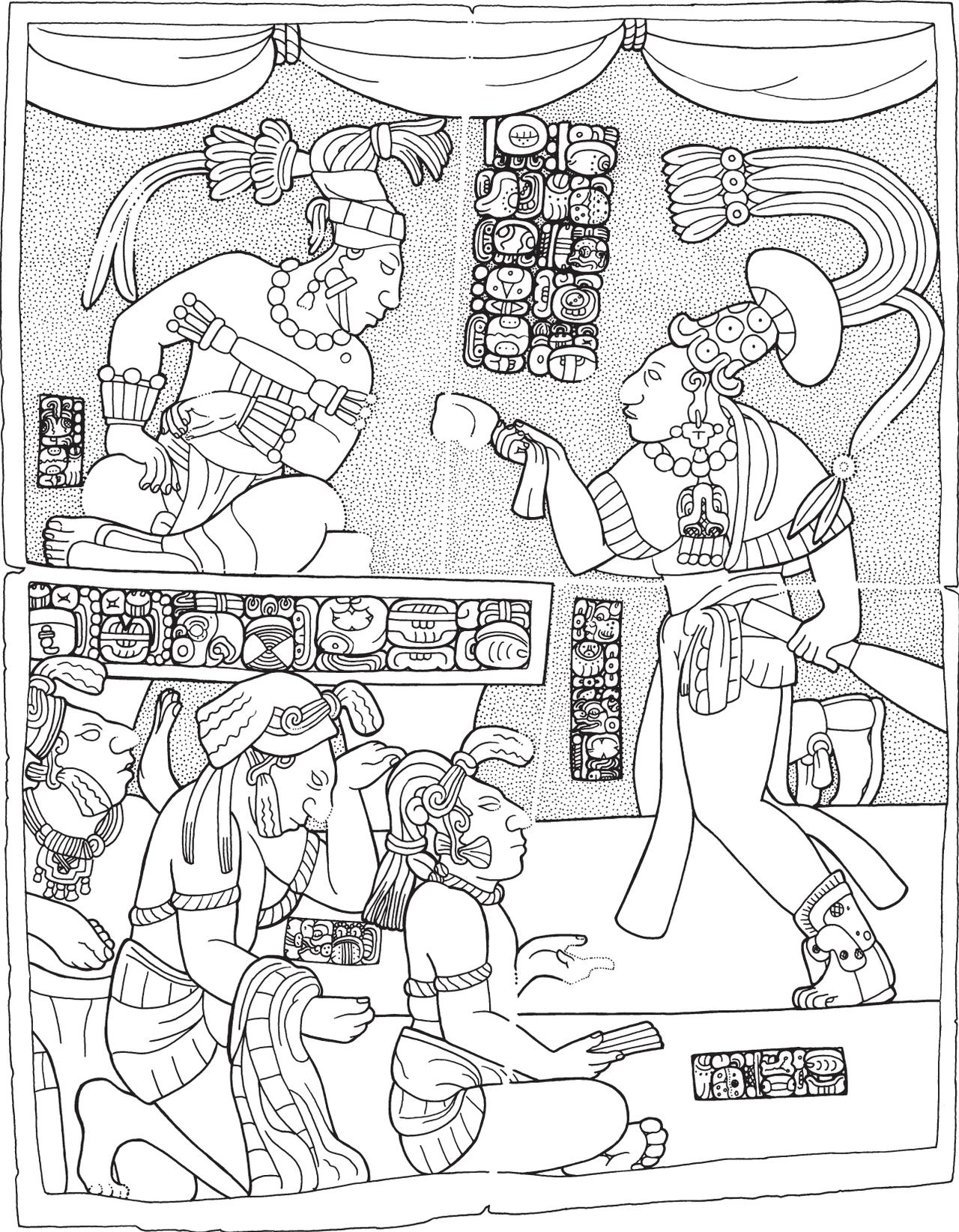
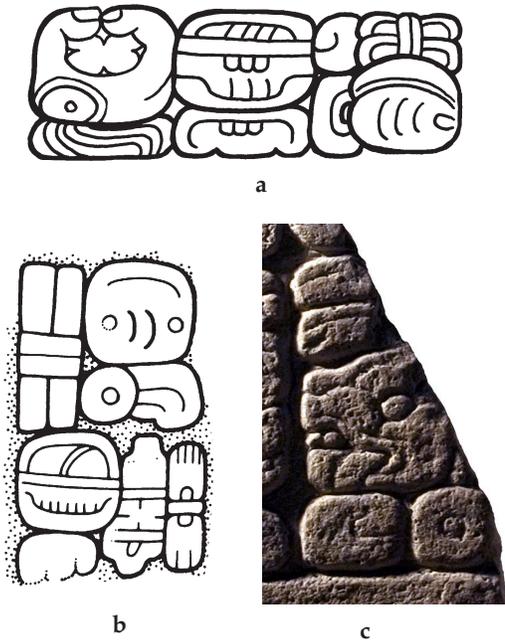


Figure 1. Unprovenanced panel from the Yaxchilan Region. Kimbell Art Museum, Fort Worth, Texas, AP 1971.07 (drawing by Marc Zender after a photograph by Justin Kerr in Miller and Martin 2004:31, Pl. 2).



**Figure 2.** Various spellings of the pre-accession name of Itzamnaaj Bahlam IV: (a) **che-le-wa CHAN-na K'IN-ni-chi**, Kimbell Panel (drawing by Marc Zender); (b) **che-le-we CHAN-na K'INICH**, Yaxchilan Lintel 58, E1-E2 (drawing by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.6.32); (c) **che-le-we ...**, Yaxchilan Stela 4, back, fragment G (photograph courtesy of Carlos Pallan).

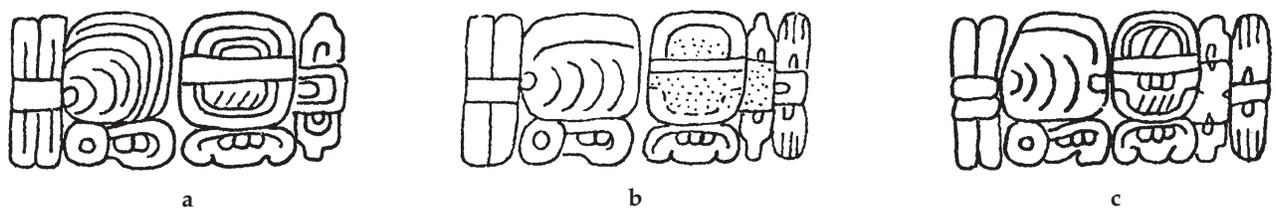
instead employ a previously-unrecognized mystery sign which has long been confused with T87 **TE'** (Figure 2b-c). We can trace the onset of this confusion to Tatiana Proskouriakoff (1964:190), who transliterated the initial portion of the pre-accession name as T145.188.87 (i.e., as **che-le-TE'**), and illustrated **TE'** as the final element in three distinct contexts (Figure 3). Contrast Ian Graham's more deliberate renderings of the first two passages for the Corpus of Maya Hieroglyphic Inscriptions (Figure 4). Note that, while the sign in question is

surely reminiscent of **TE'** in having two distinct components—one of them round with an inset circle, like a body-part marker, the other more oblong, with a line bisecting its length—the identity is not exact. Notably absent are the “globules of resin” (Stone and Zender 2011:171) which serve as a diagnostic element of **TE'** “wood” signs in Maya art and writing. And note that the bisecting line in the mystery sign (Figures 2b-c and 4) has a hook-like termination that does not appear on **TE'**. That said, the outlines and even some of the internal details of the two signs are very similar, and the “globules of resin” (on **TE'**) and the hook-like element (on the mystery sign) are clearly the main diagnostic features. In eroded contexts the signs are practically indistinguishable from one another, which helps to account for occasional examples of one sign being drawn in lieu of the other.<sup>7</sup> Indeed, given the propensity of similar signs to formally influence one another over time (Lacadena 1995:220-236), it's actually somewhat surprising that Yaxchilan's scribes were so consistent in distinguishing between these two very similar signs.

There is, however, one remarkable exception. On Yaxchilan Stela 21 (Figure 5), a very late monument most likely commissioned in the first decade of the ninth century, the pre-accession name does indeed seem to have been carved as **che-le-TE' CHAN-na-K'INICH**. This is a fragmentary monument, with a substantial amount of surface weathering, yet Morley's photograph supports the presence of the “globules of resin,” vindicating at least Proskouriakoff's third drawing (Figure 3c). It therefore seems likely that, despite the otherwise studied separation of these two signs, the late scribe or sculptor of Stela 21 has here borrowed the “globules” from the **TE'** sign and applied them to the mystery sign. Alternatively, the elements in the mystery sign may have been influenced by the presence of similar elements in the nearby **na** signs (at pG2 and pH3), with which it also seems to share a scalloped lower right corner. However precisely this happened, we hasten to add that this is one of the latest monuments at Yaxchilan and presently provides the only example known to us where the mystery sign has come to resemble **TE'** so closely.

Let us return to Tatiana Proskouriakoff's initial identification of the mystery sign as **TE'**, which now becomes easier to understand. Although Proskouriakoff did not offer a phonetic reading of the pre-accession name, her analysis is the ultimate source of the modern transcriptions Chel Te' Chan K'inich (Martin and Grube 2000:134), Chelte' Chan K'inich (Helmke 2010:7), and Cheleht Chan K'inich

<sup>7</sup> For example, Nikolai Grube (in Martin and Grube 2000:134) illustrates the first glyph block of the pre-accession name on Yaxchilan Stela 7 (front, pD2-pD3) as **che-le-TE'**. And yet the final sign is in fact broken beyond recognition on the original monument (cf. Tate 1992:194, Fig. 89). In this case, it seems that Grube has merely reconstructed the expected **TE'** from other examples (e.g., Proskouriakoff 1964:190).



**Figure 3.** Tatiana Proskouriakoff's renderings of the pre-accession name of Itzamnaaj Bahlam IV: (a) Yaxchilan Lintel 2, J1-J2; (b) Yaxchilan Lintel 52, I2-I3; (c) Yaxchilan Stela 21, G3-H3 (Proskouriakoff 1964:Fig. 3).

(Lacadena and Wichmann 2004:141), to list only the most common. Unfortunately, all of these have proven impossible to translate satisfactorily, and equally difficult to reconcile with our increasingly mature understanding of Maya onomastics. As is now fairly well established, Classic Maya royal names are typically tripartite, grouping: (1) an initial verb, frequently an affective, or a transitive verb in the antipassive voice; (2) *chan* “sky,” and; (3) a theonym, such as K’awiil, Chahk, or K’inich (see Grube 2001, 2002; Colas 2004; Zender 2010, 2014c). Thus, to return to the Kimbell spelling (Figure 2a), **che-le-wa CHAN-na K’IN-ni-chi** can be transcribed as Cheleew Chan K’inich, and translated as “(The) Sun God Fills (the) Sky.”<sup>8</sup> Now, the easiest way to reconcile this with the spellings at Yaxchilan would be to propose that the mystery sign is just an allograph of **wa**. As we will shortly discover, however, this runs afoul of the other settings of the sign, where **wa** yields little sense. Nor does the mystery sign substitute for **wa** in any other context. And, finally, we should try to explain the context of the mystery sign in such close proximity with **Ce** syllables. As David Stuart (2002a, 2008) has suggested, syllables of the shape **Ce**

<sup>8</sup> The root *chel* is poorly attested in the relevant languages. The senior author suggests *chel* “to space or place evenly, spread out, fill” on the basis of Ch’orti’ *cher* “spread, space or place evenly,” *cherem* “dense, placed together,” and *cherem tun* “piled or covered with stones, stony all over” (Wisdom 1950:698-699; cf. Hull 2016:96), where Ch’orti’ *r* descends exclusively from earlier \**l*. The Yucatec noun *chéel* “rainbow” (Bricker et al. 1998:68) might conceivably be related, inasmuch as it would have descended from Proto-Yukatekan \**chehl*, whose form suggests a deverbal noun (in *-h-*) and a pre-Proto-Yukatekan verbal root \**chel*. As descriptive terms for a rainbow, “spread thing” or “full thing” seem at least possible.

pA    pB    pC    pD    pE    pF    pG    pH

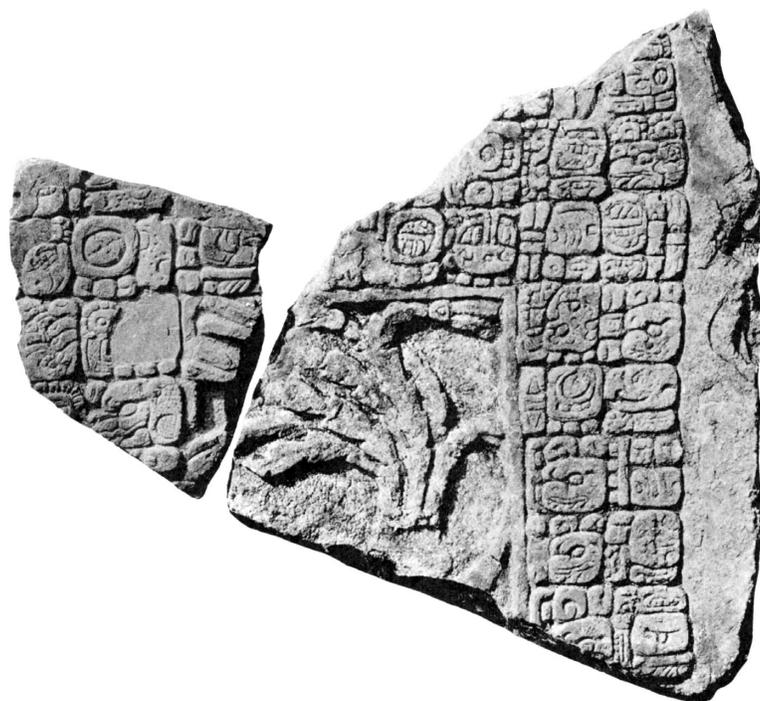


Figure 5. Yaxchilan Stela 21, with apparent TE’ sign in the pre-accession name of Itzamnaaj Bahlam IV, pG3 (Morley 1937-1938:Pl. 104b). Note similarities to **na** signs at pG2 and pH3. Glyph designations after Mathews (1997:Fig. 7.5).

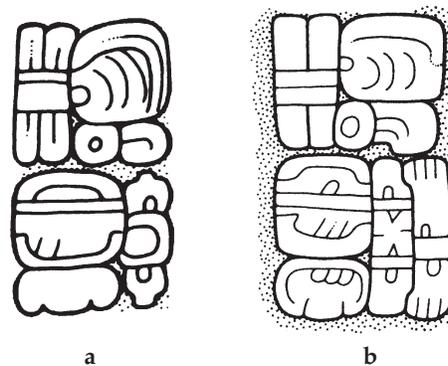


Figure 4. The pre-accession name of Itzamnaaj Bahlam IV: (a) Yaxchilan Lintel 2, J1-J2; (b) Yaxchilan Lintel 52, I2-I3. Drawings by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.5.2 and 2004.15.6.6.26.

and **Co**, being outside the framework of the **Ci**, **Ca**, and **Cu** signs employed to indicate vowel complexity (e.g., Houston et al. 2004; Lacadena and Wichmann 2004), tend to spell lexical roots and suffixes synharmonically. That is, all else being equal, **Ce** and **Co** syllables have a strong tendency to congregate with syllabic signs and logographs with which they share vowel quality. As such, given that the mystery sign follows **che** and **le** in the same glyph block and yet presumably provides at least final *-w* (given the **wa** on the Kimbell Panel), it seems at least worth considering that it had the phonetic shape **we**. If so, then all of the examples of the pre-accession name involving the mystery sign (Figures 2b-c, 3-5) should be transliterated as **che-le-we CHAN-na K’INICH** and transcribed as Cheleew Chan K’inich. The potential solution is an exciting one, inasmuch as it harmonizes the divergent Kimbell Panel spelling of this name with those found at Yaxchilan. Thankfully, there is also ample precedent for just this kind of orthographic variation in other royal names. Thus, in the inscriptions of Naranjo, while the antipassive verbal portion of the regnal name K’ahk’ Tiliw Chan Chahk is most commonly spelled **TIL-wi** (e.g., K4464, K7750, and NAR St. 21, front) or **ti-li-wi** (e.g., NAR St. 22, front), it also occasionally appears as **TIL-wa** (e.g., K2085) or **ti-li-wa** (e.g., K1398). Similarly, at Quirigua, the antipassive verbal portion of the regnal name K’ahk’ Jolow Chan Chahk is usually spelled **jo-lo-wo** (e.g., QRG Str. 1B-1, D1 and Q1), but it also occurs with final **-wi** (e.g., QRG St. I).

**che-le-we CHAN-na-K'INICH K'UH-?KAAJ-AJAW K'UH-PA'-CHAN-AJAW yu-xu-lu CHAK-ka-la-TE'**  
*chelew chan k'inich k'uh[ul] kaaj ajaw k'uh[ul] pa'chan ajaw yuxul chak kal te'*  
 "He is Chelew Chan K'inich, Divine Lord of Kaaj(?) and Pa'chan, (and) this is the carving of Chak Kal Te'."

Table 3. Metropolitan Lintel, main text.

Given these parallels, we may contemplate either that **che-le-wa** and **che-le-we** are in free variation as spellings of *chelew*, or, more interesting, that earlier *cheleew* (with a  $-VV_1w$  antipassive suffix of CVC root transitives) had already lost or was beginning to lose its long vowel and had either already developed or was still developing into  $-V_1w$ . The spellings we have just considered all belong to the names of broadly contemporary Late Classic Maya rulers of the eighth and early ninth centuries AD, in a period neatly corresponding to Houston et al's (2004:91-92) "synharmonic turn" of ca. 750–850, during which period various lexemes and morphemes previously spelled disharmonically shifted to synharmonic representation. As the same authors have noted, such a shift might "indicate one of two things: (1) a sound change from complex to simple vowels, as expected by Ch'olan linguistic history [...]; or (2) an orthographic adjustment of a conservative or *retardataire* written language to correspond with patterns in spoken language" (Houston et al. 2004:97). The **che-le-wa** and **che-le-we** spellings do not in themselves resolve these two possibilities, but they do provide welcome additional data and suggest a spatial dimension to some of these orthographic and phonetic developments. In the capital, as we have seen, Itzamnaaj Bahlam IV's pre-accession name was always written with **we**, whereas at the subordinate center of Laxtunich—possibly to be equated with Tecolote, a fortified eighth-century site on Yaxchilan's northern border—it was written with **wa**.<sup>9</sup> Cross-linguistically, sound changes (such as loss of long vowels) tend to radiate outward from high-status centers of innovation (*focal areas*), in waves which attenuate with distance, occasionally failing to reach *relic areas* which frequently preserve older forms (Hock 1991:432-444). It is intriguing to speculate that **che-le-wa** (*cheleew*) and **che-le-we** (*chelew*) appear in contemporary texts from the periphery and core, respectively, because they represent an *apparent time* sound change which is in progress or complete at Yaxchilan but which has not yet begun or has not yet reached completion at Laxtunich (see Nevalainen 2015:263-265). Additional examples would be needed to test this possibility, but it is exciting that Maya epigraphy and Mayan historical linguistics have developed to the point where we can begin to consider such intriguing historical sociolinguistic questions.

What we need at this juncture is a text from the hand

of a single scribe (or sculptor) showing the clear visual separation of the putative **we** syllable from both T87 **TE'** and T61, 62, 65, and 339 **yu** (with which, as we will shortly see, it is also frequently confused).<sup>10</sup> Thankfully, we have just such a text in the exquisite painted lintel in the collections of the Metropolitan Museum of Art (Figure 6). Although unprovenanced, epigraphic and stylistic considerations indicate that this masterwork was commissioned sometime between 769–800, and that it came from La Pasadita, yet another fortified center on Yaxchilan's northern border (Doyle 2015).<sup>11</sup> Thus, the

<sup>9</sup> Laxtunich Panels 3 and 4 (both in private collections) likely also record **che-le-wa**, although this is difficult to confirm given the poor quality of available photographs. If so, then **che-le-wa** probably represents a localism. As noted above, the Kimbell Panel and Laxtunich Panel 4 were both signed by the same sculptor, Mayuy Ti' Chuween, of K'ina'. And although we do not know the location of K'ina', other references associate it with Piedras Negras, suggesting that Laxtunich was situated somewhere between this center and Yaxchilan (Guenter and Zender 1999; Martin and Grube 2000:146, n.10, 172-173, n.74; Zender 2002:170-176, 2004:300, n.115). One candidate for Laxtunich is Tecolote (Martin and Grube 2008:135), a fortified eighth-century site on the northern border of Yaxchilan investigated by Charles Golden and Andrew Scherer; its architecture emulates that of nearby Yaxchilan, and it is situated only 5 km from La Pasadita, a known Yaxchilan client (Golden et al. 2005; Golden and Scherer 2006; Scherer and Golden 2009).

<sup>10</sup> Thompson (1962) provides a confusing set of designations for **yu**, but only because the sign exhibits such profound formal variation, with distinct Early Classic, Late Classic, and Postclassic forms (Lacadena 1995:209-219), and with occasional graphic abbreviations. Thus, Thompson's T65 is just the Early Classic form of **yu**, T61 the Late Classic form, T62 the Postclassic form (Thompson's only examples come from the Madrid Codex), and T339 the graphically abbreviated forms. Henceforth, where we write **yu**, it should be understood as encompassing T61, 62, 65, and 339.

<sup>11</sup> Ian Graham visited La Pasadita in 1971 and was able to source two looted lintels to La Pasadita Structure 1 on the basis of their saw-marks, dimensions, and stone color (Ian Graham, personal communication 2005; see also Adamson 1975:249-259; Simpson 1976:104; Graham 2010:461). The first is now in the Ethnologisches Museum, Berlin (IV Ca 45530); it depicts the La Pasadita *sajal* Tiloom presenting his captive—T'uhl Chihk, prince of Piedras Negras—to his overlord Bird Jaguar IV in 759. The second is now in the Museum Volkenkunde, Leiden (3939-1); it also depicts Tiloom, this time casting incense with Bird Jaguar IV in 766. Since the Metropolitan Lintel also depicts Tiloom, albeit this time with Itzamnaaj Bahlam IV (r. ca. 769–800), we follow Doyle's (2015) suggestions for its age and origin. More recently, La Pasadita has been the subject of archaeological investigations by Charles Golden and Andrew Scherer, who have documented its fortifications and clear architectural ties to Yaxchilan (e.g., Golden et al. 2005).



Figure 6. Unprovenanced panel from La Pasadita, Guatemala. Metropolitan Museum of Art, New York, Michael Rockefeller Memorial Collection, bequest of Nelson A. Rockefeller, 1979.206.1047, [www.metmuseum.org](http://www.metmuseum.org).

lintel depicts Tiloom, known to have been the *sajal* of La Pasadita between at least 759–771, as he and one other (unnamed) individual present offerings to Itzamnaaj Bahlam IV, who sits cross-legged in regal splendor on a decorated throne. Indeed, the scene possibly celebrates an heir apparenity rite for Itzamnaaj Bahlam IV, if not his actual coronation in ca. 768–769. Be that as it may, the

lintel is undated, and the only texts are a short caption between Tiloom and the king—**ti-lo-ma sa-ja-la**, *tiloom sajal*, “He is Tiloom, the *sajal*”—and the slightly longer main text of six larger glyphs above the king (Figure 7 and Table 3).

It is a welcome development to have such an accomplished text from a single hand that nonetheless includes



Figure 7. Detail of the main text on the Metropolitan Lintel. Metropolitan Museum of Art, New York, Michael Rockefeller Memorial Collection, bequest of Nelson A. Rockefeller, 1979.206.1047, [www.metmuseum.org](http://www.metmuseum.org).

three signs that are often visually confused.<sup>12</sup> Note how Chak Kal Te' has carefully distinguished between the signs for **we**, **yu**, and **TE'**. Although all three signs share a disc with medial circle and one or more oblong projections, Chak Kal Te' has included diagnostic elements that nonetheless separate the three signs. The **we** sign carries its distinctive hook, which is slightly more angular than the curved lines in the projections flanking the central disc of **yu**. When **yu** is graphically abbreviated

to just the disc and one projection, as we will see, it is really only this curvature that distinguishes **yu** from **we**, and occasionally, as we have already seen with **TE'**, this distinction in fact vanishes, leaving virtually no difference in the depiction of these two signs. On Chak Kal Te's masterpiece, however, only the **TE'** sign carries the "globules of resin," visually distinguishing it from both **we** and **yu**. Moving forward, we presume that Chak Kal Te' knew his craft, and we take the distinctions he made between these signs on the Metropolitan Lintel as canonical, at least for the late eighth century Usumacinta region.

<sup>12</sup> As Doyle (2015) has noted, this clearly accomplished sculptor, known only as Chak Kal Te', carved at least one other lintel depicting Tiloom, dated to 771. Still unpublished, it resides in a private collection in Holland (Graham 2010:452-467). As one exercise in understanding what we have lost, it is worthwhile to speculate what the lifetime production of a master sculptor like Chak Kal Te' would have been, both in stone and wood, and yet we have only two affirmed works by his hand. As René Derolez (in Page 1991:17) has observed with respect to Anglo-Saxon runes, "incising runes may not have been a very common skill, so let us assume that there were on average only ten 'rune-masters' ... active at any given time, and that they produced each only two inscriptions a year on durable materials ... Even on such a minimalistic estimate they must have produced 2,000 inscriptions in every century. ... The inscriptions found so far will then amount to less than one percent of that total—a sobering thought, and one that ought to render any implicit or explicit argument from silence highly suspect." And this is to say nothing of their potential output on perishable media. Such studies as we have of Classic Maya sculptors (e.g., Davoust 1994; Montgomery 1995, 1997; Houston 2012, 2013; Houston et al. 2015; Martin et al. 2015) indicate that there may have been as many as ten contemporary sculptors at every major center, suggesting that these sobering statistics and their implications are equally relevant to Maya epigraphy.

To return briefly to the historical sociolinguistic question broached above, it's fascinating to note that Chak Kal Te' spells the pre-accession name of his king **che-le-we**—just as it is consistently spelled at the capital—but distinct from the **che-le-wa** spelling employed by Mayuy Ti' Chuween at Laxtunich/Tecolote. Although La Pasadita and Tecolote are roughly equidistant from Yaxchilan (about 17 km), there are nonetheless some indications that La Pasadita had somewhat stronger connections with the capital (Golden et al. 2005), and recall that Tiloom served both Bird Jaguar IV and his son Itzamnaaj Bahlam IV and may therefore have been familiar with the latter when he had not yet taken his regnal name and was still known only as Chelew Chan K'inich. Alternatively, if we consider that monumental orthography was a sculptor's prerogative, reflecting either his own pronunciation or the preferred pronunciation or orthographic conventions of the workshop where he was trained, Chak Kal Te' may well have stud-

ied at Yaxchilan, whereas Mayuy Ti' Chuween presumably studied at K'ina' (wherever precisely that was). In any case, it may well be significant, assuming our reconstruction of the historical development from  $-VV_1w$  to  $-V_1w$  is correct, that La Pasadita has adopted either the innovative **che-le-we** orthography or the innovative  $-V_1w$  pronunciation of the Yaxchilan court, while Laxtunich/Tecolote has retained the more conservative **che-le-wa** or  $-VV_1w$ . Again, additional examples (and more isoglosses) will be needed to test these possibilities—not least given the significant issues of statistical sampling noted earlier (see footnote 12)—but there are clearly prospects here for the mapping of historical sociolinguistic variations and their correlation with political affiliation, ethnicity, and other cultural variables.

### “He Stepped on the Causeway”

Let us turn now to the appearance of the putative **we** sign in other contexts, beginning with a particularly telling example on an incised alabaster bowl from the La Florida valley, Honduras (Figure 8).<sup>13</sup> The text opens with the Calendar Round 7 Edznab 11 Yax (A-B), convincingly placed by Berthold Riese (1984:14) at 9.17.4.10.18, or August 10, AD 775. Immediately following this we find three verbal phrases (C-F, G-I, and J-L) before we come to the subject of this lengthy sentence, identified as the ruler Yax Pasaj Chan Yopat of Copan (M-R), who reigned from c. 763–810 (Martin and Grube 2000:206). The first verbal phrase (C-F) is slightly problematic, since there are several weathered and uncertain signs, but we can make out its basic structure as **u-Ca-ba-wa i-tz'i-ni TE' ta-ji**, *uCabaw itz'in te' [itz'in] taaj*, “he ...ed the junior stick(s) (and) [junior] obsidian(s).”<sup>14</sup> The verb is clearly an active root transitive declarative (likely with unmarked aspect), and although of uncertain meaning—owing in large part to the still-undeciphered **Ca** syllable—its direct objects are the “junior trees and junior obsidians.” This is almost certainly a reference to members of a ranked ritual order of priest-scribes (*itz'iin taaj* and *sakuun taaj*) only recently identified by David Stuart and Franco Rossi in the mural paintings of Structure 10K-2 at Xultun, Guatemala (Saturno et al. 2015). The implication here is that Yax Pasaj was associated with a similar group of priest-scribes, whose residences were perhaps located in El Abra and/or Los Higos, two key Copan-affiliated sites in the La Florida valley (Canuto and Bell 2008).

The second verbal phrase (G-I) is much clearer, and can be read as **u-te-k'e-we bi TUUN-ni**, *utek'ew bi[h] tuun*, “he stepped on the causeway.”<sup>15</sup> The sign below **te-k'e** (at G) has long been interpreted as a graphically abbreviated **yu** (strikingly similar to a bona fide **yu** on YAX St. 12, C3), particularly given the pronounced curvature of the line in its oblong element. But **yu** makes no sense in this context, and the close association with two **Ce** syllables, as discussed above, rather suggests **we**. In construction, the verb is another active root transitive declarative, though here in a unique synharmonic construction for the  $-V_1w$  ending. As Robert Wald (1994) has demonstrated, this inflectional morpheme is more typically written with syllabic **wa** regardless of the identity of the root vowel, leading to some debate as to whether it would be best represented as  $-VV_1w$ ,  $-V_1'w$ , or simply  $-V_1w$  (Houston et al. 2000, 2004; Lacadena and Wichmann 2004). We cannot resolve this debate here, but we can contribute the observation that the

<sup>13</sup> According to Berthold Riese (1984:13), citing a personal communication from Ricardo Agurcia, “the alabaster bowl was discovered by a farmer in a significant group of ruins in marshy terrain near La Florida, Departamento de Copán, Honduras. It is said to have been found in a hoard with other vessels, including some of Copador type” (translation from the German).

<sup>14</sup> One of us (Zender 2014d:7-8) has noted several precedents for this kind of non-contiguous haplographic abbreviation, where although *itz'in* (D) is written but once, it was likely intended to modify both *te'* (E) and *taaj* (F), as in similar diphthastic expressions such as 3-9-**CHAHK-ki** for *uhx chahk baluun [chahk]* “three rain gods (and) nine [rain gods]” (DO Panel, pC1 and pM1), and **TE'-TOOK'-BAAH-ja** for *te' baah[al] took' [baahaj]*, “wooden image (and) flint [image]” (CRN HS2, Block XI, pA1). Such abbreviations are far more common in the Classic Maya script than has been generally recognized (see also Houston and Martin 2011).

<sup>15</sup> There can be little doubt that this reflects Proto-Ch'olan \**tek'* “to step on, stand upon, kick” (Kaufman and Norman 1984:132; for Ch'orti' nuances see also Hull 2016:400). *Tek'* is a CVC-root transitive in both Ch'olan and Tzeltalan languages (Kaufman 2003:1420). Other epigraphic contexts are supportive. Thus, on the DO Panel from Palenque (D3-E3) we have the Classic Ch'olti'an passivization **te-k'a-ja yo-OOK tu-WITZ-li u-K'UH-li**, *tel[h]k'aj yook tuwitzil uk'uh[uu]*, “his legs were set upon the mountain of his god(s),” in reference to a child's induction into ritual practice (perhaps with assistance?). Similarly, on Dresden 8c, accompanying a scene of God D climbing temple steps, we have **u-te-k'a-ja NAAH-hi ITZAM-na-?**, *utek'aj naah itzamna ...*, “Itzamna ... stepped in the house,” reflecting a Yukatekan completive root transitive in *-aj* (Hofling 2006:373-376, Table 3). For *bih tuun* as “causeway (lit. road of stone)” see Stuart (2007) and Martin (2015).

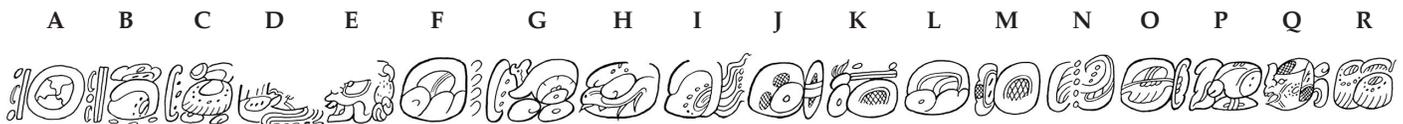
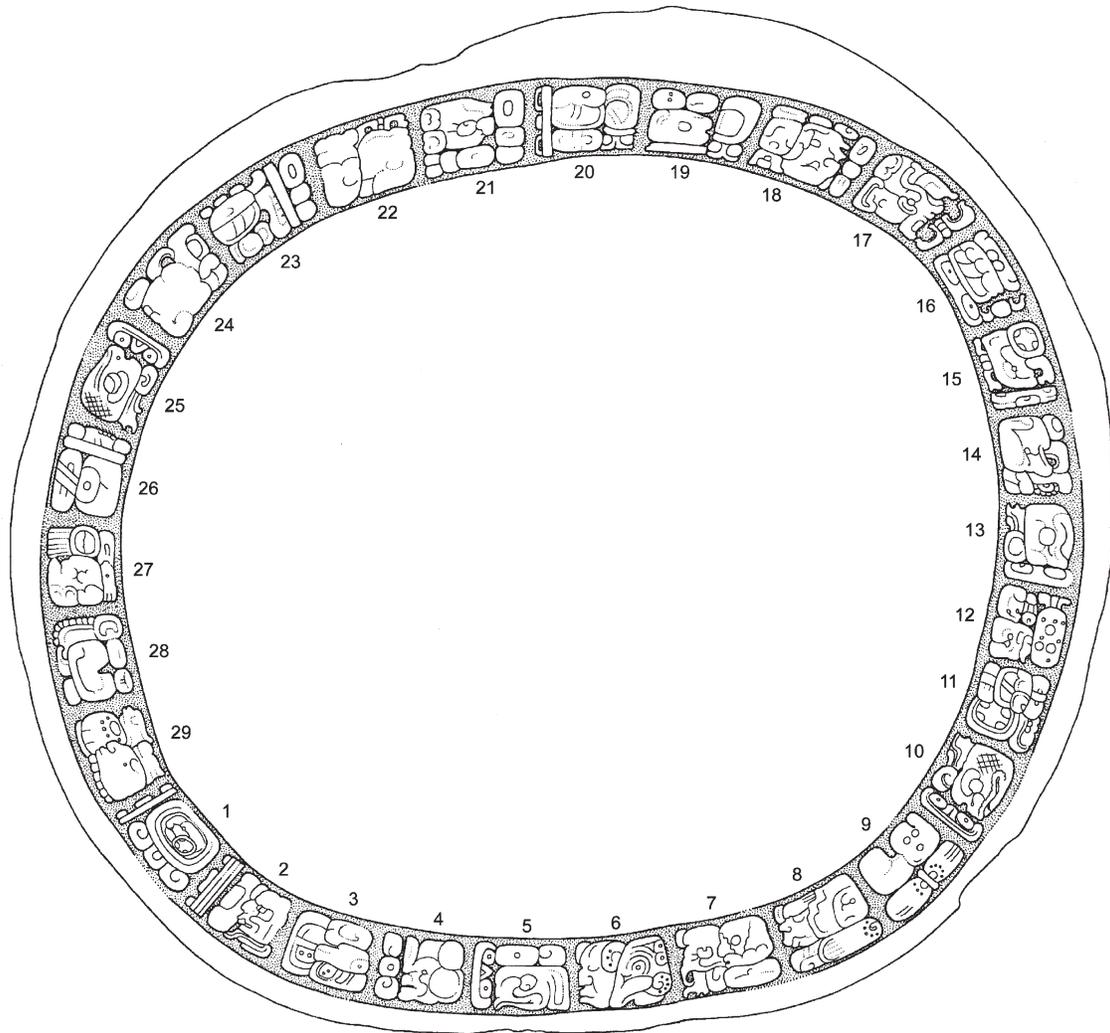


Figure 8. The text on an alabaster bowl from the La Florida valley, Honduras (drawing by Linda Schele and Mark Van Stone, SD-1041; slightly amended by Marc Zender based on photographs by Schele, research.famsi.org/schele\_photos.html, #s 64051-64060).



**Figure 9.** Unprovenanced drum altar from the Yaxchilan region. Fundación La Ruta Maya, Guatemala (drawing by Nikolai Grube, after Grube and Luín 2014:Fig. 4).

synharmonic spelling of this verb—and probably the still-undeciphered verb (at C) as well—is most likely motivated by the late eighth-century context, during the aforementioned synharmonic era (Houston et al. 2004). For one thing, note that *itz'in* (D) and *yopat* (P) are also written synharmonically. For another, as Houston et al. (2004:91-92) have noted, Yax Pasaj's Copan Temple 11 inscriptions in fact provide some of the earliest documented synharmonic spellings in the corpus, precisely contemporary with the text on this alabaster bowl.

The text continues with the third verbal phrase (J-L) **AK'-ta ti-12-pa ta**, *ak'ta ti lajchan pata[n]*, "he danced with 12 (units of) tribute," before concluding with the names and titles of the king (M-R).<sup>16</sup> Taken as a whole, then, the alabaster vase records that "on the day 7 Edz nab 11

Yax, Yax Pasaj Chan Yopat, Lord of Copan and *bahkab*, ...ed the junior sticks and junior obsidians, stepped on the causeway, and danced with twelve units of tribute." These interrelated and interdependent actions likely encompass Yax Pasaj Chan Yopaat's role as overlord and ritual supervisor to the *te'* and *taaj* officeholders acknowledged in the first verbal phrase. The king's tentative use of the causeway (perhaps in an official act of inauguration), and his dance with tribute items (perhaps clothing or jewelry provided to him for the event), probably served as public acknowledgements of the service labor and material goods provided to the Copan state by his clients in the La Florida valley. The alabaster vessel itself was almost certainly carved at Copan—given its fine calligraphy and precocious orthography in line with contemporary carving at the capital—and it may well have been gifted to Yax Pasaj's clients, both in recognition of their past service and as a material reminder of their socioeconomic obligations to the king.

<sup>16</sup> See Stuart (1995:354-356; 2006:127-128) for *patan* as a generic term for tribute, whether goods or labor.

### “His Thing for Tamale-Eating”

In 2014, Nikolai Grube and Camilo Luín published a remarkable drum altar in the collections of the Fundación La Ruta Maya, Guatemala (Figure 9). As they observed, the altar was evidently commissioned by Bird Jaguar IV on 9.16.13.5.9 7 Muluc 17 Yaxkin (glyphs 1-2)—i.e., June 19, AD 764—at least partially in honor of his father Itzamnaaj Bahlam III (r. 681–742), who is both named on the upper text and depicted on the side of the altar (see Grube and Luín 2014:Fig. 8 for details and discussion). For our purposes, however, it is the dedicatory phrase (at 3-8) that is most significant, for there we can read **i-K’AL-ja yu-xu-lu u-we-be na-li ya-? u-mu-MUHK-li**, *i k’a[h][a]j yuxul uwe[’]bnaal ya... umuhkil*, “then the carving of the altar of the ... of his burial was made/ adorned.”<sup>17</sup> As Grube and Luín recognized, the owner of the burial (named at 9-14) was apparently the child of a woman (15-17) who had several other offspring (18, 19, 20, 21-22) including Itzamnaaj Bahlam III (23-29). Thus Bird Jaguar IV apparently dedicated this mortuary altar to his late paternal uncle. Note the potential **we** sign (5), this time immediately above the syllable **be** (Houston et al. 2006:243-250). Once again, it closely resembles a truncated **yu** sign, which is how it was interpreted by Grube and Luín (2014:41-42). However, as they readily admit, **\*yu-be** is a decidedly uncouth spelling, and the search for relevant roots of the shape *-ub(eC)*, *-u’b*, or *-uub* comes up empty. On the other hand, **we-be** would be a straightforward synharmonic spelling in keeping with Stuart’s (2002a, 2008) principle.

We therefore interpret **u-we-be na-li**, *uwe[’]bnaal* as a reduced form of *\*uwe’ibaanaal* or *\*uwe’iba’naal*, analyzable as *\*u-we’-ib-a-oon-aal*. The first element clearly provides the third-person possessive. The second element is the intransitive verb root *we’* “to eat (tamales)” (Zender 2000:143). The third is the common *-ib* instrumental suffix, producing the now well-known Ch’olan term *we’ib* n. “plate, dish (lit. tamale-eating-instrument),” which appears on several tamale service plates during the Classic period (Zender 2000:1043; see also Boot 2003:3). The fourth element is most likely the Ch’olan *-a* causativizing suffix (MacLeod 1987:Fig. 12), producing *\*we’iba* “to use for the ingestion of tamales,” for which we have the Ch’ol cognate *we’iban* with the same meaning (Aulie and Aulie 1998:109).<sup>18</sup> The fifth element is the Ch’olan *-oon* antipassive of derived and non-CVC-root transitives (Lacadena 2000; Zender 2010:13, n. 22), probably producing something like *\*we’ibaan* or *\*we’iba’n* “to tamale-eat,” where the impermissible *a-oo* contact likely led to progressive vowel harmony and either regressive quantity or the production of a glottal stop, assuming Ch’orti’ morphophonemics and some potential script parallels are reasonable guides here (Lacadena 2013:13-16, and example 4). Finally, the last element surely represents a *-VV,l* nominalizing suffix. At this point, then, we have either *\*we’ibaanaal* or *\*we’iba’naal*, meaning

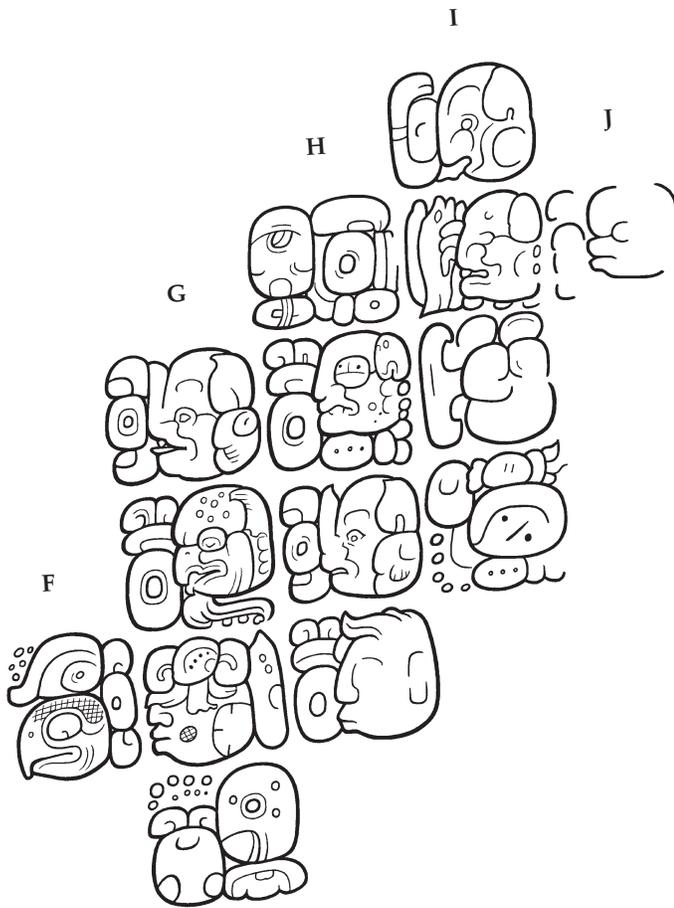
“one’s thing for tamale-eating.” Note, however, that the syllabic weight of the final long vowel causes the stress to shift, leading to syncope of several unstressed vowels (*i* and *aa* or *a’*) and probably of one or both glottal stops (’), although weak consonants of this type are typically abbreviated in Maya writing anyway (Zender 1999:130-142; Lacadena and Zender 2001:2-3). In the final analysis, this leads us to *uwe[’]bnaal* “his thing for tamale-eating,” the form directly indicated by glyphic **u-we-be-na-li**.

Considered as a whole, then, the Classic Maya term for altar seems to have referred to a place where tamale plates or similar comestible offerings would have been gathered. This is strikingly reminiscent of both Classic iconography and modern ethnographical accounts. As Houston et al. (2006:122-127) have argued, Classic altars and offering bowls were primary locales for the feeding of gods and ancestors. They note that the altar to Copan Stela 13 contains a dedicatory text which records that “the food (*uwe’*) of the Sun God was fashioned here” (Houston et al. 2006:123, Fig. 21). Similarly, David Stuart (personal communication 2014) informs us of an unpublished miniature altar from Yaxchilan, with a possessed name tag likely reading either **u-TI’-bi-li**, *uti’bil* “his thing for eating meat” (cf. Tzeltal *ti’* “to eat flesh,” Berlin 1968:211) or **u-WE’-bi-li**, *uwe’bil* “his thing for eating tamales.”<sup>19</sup> Classic Maya texts and iconography also indicate that human hearts were the principle food of the Sun God, but “the tamale was linked conceptually to the human heart” and “this organ or its symbolic substitutes may well have been the offering on the altar” (Houston et al. 2006:123). These observations resonate with ample references in the ethnographic literature to *mesas* as “eating places” for ancestors. Thus, as Bruce Love notes, *mesas* in contemporary Becanchen, Yucatán, are stacked with “cups of *báalche’*, cups of thick soup [known as *k’óol*], ... and piles of various classes of breads” (2012:129). Such “offerings and artifacts” were the means by which “humans and spirit beings alike would receive sustenance” (Love 2012:107). Although the Spanish borrowing *mesa* is now the term of art for of-

<sup>17</sup> Grube and Luín (2014:48, n.1) have proposed *k’al* “make” on the basis of Ch’ol *k’äl* vt. “construir (casa)” (Aulie and Aulie 1998:20) and Ch’olti’ <cale> (*k’al-e*) “hacer” (Morán 1695:36). Another possibility would be *k’al* (later *ch’al*) “adorn, decorate,” as suggested by Ch’ol *ch’äl* vt. “to adorn something” (Hopkins et al. 2011:48) and Tzeltal *ch’al-el* vt. “adornar” (Slocum et al. 1999:36).

<sup>18</sup> The *-n* in the Ch’ol form is not related to the *-n* in Classic *we[’]bnaal*, for it instead marks incompletive aspect in the greatly reorganized Ch’ol verbal paradigm.

<sup>19</sup> Alexandre Tokovinine (personal communication 2015) kindly suggests to us that Río Amarillo Altar 1 may contain a relevant parallel in one of its dedicatory passages (at V1-U2), which possibly referred to the altar as a **we-be TUUN-ni**, *wel’b]tuun*, “eating stone.” The presence of **be** is certainly supportive but, as Tokovinine points out, the potential **we** sign is too eroded to be certain.



**Figure 10.** Incised text on Calakmul Stela 51, F1-J1 (drawing by Simon Martin, after 1932 photograph by Frances Morley; note that glyph designations here depart from those in Ruppert and Denison 1943:11).

fering tables in Ch'olan and Yukatekan languages, Colonial dictionaries still preserve older forms that are much more reminiscent of Classic *we(')bnaal*, such as Colonial Tzotzil *ve'ebal* "dining table" (Laughlin 1988:327) and Colonial Yucatec *wi'ileb che'* "mesa de comer" (Pío Pérez in Barrera Vásquez et al. 1980:923). This continuity in ritual practice and the terminology of offering tables is striking; moreover, it provides particularly strong evidence in support of the *we* decipherment.

### "They Delivered Their Carvings"

Early last year, Martin et al. (2015) presented an insightful new analysis of the lengthy, well-executed sculptor's signature on Calakmul Stela 51 (Figure 10). As they demonstrate, the monument depicts the Calakmul king Yuknoom Took' K'awiil (r. AD 702–731). It was erected at the base of Structure I in 731 and was carved in a somewhat better, denser stone than other Calakmul monuments and "may have been imported to the site" (Martin et al. 2015:Note 2). This is essential background

to their analysis of the text, which, leaving the introductory verb (F1) to the side for the moment, clearly references two different individuals. The first is introduced by the possessed noun *yuxul* "his carving" (G1), followed by his name (G2–G3) and the titles *k'uhul 'chatahn' winik* (G4–H1) and *sak wahyis* (H2), both associating him with the region encompassing Calakmul and sites to the south as far as La Corona. The second individual is also introduced by *yuxul* (at H3), followed by his name (H4–I2), and several titles including the possible emblem glyph of Uxul (I3), *k'uhul sak wahyis* (I4) and an unclear element (J1). This analysis of the text is supported and extended by a near-duplicate sculptor's signature on Calakmul Stela 89. As the authors note:

The incised texts on Calakmul Stela 51 and 89 are conventional sculptor's signatures in a number of respects, but are unusual in two significant ways. First, they are the only ones to name major lords and indicate that they were personally responsible for the creation of the work. There are a few cases in which artisans carry high social position, but no others in which the governing elite of distant political centers are specified in this manner. We need not take this at face value, but instead consider the ways that these characters may have commissioned these two monuments and stand as symbolic or rhetorical producers—an adaptation of the normal function of signatures. (Martin et al. 2015)

Now let us return to the introductory verb (at F1). Martin et al. (2015) suggest the reading *ye-be-yu*, and suggest possible linkages to either Proto-Ch'olan *eb tv.* "to send/deliver, give" (from Proto-Mayan *\*ab tv.* "to send, give" per Kaufman 2003:58) or to Proto-Ch'olan *\*ye'-be* "to give something to someone" (Kaufman and Norman 1984:137), in which *\*-be* would have functioned as the applicative, marking an indirect object (see Kaufman and Norman 1984:139). As they observe:

... either verbal root would imply that the text on Stela 51 is a statement of gifting or tributary payment, and if this is so then this small inscription is a revealing statement about the relationship and obligations between Calakmul and two of its leading clients. (Martin et al. 2015)

The consideration that some monuments (perhaps not CLK St 51 and CLK 89 alone) were commissioned as gifts or tribute for overlords is an exciting one that deserves continued investigation elsewhere, including close attention to quality of stone, paleography, and sculpting style. Nonetheless, we concur with the authors' conclusions and only wish to take a closer look at the verb (F1).

The fact is that *ye-be-yu* is an awkward glyphic spelling. The authors admit as much when they note that "[t]he role of the terminal *yu* as a verbal suffix is unclear." Indeed, there are few precedents for this kind of spelling. (Tikal Lintel 2 of Temple IV, B11, is possibly comparable, inasmuch as the still-undeciphered T174var, denoting a verb root in some other contexts, is here followed by *-yu*, but it is by no means certain that it represents a

verb here.) Perhaps more importantly, there is no clear etymology for the resultant suffix, whether *\*-eyu(C)*, *\*-e'y*, or *\*-eey*. Orthographically speaking, however, and as we have now seen in several other contexts, the syllables **ye** and **be** strongly suggest that the final sign should also be a **Ce** syllable. In this case, we suggest **we**. True, this would be our first instance of a “full” **we** syllable with flanking oblong elements (it is likely not the only one), and there is no doubt that it even more closely resembles **yu** as a result. But we would argue that the signs still have a few distinguishing features. Note, for instance, that the tentative **we** (F1b) is much taller than it is wide and has only one medial circle in its central element, as well as curved bisecting lines in its oblong flanges that do not quite touch the sides. By contrast, the two certain **yu** signs (at G1a and H3a) are proportionally somewhat more squat, have a circle with additional ring in their central elements, and slightly more angular bisecting lines in their flanges that reach all the way to the left edge of the sign. Assuming that the sculptors of what Morley (1933:200) termed “the most beautiful monument at Calakmul” knew their business, it seems reasonable to propose that these differences, however slight, may have been intentional.

Be that as it may, we can now suggest **ye-be-we**, *yebew*, “they delivered them.” Instead of an obscure verbal formation, we have the familiar active root transitive declarative, albeit in a late synharmonic spelling probably reflecting  $-V_1w$ . As first suggested by Martin et al. (2015), the root likely reflects Proto-Ch’olan *eb tv*. “to send/deliver, give,” which in turn hails from Proto-Mayan *\*ab tv*. “to send, give” (Kaufman 2003:58). This is the same root that furnishes us with the derived Proto-Ch’olan noun *\*ebet* “messenger (i.e., one who delivers, gives)” (Kaufman and Norman 1984:119), and which likewise appears in the script in the spellings **ye-be-ta** and, somewhat later, **ye-be-te** (Houston et al. 2006:243-250). Given the usual syntax of transitive verbal phrases, we might have expected the inflected verb to be followed first by its direct objects (its patients) and then by its subject (the agent), but we would argue that this particular context presented unique challenges in the form of two sculptors each receiving more or less equal credit for the gift (though it might be noted that the order of the two sculptors is equivalent on both CLK 51 and 89). Put another way, the syntax of grammatical possession, where possessed nouns (G1 and H3) must be followed by their possessors (G2-H2 and H4-J1), effectively means that we are provided with the direct objects and agents simultaneously. As such, we can offer the following loose translation of the entire sentence, leaving out undeciphered, eroded, or uncertain elements, and reorganizing the syntax to comport with English: “Sak Ikin ..., *k’uhul ‘chatahn’ winik*, ..., *sak wahyis* (and) ... .. Tzahkaj Bahlam, *naahkuum ajaw*, *k’uhul sak wahyis* ..., delivered their carvings.”<sup>20</sup>

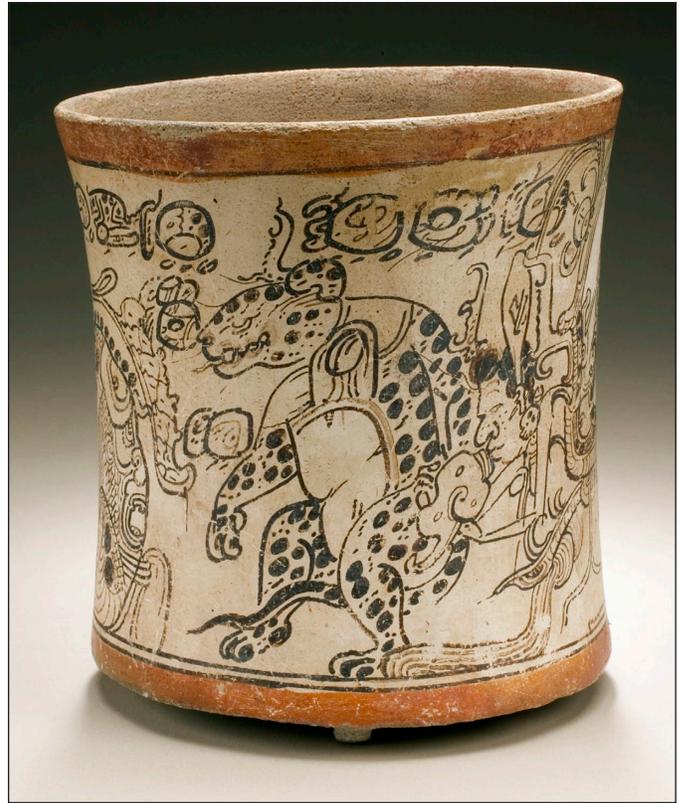
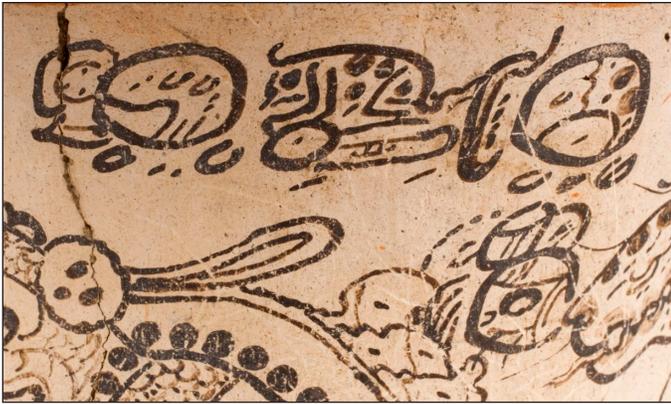


Figure 11. Unprovenanced Codex-style vessel. Los Angeles County Museum of Art, Gift of the 2006 Collectors Committee, M.2006.41, [www.lacma.org](http://www.lacma.org).

### “Eight Thousand Pelts”

Our next context takes us to a well-known Codex-style vase in the collections of the Los Angeles County Museum of Art (Figure 11). Although unprovenanced, recent epigraphic, stylistic, and chemical analyses—both of archaeologically-recovered specimens and pieces in museum collections—indicate that such vessels were produced almost exclusively in the Mirador region of northern Guatemala, primarily at Nakbe, in the period between ca. AD 675–750 (Reents-Budet et al. 2010). This elegant masterwork depicts a rogues’ gallery of nightmarish *wahy* beings, including an enigmatic jaguar first identified by Nikolai Grube and Werner Nahm

<sup>20</sup> One of our reviewers, while acknowledging the general desirability of avoiding stilted phrasing by converting Mayan VOS syntax into English SOV syntax in translation, nonetheless asks us “to also provide an intermediate bridge between what was written and your translation.” We are happy to do so. If we translate loosely and track the original syntax we instead have something like: “They delivered them, the sculpture of Sak Ikin ..., *k’uhul ‘chatahn’ winik*, ..., and *sak wahyis* (and) the sculpture of ... .. Tzahkaj Bahlam, *naahkuum ajaw*, *k’uhul sak wahyis*, and ...”.



**Figure 12.** Detail of caption on the LACMA vase. Los Angeles County Museum of Art, Gift of the 2006 Collectors Committee, M.2006.41, www.lacma.org.

(1994:687-688).<sup>21</sup> Despite what at first glance seems to be a rather active pose, however, the jaguar may well be deceased. His eyes are closed, his lips are pulled back to reveal several teeth, and his tongue emerges from his mouth. Moreover, his tail is humbly tucked forward between his legs, and he sports a large scarf knotted at the throat—an iconographic theme that has been linked to ritual beheadings (Stuart 2014).

The creature's caption appears in five glyph blocks which seem to float in front of his face, with the fourth block slightly overlapped by his muzzle (Figure 12). Grube and Nahm (1994:687) propose that the first two should be read as *\*K'IN-TAN-la BOLAY-yu*, *k'in tanal bolay*, "sun-stomach-jaguar," citing Proto-Cholan *\*bo'lay* "spotted; jaguar" and *\*tahn* "chest" (Kaufman and Norman 1984:Items 55, 504). We concur with various aspects of this reading, but it's clear to us that the first glyph block was damaged by the crack passing through it, and has most likely suffered repainting as a consequence. Rather than "a vase turned upside down with a *k'in* sign infixes" (Grube and Nahm 1994:687), we suggest that this was originally simply *\*K'IN-*ni**, as suggested by several glyphic parallels to be discussed presently.

As for the second glyph block, we are dubious about the **BOLAY** identification for several reasons.<sup>22</sup> First, given our present understanding of Classic Maya orthography, *-yu* is an unlikely phonetic complement for *bo'lay*, which has no vowel complexity in its final syllable. Second, the T832 "headless jaguar" sign would be a strange choice of icon for *bo'lay*, a generic term which refers to all kinds of dangerous animals, including not only jaguars, but also jaguarundis, coyotes, foxes, and several types of venomous snakes (e.g., Barrera Vásquez et al. 1980:62, Hopkins et al. 2011:23-24). *Bo'lay* only gains specificity when it is prefixed by a color term, as in Ch'ol *k'ün bo'lay* "coyote" and *ik' bo'lay* "nauyaca" (Hopkins et al. 2011:23-24). To our knowledge, the T832 "headless

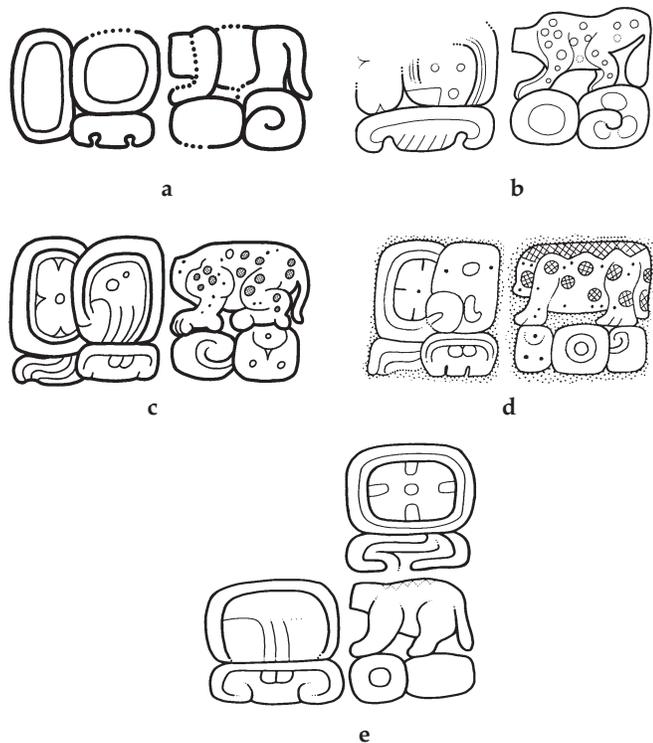
jaguar" is never prefixed by a color term. Third, we now have at least one Classic example of the term *bo'lay* on a Late Classic polychrome cylinder vase in the collections of the Fundación La Ruta Maya, Guatemala, where we find the captor title **u-CHAN-na SAK-bo-la-ya**, *uchan sakbol'lay*, "captor of Sak Bo'lay" (Musée du quai Branly 2011:170), and this further suggests that *-yu* would be an unlikely complement to a **BOLAY** logogram. Fourth, to the extent that we can trust the details on the LACMA vase, the sign below the "headless jaguar" more closely resembles **TE'** than it does **yu**. As we will shortly see, however, it is most likely none other than the **we** sign, here with the selfsame **TE'**-like infixes that we have already seen on Yaxchilan Stela 21.

The strange *wahy* character appears on a couple of other vases, and his name also features as an epithet of the Sun God in still other contexts. Of the eight additional examples of this name phrase that are known to us, we have culled five that are least eroded and yet also provide broad regional and chronological coverage (Figure 13).<sup>23</sup> We will examine these chronologically, tracing both spelling variations and the paleographic development of the **we** sign. Erected in AD 488, Tikal Stela 3 provides our earliest example (Figure 13a). Despite significant erosion, the signs can be reasonably reconstructed as *\*K'IN-*\*TAHN-na T832-we**. Note the form of the final sign, with its curved bisecting element, so very different from the angular **TE'**-semblant on the much later LACMA vase. Only the **we** sign has this developmental history. Our second example is Yaxchilan Lintel 47 (Figure 13b), dating to AD 526, and here sufficient detail survives to allow certainty as to the identities of all five elements, *K'IN-TAHN-na T832-we*. Note the internal circlets on the curved bisecting element. (Tikal Stela 3 likely featured these as well.) Grube and Nahm (1994:688) interpreted this as T21 **bu**, but this is more likely to be an Early Classic diagnostic of **we**, lost in Late Classic examples, as the **we** sign moved to distinguish

<sup>21</sup> The **WAY** glyph was deciphered by Houston and Stuart (1989), while a useful compilation of *wahy* beings was provided by Grube and Nahm (1994). The original conception of these beings as "co-essences" of Maya rulers has more recently shifted to take account of their nocturnal and threatening aspects, as well as the rich tradition of nagualism in Mesoamerica (see, e.g., Stuart 2002b:411, 2005; Zender 2004:72-77; Helmke and Nielsen 2009). More recently Zender (in Stone and Zender 2011:233, n.7) has outlined the etymological evidence in support of *\*wahy* "sorcery, spirit."

<sup>22</sup> It might be noted that our concerns about the proposed **BOLAY** reading apply equally to Helmke and Nielsen's (2009:Fig. 2) more recent proposal of **BOL**.

<sup>23</sup> For completists, the three remaining examples are: (1) Xunantunich Stela 1, B1, heavily eroded, ... .. T832-*\*we* ...; (2) K1743, some repainting, [*\*K'IN*]TAHN T832 **u-WAY-*ya*** ?; (3) "Deer-Dragon Vase," *K'IN-ni to/TOK-T832 ba-tz'u u-WAY-ya* ?-*TAL-*la** (Robicsek 1978:Fig. 145; Schele 1985:61, Fig. 3).



**Figure 13.** Various spellings of the K'in Tahn K'eweel epithet: (a) \*K'IN-*\*TAHN-na K'EW-we*, Tikal Stela 3, C3-D3, AD 488 (drawing by Marc Zender after William R. Coe in Jones and Satterthwaite 1982:Fig. 4a ); (b) K'IN-TAHN-na K'EW-we, Yaxchilan Lintel 47, C3-D3, AD 526 (drawing by Marc Zender after Ian Graham, CMHI 3:103); (c) K'IN-ni-TAHN-na K'EW-we-la, Palenque Temple of the Sun Tablet, C2-D2, AD 692 (drawing by Marc Zender after a photograph courtesy of Linda Schele); (d) K'IN-ni-TAHN-na K'EW-we-la, Yaxchilan Stela 18, front, C1-B2, AD 723 (drawing by Ian Graham, from Martin and Grube 2000:123); (e) K'IN-ni *\*TAHN-na K'EW-we(-la?)*, Ek Balam MT 7, B13-B14, ca. AD 785 (drawing by Marc Zender after Alfonso Lacadena in Grube et al. 2003:25).

itself from **bu** (and **mu**) and in so doing came instead to be visually confused with **yu** and then, still later, with **TE'**. Our third example is from Palenque's Tablet of the Sun, dedicated in AD 692 (Figure 13c). Here we can read the sequence as K'IN-ni-TAHN-na T832-we-la, and **we** now has the familiar **yu**-like features seen in other Late Classic contexts. However, note the novel **la** syllable infixed into its disc. Yaxchilan Stela 18 is our fourth example, dating to AD 723 (Figure 13d). It is very similar to the Palenque example with one small difference: **la** and **we** appear to have changed places. This may just be an example of playful sign ordering, but it's also possible that the "full form" of **we** is implicated, with **la** merely infixed into its leftmost flange. If so, then the matter is handily explained, since infixed signs can be read either before or after the signs into which they are infixed.

Finally, we come to our fifth example, Ek Balam MT 7 (Figure 13e), an incised bone lancet from the tomb of Ukit Kan Lehk Took', dating to ca. AD 785. Unfortunately, although clearly the same epithet, erosion makes it difficult to confirm whether the **we** sign has here developed the **TE'**-like details seen on Yaxchilan Stela 21 and the LACMA Vase. We include it here only to establish that the **we** sign is also attested in Late Classic northern Yucatán.

Having traced the visual history of the **we** sign in the context of its role as a phonetic complement to the T832 "headless jaguar" sign, we now have more than ample evidence to propose a decipherment for this logogram. Note that Early Classic forms seem to complement T832 with **we** alone, whereas the Late Classic examples feature both **we** and **la**. Recall also the consideration that **Ce** signs tend on the whole to operate as synharmonic complements. This suggests that T832 should be of the form *Cew* (later *Ceweel*), and by far the best candidate is the widely-diffused lowland term *\*k'eweel* "cuero (leather), piel de animal (pelt)" (Kaufman 2003:375), with cognates including Ch'orti' *k'ewer* "leather, skin, hide" (Hull 2016:231), Itzaj *k'ewel* "hide, skin" (Hofling and Tesucún 1994:390), and Yucatec *k'éevel* "skin, hide, leather" (Bricker et al. 1998:151). A "headless jaguar" seems a reasonable icon for "leather, skin, hide." Incorporating the head of the jaguar may have been confusing, in that it might have connoted the animal itself rather than its handsome pelt. Further, as Stephen Houston (personal communication 2014) usefully suggests to us, a jaguar's skin must have been something of an exemplary pelt, the most valuable of all, and it therefore makes sense that it would have been chosen as the type example for a generic concept. Andrea Stone and Marc Zender have made a similar point about the sign for "tail," noting that:

while the **NEH** sign is a perfectly natural depiction of a jaguar tail, it is at best a highly conventionalized term for tails in general, particularly when employed as a descriptor for the tails of coatis, deer, and monkeys, for instance. As with all hieroglyphic scripts, this decoupling of specific characteristics is unavoidable whenever one seeks to represent a general category, for categories do not actually exist in nature, and one must therefore choose a specific member of the category to represent. (Stone and Zender 2011:205)

Accordingly, we propose that the T832 "headless jaguar" was in fact the logogram for K'EW "pelt." Thus, even though *-el* (Ch'orti' *-er*) is not a separable part of the modern terms—e.g., Itzaj *uk'ewelal balum* "jaguar skin" (Hofling and Tesucún 1994:390) and Yucatec *uk'éewlil kéeh* "deerskin" (Bricker et al. 1998:151)—it nonetheless seems likely that this element originated as an inalienable suffix sometime between the late sixth or early seventh century AD (thereby accounting



Figure 14. Tributary scene on an unprovenanced polychrome vase in a private collection (photograph K5062 © Justin Kerr).

for the absence of *-la* in our Early Classic spellings), before becoming fossilized and reinterpreted as part of the root. Note that *-Ce-la* is precisely the spelling we would expect for an early inalienable suffix, before later changes (either to orthography or pronunciation) led to the adoption of synharmonic *-Ce-le*.<sup>24</sup> Thus, Classic Maya epigraphy and philology, combined with the results of the comparative method, now allow us to trace the development of this term from Preclassic *\*q'ew* to Early Classic *k'ew* (in the fifth and sixth centuries) to Late Classic *k'ewel* (in the seventh and eighth centuries) to modern *k'ewel* and *k'ewer*. The historical semantics of this word are less clear, but it would be naïve to believe that it always meant “leather, skin, hide.” As such, it’s interesting to note once again that Maya scribes selected a “jaguar pelt” to represent the lexeme and, as we will shortly see, that its only known script contexts refer to pelts exclusively. This is mind, it might be the case that this term developed from a narrow reference to “animal pelts” in the fifth through eighth centuries, and only later broadened to encompass “leather” more generally, as in Ch’orti’ where (uniquely) *k'ewer* can also mean “whip” and “lasso” (Hull 2016:231).

To return to the caption text associated with our *wahy* being (Figure 12), we can now read it as *\*K'IN-ni-TAHN-la K'EW-we u-WAY-ya K'UH-ka-KAAN-AJAW*, *k'in tahn k'ewel[u] uwa[h]y k'uh[ul] kaan[ul] ajaw*, “Sun-Chested Pelt is the nagual of the divine Kaanul lord.” The precise sense of “Sun-Chested Pelt” is somewhat elusive, but we need no longer wonder why the

jaguar appears to be deceased and sports the sacrificial scarf. Evidently he is just a jaguar pelt, albeit one with a sunny chest. In other contexts, as we’ve seen, *K'in Tahn K'ewel* appears to have been a venerated epithet of the Sun God, suggesting that animal skins may have had some special relevance for him, perhaps as an item of clothing or a select tribute offering. On the other hand, there are several Colonial Yucatec idioms that might prove relevant to the role of *k'ew* in a deity epithet, such as *k'éewlil báalam* “sabio, prudente, de varios pareceres (wise, prudent, of considered opinion)” and *bay uk'éewelil báalam upuksi'ik'al Juan* “es Juan muy sabio y prudente (John is very wise and prudent)” (Barrera Vásquez et al. 1980:396).

Unfortunately, we do not find *K'EW* in many other contexts, but one welcome exception is a lavish scene of tribute offerings on an unprovenanced vase in a private collection (Figure 14). Here, the Maize God

<sup>24</sup> As an example, consider Shell Pendants 15A/15B from Comalcalco Burial Urn 26, where we have the construction: *t'o-xa-ja a-pa-ka-la TAHN-na ti-BAAK-ke-la ... K'INICH-K'AN-to-ko-mo-o*, *t'ol[h]xaj alj] pakal tahn tibaakeel ... k'inich k'an tok mo*, “Aj Pakal Tahn was cut with the bone of ... K'inich K'an Tok Mo” (Zender 2004:259-260, Fig. 75). By contrast, a roughly contemporary spelling on a bone hairpin from Yaxchilan Tomb 2 of Structure 23 instead provides *u-ba ke-le BAHLAM-ma IX k'a-ba-la XOOK-ki*, *ubakel bahlam ix k'abal xook*, “this is the jaguar bone of Lady K'abal Xook” (Stuart 2013). Broadly speaking, however, the spellings with *-la* seem to be earlier than the ones with *-le*.

holds court, sitting cross-legged on his throne inside a palace chamber. He receives four visiting sumptuously attired dignitaries wearing the heads of animals. From left to right, the headdresses seem to represent a stag, a cougar, a mammal of uncertain identity, and a jaguar. Obliging, the man with the hart's headdress receives the caption **chi-ji**, *chi[h]j*, "he's a deer"; but no such courtesy is extended to us for the other three. The dignitaries have apparently brought tribute, including red-lipped containers (between them and the Maize God), narrow-necked vessels (in front of the throne), and baskets of jewelry, just behind the right arm of the Maize God, on which he leans forward to converse. Sadly, there has been some repainting of both the rim text and the inset text describing the scene, yet enough can be gleaned from both to establish that this was a thoroughly legible text before it was touched up. The opening Calendar Round (A1-B1) can't be fully made out, but seems to read in part 11 ? 8 Zip. The verb has also been somewhat retouched, but it and the following glyph (A2-B2) may have intended **yu-UK' chi**, *yuk' chi[h]*, "there was drinking of pulque." Narrow-necked jars of the kind below the maize god would have been appropriate for storing this beverage, and it may be that the animated poses of the delegation reflects their inebriated condition, just as repainting may have obliterated the small, shallow pulque-drinking cups some of them may once have been holding. (In retrospect, it is also possible that the **chi-ji** written above the man to far left is to be interpreted as a cry for more *chih*, or "pulque.") The next four glyphs (A3-B4) are an apparent couplet, 1-PIK K'EW-**we** 1-PIK ?, *juun pi[h]k k'ewel[l] juun pi[h]k ...*, "there are eight thousand pelts (and) eight thousand ...". Unfortunately, a combination of erosion and repainting renders the last glyph block unidentifiable. Almost certainly it represents some other material item of tribute, such as **bu-ku** (*bu[h]k*, "clothing"), **pa-ta** (*pata[n]*, "tribute items"), **u-ha** (*uuh*, "jewelry"), **yu-bu-TE'** (*yubte'*, "tribute mantles"), or something similar.<sup>25</sup> In any case, it's intriguing to see *k'ew(el)* "pelts" enumerated as a tribute item, and perhaps noteworthy to see that its primary meaning of "pelt" remains.

### Considerations

At this point, we believe that the case for **we** is convincingly made. Further, given the sign's mutability of form during the roughly three hundred years for which it is presently attested (ca. AD 450–750), we trust our apology for this delayed decipherment is both understood and accepted. There remains much to do, inclusive of

<sup>25</sup> One of our reviewers suggests **ka-wa** (*ka[ka]w*, "chocolate") but we consider it unlikely. There is a **ka-wa** glyph in the PSS (just above the **chi-ji** caption) and its form and interior details are rather different from what survives in our mystery compound at B4.

scouring the corpus for Early Classic **bu**-semblants, Late Classic **yu**- and **TE'**-semblants, and Terminal Classic **TE'**-semblants in odd contexts, including close and otherwise inexplicable association with **Ce** syllables, or with still-undeciphered logograms (we list several candidates for these below). Regrettably missing are any incontrovertible examples of **we** from the codices, meaning that we still do not know for certain what form (or forms) the sign may have taken in the Late Postclassic. A close search for **TE'**-semblants in the Dresden, Madrid, and Paris codices discloses no standout candidates. Earlier examples, from the Protoclassic and Late Preclassic, are also absent, but this is equally true of many otherwise well-known signs. Yet we may at least hope for these to emerge eventually, since it strains credulity to imagine that **we** was only conjured in the late fifth century.

In the meantime, we have gathered several other potential occurrences of the **we** sign. Sadly, in many of these cases, visual confusion (with **yu**, **TE'**, **bu**, and still other signs), uncertain contexts, unique examples, or damage and repainting have made certainty elusive. Nonetheless, we offer them in the hopes that some of our colleagues can take them further, or at least so that they might serve as a convenient list for annotation and expansion as and when new examples appear.

#### *Yaxchilan Lintel 49*

This Early Classic lintel belongs to the famous set of four listing the first ten kings of Yaxchilan, and dating to ca. AD 550. During the reign of the sixth ruler, K'inich Tatbu Jol II, sometime during the first half of the fifth century, he took a captive with the name **ke-?we-le** ?**PECH**, *kewel pech*, "protruding-lipped duck" (C3-D3). The identity and reading of the logogram is uncertain. The Early Classic **we** candidate is practically identical to the **bu** syllable in the name of K'inich Tatbu Jol II (at B8). Still, **ke-bu-le** is not a particularly promising collocation, and Chuj *chew*- v.pos. "to have protruding lips, be lippy" (Hopkins 2012:54) would be a marvellous lexeme to have.

#### *Tikal Altar 5*

Following Lady Te' Tuun Kaywak's death (glyphs 10-14) we read that **k'u-ba-ja ti-MRD-?we mu-ka-ja 9-AJAW-NAAH**, *k'u[h]baj ti ...w mu[h]kaj baluun ajaw naah*, "she was put/placed in/with/as ... (and) buried in (the) nine lords house" (glyphs 15-18). There are only six examples of MRD (Macri andLooper 2003:124), which depicts a hand holding a series of stacked objects. Schele and Grube (1994:2) argue that the objects represent "flints or obsidians," yet we note that they carry the "rough/wrinkly texture" marker which labels the skin of crocodiles, cacao pods, dried leaves, and testicles (Houston et al. 2006:16). The Tikal context is

unique in providing MRD with a final phonetic complement (see Jones and Satterthwaite 1982:Fig. 23 glyph 16, Fig. 94c), which suggests the value **CEW**. One candidate would be Ch'ol *p'ew* vt. "augmentar (to increase, add to)" (Aulie and Aulie 1998:171). The presence of /p'/ in Classic times is still debatable (see Wichmann 2006), but Kaufman and Norman (1984:85) note that "[s]ome instances of /p'/ come from earlier /b'/, some from /p'/' so this verb may have appeared as *bew* or *pew* if /p'/ was not present. Other contexts of MRD include: (1) the Houston Panel, F5, **u-MRD**, and note texture marker (Mayer 1984:Pl. 26-27; www.wayeb.org/drawings/col\_houston\_panel.png); (2) the Regal Rabbit Pot, K1398, C8-D9, **a-ni u-MRD yi-bi k'e-se**; (3) K4930, A2, **MRD-ja**; (4) El Peru Stela 44 (Stanley Guenter, personal communication 2015), and; (5) Ek Balam MT 7, B5 (Grube et al. 2003:25).

#### St. Louis Art Museum Column Altar

This unprovenanced monument contains the name of a Bonampak ruler written 'EDZNAB'-?**we**, of unclear transcription (see Martin and Grube 2000:184). The **we** sign here is the typical Late Classic form common in **che-le-we** spellings at Yaxchilan, and although the preceding sign looks somewhat like **cho**, there are some visual differences, and **cho-we** would make for an awkward grouping.

#### Tonina Fragment p2

This unpublished Late Classic monument fragment contains two full glyph blocks and three partial ones, and the context is therefore more than a little unclear. Nonetheless, we apparently have **we-le-AJAW**, *we(h)l ajaw*, "Lord of We(h)l." The **le** variant is the rare T752 "licking dog" sign, of which we only have four other examples.<sup>26</sup> Unfortunately, there is indifferent semantic control here and numerous candidate lexemes, including Ch'olan *wehl* "fan" and Yucatec *wel* "a species of small mosquito."

#### K1398 (The Regal Rabbit Pot)

In God L's pathetic plea to the Sun God, he apparently states of the rabbit that **u-CH'AM-wa ni-?we-ha ni-bu-ku ni-pa-ta**, *uch'amaw niweha[l] nibu[h]k nipata[n]*, "he took my teeth(?), my clothes, (and) my tribute offerings." Although it's not evident that the rabbit has snatched the chapfallen old god's teeth, it is intriguing to connect this to the mythical comeuppance of Seven Macaw in the Popol Vuh, who has his bejeweled teeth knocked out by the Hero Twins. Yet we are compelled to note that, rather than **we**, this sign might instead represent an undeciphered 'jewel' sign (e.g., in X3 of the supplementary series).

#### K1941

Glyphs 9-11 of this Xultun-style black background vase name a royal woman of Tikal: **IX-K'AN-na AHK-?-T594-?we**, *ix k'an ahk ...ew*, "Lady K'an Ahk (Ce)Cew." This would be the "full form" of **we** previously seen on CLK 51, and it must be admitted that it is completely equivalent to two nearby **yu** signs (at 6 and 7). But Yaxchilan Lintel 23 (E2) also seems to provide a **we** phonetic complement to T594. Otherwise, the sign is best known from its appearance in the name of the Palenque patron god GIII, where it usually takes **-wa** (e.g., PAL T.21 bench) but not in all instances (e.g., PAL T.I., Center, E7), suggesting that it is a logogram terminating in **-w**. If we are correct about the contexts with **-we**, then the synharmonic rule suggests that it should in fact have the shape (CE)CEW. Given that the sign seems to depict an item woven from reeds, two candidates might be Ch'ol *sew(al)* "red de tejido para llevar pozol" (Hopkins et al. 2011:204) and Ch'olan *ch'ehew* "cup, bowl, plate, dish (of any material)" (cf. Ch'ol *ch'ejew*, Aulie and Aulie 1998:28; Ch'orti' *ch'e'w*, Hull 2016:120).<sup>27</sup>

#### K8017

This magnificent incised vessel from the Xcalumkin region of northern Yucatán contains an odd **?we-HEADLESS.MAN-?ne** spelling, where the medial sign is likely to be a rare and uncataloged logogram. Once again, the **we** would be a "full form" and is identical to two **yu** syllables on the same vase. A second example can be found on Xcalumkin Column 1, A3 (Lacadena 1995:86, Fig. 2.30), once more written **?we-HEADLESS.MAN-?ne**, and with the same striking similarity to a nearby **yu** sign (at A2).

<sup>26</sup> For T752, Thompson (1962:340) notes that his examples are "[a] menagerie which may contain more than one genus." Indeed, his second example is the **ji** rodent (TIK St 31, F7b), his sixth is either **OOK** or **TZ'I'** (PAL T.I. West, J3), and his eighth is **BAHLAM** (CRC St 16, B19). Only Thompson's seventh example (PAL T.I. East, K11) matches the type illustration, which is a dog with its tongue hanging out. Its value as **le** is certain given the context (**CHUM-wa-ni-ya ta-AJAW-le**), as is also true of two **che-le-we** spellings (the previously seen YAX St. 4, Fragment G, and YAX St. 24, front, pD1). Guido Krempel's (2015) addition of Tzocchen Miscellaneous Sculpture 1 to this list is a welcome one, and we also concur with him that the **le** value probably reflects acrophony from a root meaning "to lick." But rather than Yukatec *leztz'* (his suggestion), we propose Proto-Ch'olan *\*lek'* "to lick" (Kaufman and Norman 1984:124 item 284) as the more likely source, particularly given that the earliest appearances of this sign are in Chiapas. Similarly, the rarity and exclusively Classic contexts of T752 make it unlikely that it served as the source of T188 **le** (pace Krempel 2015:5).

<sup>27</sup> If these observations are correct, then Christian Prager's recent proposal of **BAL** "to hide, guard, cover" for T594 is incorrect (Prager and Braswell 2016:271).

## Conclusions

Although still inconclusive, we feel that several of the above contexts are promising, and it is quite likely that other examples of **we** remain to be identified, so intertwined is its visual history with **bu**, **yu**, and **TE'**.

Our identification of the **we** syllable has shed considerable light on several aspects of Maya writing. From a lexical point of view, the new reading establishes the presence during the Classic period of the words *k'ew* (later *k'eweel*) "pelt" and *we(ˀ)bnaal* "altar." And it has helped to clarify the precise grammatical roles and semantic range of several others, such as *chel* "to space or place evenly, spread out, fill," *eb* "to send / deliver, give," and *tek'* "to step on, stand upon, kick." From the perspective of decipherment, the new sign appears as a phonetic complement to at least four different logograms, providing a reasonably secure reading for one of them, T832 **K'EW** "pelt," and important phonetic information which should assist in the eventual decipherment of three others (T594, MRD, and the 'headless man'). With respect to script orthography, the **we** syllable provides welcome new data relevant to the precise nature of the relationship between vowel complexity and harmonic / disharmonic spellings (Houston et al. 2004; Lacadena and Wichmann 2004; Robertson et al. 2007), and it has permitted a useful test and extrapolation of David Stuart's (2002a, 2008) orthographic principle that syllables of the shape **Ce** (and **Co**)—being generally outside the framework of the **Ci**, **Ca**, and **Cu** signs employed to indicate vowel complexity—consistently spell lexical roots synharmonically. Grammatically speaking, a sign for **we** also has important implications for the phonetic shape and historical development of two significant grammatical suffixes. The Classic Ch'olti'an CVC-root transitive declarative suffix has been reconstructed as  $-V_1w$ ,  $-VV_1w$ , and  $-V_1'w$ , and while we cannot fully resolve this, recognition of the **we** sign reveals several late synharmonic contexts (e.g., *yebew*, *utek'ew*, *uCabaw*) where  $-V_1w$  is surely indicated, suggesting loss of an earlier long vowel during the eighth century (Houston et al. 2004). Similarly, the  $-VV_1w$  (later  $-V_1w$ ) antipassive suffix of CVC-root transitives (Lacadena 2000 and Zender 2010:13) here receives additional support in the form of *chelew*, *tiliw*, and *jolow*. Last, but by no means least, the **we** decipherment provides interesting historical sociolinguistic information, such as that part of the pre-accession name of Yaxchilan's Itzamnaaj Bahlam IV apparently developed from *cheleew* to *chelew* in the capital during the late eighth century, and that client sites did not all take up the new, presumably prestigious pronunciation (or orthographic innovation) at the same time. It is suggested that closer attention to such variable linguistic features in Classic Maya texts stands to reveal much about not only linguistic history, but the sociopolitical networks which influenced language change.

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