

KINGS OF THE EAST: ALTUN HA AND THE WATER SCROLL EMBLEM GLYPH

Christophe Helmke, a Stanley P. Guenter, b and Phillip J. Wanyerkac

ABSTRACT

The importance of emblem glyphs to Maya studies has long been recognized. Among these are emblems that have yet to be conclusively matched to archaeological sites. The Water Scroll emblem glyph is one such example, although it appears numerous times in the Classic Maya written corpus between the sixth and the eighth centuries. These many references are found at a variety of sites across the lowlands, attesting to the importance of this ancient kingdom and the kings who carried this title. In the present paper, we review the epigraphic and archaeological evidence and propose that this may be the royal title of the kings who reigned from Altun Ha, in the east central Maya lowlands, in what is now Belize. In so doing, we also begin to reconstruct the dynastic history of the Water Scroll kings, from the vantage of both local and foreign sources.

INTRODUCTION

In 1965, while excavating at the northern Belizean site of Altun Ha, David M. Pendergast encountered Tomb 6 within Structure B-4 (Figure 1). Hiding behind this rather prosaic archaeological designation is the Temple of the Masonry Altars, as it is better known today, the iconic building that is featured on innumerable advertisements and banners, not to mention the Belizean two-dollar bill and seemingly countless Belikin Beer bottles.

This was but one of the many richly furnished tombs found at the site that testify to the wealth and affluence of this small, but clearly important, center. So disproportionate to the size of the site is the wide array of material culture and exotic goods recovered in excavation that Gordon Willey exclaimed in uncharacteristically strong terms—which we will not repeat here—his agitation and disbelief (David M. Pendergast, personal communication 1999). Indeed, the monumental epicenter of Altun Ha encompasses no more than 3.5 ha, consists of just 14 major structures, with inscribed monuments unknown at the site, otherwise a hallmark of prominent and strong dynasties during the Classic period. Counterbalancing these features is the veritable wealth of materials found throughout the site, not only in royal tombs and within the palatial structures, but also in affluent neighborhoods surrounding the site core, where well-made and highly decorated serving vessels were found in fine vaulted masonry structures, often accompanied by a wide array of imported goods including jadeites, obsidian, and marine shells from both Caribbean and Pacific sources (Pendergast 1979, 1982, 1990).

Clearly, Altun Ha owed much of its prominence to its strategic location, in relative proximity to the Caribbean Coast and just 16 km north of the Belize River, which provided a major artery of

transport and trade inland to the central lowlands. This connection is made clear in the realm of ceramics, for many of the Late Classic forms and decorative modes found at Altun Ha are identical to those that predominate farther inland at sites in the Upper Belize River Valley (compare Pendergast 1979, 1982, 1990 with Gifford 1976). In addition to these more quotidian ceramics, Altun Ha was also the production center for a particular type of polychrome serving vessels designated as Petkanche Orange-polychrome (see Ball 1977:72, 177, Figure 29a). Ceramics of this type have been found in abundance at Altun Ha, but have also been recovered from sites farther afield, including Coba and Río Hondo to the north, Becan to the northwest, on Ambergris Caye to the northeast, as well as at Pusilha and Copan to the south (see Reents-Budet et al. 1994:198–203). The pattern revealed by the ceramics of Altun Ha, speaks forcefully to a wide network of influence centered at the site and stretching across coastal Belize and considerable distances beyond.

Returning to Tomb B-4/6, it was found to contain, among other objects, a large jadeite plaque, its front embellished with the portrayal of a ruler seated in power, its reverse covered with a lengthy and detailed glyphic text. In many ways, the plaque has the appearance of a miniature stela, a type of monument famous in the Maya world for bearing the portraits of kings and lengthy texts commemorating their rule. This absence of this type of monument at Altun Ha remains conspicuous, although there is at least one large stone slab in a residential zone that has yet to be examined in detail, which might turn out to be a monument (David M. Pendergast, personal communication 2004). The text of the jadeite plaque was first discussed by Pendergast (1969) and thereafter studied by Mathews (Mathews and Pendergast 1979, 1981). These groundbreaking studies were conducted at a time when modern epigraphy as we know it today was still in its infancy. Nevertheless, they made it clear that the text includes a previously unknown emblem glyph,

E-mail correspondence to: cgbh@hum.ku.dk

^aInstitute of Cross-Cultural and Regional Studies, University of Copenhagen, Karen Blixens Plads 8, DK-2300 Copenhagen S, Denmark

^bFoundation for Archaeological Research and Environmental Studies, 164 W 400 N, Rupert, Idaho 83350

Department of Criminology, Anthropology, and Sociology, Cleveland State University, 2121 Euclid Ave. RT 932, Cleveland, Ohio 44115



Figure 1. Structure B-4, otherwise known as the Temple of the Masonry Altars, at Altun Ha, Belize. Photograph by Helmke.

the exalted dynastic title of ruling Maya kings. The principal sign of the emblem glyph can be described as a "Water Scroll" and from the outset was thought to refer to the dynasty established at Altun Ha.

We review this initial hypothesis here in light of the many examples of the Water Scroll emblem glyph that have been amassed over the past few decades, in texts both at nearby and distant sites throughout the Maya lowlands. In so doing, we hope to present more conclusive evidence that the Water Scroll emblem glyph did indeed function as the dynastic title of ruling kings at Altun Ha, and also to assess the historical and even cosmological significance of this important site. The glyphic texts that make mention of the Water Scroll emblem glyph can be divided into two major categories: local texts in the relative vicinity of Altun Ha, and foreign texts that mention the influence, presence, or intervention of Water Scroll kings. We present and examine these texts in chronological sequence, from earliest to latest, in order to outline the events associated with the Water Scroll kings in antiquity and to ultimately evaluate their deeds and their place in Classic Maya history.

EMBLEM GLYPHS: A BRIEF APPRAISAL

Emblem glyphs were first identified as a special category of Maya glyphs by Berlin (1958) and, in the six decades since that seminal publication, scholars have slowly begun to reveal the many-faceted nature of these glyphs. Today we know that emblem glyphs were exalted titles of the rulers of the various polities that made up the ancient Maya political landscape. When borne by a man, the title is functionally equivalent to that of 'king' and as 'queen' when borne by woman (Martin 2004; Martin and Grube 2000:17-19). These emblem glyphs comprise three constituent parts. The first sign is the logogram K'UH and its many allographs, functioning in abbreviated or "underspelled" fashion (see Zender 1999:130-142; Zender et al. 2015) for k'uhul, 'godly, divine,' serving as a qualifier for what follows. The final sign is always the titular AJAW (Mathews 1991), literally 'shouter, orator' (Stuart 1995:190–191), but functionally as 'king, ruler, queen.' Between the qualifier and the title is a main sign that names the dynasty that ruled over a given polity. In the present case, we focus on the Water Scroll sign that serves as the main sign for a particular emblem glyph.

Just as in most other cultures of the ancient world, the name of a polity, or "kingdom," as it were, was derived, at least originally, from either a place name (toponym) or the name of an ethnic

group (ethnonym). Such toponyms can derive from the geography of the real world (Stuart and Houston 1994), or may at times find their source in the realm of mythology (see Helmke 2012). A further wrinkle is introduced when one recognizes that changing patterns of history could serve to complicate the picture (Helmke and Awe 2008:75-76). Thus, for instance, whereas later Roman emperors did not actually rule from Rome, they continued to be styled as Emperors of Rome (Scarre 1995:218-232). In much the same way, we have evidence that certain Maya dynasties saw shifts in their seats of power, but the later monarchs continued to use the original title, referring to their place of origin. The best example of this for the Classic Maya is the case of the Kanu'l dynasty, also known as a Snake-head kings, whose capital shifted from Dzibanche to Calakmul in the seventh century (see Helmke and Awe 2016; Helmke and Kupprat 2016; Martin 2005; Martin and Grube 2000:106-108).

Historical incidents could also lead different factions of a court to contest the use of an emblem glyph by opposing claimants, with one faction being forced into exile, and yet maintaining use of the contested emblem glyph of the original and eponymous capital. The best-known example of such a case appears to be that of the rulers of Dos Pilas, a splinter dynasty that continued to use the emblem glyph of Tikal (Houston 1993; Martin and Grube 2000:42, 55, 56–57). In other cases, such as the emblem glyph shared by Palenque, Tortuguero, and Comalcalco, we still lack coherent historical information that would explain the pattern (Helmke 2012:95–100; Martin 2004; Martin and Grube 2000: 165). These illustrative cases demonstrate the complexity involved in attempting to analyze the origins and referents of the main signs at the heart of emblem glyphs.

The Water Scroll main sign of the emblem glyph under examination remains an undeciphered logogram. We therefore continue to refer to it by its nickname and also at times by its number in the Thompson (1962:205) sign catalog, namely T579 (a related variant was given the designation T578). What appears to be the same logogram is seen with various phonetic signs in final position (as postfix or subfix), which suggests that these may serve as phonetic complements, or to spell derivational suffixes. On the jadeite plaque found at Altun Ha, for instance, the main sign appears to be complemented by -**ni**¹ (Figure 2a; Helmke 1999:19, 21; Mathews and Pendergast 1979:202, 1981:247; Pendergast 1982:85). In contrast, in an unpublished monument fragment from Tonina, the logogram is affixed by -la, in what may be a nominal context, presumably providing an anthroponym (Figure 2b). This may compare to the name of the mother of the Naranjo ruler "Itzamnaaj" K'awil, who was drawn from the royal house of Yaxha and was nicknamed Lady Shell Star (Closs 1989; Martin and Grube 2000:82), although her name consists of the same Water Scroll sign above an EK' logogram, for 'Water Scroll star' (Figure 2c). Finally, on an unpublished vase in a private collection, the same Water Scroll sign receives a clear -ma sign as a subfix (Figure 2d; Matteo 2015). This is a feature shared with a pair of codex style vases naming a supernatural entity or spirit familiar (Helmke and Nielsen 2009; Houston and Stuart 1989:6; Stone

While the hieroglyphs carved into the jadeite plaque are not all entirely clear in their details, no doubt owing to the hardness of the material, one can note that the suffix to the Emblem Glyph at A7 is identical to the —**ni** phonetic complement to the nominal *k'inich* (B3) rendered on the same plaque. Both exhibit a very distinctive serif in the middle of the **ni** sign, which makes the equivalence of the two certain.

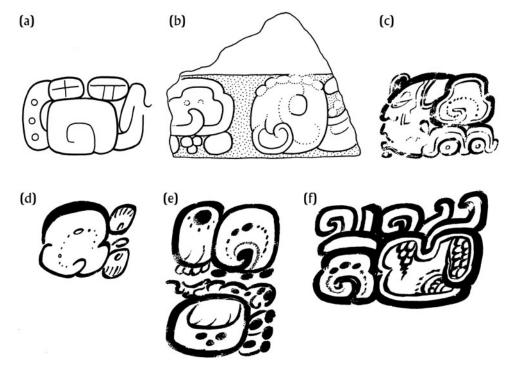


Figure 2. Examples of the Water Scroll logogram: (a) The Emblem Glyph on the jadeite plaque found in Tomb B-4/6. (b) Detail of Monument 133 at Tonina. (c) The name of Lady Shell Star of Yaxha on a Chinos Black-on-cream vase produced at Naranjo (K635). (d) Example of the logogram with ma syllabogram on a vase in a private collection (after Matteo 2015:Figure 7). (e) Name of the aquatic feline spirit rendered on a Codex Style vase (K771). (f) The name of a supernatural mountain rendered on the wall of Tomb 25 at Río Azul. Drawings by Helmke.

and Zender 2011:233, n. 7). On these vases, the spirit is named **HA**'-T579-**ma-Hix**, or 'water ... feline,' which indicates that the Water Scroll cues a word with an aquatic semantic domain (Figure 2e). A similar case is also seen in a nominal sequence on the recently discovered Monument 3 at the site of Tipan Chen Uitz in Belize (Helmke et al. 2015:16).

Given the wide array of syllabograms, while not impossible, it is unlikely that these all function as typical phonetic complements. As a result, and in the absence of a fuller understanding of the semantics of this sign, we are not yet closer to proposing a decipherment.² Yet, the iconography does, however, make it clear that the sign marks bodies of water, perhaps specifically freshwater, and may, in fact, represent a wave (see Hellmuth 1987:Figures 179–182, 189; Matteo 2015; Schele and Miller 1986:47). As a result, we may venture to suggest that toponyms involving the Water Scroll sign name prominent bodies of freshwater. The very same sign

² The presence of the −**la** sign may cue a −*Vl* derivational suffix, such as an abstractive, and is thereby unlikely to serve as a phonetic complement and can therefore be set aside. One of the initial suggestions proposed the reading of *kawam* for the logogram, motivated by an erroneous reading of the toponym of Nim Li Punit, written **wa-ka-ma** on Stela 21 (Houston et al. 2001:50, n.7) and **wa-ka-mi** on Stela 2. Marc Zender (1998:11, 14) initially suggested the value of **HA**¹ for the Water Scroll sign, based on its association with aquatic motifs and connotations. Similarly, in the monumental report of the Southern Belize Epigraphic Project, Phillip Wanyerka (2003:37) suggested the reading of **JA**² for this same logogram. More recently, Sebastían Matteo (2015) has proposed the reading of **OM** 'froth' for the same sign on the basis of the same pattern of complementation. These suggestions, however, fail to account properly for the accompanying syllabograms, particularly the −**ni** complement seen on the jadeite plaque, especially because the **ma** sign may cue an agentive suffix −*o*′*m*.





Figure 3. (a) A pair of decorated shell earspools depicting royal figures in profile, including a Water Scroll king (at right). Photograph K5086 © Justin Kerr. (b) A comparable pair of decorated shell earspools found in Burial C-16/13 at Altun Ha, dated to ca. A.D. 550. Drawing by David Findlay, reproduced with permission (after Pendergast 1982:Figures 109a—109b).

also occurs as part of a toponym that is prominently painted on the walls of the famed Early Classic tombs at Río Azul, particularly Tombs 5, 6, 25, and possibly also Tomb 2 (Figure 2f; Hall 1986). This toponym is one of four named supernatural mountains that are tied to one of the principal cardinal directions, and it appears to be written SAK[T579]-WITZ-NAL, for 'white Water Scroll mountain place' (Acuña 2015).

Another interesting example is found integrated in the iconography decorating a set of unprovenienced carved shell ear ornaments (K5086; Figure 3a). The set depicts two regal figures in profile, the carved details emphasized by hematite pigment. The style of the depictions suggests that they were produced sometime in the sixth century. Both figures have elements adorning their mouths, and wear large earspools that echo the very objects that bear these depictions. In addition, the figures wear large capes with long fringes, attached at their necks with broad knots above shell gorgets. These objects are very reminiscent of a pair of contemporaneous shell ornaments found in Burial C-16/13 at Altun Ha (Figure 3b; Pendergast 1982:Figures 109a-109b). These ornaments portray individuals with headdresses that bear glyphic elements that appear to spell the names of the figures depicted. The name on the left includes both the elements k'in, 'sun,' and mo', 'macaw' (see Zender 1998:14), whereas that on the right has a paw, or at least a claw, perhaps ich'aak, and the head of the great celestial bird, elements attested in other regnal names. Similarly, there are elements on the unprovenienced set that appear to provide the name of the figure at the left, whereas that on the right has a Water Scroll sign, topped by the ajaw logogram. Whereas these two elements do not constitute a complete emblem glyph, they nevertheless designate the figure as the Water Scroll king. Considering the many points of equivalence between these ornaments those found at Altun Ha, a provenience attribution to that site is quite plausible, especially since the site had suffered considerable looting before the onset of archaeological interventions in 1964.

In the initial analyses of this title presented by Mathews and Pendergast (1979:202, 1981:247-248) they rightly point out that there are broad similarities between the Water Scroll emblem glyph and that borne by lords of the Petexbatun region, particularly Tamarindito and Arroyo de Piedra (see Mathews 1991:20; Martin and Grube 2000:19), but it is now clear that these two signs are distinct. The similarities between the signs are brought about by shared iconographic attributes, as both appear to refer to bodies of water or hydrological features (see Schele and Miller 1986:47; Stone and Zender 2011:23, 232). In addition, both signs can be rendered either as a spiral within a rounded square, or as a coiled trilobate form. That used in the Petexbatun region frequently illustrates small aquatic plants at the corners of the sign and the scroll is often embellished with cross-hatched fields (see Houston 1993: 99, Figure 4-2f). These observations have led Guenter (2008) to suggest that the main sign represents the Petexbatun lagoon, the most prominent body of water in the area, where aquatic plants often grow to the surface of the waters. In contrast, the main sign of the Water Scroll kings never has such plants, nor the crosshatching, and, instead, has a plain scroll and small circular elements within the scroll, presumably denoting air bubbles (see Matteo 2015). The differences make it clear that the Water Scroll emblem glyph is the dynastic title of another distinct royal house.³

ALTUN HA, JADEITE PLAQUE

Without a doubt, the jadeite plaque (RP256/3) found at Altun Ha, and mentioned at the onset, is at the root of all research concerning the Water Scroll emblem glyph (Figure 4). It was found in Tomb B-4/6, which contained the remains of a probable young to middleaged adult male skeleton. The tomb was richly furnished with three ceramic vessels, two chimneyed censers, a pair of pearls, a stuccocoated object, an obsidian flake, the complete shell of a fighting conch (Strombus pugilis), 10 spiny oyster shells (Spondylus americanus), most of them modified, and 55 angular pieces and a single lamina of crystalline hematite. Items of personal adornment included a necklace of 109 shell discs, a stunning set of 19 carved jadeite and albite pendants and beads, a necklace of 21 beads, an anklet of 69 beads, as well as the large inscribed jadeite plaque (Pendergast 1982:84-91). The tomb was built within the second phase of construction (penultimate), which has been dated to ca. A.D. 650, in the Mac phase (Pendergast 1982:102–103, 136–137). When the plaque was first studied by Pendergast (1969:91), he concluded rather pessimistically that: "this group of twenty glyphs seems a hopeless jumble of symbols and meanings, a maze through which no path can be cleared ... until such time as our knowledge of the meanings of the glyphs, as well as the workings of the system, has increased." Mathews studied the plaque in the late 1970s and a short coauthored paper eventually appeared (Mathews and Pendergast 1979). Revised syntheses that integrated Mathews's most recent readings were subsequently published (Mathews and Pendergast 1981; Pendergast 1982:84–85).

In his detailed and attentive analyses of the plaque, Mathews was able to identify the two clauses that together constitute the text. The first is headed by the calendar round date 8 K'an 7 Sip, which can be anchored to the 9.6.15.6.4 Long Count date and correlated to May 6, A.D. 569 (expressed in proleptic Gregorian calendar, using the GMT+1 correlation coefficient; see Martin and Skidmore 2012). On this date a warfare event is recorded against an unidentified person or locality, an event that is described as *ch'ahkaj*, 'he axed, chopped.' The individual behind the attack is introduced by an agency expression read *uchabjiiy*, and the name of agent is given as K'inich Chak Pax(iil). This figure is not known from other texts and, as such remains, rather obscure.

The second clause is initiated by another calendar round date, 7 Kaban 5 K'ank'in. This date can be anchored to 9.7.11.2.17 in the Long Count and correlates to December 7, A.D. 584. The verb or action that transpired on this date is written **u-K'AL[HUN]-ja**, to be read as u-k'al-huun-aj. The verbal expression involves the root k'al, 'to hold, take, present, bind,' and the substantive huun, literally '(bark) paper,' but 'crown' by extension, since this refers to a particular type of paper headband worn in accession ceremonies (see Schele et al. 1990; Stuart 2012; Zender 2016). Together the compound k'al-huun forms a derived noun, which can be denominalized, or verbalized, by the affixation of the suffix -aj (Lacadena 2003:855–857), as is seen in this case. With the addition of the third person pronominal prefix u-, functioning as a possessive marker, the entire construction can be understood as 'it is his crown-taking,'

(Stuart and Houston 1994: 29, Fig. 31). The latter also involves the Water Scroll main sign but is always preceded by *chak* 'red' (although in this case it may well be directional as 'east'; Stephen Houston, personal communication 2017) and followed by the toponymic suffix *-nal* 'place.' Considering the location of Topoxte on the eponymous island in Lake Yaxha, it seems evident that the Water Scroll must serve to name an aquatic feature, such as a lake.

³ In addition, the Water Scroll Emblem Glyph shares some features with the toponym of Topoxte in the Peten, which is written **CHAK-T579-NAL-la**



Figure 4. The large jadeite plaque (RP256/3) found within Tomb B-4/6. Drawing by David Findlay, reproduced with permission (after Pendergast 1982: Figure 55).

clearly referring to the acquisition of a crown as part of a royal investiture ceremony. The person that is said to have acceded to kingship on this day is named Til Man K'inich⁴ (Helmke 1999:19, 20–21; Mathews and Pendergast 1979:201–202), whose name is written with three logograms. The first represents a small figure with bent

arms that functions as **TIL**, whereas the main sign is the so-called "Serpent Segment" that depicts a lateral view of snake, with ventral scales at the bottom and trapezoidal dorsal markings at the top, for **MAN**, followed by **K'INICH** at the right. Onomastically, this name is a verbal theonym that refers to one particular attribute or facet of the sun deity K'inich, literally 'radiant (one)' (e.g., Colas 2003).

The pedigree of this individual closes the text by providing references to his mother and father, in that order. The mother bears the title *k'uhul ixik*, 'divine lady,' and seems to be named Chan(al) Lem?, Maax Ajaw, perhaps 'Celestial Celt, Spider Monkey Lord.' The father, in turn, is not named as such, but is only referred to by his title, and he is described in this capacity as one who bore the title of *kalo'mte'* for a k'atun, or score of years. Although far

⁴ Whereas all the examples of names that we have for this regal figure are spelled with the logogram **TIL**, without accompanying affixes or derivational suffixes, the possibility remains that **TIL** was intended to be read *Tiliiw* ~ *Tiliw* based on comparison to similar regnal names. At Naranjo, for instance, the 38th king adopted the name *K'ahk' Tiliiw Chan Chaahk* upon his accession, whereas the great conqueror king of Quirigua was known as *K'ahk' Tiliw Chan Yopaaht* (see Martin and Grube 2000:218–222). Both of these names include at times the same T233 logogram **TIL**, although the scribes were more attentive to the antipassive suffix –*iiw* and its allomorph –*iw*.

from adequate, this *kalo'mte'* title can be translated very loosely as "warlord" or "emperor" (Guenter 2002:20; Stuart 2000:487), and, in the Early Classic, served as a mark of distinction of the most exalted kings who often served as overlords to other kings, as the very nexus of allegiances with vassal kings (e.g., Martin and Grube 1994).

As discussed by several authors, the appearance of the *kalo'mte'* title in the Maya area coincides with the so-called Teotihuacan *entrada* (e.g., Martin 2001; Stuart 2000). The use of the title by Maya kings thereby implies ties with that great central Mexican metropolis, be they genuine or fictive. In this connection, the presence of 23 Teotihuacan ceramic forms (including jars, bowls, and dishes), and 248 pieces of green obsidian from Pachuca within Tomb F-8/1 at Altun Ha is strongly indicative of some intimate relationship between the two centers (Pendergast 2003). One can venture the conjecture that the use of the highly exalted *kalo'mte'* title by the kings of Altun Ha was vindicated by precisely this connection.

Most interesting for the present study, the title borne by Til Man K'inich is a complete emblem glyph, with the Water Scroll as its main sign, followed by a **ni** syllabogram, possibly a phonetic complement. The second agent presented on the plaque, who acceded to the throne in December A.D. 584, was therefore one who bore the Water Scroll emblem glyph as his dynastic title and who would see his claims bolstered with an illustrious pedigree.

Because the Water Scroll emblem glyph and the emblem glyph utilized in the Petexbatun region are now recognized as distinct, it is clear that the former is the dynastic title of another royal house. In view of the portability of the jadeite plaque, it is possible that its origin lies at another site. This is an important observation, not the least since the plaque appears to have been an heirloom, as the last date mentioned on the plaque corresponds to A.D. 584 and the tomb can be dated to ca. A.D. 650 (Mathews and Pendergast 1979:204-205, 1981:250). Nevertheless, as has been aptly remarked by Pendergast, considering the profusion of imported and finely worked greenstone at Altun Ha and the evident importance of the site, the provenience of the plaque makes it at least a very promising candidate as an object produced at the site (Mathews and Pendergast 1979:202, 1981:248). As a result, it was suggested from the outset that the Water Scroll emblem glyph may well refer to the royal house established at Altun Ha, and, without any evidence to the contrary, by the early 1990s this interpretation had become entrenched in epigraphic circles (see Martin and Grube 2000:19; Mathews 1991:20). This conclusion still has much to favor it, and has been pursued by the authors collaboratively (see Grube et al. 1999:28-29, Figure 5; Helmke 1999; Helmke and Awe 2008:75; Wanyerka 2009). In the discussion that follows, we continue to explore the various occurrences of the Water Scroll emblem glyph, both to ascertain the probability that the title refers to the kings of Altun Ha, and to begin to sketch out a historical overview of prominent kings of that royal house.

LIMESTONE STATUETTES OF UNKNOWN PROVENIENCE

Another set of evidence is afforded by a pair of fine limestone statuettes representing aged male deities (Figure 5a). These statuettes have recently been acquired by the Princeton Art Museum (Just 2013), but were originally part of the private collection of Jay C. Leff, an affluent banker of Uniontown, Pennsylvania. From

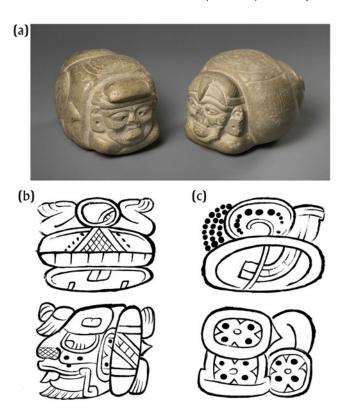


Figure 5. (a) A pair of limestone statuettes representing aged male deities. Note the incised glyphs on the side and the larger, circular glyphic medallions on the backs of the statuettes. Photograph by Bruce White © Princeton Museum of Art. The glyphic text adorning the sides of the Itzam K'an Ahk figure: (b) the left side of the statuette naming the original owner; and (c) the right side of the same, providing the owner's titles. Drawing by Helmke.

published records, Leff acquired the statuettes in 1959, and they were on loan to the Brooklyn Museum in the mid-1960s, where they were exhibited along with large parts of the substantial collection (Easby 1966). Thereafter, the businessman Peter G. Wray, of Scottsdale, Arizona, acquired the pieces in question. While they were part of the Wray collection, these pieces were featured in an exhibit hosted by the Perls Gallery in 1984 (Emmerich 1984) before their acquisition by the Princeton Art Museum in 2013. Evidently, these pieces are of unknown provenience and have had a very active life since they were unearthed in the 1950s, but the middlemen or antiquities dealers related to Leff that these were allegedly from British Honduras. As we will see, the glyphs that adorn the statuettes support this attributed provenience.

Together, the two statuettes represent crouching male deities, with prominent facial hair, the mark of aged figures, similar to the *pawahtun* or *bakab* known from the ethnohistoric sources of Colonial period Yucatan (see Martin 2015; Taube 1992:92–99). More properly speaking, the supernatural entities are seen emerging from other beings, since one may appears from what may be a crocodilian creature, replete with a fish nibbling on its tail (see Hellmuth 1987:Figures 710–713). This is one particular variant or aspect of the aged male deities, who are usually subsumed under the heading of God N (see Taube 1992:92–99), a matter discussed at length by Martin (2015:194–196). The other figure wears a characteristic netted headdress and is shown emerging from the large coiled shell of a marine gastropod (Hellmuth 1987: Figures

706–709). These attributes mark him as one of the Atlantean figures that were thought to bear the sky, known from other hieroglyphic texts as Itzam K'an Ahk, or 'wizard yellow/shell turtle' (Martin 2015:188–192). Epigraphic, ethnohistoric, and ethnographic sources make it clear that such Atlantean figures are said to occur in sets of four, and, as such, it is likely that these two statuettes originally formed part of a set of four, wherein each represented a distinct aged deity, each tied to a particular cardinal direction.

Both statuettes bear short glyphic captions and one prominent glyph block on their backs. Each of the large glyphs is rendered in a circular cartouche, and together probably once formed an independent clause to be read across the presumed original set of four. As preserved, we have a relationship expression and a personal name, but we can expect a verbal or possessive statement on the first statuette and a title on the last, to form a complete clause. At present, the name that adorns the back of the Itzam K'an Ahk effigy can be transliterated as **a-K'AN-ba-tz'u** for *ajk'an ba'tz'*, or 'he the yellow howler monkey.' On the back of the crocodilian figure, we can identify the relationship expression 1-TAN-na for juuntahn, literally 'one chest,' but more freely as 'of one's breast.' This expression is typically used to describe the relationship between a mother and her child (Stuart 1997:8-9), and thereby can be understood as "cherished one," but at times can also refer to the affection that kings have for their deities (Guenter 2007:30, 54; Helmke 2012:99). Although conjectural, the original set of four glyphs is likely to have formed a statement of ownership, or nametag, asserting that "the four aged deities were the cherished ones of Ajk'an Ba'tz', who was lord of such-and-such a place."

Most interesting are the small, incised texts that adorn the two effigies, particularly that found on the sides of the Itzam K'an Ahk figure (Figures 5b–5c). On one side, we see two glyph blocks that provide a name (Figure 5b), whereas the opposite side provides his titles in another two glyph blocks (Figure 5c). Together these can be analyzed as follows:

Transliteration: TIL-MAN-na (pA1) K'INICH (pA2) K'UH-[T579]
AJAW (pB1) EL-K'IN-vo?-K'IN (pB2)

Transcription: til[iiw] man k'inich, k'uh[ul] ... ajaw elk'in ... k'in

Fascinatingly, this caption provides precisely the same name as that seen on the Altun Ha plaque (Houston 1984:796, Figure 9). The secure archaeological provenance of the plaque lends much weight to the initial attribution of British Honduras to the statuettes as originally being from Belize, if not from Altun Ha itself or its vicinity. Whereas some of the details are not entirely evident on the plaque, the glyphs on the statuette are perfectly clear and executed by a highly skilled hand. Here, the details of the TIL and MAN logograms are all visible and the final part of the name is rendered with the head of the Sun God. The emblem glyph that this figure bears is also significant because the scribe has chosen to place the T579 Water Scroll sign in the superfix or upper portion, leaving most of the AJAW logogram exposed, which is usually concealed by the toponymic main sign. There can be little doubt, therefore, that the person named on the plaque and on the statuette are one and the same. Stylistically, the statuettes can also be attributed to the sixth century and, as such, are wholly contemporaneous references.

In addition, Til Man K'inich is also provided with another title that may be read *elk'in* ...*k'in*. The reading of this title is complicated by the fact that one part is written on its head, whereas the second appears to refer to a title that continues to flummox

epigraphers. Assuming that the orientation of the initial portion is to be ignored as a scribal error of sorts, we can read this segment as *elk'in* or 'east.' The second portion appears as the title proper, which here may be rendered in a phonetically transparent form as **yo?-K'IN**, but one that is syncopated and affected by morphophonemic processes, possibly read as *yok'in*.⁵ Whereas the precise form and meaning of this title remain debated, the surface form may find its origins in /*y-ok-k'in*/, referring to 'the sun's entry' or the 'sun's pedestal, base, plinth' (see Valencia Rivera and Sheseña Hernández 2016). Significantly, this title is here qualified and preceded by *elk'in*, east, indicating that the person bearing this title hailed from this quadrant of the world and exerted his office over a commensurate area.

The use of geographic qualifiers is seen in a series of different titles, and it indicates that the ancient Maya were keenly aware of what we today call the Maya area. Whereas the kings of Copan and Quirigua at times used the prefix nojool, 'south,' with their titles, kings of the Yucatan peninsula such as Ek Balam used xaman, 'north,' in theirs, while kings of the eastern central lowlands and Belize in particular used elk'in, 'east' (see Tokovinine 2013: 94). The use of *elk'in* as a titular modifier is exceedingly rare and has only been securely documented in texts at Lamanai, Uaxactun, and Yaxchilan. At Lamanai (Stela 9), the local monarch K'ahk' Yipyaj Chan Yopaaht bears the title elk'in kalo'mte', or "eastern emperor" (Closs 1988:14).6 At Uaxactun, the title is found on the so-called Initial Series Vase, designating a mythical ruler (Carter 2015:10-11, Figure 10) who is qualified as k'uhul kan[u'l], 'godly Kanu'l' (Simon Martin, personal communication 2017). This suggests that this figure may have ruled at the ancient capital of the Snake-head dynasty, quite possibly Dzibanche in modern Quitana Roo (Martin and Velásquez García 2016). Similarly, at Yaxchilan (Stela 10) it is the mother of the famed Bird Jaguar IV who also takes the elk'in kalo'mte' title. Based on her other titles, including that of Ixkanu'l ajaw (lit. 'lady-Kanu'l princess'), she may also originate from Dzibanche, the original seat of the Snake-head dynasty, to the east (Martin 2005; Martin and Velásquez García 2016). The provincial division huk tzuk, 'seven province,' was likewise divided between east and west, wherein elk'in was used to designate individuals hailing from sites east of Naranjo, a site that is only 14 km from the modern Guatemalan-Belizean border (see Beliaev 2000:65; Tokovinine 2013:99–102; Helmke et al. 2015:26–28). As such, the use of elk'in, 'east' in the titular string of Til Man K'inich confirms that he ruled over the eastern reaches of the Maya world in what is

⁵ Alternatively, if the entirety of second collocation is to be read upside-down, this would naturally provide a very different reading. If this is the case, then the initial element may provide an unusual combination of signs with what may be a stylized arm upholding a **K'IN** sign. In this context these two signs can be described as 'Sun-raiser' and may well be graphically fused and stand for a reading that is unrelated to its constituent parts. Unfortunately, little more can be said here, except to say that according to this interpretation it may serve as a qualifier for *elk'in* or 'east' that would close the titular string.

⁶ Another possible reference can be found on Panel 1 at Coba, where a person is mentioned who appears to be named *Til Man* ... although the final part is unclear. Of note is the fact that he is qualified by *aj-elk'in*, or 'he from the east', whereas in the segment before the we can read *u-k'awiil*, or 'it is his royal authority' (see Guenter 2014:412; see also Helmke and Awe 2016:14–15). This reference is significant since it may refer to a near-contemporary with a similar name, or could well be another reference to the same *Til Man K'inich* of Altun Ha, indicating some sort of relationship between the two sites in the sixth century.

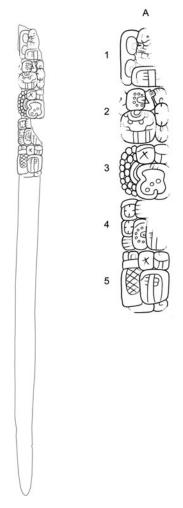


Figure 6. The carved bone pin found in Burial 43 at the site of Chau Hiix and detail of the glyphic text. Drawing by Helmke.

now Belize. This key piece of evidence supports the identification of the Water Scroll dynasty with a site in Belize, such as Altun Ha.

CHAU HIIX: CARVED BONE PIN

Another remarkable piece of evidence is a small glyphic text incised on a bone pin found at the archaeological site of Chau Hiix (Figure 6). The site is located just 19 km west of Altun Ha, along the Western Lagoon of northern Belize, essentially midway between Lamanai and Altun Ha (Pyburn 1991). The pin was found within Burial 43, in the core of Structure 38, the basal platform supporting four structures that together form a residential group or plazuela just to the south of the palatial complex (Group C) and possibly connected to the monumental architecture by a raised via (Andres 2009:Figure 2b; Cook 1997:182). The burial contained the remains of an adult male accompanied by three ceramic vessels, including a large red ware dish and a black ware bowl with small "coffee bean" incised motifs along the base. Although the excavators identified these vessels with Early Classic types (Cook 1997:171, 177), it is more probable that the dish is a sixth-to-seventh-century Tiger Run form (perhaps Mountain Pine Red) and that the bowl is a postslip incised black ware, clearly a form and type of the Late Classic (see Gifford 1976:193–195; Pendergast 1990:Figures 106n and 163q). In addition, a chalcedony axe head was recovered near the cranium, as well as four conch shell "ladles," which may have served as inkwells, and a series of other shell objects (Cook 1997:171–174). Most significant was the discovery of a highly fragmented, redpainted bone pin bearing five glyphs at its distal end (Cook 1997:174). Based on comparisons to similar artifacts (see Dacus 2005; Stuart and Houston 2001:64–65), this object may have served as a weaving pin, and as found measured approximately 23.4 centimeters in length, although the proximal end has broken off. It was clearly made from the bone of a large mammal and could well be made from a human fibula (Cook 1997:174; Pyburn 2005:150; Gabriel Wrobel, personal communication 2005).

The short text that adorns the head of the pin consists of five glyphs arranged in a column. Not surprisingly, the text is a name tag, providing a statement of possession between the object and its original owner. The first glyph (A1) makes reference to the pin itself and is preceded by the third person pronominal marker ufor 'his' in this instance. A reference to the pin follows and, whereas the main sign is unclear owing to breakage and erosion, it appears to represent a cranium and is clearly followed by the syllabogram ki. As such, it would appear that the first glyph is written **u-BAK-ki**, to be read *u-baak* 'it is his bone.' The name and titles of the owner follow suit. First comes the name (A2) which here is written as TIL-MAN-K'INICH, precisely duplicating the name seen both on the Altun Ha plaque and the stone statuettes that are said to be from the area. The first title borne by Til Man K'inich on the bone pin is once more the Water Scroll emblem glyph (A3), which confirms that the same person once owned this object as well as the other two examined above. More surprising is the following title (A4), which attributes to him the title of elk'in kalo'mte', or "eastern emperor" in precisely the same terms as K'ahk' Yipyaj Chan Yopaaht, who is celebrated in the seventh century on Stela 9 at Lamanai (see Closs 1988:14). The final glyph block (A5) is written as tu-AJAW-wa, but here the meaning is not entirely clear. One might conjecture, for instance, that it involves a prepositional phrase involving the contraction tu from /ti-u/, melding the preposition ti with the possessive prefix. This syntactically duplicates the final segments of similar texts on bones, such as tu-ma-ma on the bones of Burial 116 at Tikal (which we will return to, below), and tu-ba-ki. The latter may be contractions of chehe'n tu-baak, 'it is said on the bone,' providing a self-referential quotative (see Grube 1998; Martin and Grube 2000:51; Stephen Houston, personal communication 2017; Stuart et al. 1999:23). Assuming that the same type of elision is represented on the Chau Hiix bone, the final segment may be understood as 'he said on the bone, the king,' making the initial part of the text an utterance by the king himself.

Whatever the reading of the final glyph on the bone, the significance of the bone pin is that it was once the property of Til Man K'inich and that it found its way to Chau Hiix sometime at the onset of the Late Classic, to judge from the ceramics found in Burial 43. Considering also the proximity of Chau Hiix to Altun Ha, the occurrence of the same name with the same dynastic title once more increases the probability that the Water Scroll identifies kings from the area and suggests that Chau Hiix, for at least part of its history, found itself within the political ambit of the Water Scroll kingdom

The preliminary interpretations that have been made of the bone pin in the literature must also be briefly commented upon. Rosemary Joyce initially worked on the glyphic text, but misidentified the

Water Scroll emblem glyph as the one used in the Petexbatun region. In this respect, she also remarked on the partial similarity between the name rendered on the bone pin to that of a Tamarindito ruler, whose name is recorded on the Hieroglyphic Stairway 3 at the site, perhaps raised in the eighth century (Houston et al. 1992:Figure 2). The individual in question is named TIL-HA'-EK', for Til(iw) Ha' Ek', wherein it is only the initial element that provides a superficial point of similitude. It was further assumed that the bone pin might mention this Tamarindito individual and, therefore, was a foreign import to Chau Hiix from the distant Petexbatun region (see Pyburn 2005: 150). In addition, the Late Classic reference on the hieroglyphic stair at Tamarindito was used to significantly push back the date of Burial 43 by several centuries into the Terminal Classic. Based on current evidence, however, it is more plausible to assume that the burial dates to around the same time as the whole vessels found within the burial and to assign the interment to the initial part of the Late Classic. Of course, it is still possible that the bone pin is an import to Chau Hiix and that it is an heirloom, but it is much more proximate both temporally and geographically. This view finds support in the title that Til Man K'inich bears on the bone pin, which is also qualified by 'east' and therefore is more likely to be of local origin.

PUSILHA, STELA D

The next references to the Water Scroll are found at Pusilha, on the back of Stela D (Figure 7a); these do not make use of the emblem glyph, but only the main sign, which is employed for its toponymic function. These examples are key to understanding that the main sign of the Water Scroll emblem glyph is indeed toponymic and confirm that it can function by itself, retaining its referential value as a place name. The lengthy text starts with the dedicatory date of 9.8.0.0.0 (erroneously written 9.3.0.0.0), which corresponds to August 25, A.D. 593 (see Prager 2013:259; Wanyerka 2003:21, 2009:333). After recording the erection of a stela under the aegis of one K'awiil Chan K'inich, the narrative skips forward a little under two years, to the date 2 Lamat 1 Sip, or April 25, A.D. 595. On this date, we see a rare warfare expression, here written i-k'a-sa-ya (D11) LAKAM-TUN-ni (C12) for i-k'as-ay lakamtuun, or 'and then were splintered the stelae' (Figure 7b; Prager 2013:261, 277; Wanyerka 2003:23, 2009:338–339). This event was clearly one that marred the dynastic history of Pusilha, and those responsible for this assault and damage are introduced by means of an uchabity agency expression (D12). It is interesting that the agent is referred to by neither name nor title but by a toponym instead, to provide a type of demonym. The toponym is question is written with the T579 Water Scroll main sign, accompanied by the syllabogram ni-bi (Wanyerka 2009:338-339). Together these provide the compound suffix -n-ib that is seen with a series of other toponyms, including te'-n-ib and took'-n-ib, cited in the texts of Xunantunich and Topoxte, as well as one of the place names for Naranjo in which the head of the Jaguar God of the Underworld, perhaps read chuwaaj, is equally followed by the same suffix (see Helmke et al. 2010:104-106; Houston et al. 2001:50, n. 7). Based on collaborative work with Alfonso Lacadena, we have been able to conclude that this suffix involves an -n- particle that serves to denominalize and intransitivize the preceding substantive so that it can take the instrumental suffix -ib, which is typically only used with intransitive verbs. As such, the resulting forms provide toponyms that specify where particular

things occur or, more properly speaking, take place, including 'trees' at Te'nib, 'flint' at Took'nib, the 'Jaguar deity' at Naranjo, and freshwater waves at the Water Scroll place. The text of Pusilha Stela D therefore informs us that those responsible for destroying and despoiling the stelae of Pusilha hailed from the Water Scroll place, which we surmise must refer to Altun Ha.

As an event that took place in A.D. 595, it may well be that this occurred under the aegis and on the orders of none other than Til Man K'inich, who acceded to power just 11 years earlier. The clause in question on Stela D continues with more martial actions, including jub-uuy (D13) u-took', u-pakal (C14), providing the record of a defeat wherein the 'his flints and the shields were toppled' (Wanyerka 2009:339). To whom these implements of war belonged is specified in the following segment, although only the very first portion remains, which records ma' ahk'ab-aal (D14), literally "without night." The expression is the first part of a difrasismo, or poetic couplet, that is used to qualify kings as powerful, when they are labeled as ti ch'ahb ti ahk'ab-aal, 'with creation, with night'⁷ (see Knowlton 2012:260–261; Stuart et al. 1999:18; Zender 1999:126–127). In contrast, kings that are defeated and powerless are designated as being without these attributes by adding the negative particle ma', 'none,' as ma' ch'ahb ma' ahk'ab, 'without creation, without darkness' (see Zender 1999: 126–127), and it is part of this form of the difrasismo that is seen on Stela D. As such, the toppled armies were those of the defeated king, undoubtedly the ruler of Pusilha.

The Water Scroll toponym occurs once more, later in the text of Stela D as part of a reiteration, in which the account is driven forward by counting almost 53 years from the pivotal nadir in the narrative, the episode of the shattered stelae (Figure 7c). After a long distance number, the attack is reiterated as *k'as-ay* (F12) *lakam-tuun* (E13), acquiescently followed by *uchabij* (F13) and the Water Scroll toponym, written T579-**ni-bi** (E14). As such, this is not a separate mention of another later event, but is merely a repetition of the same earlier event. Nevertheless, with these two examples we can be sure of the meaning and intent of these statements, as well as ensuring the reading of key parts of these parallel clauses.

What is significant here from the vantage of this study is that the references to the Water Scroll place are provided to mark out distant adversaries, which means that it is improbable that the locality should be in the immediate vicinity. The location of Altun Ha just west of the Caribbean coast ensured that the site was extremely well-situated in terms of trade and commerce, but also allowed its dynasts to travel far both up and down the coast, perhaps also making use of the Belize River as a major artery of travel inland into the central lowlands. Considering that Pusilha is located approximately 207 kilometers south of Altun Ha as the macaw flies, it is interesting to note that the only other military expeditions recorded during the Classic period of an equal or greater reach are those of the Snake-head kings, when the dynasty was at the apogee of its power.⁸ That the Water Scroll kings could mount an attack on

⁷ Although we provide 'creation' as a translation of *ch'ahb* from the varied contexts of its use, it is evidently a term with a broad semantic domain, and other possible meanings and connotations that this lexeme conveys include 'fasting,' 'penance,' and ritual obligations more generally (Houston et al. 2006:74).

⁸ Another monument worth noting is Stela H at Pusilha that appears to make reference to the Water Scroll Emblem Glyph (C3). Stela H bears the dedicatory date of 9.11.0.0.0, corresponding to October 15, 652, a propitious date upon which the local Ruler C received the crown, at the ripe age of 66 (Prager 2013:265–266; Wanyerka 2003:32) and as such was raised three

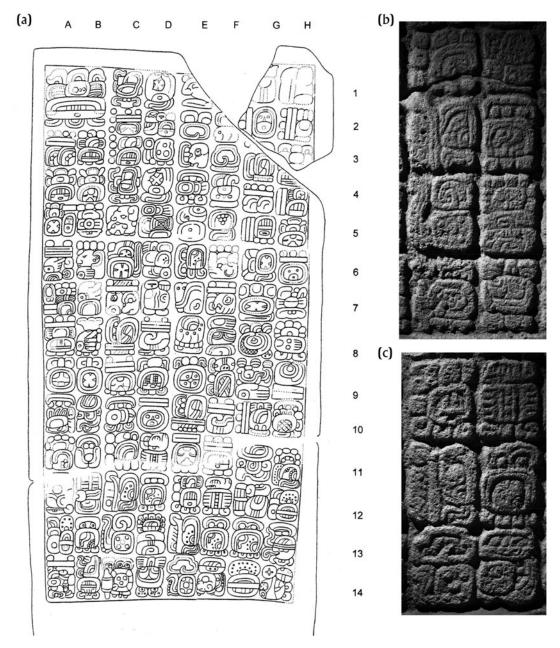


Figure 7. (a) The hieroglyphic text on the back of Pusilha Stela D. Drawing by John Montgomery reproduced with permission (after Wanyerka 2003:Figure 47). (b) Details of the first clause (CII–DI4) to mention the Water Scroll Emblem Glyph and (c) the second clause (EI2–FI4). Photographs by Helmke (British Museum catalog no. Aml928,Q.79).

such a distant enemy is ample testimony to the power they wielded and helps to explain, at least in part, the comparative richness of the relatively small site of Altun Ha.

TIKAL, CARVED BONE PINS

Thanks to the advances made in the decipherment of Maya writing, our understanding of Classic Maya politics and dynastic allegiances has greatly increased in recent decades and allows us to identify the

decades after Stela D. The clause in question in which the Water Scroll appears is, however, unfortunately rather eroded, and it is therefore unclear as part of which context this reference is made.

dominant dynasties that controlled much of the politics in the central lowlands. These were the Mutu'l dynasty established at Tikal and the Kanu'l dynasty established at Calakmul in the Late Classic (e.g., Harrison 1999; Helmke and Awe 2016; Helmke and Kupprat 2016; Martin 2005). This over-simplified presentation of ancient Maya politics, however, fails to convey the fact that, for much of the Late Classic, Tikal was in an appreciably subservient position, vanquished by war and suffering through what has been termed a hiatus, from A.D. 562 to 692. During much of this time, Tikal rulers failed to erect monuments, and the few that were raised were obliterated in dynastic struggles (see Guenter 2002; Martin 1999). In contrast, precisely the same period was one of dominance and triumph for the Kanu'l dynasty and its allies. This

delicate balance of power was strikingly upset on August 9, A.D. 695, when a newly ascendant Tikal king bearing the regnal name Jasaw Chan K'awiil met the forces of the Kanu'l king Yuhkno'm Yich'aak K'ahk' and decisively defeated them on the battlefield. Although Yuhkno'm Yich'aak K'ahk' survived the encounter (Stuart et al. 2015), this event was a real turning point in Maya history. The Kanu'l were never able to fully recover from this defeat, and the eighth century saw the rise of a series of polities that once had been subservient allies of the Kanu'l. The relatively short period of domination, when the power and influence of the Kanu'l shone brightest, was quickly diminished, and would see Jasaw Chan K'awiil raise large and imposing structures throughout his city, including his iconic mortuary shrine, Structure 5D-1, better known as Temple I (see Harrison 1999:140-145; Martin and Grube 2000:47). It is within this structure that a large wooden lintel was raised that commemorates the victory of Jasaw Chan K'awiil over the forces of the Kanu'l.

One of the most interesting sources on the reign of Jasaw Chan K'awiil stems from his tomb, designated as Burial 116, over which Temple I was raised. A bundle of bones, deposited in the southwestern corner of the funerary chamber, was among the many funerary goods that filled his richly provisioned tomb. This assemblage of bones derived from large mammals and, in all likelihood, many, if not most, are carved human long bones (Moholy-Nagy 2008: 61-62, Figures 189-209). The bones were worked into a wild array of forms, including tubes, tweezers, spatulate forms, and weaving pins. Many of the objects are inscribed with glyphic texts designated rather indelicately as "Miscellaneous Texts." Some accompany mythological events, such as the famed scene of the Maize God's demise, in which he is ferried across and into the watery underworld by the Paddler Deities (see Freidel et al. 1993:89-92; Schele and Miller 1986:52, 270-271; Stone and Zender 2011:50–51). In addition, one bone provides a lengthy list of death dates, recording the passing of foreign kings, many of whom appear to have been foes of Jasaw Chan K'awiil (Houston 1993:99, Figure 4-3). Others relate legendary events that came to pass centuries earlier, wherein celebrated predecessors travelled to far-off lands to be invested with the symbols of power (Taube 2000). One set, with which we will concern ourselves here, is a pair of weaving pins with glyphic texts that provide near identical parallel clauses. The texts on these bones have been designated as Miscellaneous Texts 42A and 42B, the first consisting of 12 glyph blocks and the latter of 11 (Figures 8a-8b). We can reconstruct the complete clause using both texts, as both have suffered some breakage and erosion and also because MT42B omits one glyph block. On this basis, the following transliteration and structural analysis can be provided:

Type of bone	It is the 'bone'	Dynastic Attribution
tzu-lu?-BAK	u-ba-ki	T756d- pi-AJAW
TIL?-BAK	u-ba-ki	T579 -AJAW
ju-lu-BAK	u-ba-ki	nu-EDZNA-la?
PAT?-BAK-la	u-ba-ki	K'UH-BAK-AJAW

Based on this analysis, we can see that the texts provide a clear pattern and structure, with each secondary clause introduced by a descriptive label followed by a statement of ownership, read *u-baak*, 'it is the bone of,' and a final portion that provides the

name of a particular dynasty to which the bone is attributed. We must recall, however, that the term *baak* in Classic Mayan is homophonous for 'bone' in a literal sense and is also the word for 'captive' in an extended sense. The medial segments of the clauses recorded on these bones may therefore also refer to captives from the four corners of the world, and provide a distinctly Tikal-centric template of Classic Maya political geography.

The very first label that introduces the initial sub-clause may be read tzul baak, or 'it is a foreign bone' (see Beliaev 2013:170; Tokovinine 2013:97), which is attributed to the Copan dynasty. The second sub-clause may refer to a *til-baak*, possibly a 'stoking bone,' based on the use of this root in other contexts. This particular type of bone is attributed to the kings of the Water Scroll dynasty. The third sub-clause refers to a jul-baak, or 'perforator bone,' since jul means 'spear, projectile' as a noun but can also serve as the verb 'to perforate, spear' (see Boot 2009:87), which appears to pertain to the dynasty of Edzna (see Pallán Gayol 2012:99).9 Finally, the fourth sub-clause appears to be headed by patal-baak or 'fashioned bone,' involving the intransitive verb pat 'to make, shape,' and an -al nominalizing suffix. This type of bone pertains to the kings of Palenque, who bore the Bake'l emblem glyph (see Helmke 2012:95–100), here preceded by the honorific k'uhul, 'godly, divine.'

Apart from the clearly morbid medium that serves as the support for these texts, their content is also driven by macabre themes, by focusing on foreign bones and/or captives. Whereas we are able to parse the structure of these texts, the meaning and impetus behind them remain much more difficult to ascertain. What is interesting here is the reference to the Water Scroll dynasty in and among the dynasties of Copan, Edzna, and Palenque. One way to account for their inclusion here is that the four dynasties were somehow perceived to delimit the central Maya lowlands, as if they were thought to be located at the geographic extremities. This pattern would duplicate other instances wherein sets of four emblem glyphs are cited in texts commemorating encounters between kings, such as those recorded on Stela A at Copan and Stela 10 at Seibal (see Barthel 1968; Marcus 1973; Helmke and Kupprat 2017; Schele and Mathews 1998:159-161, 185-187). Assuming that this interpretation is correct, it can be suggested that Palenque was deemed to represent the west and Copan the south. In fact, Copan is the southernmost site that produced glyphic texts and had its own emblem glyph, in much the same way that Palenque is far to the west, not only of Tikal, but also in relation to the Maya world as a whole. This would leave Edzna to demarcate the north and the Water Scroll to typify the east. On these grounds, it seems likely that the Water Scroll should be situated in the east, and the location of Altun Ha agrees perfectly with such a scheme (see Figure 9). It can also be added that the rulers of these sites—Tikal, Copan, Altun Ha, Edzna, and Palenque-were all styled with the kalo'mte' title, providing yet further support for the identifications provided here. These highly intriguing bones from Tikal speak of an emic awareness of the central Maya lowlands, of a geographic knowledge of distant Maya realms, a knowledge that strengthens the location of a victorious Tikal at the center of such a cosmological model, at the heart of Late Classic political geography (see also Tokovinine 2013:91–97).

⁹ On MT42A what seems to be the Edzna Emblem Glyph appears to be written rather oddly with an initial **nu** sign, perhaps even with a doubler. This feature remains unexplained at present.

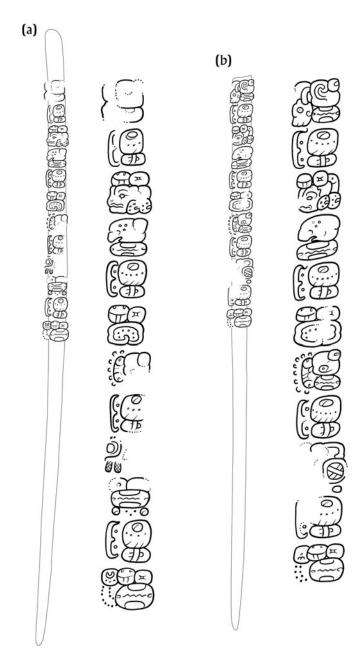


Figure 8. A pair of carved bone pins found in Burial II6 at Tikal. The pins and details of the glyphic texts (a) MT42A and (b) MT42b. Drawings by Helmke (after Moholy-Nagy 2008:Figures 194c–194d and Tokovinine 2013:Figures 48b–48c).

ALTAR DE LOS REYES, ALTAR 3

The next text to make reference to the Water Scroll emblem glyph was found at the archaeological site of Altar de los Reyes, in southeastern Campeche. The circular monument in question is the one that gives the site its name, as it provides a lengthy list of emblem glyphs (Figure 10; Grube 2003). The top of the monument once bore an elaborate iconographic scene, but, sadly, it is now mostly eroded. If this monument once bore a date, it is now completely weathered away. Nevertheless, based on style and content, it is likely that the monument was raised sometime in the first part of the late eighth century (Grube 2003:37). Amid the outlines across the top of the altar, we can discern a seated ruling figure and two

small glyphs survive at the base. Although weathered, these can be read as *k'uhul kab* (pA1), *uxlajuun kab* (pB1), or 'divine lands, thirteen lands' (Grube 2003). The caption is not immediately clear, but it would seem to make reference to the thirteen emblem glyphs that are emblazoned around the circumference of the altar. Based on their placement, the emblem glyphs appear to designate not dynastic titles so much as placeholders for territorial entities that reflect some sort of meaningful subdivision of the

¹⁰ Alternatively, the reference to **13-KAB** on the altar may be a reference to Tayasal or a site in the vicinity in the central Peten (Stephen Houston pers. comm. 2017).

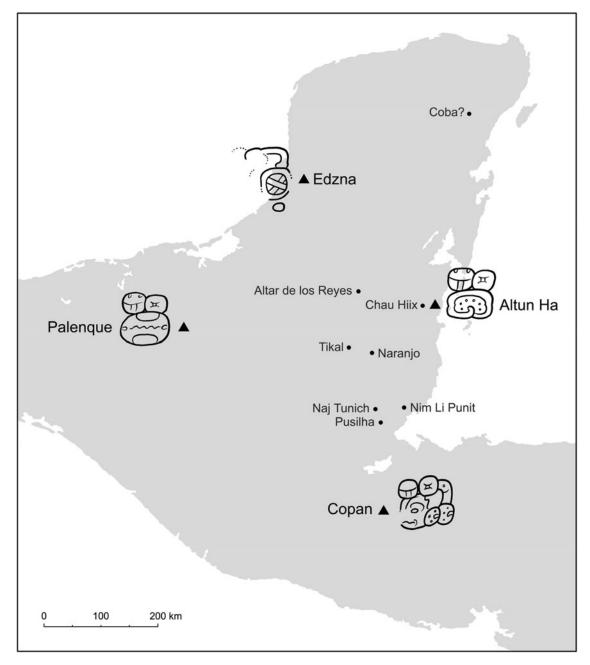


Figure 9. Map of the Maya area showing the probable locations of the capitals of the four dynasties mentioned on the carved bone pins found at Tikal. Salient sites mentioning the Water Scroll Emblem Glyph are also presented. Map by Helmke.

lowlands according to these thirteen emblems. Unfortunately, only about half of the emblem glyphs that originally graced the altar remain legible. Those that remain are of the Kanu'l at Calakmul (p6), the Mutu'l at Tikal (p7), the Bake'l at Palenque (p8), the Water Scroll (p9), the dynasty established at Edzna (p13), and the Ik'a' of Motul de San José (p14), followed by a closing statement (p1). Whereas Grube read this text as starting at Glyphs p1 and p2, we instead see these as the summary conclusion of the text. This closing statement can be read *saak tz'amaal*, or 'seed thrones,' and would be tied to the following glyph block (p2), which provides the titular ethnonym Chatahn Winik (see Boot 2005:505–516). The lengthy listing of emblem glyphs may relate

that these are the 'seed thrones' of the Chatahn Winik, a title that was held by a variety of lords as a type of secondary emblem glyph, with the exception of rulers of the Mirador area, who appear to have used this title as their primary (and, in fact, sole) dynastic title (Guenter 2013). One interpretation that therefore presents itself is the view that the thirteen kingdoms listed on the monument of Altar de los Reyes were descendants of an early dynasty once established in the Mirador area.

This grouping of emblem glyphs does not readily conform to a cosmological pattern, and may instead provide a list of dynasties that were considered to be equal in terms of the dates at which their dynasties were founded (from a decidedly Late Classic vantage).

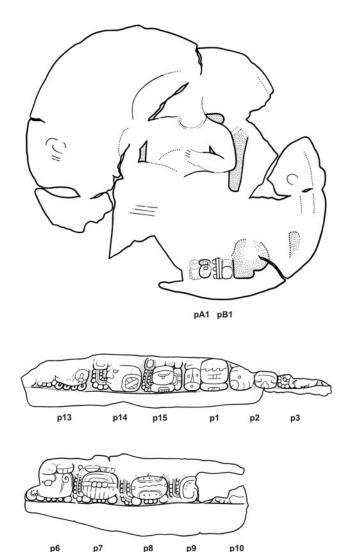


Figure IO. Altar 3 of Altar de los Reyes, showing the eroded scene on its top and the emblem glyphs along its side. Drawing by Nikolai Grube (after Grube 2003:Figures 1–2).

Significantly, in addition to the Water Scroll emblem glyph, those of Palenque and Edzna are also cited on the altar, duplicating in large measure the quadripartite pattern recorded in the texts of Tikal that we have just seen above. Moreover, one of the other significant texts found at Altun Ha, incised into a pair of exquisite obsidian earspools found within Tomb A-1/1, records the title 13-K'UH or uxlajuun k'uh, 'thirteen gods' (see Mathews 1979; Helmke 1999:13–17). As first suggested by Wanyerka (2009:383-384) and again by Tokovinine (2013:106–107), the use of this title in a text at Altun Ha and the inclusion of the Water Scroll emblem glyph among those listed at Altar de los Reyes may well indicate that all of the sites named once formed part of a distinct network operating on the number thirteen. This number was a significant one in ancient Maya cosmology (see Thompson 1950:54-55, 99, 129, 210, 252-256) and, unless this is coincidental, this numeral may have been one of the underlying features of this framework (see Houston et al. 2006:89–97). Whereas the details and motivations behind this list remain obscure, it is highly significant that the Water Scroll kings are once more cited in and amongst the

privileged few, standing alongside the most influential and powerful dynasties of the Late Classic period.

NARANJO, STELA 46

The kings of the Water Scroll dynasty and their role in the dynastic matters of distant city-states are made all the more clear by the recently discovered Stela 46 at Naranjo (Martin et al. 2017). This lengthy, wonderfully detailed, and well-preserved text provides us with answers to many of the queries that have plagued epigraphers concerning matters of dynastic succession towards the end of the reign of K'ahk' Tiliiw Chan Chaahk, thirty-eighth king of the dynasty (see Proskouriakoff 1993:72-75; Martin 1996:230; Martin and Grube 2000:74-77). He acceded to power at the tender age of five in May A.D. 693, under the mindful gaze of his mother, Lady Six Sky, who wielded an iron grip on the throne and matters of state, not just during the regency that accompanied the minority of K'ahk' Tiliiw but also throughout his reign and beyond, eventually intervening in the dynastic succession (see Helmke 2016; Helmke and Savchenko 2016). In fact, during the entirety of K'ahk' Tiliiw's reign, Lady Six Sky appropriated the prerogatives of kings, raising monuments in her name, assuming the title of bahkab, literally 'first of the land' or "chief," and trampling captives from wars that she seems to have instigated. On present evidence, Lady Six Sky outlived her son, and then went on to favor the cause of two other claimants, Yax Mayuy Chan Chaahk and Yax Bajlaj Chan Chaahk, who may have been her younger offspring and siblings of the defunct king, rather than letting the succession proceed patrilineally to the son of K'ahk' Tiliiw (but see Martin et al. 2017 for an alternate scenario). These machinations were apparently intended to ensure her place, power, and prerogatives within the court, and ultimately resulted in delaying the accession of Yax Mayuy until after her passing, ostensibly in A.D. 741, a fateful consequence of her protracted regency (Houston 1993:108; Helmke 2016; Helmke and Savchenko 2016; but see Guenter 2008).

The text of Naranjo Stela 46 plots out the relationship between all of these agents and attempts to establish the claims of the younger siblings by associating them with K'ahk' Tiliiw and mentioning a series of ritual events in which they participated together. This monument bears the dedicatory date of 9.14.15.0.0, corresponding to September 18, A.D. 726, and thereby dates to the end of K'ahk' Tiliiw's reign. It is perhaps on account of this late date that this is the first monument to bear explicit information regarding the parentage of the king, citing Lady Six Sky as his mother and a more obscure figure from the Naranjo court as his father (Martin et al. 2017:673-674). After the rituals that involved the two claimants, events that took place under the aegis of the king and in company of Lady Six Sky, the narrative shifts to the date 1 Ik' 0 Pop (Figure 11), which can be anchored to 9.14.14.7.2, and matched to February 12, A.D. 726. This date is precisely the same as that seen on Stela 18 at Naranjo and records a New Year's date, since it corresponds to the celebrations of the incoming year in the Haab calendar, as identified by Stuart (2004). The event that transpired on this propitious date is not well-understood. It may record a ritual action related to the preparation of the ground or the cavity in which the stela would be erected just seven months later, to commemorate the holahuntun period ending of the fourteenth k'atun (Martin et al. 2017:672).

The odd predicate aside, what is really intriguing is that the ground-breaking ceremony was officiated by a number of foreign dignitaries, prominent among them one figure called Yobe Ajaw

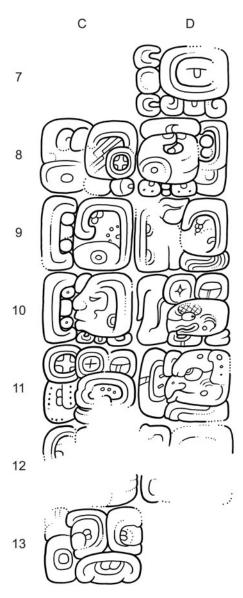


Figure 11. Excerpt of the lengthy text adorning the back of Stela 46 of Naranjo, mentioning the king of the Water Scroll dynasty. Drawing by Helmke (after Martin et al. 2017:Figure 5).

(D10) bearing the Water Scroll emblem glyph (C11), another possibly named Yax Ikin (D11) whose emblem glyph (C12) has unfortunately spalled off, and followed by the names of two additional local figures (D12-C13), who may either be lesser dignitaries or supernatural entities that are attributed agency in this ritual (see Martin et al. 2017:672). The last two figures cited in the sentence are referred to only by title, which they share, usually distinguished on the basis of cardinal directions xaman, 'north,' and nojool, 'south,' something that is also seen in the following clause on Stela 46, as well as in the text of Stela 24 and Altar 2 at the site (Grube 2004:208-209), and on the recently discovered Komkom Vase excavated at Baking Pot (Helmke et al. 2017). In this important clause on Stela 46 we once more see a group of four individuals, with the local figures tied to the north and south, respectively, whereas the two foreign lords may therefore be tied to the remaining cardinal directions. In this scheme, Yax Ikin would stem from the

west, whereas Yobe Ajaw would hail from the east. Once more, this implies a very close affinity of the Water Scroll emblem glyph with a dynasty established in the east, which is most likely to be Altun Ha. This and the foregoing examples make it clear that the Water Scroll kings occupied a site that was not only significant in terms of status, power, and political geography, but also on a cosmological level, considering the many references made to this title and its repeated associations with the eastern realms.

That there may have been a sustained relationship between Altun Ha and Naranjo is suggested not only by the relatively late text inscribed on Stela 46, but also on the basis of shared supernatural entities. Chief among them is the so-called "Square-nosed Beastie," a label of endearment attributed to this entity by Schele (1992:140–141; Figure 12). We know that this figure was thought to be the dynastic founder at Naranjo; the narratives in which it is involved stretch all the way back to mythological times, in texts that provide huge distance numbers, one going back more than 895,000 years into the past (Figures 12a–12b; see Martin 1996: 226; Martin and Grube 2000:70, 71-72; Helmke 2016). Two references to this same supernatural entity are known from Altun Ha, both from locally produced ceramics (Helmke and Awe 2008: 82-83). One is rendered on a sixth-century incised brown ware bowl (Figure 12e) and the other on a seventh-century painted vase (Figure 12f). The exact significance of the supernatural entity to the nobility of Altun Ha remains unknown, but it may well be that this common ground indicates a bond between the two dynasties, perhaps even shared descent, or at least perceived affinity.

This affinity may also be partially reflected in the ceramics produced at the two sites during the sixth century, especially as there are many similarities in form, surface treatment, and choice of palette in the ceramics produced in the workshops of Naranjo's long reigning Ajasaaj Chan K'inich (also nicknamed in the literature as "Aj Wosal," see Martin and Grube 2000:71-72) and many of the Petkanche Orange-polychrome bowls found at Altun Ha and sites in the vicinity (see Ball 1993:260–261). Significantly, the petrography and sphere of distribution of Petkanche ceramics indicates that these likely were produced at Altun Ha, where the vast majority have been recovered (Reents-Budet et al. 1994: 198-203). Nevertheless, the ceramics were distributed far and wide, including the so-called Blom Plate found at Río Hondo in Quintana Roo (Blom 1950), the specimens found at sites on Ambergris Caye (Figures 13a-13b; see Guderjan and Garber 1995; Guderjan 1993:25, 28-30; Christophe Helmke, personal observation 2007), as well as the famed Quetzal Vase found at Copan (Figure 13e). Typologically and stylistically related, but petrographically distinct, are Petkanche vases found at Coba in Quintana Roo and Becan in Campeche (Figure 13d; Ball 1977:72, 177, Figure 29a; Reents-Budet et al. 1994:201). Significant in this regard are a group of sherds of the same type found at Pusilha, which confirm the connection to Altun Ha as revealed by the epigraphy (Figure 13c). All of these ceramics testify to the importance and the reach of Altun Ha's influence and, interestingly, they closely duplicate the extent of the references to the Water Scroll emblem glyph. With trade to the north, we may even have a mention of Til Man K'inich at Coba (Guenter 2014:412) and, with contacts to the south, we also see the Water Scroll kings interacting with polities in southern Belize. The case of Pusilha has already been discussed but such interactions would also be made manifest at Nim Li Punit in the Late Classic.

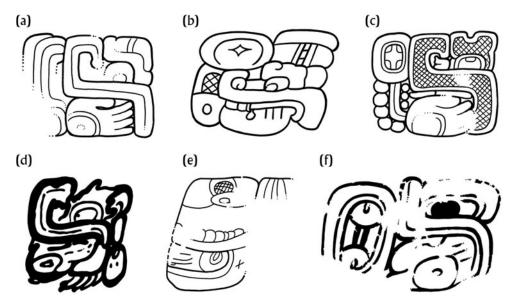


Figure 12. The supernatural entity known as the "Square-nosed Beastie": (a) Naranjo, Stela 24; (b) Naranjo, Altar 1; (c) Tikal, Temple IV, Lintel 2; (d) unprovenanced ceramic bowl, K2358; (e) Altun Ha, incised ceramic bowl RP595/161; and (f) Altun Ha, Petkanche ceramic vase RP 595/56. Drawings by Helmke.

NIM LI PUNIT, STELA 2

The references to the Water Scroll kings at Nim Li Punit are twofold and both are recorded on Stela 2 (Figure 14). The latest date on the monument is 9.15.7.0.0 and thereby probably marks the date of its dedication, which corresponds to July 17, A.D. 738 (Wanyerka 2009:489). The text records that the lord of Nim Li Punit, bearing the local dynastic title of Wakaam Ajaw (F3-E4), acceded to power by taking the k'awiil scepter (E2-F2) on this date. Interestingly, the accession is said to have taken place yichnal (H1), 'in front of' or 'before' the 'godly Water Scroll king' (G2-H2; Grube et al. 1999:28; Wanyerka 2009:518). We can therefore see that the local lord of Nim Li Punit acceded to power, but under the watchful gaze of a foreign overlord. While it is not explicitly stated that the accession of the local king took place under the auspices of the foreign ruler, it is certainly implied. Recalling the mentions made at Pusilha 143 years earlier, this constitutes a resounding echo of the presence of Water Scroll kings in southern Belize. Based on the textual evidence, it would seem that the Water Scroll kings had a strong, if intermittent, hand to play in the politics of the polities of southern Belize.

As regards the possible relations between southern Belizean sites with Copan and Quirigua to the south (e.g., Braswell et al. 2008), it is not altogether surprising to see frequent mentions of titles and placenames familiar from these latter sites (e.g., Grube et al. 1999; Stuart and Grube 2000; Tokovinine 2013:63–66; Wanyerka 2003: 70). The same is true on Stela 2, where titles such as the "Black Bat," also found at Quirigua (Wanyerka 2003:8), appear. On Stela 2, this title appears in the context of a stela dedication event seven years prior in 9.15.0.0.0 or August A.D. 731, when the raising of the stela is said to have taken place *yita* (J1), or 'in the company of' the twenty lords of "Black Bat" (I2–J2; Wanyerka 2009: 519–520).

Thereafter, the narrative jumps back to an event in A.D. 726 (J4–K1), which incidentally is also the date borne at the top of Stela 2, and ties this event with the period ending of A.D. 731

(L1–K3; Wanyerka 2003:37). Although the particular action or event that occurred on this date is not specified, the Water Scroll emblem glyph is once more cited, and is related to the Black Bat title (M1) by means of an agency expression (K4). The Water Scroll kings appear to have also had a hand in the ritual events that transpired on the major period ending of 9.15.0.0.0. The remainder of the text is quite eroded, and therefore less instructive, but it closes with the part of the martial couplet we saw on Pusilha Stela D, which is only preserved in this instance as *tu-pakal*, 'with his shield' (M4).

The references to foreign lords, both of the Water Scroll dynasty to the north and of the Black Bat kings to the south, indicate that the polities of southern Belize were firmly integrated into the geopolitics of the area and the times, with foreign lords expressing interests in local events, including the celebration of period endings and the enthronement of local kings (Wanyerka 2009:517-521). This implies that the kings of Nim Li Punit were vassals, but whether their overlords had their capital to the north or to the south remains unknown. The tug of war in which these southern polities undoubtedly found themselves may also account for the presence of the Quetzal Vase at Copan and perhaps also the large quantity of jadeite artifacts at Altun Ha, presumably sourced in the Motagua Valley (see Taube et al. 2005), bespeaking their involvement in the area and the manner in which this presence was translated into economic gain and material wealth. The accession of the Nim Li Punit king in A.D. 738 in the presence of the Water Scroll king implies that the former owed fealty to the latter and paints a picture in which Altun Ha assumed a position of power in the region.

NAJ TUNICH, WALL PAINTINGS

The final two mentions of lords of the Water Scroll emblem glyph are once more found far away from their presumed capital in painted texts rendered in stark black pigment on the limestone walls of the



Figure 13. Examples of Petkanche Orange-polychrome vessels that were manufactured in workshops at Altun Ha. (a) A vase discovered at Chac Balam on Ambergris Caye and (b) A sherd of comparable specimen in a private collection in San Pedro. (c) One of the Petkanche sherds discovered in excavations at Pusilha. Photographs by Helmke. (d) Vase found in Structure N2 at Becan. Photograph by Harri Kettunen. (e) The Quetzal Vase found in Tomb 2 at Copan. Photograph Hillel Burger © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, Harvard University (PM# 2004.24.34540.1).

cave of Naj Tunich in the southeastern Peten. The site of Naj Tunich has the distinction of being a ritually important cave, one that was both used for inhumation of prominent elites in the Protoclassic, within walled enclosures at the entrance (see Brady 1989: 101-147) and also for its varied rock art, which exhibits dozens of stunning painted glyphic texts in addition to petroglyphs and handprints. Although other caves with painted glyphic texts are known in the Maya area (Bassie-Sweet et al. 2015; Helmke 2009: 508-511; Stone 1995), Naj Tunich has by far the largest glyphic corpus of any cave and one that rivals the written corpora of many surface sites. Given their context, the content of these texts expectably does not duplicate the same matters, phraseology, and genres that are seen in texts found at surface sites throughout the Maya area (MacLeod and Stone 1995). Many, if not most, of the texts are records of the arrival of high-standing pilgrims to the site, especially in the years between A.D. 692 and 745 (Helmke 2009:167-173; MacLeod and Stone 1995:157-164). As such, many of the texts make references to verbs of motion, such as hul-i, 'he arrived here'; hul-oob, 'they arrived here'; and even pakxi, 'he returned' (Helmke 2009:150-161). Other texts relate that one of the primary purposes of these pilgrimages was to il-(with its many derivations) 'see' or 'witness' something called monpaan ~ monpan. What this may be remains unknown, but it bears an uncanny similarity to Mopan, the name of the river that has its source just to the north of Naj Tunich. One cannot help but wonder if this was the name of a deity or formation or place within the cave that pilgrims were meant to see, the culmination of the pilgrimage. Perhaps owing to of the importance of this feature, the area and the river were progressively associated with that name (see Helmke 2009:164–173; Helmke et al. 2010:103).

Among the many texts seen at Naj Tunich are two that are of real importance for understanding the role and significance of the Water Scroll kings. In Drawing 34, we have a relatively short text that records the arrival of pilgrims on the date 8 Men 9 K'ayab (A1–A2), possibly correlated to span from the second to the third of January, A.D. 744 (Figure 15a; see Helmke 2009:160–161; MacLeod and Stone 1995:163). The verb in question is *hul-i*, 'he arrived here' (A3), with the locality specified in the following glyph block, perhaps read as *lk'-jul-kab* (A4) or 'black-piercedearth,' an apt name for Naj Tunich. The person said to arrive at this locality is named in the following two glyph blocks, first by attributing him the Water Scroll emblem glyph (B1) and thereafter by naming him as **MUYAL-cha-ki** (B2) for Muyal Chaahk, or

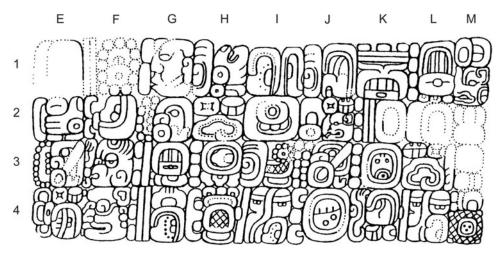


Figure 14. The lowest portion of the glyphic text of Stela 2 at Nim Li Punit. Drawing by John Montgomery reproduced with permission (after Wanyerka 2003:Figure 17).

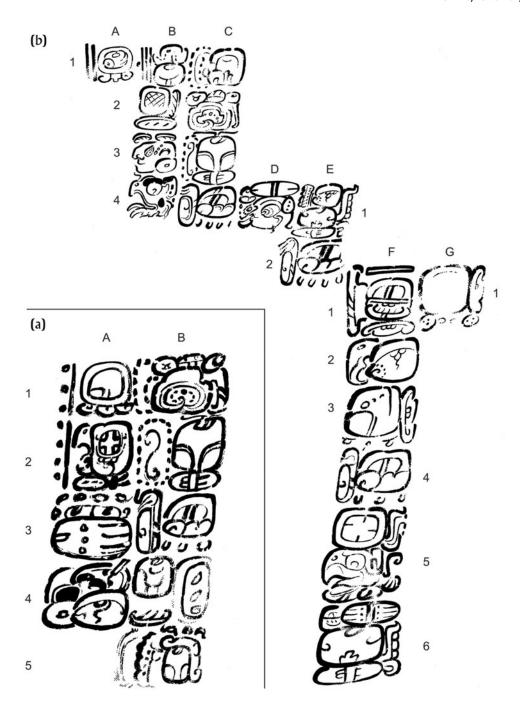


Figure 15. Texts from Naj Tunich mentioning a Water Scroll king. (a) Drawing 34. (b) Detail of Drawing 65. Drawings by Helmke, based on photographs by Chip and Jennifer Clark.

'cloudy thunder god.'¹¹ Interestingly, this figure is not said to arrive alone, but *yitaaj*, or 'in the company of' or 'with' (B3) another person, who in part seems to be named Wakax (B4), and bears the distinctive *Sak Chuwen* title of Naranjo dynasts (B5). In this

text, we can see a continued and intimate relation between the Water Scroll kings and the lords of Naranjo. At this date, the ruling figure at Naranjo would appear to have been Yax Mayuy Chan Chaahk, who was defeated and captured by Tikal forces in a surprise attack just one month later, on February 9, A.D. 744 (Martin 1996; Zender 2005:13–14). Although the end of the text of Drawing 34 is not entirely clear, it appears to make reference to a high-standing member of the Naranjo court conducting a joint pilgrimage with the ruler of Altun Ha. This pairing of names and titles confirms the close bonds between the rulers of the two sites and repeats the joint ritual actions celebrated on Stela 46 at Naranjo.

The reference to this Water Scroll king provides an interesting example of syntactic inversion, with the Emblem Glyph preceding the regnal name. As such, the references to this king at Naj Tunich are more in keeping with Yukatekan syntax, wherein titles precede names, rather than the more prevalent Ch'olan form attested throughout the Classic period wherein titles follow names (see Lacadena 2000).

All the more fascinating is another text at Naj Tunich, known as Drawing 65, which records another pilgrimage event (Figure 15b). The caption is headed by the calendar round 10 Manik' 16 Kumk'u (A1-B1), again presumably for a span of dates, January 28-29, A.D. 745 (see Helmke 2009:168-170; MacLeod and Stone 1995: 165–167). This dates the text of Drawing 65 to some 392 days after Drawing 34. The initial verb of this text is pakxi, 'he returned,' (B2) and the place that is returned to appears to be written ka-ti' ch'een, 'to the mouth of our cave' (B3-B4). The first person in the lengthy list of names is none other than Muyal Chaahk (C3), to whom the Water Scroll emblem glyph is once more attributed (C1-C2). A litany of other pilgrims is introduced by the person conjunctive yitaaj (C4, E2, and F4), including one Ajchak Maax (D1), said to be the elder brother (E1), who is previously mentioned in Drawing 52 (perhaps dated to A.D. 738), in the company of another figure who is said to be subservient to a figure from Sako'k, the ancient name of El Palmar in Quintana Roo (see MacLeod and Stone 1995:163, Figure 7-2; Tsukamoto and Esparza Olguín 2014: 52-53). Other names mentioned in Drawing 65 include an entity known as K'anal Tahn Ahk (G1, F2-F3), possibly a supernatural figure considering the Nahho'chan title that precedes its name (F1; Helmke et al. 2015:18, Figure 16a), and one K'in Muwan, (F4) said to be the younger brother (F5; Stuart 1997:5, Figure 6d). Based on this text, we can see a known figure returning to the cave with an entourage of kin to conduct an iterative pilgrimage, just a year later than the first. These two texts confirm the vitality of the Water Scroll dynasty and the power of a Late Classic king to venture far from his capital to conduct a pilgrimage to an important ritual site.

As this is the last clear reference to a king of the Water Scroll dynasty, we can appreciate the many mentions made throughout the central lowlands, from the accession of Til Man K'inich in A.D. 584 to the second pilgrimage of Muyal Chaahk, 161 years later. The Water Scroll kings exerted a huge amount of influence during this period and figured prominently in various geopolitical schemes devised by the kings of Tikal, Naranjo, and Altar de los Reyes. With the reversals of fortune that befell Naranjo after the defeat of Yax Mayuy, this strong ally was plunged once more into a second hiatus that would endure until the accession of K'ahk' Ukalaw Chan Chaahk, the son of K'ahk' Tiliiw, in A.D. 755. From that point on, the texts are mute as to the fate of the Water Scroll kings, but they shared the fortunes of other dynasties at the advent of the collapse.

CONCLUDING THOUGHTS

Although the decipherment of the enigmatic T579 Water Scroll emblem continues to elude epigraphers, the many references to the kings bearing this title in texts throughout the eastern Maya lowlands amply demonstrate the importance of these rulers in antiquity. The numerous texts as well as their geographic distribution lend support to the identification of Altun Ha as the capital of the Water Scroll dynasty from at least the sixth through to the eighth century. In fact, we can divide the references to the Water Scroll emblem glyph into two dominant categories. The first encompasses relatively early and local instances at Altun Ha, Chau

Hiix, and the statuettes of the aged Atlantean figures. In contrast, the other references are both later and more geographically distant. This patterning reflects the growing importance of the site and also serves as a proxy for the power wielded by the dynasty, not omitting the fact that Caracol, the veritable behemoth of Belize, is not mentioned by foreign centers, but only at sites such as Hatzcab Ceel, La Rejolla, and Caballo, i.e., subservient satellites that were physically integrated into the urban fabric by an extensive network of causeways (see Chase and Chase 2001; Helmke and Kettunen 2005). The distribution of the external references to the Water Scroll kings forms a neat arc around epicentral Altun Ha, with the curve extending from Pusilha, to Naj Tunich, Tikal, and Altar de los Reyes. The possible mention of Altun Ha at Coba is part and parcel of this model and helps to substantiate the influence that Altun Ha exerted both north and south along the Caribbean coast. Interestingly, the distinctive Petkanche Orange-polychrome ceramics that are the hallmark of Altun Ha are found predominantly within the same sphere of influence as the one delineated by the epigraphy. This concurrence speaks of a region that was often under the influence of Altun Ha, where elite serving vessels functioned as social currency to cement alliances between sovereigns (see Reents-Budet et al. 1994:198-203).

The relationships that Altun Ha maintained with different kings varied according to the times and the polities in question. At both Tikal and Altar de los Reyes, the Water Scroll kings are mentioned in their capacity as markers for the sacred geopolitics of the Late Classic, whereas in southern Belize we see Altun Ha in a decidedly assertive manner, meting out attacks on Pusilha as well as officiating over the investiture of the kings of Nim Li Punit. At Naj Tunich we see the Water Scroll kings participating in joint pilgrimages and ritual actions, much the same as recorded at Naranjo. In fact, the relationship between these two dynasties may have been much closer than is generally recognized, possibly involving shared affinal relations followed by consanguinity.

Mentioning Altun Ha's diminutive size is not meant to be a monotonous exercise, but instead conveys our genuine appreciation and wonderment of its wealth and prominence in antiquity. Strategically located between the Caribbean coast and the Belize River, the Water Scroll capital exercised extraordinary power and displayed opulent wealth that is likely to have been the result of the ability of its rulers to maintain control of the major inland waterways between the Caribbean coast and the central Maya heartland. In addition to the tangible markers of the realm of commerce and wealth, the epigraphy demonstrates that the Water Scroll kings were entitled to bear some of the most exalted titles and to be styled by the kalo'mte' title, which ascribed the kings the eastern quadrant of the Maya lowlands as their realm. As one of the four cardinal directions, that of the east was the most significant one in Mesoamerican cosmology, not the least since that is the direction of the rising sun. The repeated references to the bearers of the Water Scroll emblem, as kings of the east, indicates that Altun Ha constituted one of the corners of the diamond of Classic Maya geopolitics, and, as such, was among the truly influential capitals in ancient Maya history.

RESUMEN

La importancia de los glifos emblema en los estudios mayas ha sido reconocida desde hace mucho tiempo. Entre éstos se encuentran los emblemas que todavía no han sido asociados de manera concluyente con sitios arqueológicos específicos. Un ejemplo de este tipo es el Glifo Emblema que permanece no descifrado y por lo tanto ha sido denominado Voluta de Agua, que aparece en numerosas ocasiones en los textos mayas de periodo clásico, entre los siglos

VI y VIII. Estas muchas referencias se encuentran en una variedad de sitios a través de las tierras bajas, lo que atestigua de la importancia de este antiguo reino y de los reyes que llevaron este título. En la presente contribución revisamos las evidencias epigráficas y arqueológicas y proponemos que este sea el título real de los reyes que reinaron desde Altun Ha, en las tierras bajas mayas orientales, en lo que ahora es Belice. La presentación de la evidencia

epigráfica sigue su incidencia temporal y se inicia con textos descubiertos en Altun Ha y sitios vecinos, y de allí va en la exploración de las menciones realizadas en sitios más allá, incluyendo Pusilha, Tikal, Altar de los Reyes, Naranjo, Nim Li Punit y Naj Tunich. Al hacerlo, comenzamos a reconstruir la historia dinástica de los reyes de la dinastía Voluta de Agua, desde la perspectiva de fuentes locales tanto como extranjeras.

ACKNOWLEDGMENTS

First and foremost, we would like to thank Helen Haines for stimulating conversations that prompted the writing of this paper. Many thanks also to Anne Pyburn for permission to include the bone pin from Chau Hiix in this paper and to Rosemary Joyce for her comments on the glyphic text. To Christopher Andres, our appreciation for information pertaining to Structure 38 at Chau Hiix and to Gabriel Wrobel for information on Burial 43. Many heartfelt thanks to Elizabeth Graham and David Pendergast for all their help and support in our study of the glyphic corpus of the texts of Altun Ha and for their insightful and constructive comments on an earlier draft of this paper. The senior author would like to thank the Royal Ontario Museum for providing access to the glyphic materials from Altun Ha and permission to document them. Likewise, a warm thanks to the British Museum, particularly to Jago Cooper and Kate Jarvis, for their kind and courteous help in examining the monuments and ceramics of Pusilha. Further thanks also to Elizabeth Graham for including the senior author on her team as project epigrapher and facilitating the documentation of the monuments of Lamanai.

REFERENCES

Acuña, Mary Jane

2015 Royal Death, Tombs, and Cosmic Landscapes: Early Classic Maya Tomb Murals from Río Azul, Guatemala. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 168–185. Precolumbia Mesoweb Press, San Francisco.

Andres, Christopher R.

2009 Architecture and Sociopolitical Transformation at Chau Hiix, Belize. *Journal of Field Archaeology* 34:1–24.

Ball, Joseph W.

1977 The Archaeological Ceramics of Becan, Campeche, Mexico. Middle American Research Institute, Publication No. 43. Tulane University, New Orleans.

1993 Pottery, Potters, Palaces, and Polities: Some Socioeconomic and Political Implications of Late Classic Maya Ceramic Industries. In *New Perspectives on Classic Maya Civilization: Lowland Societies in the Eighth Century A.D.*, edited by Jeremy A. Sabloff and John S. Henderson, pp. 243–272. Dumbarton Oaks Research Library and Collection, Washington, DC.

Barthel, Thomas

1968 El complejo emblema. Estudios de Cultura Maya 7:159-193.

Bassie-Sweet, Karen, Marc Zender, Jorge Pérez de Lara and Stanley Guenter 2015 The Paintings of Joljá Cave 1. In *The Ch'ol Maya of Chiapas*, edited by Karen Bassie-Sweet, Robert M. Laughlin, Nicholas A. Hopkins, and Andrés Brizuela Casimir, pp. 86–104. University of Oklahoma Press, Norman.

Beliaev, Dmitri

2000 Wuk Tsuk and Oxlahun Tsuk: Naranjo and Tikal in the Late Classic. In *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*, edited by Pierre R. Colas, Kai Delvendahl, Marcus Kuhnert, and Annette Schubart, pp. 63–82 Acta Mesoamericana, Vol. 10. Verlag Anton Saurwein, Markt Schwaben.

2013 Western Foreigners in the Dresden Codex. In *The Maya in a Mesoamerican Context: Comparative Approaches to Maya Studies*, edited by Jesper Nielsen and Christophe Helmke, pp. 167–173. Acta Mesoamericana, Vol. 26. Verlag Anton Saurwein, Markt Schwaben.

Berlin, Heinrich

1958 El glifo emblema en las inscripciones Maya. *Journal de la Société des Américanistes de Paris* 47:111–119.

Blom, Frans

1950 A Polychrome Plate from Quintana Roo. Notes on Middle American Archaeology and Ethnology, No. 98. Carnegie Institution of Washington, Washington, DC. Our gratitude is due to Justin Kerr, Harri Kettunen, and Nikolai Grube for allowing us to reproduce some of their excellent photographs and drawings. Sincere thanks to David Pendergast, the Princeton Museum of Art, the President and Fellows of Harvard College, the Peabody Museum of Archaeology and Ethnology, and the British Museum for allowing the reproduction of selected drawings and photos.

Thanks to Sebastían Matteo for relating his research on the Water Scroll sign. To Simon Martin, Alexandre Tokovinine, and Vilma Fialko many thanks for sharing with us the fascinating text of Stela 46 at Naranjo. We are also extremely thankful for the many constructive comments made by Simon Martin and the three anonymous reviewers. Although the comments and insights of our colleagues have greatly contributed to this paper, none of the shortcomings can be attributed to them, for they are ours alone. Last, but certainly not least, many thanks to the director and staff of the Belize Institute of Archaeology for their help, support, and encouragement of our work throughout the years.

Boot, Erik

2005 Continuity and Change in Text and Image at Chichén Itzá, Yucatán, Mexico: A Study of the Inscriptions, Iconography, and Architecture at a Late Classic to Early Postclassic Maya Site. CNWS Publications, Leiden.

2009 The Updated Preliminary Classic Maya - English, English - Classic Maya Vocabulary of Hieroglyphic Readings. *Mesoweb*. http://www.mesoweb.com/resources/vocabulary/Vocabulary-2009.01. pdf, accessed February 13, 2018.

Brady, James E.

1989 An Investigation of Maya Ritual Cave Use with Special Reference to Naj Tunich, Peten, Guatemala. Ph.D. dissertation, Archaeology Program, University of California, Los Angeles.

Braswell, Geoffrey E., Cassandra R. Bill, and Christian M. Prager

2008 Exchange, Political Relations and Regional Interaction: The Ancient Maya City of Pusilhá in the Late Classic Maya World. Research Reports in Belizean Archaeology 5:51–62.

Carter, Nicholas P.

2015 Once and Future Kings: Classic Maya Geopolitics and Mythic History on the Vase of the Initial Series from Uaxactun. *The Pre-Columbian Art Research Institute Journal* 15:1–15.

Chase, Arlen F., and Diane Z. Chase

2001 Ancient Maya Causeways and Site Organization at Caracol, Belize. *Ancient Mesoamerica* 12:273–281.

Closs, Michael P.

1988 The Hieroglyphic Text of Stela 9, Lamanai, Belize. *Research Reports on Ancient Maya Writing* 21:9–16.

1989 The Dynastic History of Naranjo: The Late Period. In Word and Image in Maya Culture: Explorations in Language, Writing, and Representation, edited by William F. Hanks and Don S. Rice, pp. 244–254. University of Utah Press, Salt Lake City.

Colas, Pierre Robert

2003 K'inich and King: Naming Self and Person among Classic Maya Rulers. Ancient Mesoamerica 14:269–283.

Cook, Patricia M.

1997 Basal Platform Mounds at Chau Hiix, Belize: Evidence for Ancient Maya Social Structure and Cottage Industry Manufacturing. Ph.D. dissertation, Department of Anthropology, University of Arizona, Flagstaff.

2005 Weaving The Past: An Examination of Bones Buried with an Elite Maya Woman. M.A. thesis, Meadows School of the Arts, Southern Methodist University, Dallas. Easby, Elizabeth K.

1966 Ancient Art of Latin America from the Collection of Jay C. Leff. Brooklyn Museum, New York.

Emmerich, André

1984 Masterpieces of Pre-Columbian Art from the Collection of Mr. and Mrs. Peter G. Wray. André Emmerich Gallery and Perls Galleries, New York.

Freidel, David A., Linda Schele, and Joy Parker

1993 Maya Cosmos: Three Thousand Years on the Shaman's Path. William Morrow and Company, New York.

Gifford, James C.

1976 Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley. Memoirs of the Peabody Museum of Archeology and Ethnology, Vol. 18. Harvard University Press, Cambridge.

Grube, Nikolai

1998 Speaking Through Stones: A Quotative Particle in Maya Hieroglyphic Inscriptions. In 50 Years of Americanist Studies at the University of Bonn: New Contributions to the Archaeology, Ethnohistory, Ethnolinguistics and Ethnography of the Americas, edited by Sabine Dedenbach-Salazar Sáenz, Carmen Arellano Hoffmann, Eva König, and Heiko Prümers, pp. 543–558. Verlag Anton Saurwein, Markt Schwaben.

2003 Epigraphic Analysis of Altar 3 of Altar de los Reyes. In Archaeological Reconnaissance in Southern Campeche, Mexico: 2002 Field Season, edited by Ivan Sprajč, pp. 34–40. Electronic document, http://www.famsi.org/reports/01014/01014Sprajc01.pdf, accessed September 16, 2017.

2004 La historia dinástica de Naranjo, Petén. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 24:195–213.

Grube, Nikolai, Barbara MacLeod, and Phil Wanyerka

1999 A Commentary on the Hieroglyphic Inscriptions of Nim Li Punit, Belize. *Research Reports on Ancient Maya Writing* 41:17–39.

Guderjan, Thomas H.

1993 Ancient Maya Traders of Ambergris Caye. Cubola Productions, Benque Viejo.

Guderjan, Thomas H., and James F. Garber (editors)

1995 Maya Maritime Trade, Settlement, and Populations on Ambergris Caye, Belize. Labyrinthos Press, Lancaster.

Guenter, Stanley P.

2002 Under a Falling Star: The Hiatus at Tikal. Master's thesis, La Trobe University, Melbourne.

2007 The Tomb of K'inich Janaab Pakal: The Temple of the Inscriptions at Palenque. Electronic document, http://www.mesoweb.com/articles/guenter/TI.pdf, accessed May 24, 2017.

2008 Martillando el cielo: La epigrafía de la región Petexbatún. Paper presented at the VI Mesa Redonda de Palenque. Instituto Nacional de Antropología e Historia, Palenque.

2013 La Corte Real de los K'uhul Chatan Winik: Recuperando Información de la cerámica estilo-códice. Paper presented at XXVII Simposio de Investigaciones Arqueológicas en Guatemala. Museo Nacional de Arqueología y Etnología, Guatemala City.

2014 The Queen of Cobá: A Reanalysis of the Macanxoc Stelae. In *The Archaeology of Yucatán*, edited by Travis W. Stanton, pp. 395–421. Archaeopress Pre-Columbian Archaeology 1. Archaeopress, Oxford.

Hall, Grant D.

1986 Results of Tomb Investigations at Río Azul, Season of 1984. In *Proyecto Río Azul, Informe 2, 1985*, edited Richard E.W. Adams, pp. 69–110. Center for Archaeological Research, University of Texas, San Antonio.

Harrison, Peter D.

1999 The Lords of Tikal: Rulers of an Ancient Maya City. Thames and Hudson, London.

Hellmuth, Nicholas M.

1987 Monster und Menschen in der Maya-Kunst: Eine Ikonographie der alten Religionen Mexikos und Guatemalas. Akademische Druckund Verlagsanstalt, Graz.

Helmke, Christophe

1999 Preliminary Comments on the Altun Ha Dynastic Sequence: An Epigraphic and Ceramic Analysis. Paper presented at Maya Universe Symposium and Exhibit, Gardiner Museum of Ceramic Art, Toronto.

2009 Ancient Maya Cave Usage as Attested in the Glyphic Corpus of the Maya Lowlands and the Caves of the Roaring Creek Valley, Belize. Ph.D. thesis, University of London, London. 2012 Mythological Emblem Glyphs of Ancient Maya Kings. Contributions in New World Archaeology 3:91–126.

2016 Indicators of Matrifocality and Maternal Dominance during the Regency of Lady Six Sky at Naranjo, Guatemala. Paper presented at the 5th Cracow Maya Conference: Weaving Histories: Women in Mesoamerican Culture, Society and Politics. Department of New World Archaeology, Jagiellonian University, Cracow.

Helmke, Christophe, Christopher R. Andres, Shawn G. Morton, and Gabriel D. Wrobel

2015 For Love of the Game: The Ballplayer Panels of Tipan Chen Uitz in Light of Late Classic Athletic Hegemony. The Pre-Columbian Art Research Institute Journal 16:1–30.

Helmke, Christophe, and Felix Kupprat

2016 Where Snakes Abound: Supernatural Places of Origin and Founding Myths in the Titles of Classic Maya Kings. In *Places of Power and Memory in Mesoamerica's Past and Present: How Toponyms, Landscapes and Boundaries Shape History and Remembrance*, edited by Daniel Graña-Behrens, pp. 33–83. Estudios Indiana, Vol. 9. Gebrüder Mann Verlag, Berlin.

2017 Los glifos emblema y los lugares sobrenaturales: El caso de Kanu'l y sus implicaciones. Estudios de Cultura Maya 50:95–135.

Helmke, Christophe, and Harri Kettunen

2005 Caracol and Its Neighbours. Workshop tutored at 10th European Maya Conference, Leiden University, Leiden.

Helmke, Christophe, and Ivan Savchenko

2016 The Legacy of Lady Six Sky: Problematic Dynastic Successions at Naranjo in the Eighth Century. Paper presented at the 21st European Maya Conference, Knorozov Center for Mesoamerican Studies, Russian State University for the Humanities, Moscow.

Helmke, Christophe, and Jaime J. Awe

2008 Organización territorial de los antiguos mayas de Belice Central: Confluencia de datos arqueológicos y epigráficos. Mayab 20:65–91.

2016 Sharper than a Serpent's Tooth: A Tale of the Snake-Head Dynasty as Recounted on Xunantunich Panel 4. The Pre-Columbian Art Research Institute Journal 17:1–22.

Helmke, Christophe, Jaime J. Awe, and Nikolai Grube

2010 The Carved Monuments and Inscriptions of Xunantunich. In Classic Maya Provincial Politics: Xunantunich and Its Hinterlands, edited by Lisa J. LeCount and Jason Yaeger, pp. 97–121. University of Arizona Press. Tucson.

Helmke, Christophe, and Jesper Nielsen

2009 Hidden Identity and Power in Ancient Mesoamerica: Supernatural Alter Egos as Curses and Diseases. Acta Americana 17:49–98.

Helmke, Christophe, Julie A. Hoggarth, Jaime J. Awe, Sarah E. Bednar, and Amber López-Johnson

2017 Some Initial Comments on the Komkom Vase Discovered at Baking Pot, Belize. Research Reports in Belizean Archaeology 14: 227–240.

Houston, Stephen D.

1984 An Example of Homophony in Maya Script. American Antiquity 49:790–805.

1993 Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya. University of Texas Press, Austin.

Houston, Stephen, and David Stuart

1989 The Way Glyph: Evidence for Co-essences among the Classic Maya. Research Reports on Ancient Maya Writing 30:1–16.

Houston, Stephen, David Stuart, and Karl Taube

2006 The Memory of Bones: Body, Being, and Experiences among the Classic Maya. University of Texas Press, Austin.

Houston, Stephen, John Robertson, and David Stuart

2001 Quality and Quantity in Glyphic Nouns and Adjectives. *Research Reports on Ancient Maya Writing* 47:1–56.

Houston, Stephen, Robert Chatham, Oswaldo Chinchilla, Erick Ponciano, and Lori Wright

1992 Mapeo y sondeos en Tamarindito, Petén. In IV Simposio de Investigaciones Arqueológicas en Guatemala, 1990, edited by Juan Pedro Laporte, Héctor Escobedo, and Sandra Brady, pp. 154–163. Museo Nacional de Arqueología y Etnología, Guatemala City.

Just, Bryan R.

2013 Collecting Art of the Maya. Electronic document, http://artmuseum.princeton.edu/story/collecting-art-maya, accessed March 5, 2017.

Knowlton, Timothy W.

2012 Some Historical Continuities in Lowland Maya Magical Speech

Genres: Keying Shamanic Performance. In *Parallel Worlds: Genre, Discourse, and Poetics in Contemporary, Colonial and Classic Maya Literature*, edited by Kerry M. Hull and Michael D. Carrasco, pp. 253–269. University Press of Colorado, Boulder.

Lacadena, Alfonso

2000 Nominal Syntax and the Linguistic Affiliation of Classic Maya Texts. In *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*, edited by Pierre Robert Colas, Kai Delvendahl, Marcus Kuhnert, and Annette Schubart, pp. 111–128. Acta Mesoamericana, Vol. 10. Verlag Anton Saurwein, Munich.

2003 El sufijo verbalizador -Vj (-aj ~ -iij) en la escritura jeroglífica maya. In De la tablilla a la inteligencia artificial, edited by Antonino González Blanco, Juan Pablo Vita Barra, and José Ángel Zamora López, pp. 847−865. Instituto de Estudios Islámicos y del Oriente Próximo, Zaragoza.

MacLeod, Barbara, and Andrea Stone

1995 The Hieroglyphic Inscriptions of Naj Tunich. In *Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting*, edited by Andrea J. Stone, pp. 155–184. University of Texas Press, Austin.

Marcus, Joyce

1973 Territorial Organization of the Lowland Classic Maya. *Science* 180:911–916.

Martin, Simon

1996 Tikal's "Star War" Against Naranjo. In *Eighth Palenque Round Table*, 1993, edited by Martha J. Macri and Jan McHargue, pp. 223–236. Pre-Columbian Art Research Institute, San Francisco.

1999 The Queen of Middle Classic Tikal. Pre-Columbian Art Research Newsletter 27:4–5.

2001 The Power in the West: The Maya and Teotihuacan. In Maya: Divine Kings of the Rainforest, edited by Nikolai Grube, Eva Eggebrecht, and Matthias Seidel, pp. 98–111. Könemann, Cologne.

2004 Identity and Distinction in the Classic Maya Polity. Paper presented at the 9th European Maya Conference, Bonn.

2005 Of Snakes and Bats: Shifting Identities at Calakmul. *The Pre-Columbian Art Research Institute Journal* 6:5–13.

2015 The Old Man of the Maya Universe: A Unitary Dimension to Ancient Maya Religion. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 186–227. Precolumbia Mesoweb Press, San Francisco.

Martin, Simon, Alexandre Tokovinine, Elodie Treffel, and Vilma Fialko

2017 La Estela 46 de Naranjo Sa'al, Petén, Guatemala: Hallazgo y texto jeroglífico. In XXX Simposio de Investigaciones Arqueológicas en Guatemala, Tomo II, edited by Bárbara Arroyo, Luis Méndez Salinas, and Gloria Ajú Álvarez, pp. 669–684. Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal, Guatemala City.

Martin, Simon, and Erik Velásquez García

2016 Polities and Places: Tracing the Toponyms of the Snake Dynasty. The Pre-Columbian Art Research Institute Journal 17:23–33.

Martin, Simon, and Joel Skidmore

2012 Exploring the 584286 Correlation between the Maya and European Calendars. *The Pre-Columbian Art Research Institute Journal* 13:3–16.

Martin, Simon, and Nikolai Grube

1994 Evidence for Macro-Political Organization amongst Classic Maya Lowland States. Electronic document, http://www.mesoweb.com/ articles/Martin-Grube/Macro-Politics.pdf, accessed November 11, 2017.

2000 Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya. Thames and Hudson, London.

Mathews, Peter

1979 The Glyphs on the Ear Ornaments from Tomb A-1/1. In *Excavations at Altun Ha, Belize, 1964–1970, Volume 1*, edited by David M. Pendergast, pp. 79–80. Royal Ontario Museum, Toronto.

1991 Classic Maya Emblem Glyphs. In Classic Maya Political History, edited by T. Patrick Culbert, pp. 19–29. Cambridge University Press, Cambridge.

Mathews, Peter, and David M. Pendergast

1979 The Altun Ha Jade Plaque: Deciphering the Inscription. Contributions of the University of California Archaeological Research Facility 41:197–214.

1981 The Altun Ha Jade Plaque: Deciphering the Inscription. In Ancient

Mesoamerica: Selected Readings, edited by John A. Graham, pp. 239–251. Peek Publications, Palo Alto.

Matteo, Sebastían

2015 Un grafema para "espuma", OM, ohm. Unpublished manuscript in possession of the authors.

Moholy-Nagy, Hattula

2008 The Artifacts of Tikal: Ornamental and Ceremonial Artifacts and Unworked Material. Tikal Report No. 27, Part A. University Museum Monograph 127. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Pallán Gayol, Carlos

2012 A Glimpse from Edzna's Hieroglyphics: Middle, Late and Terminal Classic Processes of Cultural Interaction between the Southern, Northern and Western Lowlands. *Contributions in New World Archaeology* 4:89–110.

Pendergast, David M.

1969 An Inscribed Jade Plaque from Altun Ha. Archaeology 22:85–92.
 1979 Excavations at Altun Ha, Belize, 1964–1970, Volume 1. Royal Ontario Museum, Toronto.

1982 Excavations at Altun Ha, Belize, 1964–1970, Volume 2. Royal Ontario Museum, Toronto.

1990 Excavations at Altun Ha, Belize, 1964–1970, Volume 3. Royal Ontario Museum, Toronto.

2003 Teotihuacan and Altun Ha: Did It Make a Difference? In *The Maya and Teotihuacan: Reinterpreting Early Classic Interaction*, edited by Geoffrey E. Braswell, pp. 235–248. University of Texas Press, Austin.

Prager, Christian

2013 A Study of the Classic Maya Hieroglyphic Inscriptions of Pusilha, Toledo District, Belize. *Indiana* 30:247–282.

Proskouriakoff, Tatiana

1993 Maya History. University of Texas Press, Austin.

Pyburn, K. Anne

1991 Chau Hiix: A New Archaeological Site in Northern Belize. Mexicon 8:84–86.

2005 Complex Deposits at Chau Hiix. Research Reports in Belizean Archaeology 2:143–153.

Reents-Budet, Dorie, Ronald L. Bishop, and Barbara MacLeod

1994 Painting Styles, Workshop Locations and Pottery Production. In *Painting the Maya Universe: Royal Ceramics of the Classic Period*, edited by Dorie Reents-Budet, pp. 164–233. Duke University Press, Durham, and Duke University Museum of Art, London.

Scarre, Chris

1995 Chronicle of the Roman Emperors: The Reign-by-Reign Record of the Rulers of Imperial Rome. Thames and Hudson, London.

Schele, Linda

1992 The Founders of Lineages at Copan and Other Maya Sites. Ancient Mesoamerica 3:135–144.

Schele, Linda, and Mary E. Miller

1986 The Blood of Kings: Dynasty and Ritual in Maya Art. Kimbell Art Museum, Fort Worth.

Schele, Linda, and Peter Mathews

1998 The Code of Kings: The Language of Seven Sacred Maya Temples and Tombs. Scribner, New York.

Schele, Linda, Peter Mathews, and Floyd Lounsbury

1990 Untying the Headband. Texas Notes on Precolumbian Art, Writing, and Culture 4:1–6.

Stone, Andrea J.

1995 Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting. University of Texas Press, Austin.

Stone, Andrea, and Marc Zender

2011 Reading Maya Art: A Hieroglyphic Guide to Ancient Maya Painting and Sculpture. Thames and Hudson, London.

Stuart, David

1995 A Study of Maya Inscriptions. Ph.D. dissertation, Department of Anthropology, Vanderbilt University, Nashville.

1997 Kinship Terms in Maya Inscriptions. In *The Language of Maya Hieroglyphs*, edited by Martha Macri and Anabel Ford, pp. 1–11. Pre-Columbian Art Research Institute. San Francisco.

2000 "The Arrival of Strangers": Teotihuacan and Tollan in Classic Maya Texts. In *Mesoamerica's Classic Heritage: From Teotihuacan* to the Aztecs, edited by Davíd Carrasco, Lindsay Jones, and Scott Sessions, pp. 465–513. University of Colorado Press, Boulder.

- 2004 New Year Records in Classic Maya Inscriptions. *The Pre-Columbian Art Research Institute Journal* 5:1–6.
- 2012 The Name of Paper: The Mythology of Crowning and Royal Nomenclature on Palenque's Palace Tablet. In *Maya Archaeology* 2, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 116–142. Precolumbia Mesoweb Press, San Francisco.
- Stuart, David, Marcello A. Canuto, Tomás Barrientos Q., Jocelyne Ponce, and Joanne Baron
- 2015 Death of the Defeated: New Historical Data on Block 4 of La Corona's Hieroglyphic Stairway 2. *La Corona Notes* 1:1–7.
- Stuart, David, and Nikolai Grube
- 2000 A New Inscription from Nim Li Punit, Belize. *Research Reports on Ancient Maya Writing* 45:1–7.
- Stuart, David, and Stephen Houston
 - 1994 Classic Maya Place Names. Studies in Pre-Columbian Art and Architecture, No. 33. Dumbarton Oaks Research Library and Collection, Washington, DC.
 - 2001 Peopling the Classic Maya Court. In Royal Courts of the Ancient Maya, Volume I, edited by Takeshi Inomata and Stephen Houston, pp. 54–83. Westview Press, Boulder.
- Stuart, David, Stephen Houston, and John Robertson
 - 1999 Recovering the Past: Classic Maya Language and Classic Maya Gods. In *Notebook for the XXIII Maya Hieroglyphic Forum at Texas*, edited by Nikolai Grube, pp. 1–80. University of Texas, Austin.
- Taube, Karl A.
 - 1992 The Major Gods of Ancient Yucatan. Studies in Pre-Columbian Art and Archaeology, No. 33. Dumbarton Oaks Research Library and Collection, Washington, DC.
 - 2000 Flowering Mountain: Concepts of Resurrection among the Ancient Maya. Paper presented at the Institute for Mesoamerican Studies, State University of New York, Albany.
- Taube, Karl, Zachary Hruby, and Luis Romero
- 2005 Jadeite Sources and Ancient Workshops: Archaeological Reconnaissance in the Upper Río El Tambor, Guatemala. Electronic document, http://www.famsi.org/reports/03023/03023Taube01.pdf, accessed March 30, 2017.
- Thompson, J. Eric S.
 - 1950 Maya Hieroglyphic Writing: An Introduction. Carnegie Institution of Washington, Publication No. 589. Carnegie Institution of Washington, Washington, DC.

- 1962 A Catalog of Maya Hieroglyphs. University of Oklahoma Press, Norman.
- Tokovinine, Alexandre
 - 2013 Place and Identity in Classic Maya Narratives. Studies in Pre-Columbian Art and Archaeology, No. 37. Dumbarton Oaks Research Library and Collection, Washington, DC.
- Tsukamoto, Kenichiro, and Octavio Q. Esparza Olguín
 - 2014 Ajpach' Waal: The Hieroglyphic Stairway of the Guzmán Group of El Palmar, Campeche, Mexico. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 30–55. Precolumbia Mesoweb Press, San Francisco.
- Valencia Rivera, Rogelio and Alejandro Sheseña Hernández
 - 2016 Acerca del jeroglífico [T544.501] y las colectividades geopolíticas entre los mayas clásicos. *Estudios de Cultura Maya* 48:101–127.
- Wanyerka, Phillip J.
 - 2003 The Southern Belize Epigraphic Project: The Hieroglyphic Inscriptions of Southern Belize. Report submitted to the Foundation for the Advancement of Mesoamerican Studies, Inc., Crystal River.
 - 2009 Classic Maya Political Organization: Epigraphic Evidence of Hierarchical Organization in the Southern Maya Mountains Region of Belize. Ph.D. dissertation, Department of Anthropology, Southern Illinois University, Carbondale.
- Zender, Marc
 - 1998 Ki Wech Kaminak': Death-Eye Iconography and Epigraphy in the light of T15, T108, and T135 as syllabic cha. Unpublished manuscript in possession of the authors.
 - 1999 Diacritical Marks and Underspelling in the Classic Maya Script: Implications for Decipherment. Master's thesis, Department of Archaeology, University of Calgary, Calgary.
 - 2005 The Raccoon Glyph in Classic Maya Writing. *The Pre-Columbian Art Research Institute Journal* 5:6–16.
 - 2016 'The Crown Was Held Above Him': Revisiting a Classic Maya Coronation Ceremony. Paper presented at the Institute of Maya Studies, Miami.
- Zender, Marc, Alfonso Lacadena, and Albert Davletshin
 - 2015 Abbreviational Conventions of Classic Maya Writing. Workshop held at the 20th European Maya Conference. Department of Anthropology, University of Bonn, Bonn.