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# WATER IN MAYA IMAGERY AND WRITING

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#### Abstract

The focus of this article is the concept of water in Maya imagery and writing. We will discuss the representation of different bodies of water in Maya art, the evolution of aquatic iconography, as well as expressions related to water in Mayan languages. Although saline water covers more than 70 % of the surface of our blue planet, most of the world's languages refer to the sea by analogy to smaller bodies of water, such as lakes. As such most cultures essentially have a land-locked perspective on the sea. The Maya are no different, even though the Maya area is partly demarcated by two oceans and although they have various words for different types of bodies of water, the vocabulary is wholly land-based. Some of the words for 'sea' in Mayan languages are originally based and built up on the words for smaller bodies of water, such as 'pool' or 'lake'.

## Resumen

Este artículo se centra en el concepto del agua en las imágenes y la escritura de los mayas. Discutiremos las diversas representaciones de los cuerpos de agua en el arte maya, la evolución de la iconografía acuática, así como las expresiones relacionadas con el agua en los idiomas mayenses. Aunque el agua salina cubre más del 70 % de la superficie de nuestro planeta, la mayor parte de los idiomas del mundo hacen referencia al mar por analogía a cuerpos de agua dulce, tales como lagos. De tal manera que la mayoría de las culturas tienen esencialmente una perspectiva terrestre del mar. Lo mismo sucede en el caso de los mayas aunque el área maya está demarcado en parte por dos océanos y los idiomas tienen varias palabras para referir diversos tipos de cuerpos de agua. Algunas de las palabras para el 'mar' en los idiomas mayenses se basan en expresiones que designan cuerpos de agua dulce pequeños, tales como 'aguada' o 'lago'.

## WATER, LAKES, SEAS, AND RIVERS IN MAYAN LANGUAGES

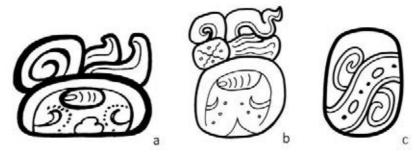
The word for 'water' itself in Maya languages is of great antiquity, rather conservative, and resistant to change. The Proto-Mayan \*ha' (Kaufman 2003: 552-553) is still preserved in many modern Mayan languages. Lexemes for 'water' in Mayan languages are tabulated, below (after Kaufman 2003: 552-553; see also the appendix):

pM	*ha'	MCH	ja'
WASw	ja'	TEK	a'
YUK	ja*	MAM	a'
LAK	ja'	AWA	a'
ITZ	ja'	IXL	a'
MOP	ja'	USP	ja'
pCH	•ja′	KCHq	ja'
CHR	ja*	KCHc	ya'
CHT	<ha></ha>	KCHk	ya'
CHL	ja'	SIP	ya'
TZO	ho'	SAK	ya'
TZE	ha'	TZU	ya'
TOJ	ja'	KAQp ya	
CHJ	ha'	PQMp	ja'
QAN	ha'	PQMj	ha'
AKA	ja'	PCH ha'	
POP	ha'	QEQ	ha'

**Table 1:** Cognates for 'water' in modern and colonial Mayan languages, in contrast to select proto-languages. Language codes are as follows: Akatek (AKA), Awakatek (AWA), Chuj (CHJ), Ch'ol (CHL), CHR (Ch'orti'), Chontal (CHT), Itza' (ITZ), Ixil (IXL), Kaqchikel of Patzun (KAQp), K'iche' of Quiche (KCHq), of Chichicastenango (KCHc), and of Chicaj (KCHk), Lakantun (LAK), Mam (MAM), proto-Ch'olan (pCH), Poqomchi' (PCH), Popti' (POP), Poqomam of Palin (PQMp) and San Luís Jilotepeque (PQMj), Q'anjobal (QAN), Q'eqchi' (QEQ), Sakpultek (SAK), Sipakapense (SIP), Teko (TEK), Tojolobal (TOJ), Tzeltal (TZE), Tzotzil (TZO), Tz'utujil (TZU), Uspantek (USP), western Wastek of Tancanhuitz (WASw) and Yukatek (YUK).

When it comes to the early Ch'olan recorded in the texts of the Classic period, the hieroglyphic corpus presents a handful of terms for water and different bodies of water. For instance, Classic Maya has a generic term ha' for 'water'. This term can refer to water in general but it can also refer more specifically to fluids, liquids, rivers, and lakes as well as bodies of water in the broadest sense. Ha'al (literally 'water-y' or 'water-like'), on the other hand, refers specifically to 'rain', whereas ha'ha'al (literally 'water-rain' or "very rainy") refers specifically to the rainy season. These are reflected in modern Ch'orti' (Wisdom 1949) where ha' is 'water, stream, ocean',  $haha' \sim ha' ha'$  is 'watery, rainy, aquatic', and haha'ar k'in is 'rainy season'. In addition, examples are found in the theonym for God L, the supreme lord of the underworld (e.g. Helmke 2012a: 80-85; Martin in press). In both the Dresden Codex and in fragmentary ceramic texts from Altun Ha, Belize, the head of God L is preceded by the logograms HA'-HA'AL (see Helmke 1999; Lacadena 2004), suggesting, among other things, that the Ch'orti' haha'ar is a reflex of the Classic Maya.

In Mayan languages we have different words for 'ocean', 'lake' and 'river', as well as other bodies of water. However, so far only a handful of these terms have been found in the glyphic corpus. The term *nahb* is usually translated as 'pool' or 'aguada' in reference to a small body of freshwater, but fundamentally it can designate any body of water (Figure 1a). The compound term *k'ahk'-nahb* (literally 'fire-pool'), on the other hand, refers to 'sea' or 'ocean' or large bodies of saline water in general (Figure 1b). The initial *k'ahk'* part in the expression for 'sea' is especially interesting. It is tempting to think that the origin of the expression has something to do with the exposure of the sea to the sun, or to the sun rising or setting from the sea. Conversely, Alfonso Lacadena (pers. comm. 2012)



**Figure 1.** Glyphs for *nahb*, *k'ahk'nahb*, and *palaw pulaw?* (drawings by Christophe Helmke [a, b] and Harri Kettunen [c]).

has offered another possibility wherein *k'ahk'* might essentially function as an augmentative, leaving *k'ahk'nahb* to mean "large waters". The only supporting evidence, however, comes from Colonial Tzeldal where *k'ahk'* operates as an augmentative, for verbs (Alfonso Lacadena, pers. comm., 2012).

Besides these expressions, one word in Ch'olti' might yield the reading for the 'ocean' glyph (Lopes 2004) (Figure 1c). In Ch'olti' this is polaw (possibly recorded as <polau> in Morán 1695: 151) and in Q'eqchi' (ALMG 2004) it is palaw. In both cases the translation of the word is 'mar' or 'sea' in Spanish. However, the word does not seem to appear in other lowland Mayan languages (excepting Ch'olti', and even there it may represent interaction with highland languages), so it remains speculative whether the word is an integral part of Ch'olan languages or whether it was a loanword from Q'eqchi'an language to Ch'olti'. It should also be noted that Kaufman (2003: 430) proposes the reconstruction \*palaw for Greater K'iche'an and records palaw in Q'eqchi' and Poqomchi', as well as palow in both Kaqchikel and K'iche'. Regardless, the word recorded in the glyphs, appears to end in -w, considering the final phonetic complement wa, but other than that we cannot be secure of the reading of this glyph. Besides the polaw or palaw reading, David Stuart has suggested tikaw ("warm/ hot water" in Ch'orti') for the sign (pers. comm. cited in Houston 2010: 75). Considering the evolution of u > o attested between Classic Maya and its descendant languages, one can propose that the term would have been pronounced pulaw in the Classic period, especially considering that polau> may be attested for Ch'olti' (Stross 1990: 54). Nevertheless, on the basis of present linguistic evidence the most plausible reading of the logogram is PALAW, not the least since the Ch'oti' entry may in fact record <palau>. Looking

at the imagery of the putative **PALAW?** sign and its iconographic context, we cannot overrule the possibility that the sign could refer to large bodies of water in general, or more specifically to mythical or even supernatural bodies of water, such as that which characterizes the underworld.

Also, it is interesting to note that no separate word for 'river' has been found in the corpus of Maya glyphic texts. This either stems from the fact that Mayan languages are quite ambivalent when it comes to different bodies of water or from a fact that we have overlooked words in the Maya hieroglyphic corpus that might actually refer to rivers. For instance, a well-known Mesoamerican calque for "river" is 'big water', and we do find this compound *lakam-ha'* ('big/wide-waters'), one of the main toponyms of Palenque, apparently the original name of the Otulum river that crosses the archaeological site (Helmke 2009; see Smith-Stark 1994). Nevertheless, distinct lexemes do exist for 'river' in several Mayan languages. Ch'orti', for example, has *xukur* for 'river' (Wisdom 1950), Chontal dictionaries provide the Spanish loanwords *río*, *riu*, and *riyu* (Knowles 1984; Keller and Luciano G. 1997); and both Tzotzil (Hurley and Ruíz 1986) and Yukatek (Barrera Vázquez 1980) have *uk'um* for 'river'.

Yukatek also has 'laguna' or 'lake' for the same entry. In Itza' there are a few words for 'river', including bekan, ok ja', and a Spanish loan riiyoj. Itza' also has ja' for 'water, lake, rain, and river' in general, noj-ja' for 'lake', and k' $abnaab \sim k$ 'a'naab for 'sea'. It is interesting to notice that the word ja' can cover all these domains, except for 'sea', making it clear that it is intimately tied to freshwater. It is equally noteworthy that Itza' has k'ab- or k'a'- rather than k'ahk' to form the word for sea, a piece of evidence that the word k'ahk' has probably been reanalyzed in Itza' and is probably a loan from a Ch'olan language (possibly eastern Ch'olan). However, we do have the same pattern in Yukatek, where we have both k'ak'nab and k'anaab for 'sea', suggesting that morphophonemics are at play. The same word is also found in Ch'olti', recorded somewhat awkwardly by Ara (1695) as cahnab. Interestingly, however, k'ak'naab in Q'eqchi' (ALMG 2004) is glossed as 'laguna, laguneta'.

With regard to the seeming absence of a specific term for 'river' in Classic Maya inscriptions, one should take into account that ha' (recorded as < ha>) is glossed as 'río' ('river') in the Morán dictionary (1695) and one of the glosses for ha' in Ch'orti' (Wisdom 1949) is 'stream'. Also the aforementioned ja' for 'river' in Itza', not to mention the Classic Maya lakamha', both reinforce the idea that ha' and its cognates can also signify 'river' in many Mayan languages. As regards the Highland Mayan languages, Q'eqchi' has  $nim-ha' \sim nim-a'$  (literally 'large-water') for "river", precisely duplicating the Classic Maya and broader Mesoamerican calque, whereas K'iche' has the more descriptive  $binel\ ha'$  (literally 'traveling water'), whereas Pokomchi' has  $chi'\ ja'$  ('mouth of water') for "river". Besides terrestrial water, there are also words in Mayan languages for subterranean water, such as the Yukatek tz'onot for 'cenote' or 'lagos de agua dulce muy hondos o pozos o bolsas así' (Barrera Vásquez 1980).

Water-related words and expressions in the corpus of Maya hieroglyphic texts are as follows:

ha'/-a'	HA'-a HA' A	ha' ha' a[']	n	'water' in general and can refer more specifically to fluids, liquids, rivers, and lakes as well as bodies of water in the broadest sense
ha'al	HA'-a-la HA'-la HA'AL	ha'al ha'al ha'al	n	lit. 'water-y' or 'water-like' but specifically refers to 'rain'
ha'ha'al	HA'-HA'AL	ha'-ha'al	n	lit. 'water-rain' or "very rainy" refers specifically to the "rainy season"
naab ~ nahb	na-bi NAB-bi	naab ~ nahb naab ~ nahb	n	'pool, lake' in particular and bodies of freshwater in general
k'ahk'naab ~ k'ahk'nahb	K'AK'-NAB	k'a[h]k'-na[a]b k'a[h]k'-na[h]b	cn	lit. 'fire-pool' or "great wa- ters" meant as "ocean, sea" or large bodies of salt wa- ter in general
palaw ~ pulaw?	PALAW/PULAW?-wa	palaw ~ pulaw	n	'sea, ocean, large body of water'

If we look at Indo-European languages, we find a very similar pattern to that of Mayan languages: the words for 'lake' and 'sea' seem to travel from language to language, changing their semantics as they go. It is also noteworthy that in different areas of the Germanic world, the words for lake and sea change their meaning depending on the geographic area (Table 2).

Language	Entry	Gloss
English	sea	'sea'
German	der See / die See	'lake' / 'sea'
Danish	sø sø-/hav	'lake' 'of the sea' / 'sea'
Swedish	sjö hav	'lake' ~ 'sea' 'sea'
French	lac	'lake'
Spanish	lago	'lake'
Latin	lacus	'lake, pool, basin'
Gælic	loch	'lake'
Spanish	mar	'sea'
Latin	mare	'sea'
French	mer mare	'sea' 'pond, small lake'
German	das Meer	'sea' ~ 'lake'
Dutch	meer	'lake'
Russian	more	'sea'
Polish	morze	'sea'

Table 2: Terms for freshwater and saline bodies of water in salient European languages.

# SERENE AND OTHERWORLDLY BODIES OF WATER IN CLASSIC MAYA IMAGERY

As regards the representations of bodies of water in Maya imagery, the depictions are quite often very stylized and abstract. From the context we know that a dotted line (Figure 2)a represents the surface of water – or sometimes water itself (see Houston and Taube 2012).

Another marker of water are the so-called "water stacks" (Schele and Miller 1986: 46) and "water scrolls". Both can appear sideways or upside down in Maya imagery (see Figures 2a-c). Although no satisfactory explanation exists for what these "water stacks" depict, these may initially have represented the spires of conches, partly buried in the sand of the sea floor. In contrast the "water scrolls" may



**Figure 2.** a) Tikal, Burial 116, Miscellaneous Text 51A (drawing by Annemarie Seuffert). Note the "water stack" framed by two "water scrolls" at the right end of the drawing; b) detail from a Late Classic ceramic vase (drawing by Andrea Stone after Hellmuth 1987: 161); c) detail from the mural of Substructure A, Chiik Nahb Acropolis, Calakmul (drawing by Simon Martin); d) Early Classic tripod vessel from Uaxactun (photograph by Harri Kettunen).



Figure 3. Water Lily Serpent (drawing by Linda Schele).

depict waves, although the same element, when it occurs in the glyphic texts, appears to provide an alternate term for a body of freshwater, such as a lake (e.g. in the toponyms of Tamarindito it may name the Lago Petexbatun, in the Altun Ha case, the pond that gives the site and nearby settlement [Rockstone pond] its name). It is also worth noticing that on the mural of Substructure A at Chiik Nahb Acropolis, Calakmul, the water stacks, scrolls, dots, and droplets are painted using blue color (Figure 2c).

Other somewhat direct references to water in Maya imagery include water lily flowers and water lily pads, both of which are abundant in Maya art (see Figures 2c-d, 3-6). Besides water lilies, dotted lines, water stacks and scrolls, the Maya also used a sign that resemble early **na** syllabogram (Figures 2b and 2d). Alfonso Lacadena has suggested that the sign originates in the Isthmian writing system where it functioned as the logogram for 'water'. The argument is reinforced by the reconstructed Proto-Mije-Sokean word for 'water', \*nä:', explaining both the graphic origin of the sign as well as phonetic value (Wichmann 1995: 392; Lacadena 2010).

Besides the aforementioned representations of water, the Maya portrayed water in a personified form in their imagery, as in the form of so-called Water Lily Serpents (see Figure 3). In the most complete instances this creature is named as *Yax Chit Jun Witz' Nah Kan* (see Helmke in press). Conventions of depicting water in Maya imagery changed during the course of the history of Maya art. It is interesting to notice that both in early and late Maya art (see Figures 3-4) water was depicted in a less abstract manner (as was often the case during the Late Classic). During the Early Classic, depictions of different bodies of water and water itself became very stylized. Tomb 1 at Río Azul depicts a water band common to the Early Classic imagery (Figure 5). This water band has as its basis

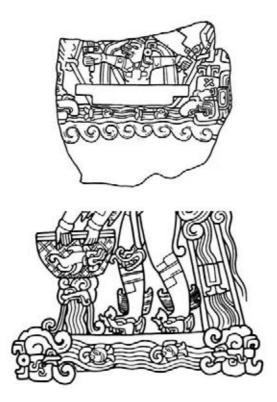


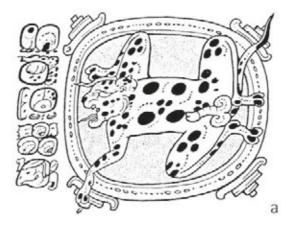
Figure 4. (top) Izapa Stela 67; (bottom) Izapa Stela 1 (drawings by Ayax Moreno).



Figure 5. Río Azul, Tomb 1 (photograph by George Mobley).



**Figure 6.** Imagery on an Early Classic ceramic bowl from Quintana Roo (drawing by Linda Schele, in Schele and Miller 1986: 280).





**Figure 7.** a) Detail of a Late Classic ceramic vase, K711 (drawing by David Stuart); b) Detail from a Late Classic tripod dish, K1609 (photograph by Justin Kerr).

a wavy band, marked with dots that represent water (compare to the glyph for 'sea' in Figure 1c). Attached to this band are the so-called proto-na ~ HA' signs as well as dotted scrolls. Early versions of water stacks are found on the murals at San Bartolo where they appear to represent rain (see Taube et al. 2010). An Early Classic ceramic bowl from Quintana Roo (see Figure 6) depicts an Early Classic version of water stacks that later become even more stylized and abstract (see Figure 7). On K2085 water stacks are represented sideways, flanking a simple water band. One of these figures appears underneath the glyph for 'cloud' in the dedicatory text of the vessel, as pointed out by Andrea Stone and Marc Zender (2011) (Figure 8a). Whether this is intentional or not remains a point of discussion.







**Figure 8.** (top) Roll-out photograph of a polychrome vase, produced under the patronage of Naranjo's ruler K'ahk' Tiliw Chan Chahk, K2085 (photograph by Justin Kerr); (middle) Mural, Temple of the Warriors, Chichen Itza (ca. AD 900–1100) (watercolor by Ann Axtell Morris); (bottom) Golden disk from Chichen Itza (drawing by Tatiana Proskouriakoff).



Figure 9. (top) Detail from the Dresden Codex, page 39. (bottom) Detail from the Madrid Codex, page 4.

During the Postclassic, depictions of water distantly resemble those of the Preclassic, with a more realistic approach, as on the murals (Figure 8b) and on a golden disk from Chichen Itza (Figure 8c).

In the Postclassic codices water is represented with wavy blue lines. The lines on some of the pages of the Dresden Codex are curvier than, for example, those on the Madrid Codex (Figure 9). The Dresden Codex also portrays water as blue dotted line, possible vestige of an earlier stylistic tradition of depicting water. The Madrid and Paris Codices, on the other hand, mostly portray water as vertical wavy lines. Although part of the explanation for these disparate styles rests in the individual penmanship of scribes, it is also possible that representing water with wavy lines corresponds to the international Postclassic tradition, with parallels in the Central Mexican representations of water.

## WATER BANDS AND CENTRAL MEXICAN CONNECTIONS

As regards Maya writing, we have the above-mentioned references (ha', nahb, k'ahk'nahb, and palaw?) to the different bodies of water. The sign for water, **HA'**, is augmented with the sign **LAKAM** at Palenque. Clearly a place name, this combination has been interpreted by David Stuart as 'large waters', a reference to the many rivers cutting through Palenque. As we have already noted, the notion of 'big waters' is a Mesoamerican calque for "river" and this seems to be precisely what the toponym of Palenque referred to (Helmke 2009).

The sign that reads **NAB** (for pool or any body of water) appears to represent a stylized water band with watery dots and a leafy **le** sign, possibly topped with a stylized water plant (see Figure 1a). In the glyph for 'sea' or *k'ahk'nahb*, the sign **NAB** is supplement with a **K'AK'** sign for 'fire' (Figure 1b). On the tablet of Temple XIV at Palenque (Figure 10), this sign is preceded by a sign **TI'** for 'mouth', but functioning as a locative for place, such as 'at'. The water band also depicts water bubbles or dots,



Figure 10. Temple XIV Tablet, Palenque (drawing by Merle Greene Robertson).



Figure 11. Detail of the water band on the North wall of Structure A, Cacaxtla (photograph by Enrico Ferorelli).

water stacks (pointing both upwards and downwards), na-like signs and HA' logograms representing stylized water, in addition to water scrolls and le signs.

The identification of the water band at Palenque and elsewhere can be contrasted to the water bands that frame the famed murals at Cacaxtla (Figure 11) where the iconography is rendered in a distinct central Mexican-Maya hybrid style, embellished with an abundance of water imagery, much alike at other arid areas around the world, such as the water-saturated architecture at Alhambra in Granada, Spain.

The East wall of the Red Temple at Cacaxtla depicts a Maya underworld deity God L, whom we have already mentioned earlier, along with his backpack, within a supernatural scene with cacao trees and maize plants, surrounded by a water band. A similar water band can be found on the piers of Structure A. The water band portrays aquatic animals such as a conch, an egret, and a variety of mollusks, including conches and tent cone shells. Some of these resemble the creatures represented on the mural at the Temple of the Warriors at Chichen Itza. However, what is interesting about the water bands at Cacaxtla, is that they portray a version of the leafy le sign that we see often in Maya iconography and in the glyph NAB (see Figures 1a-b, 10). This water band also resembles the simplified water band on a Tzakol 3 tripod vase from Burial 48 at Tikal on which the water band is reduced to wavy lines and le signs (Figure 12).

The **le** sign as part of the water band has great antiquity in Maya imagery. It can be traced back to the central scene of the West Wall of the Las Pinturas Complex at San Bartolo (Taube *et al.* 2010: 81-83). On the left side of the scene the Maize God is born, on the right side one can observe his death, and in the middle his resurrection. In the scene on the right, the Maize God is in a descending position, amidst scrolls and swirls. He is quite literally being dragged into the watery underworld by a snake that is coiled around his chest. In Maya graphic conventions the snake is relevant to the scene but significantly as a means of contextualizing the descent of the Maize God, he is marked by a stylized water band. Remembering that these murals date to around 100 BC it is clear that the conventionalized water band in the Maya area is of great antiquity. As a result the examples of water bands with the **le** sign at Cacaxtla are clearly of Maya origin or import (Helmke 2010). The descent of the Maize God into the watery underworld is paralleled in the Classic Maya expression *och ha'*, 'to enter water', one of the euphemisms for "to die" (Lounsbury 1974; Schele 1980: 116-117, 350; Helmke 2012b: 111-113). The death by "entering the water" is also depicted in Maya imagery, as in the famous incised bones from Tikal Burial 116 (Figure 13).

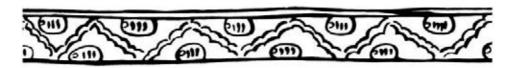


Figure 12. Simplified water band on a Tzakol 3 tripod vase from Burial 48 at Tikal (Culbert 1993: Fig. 31a).

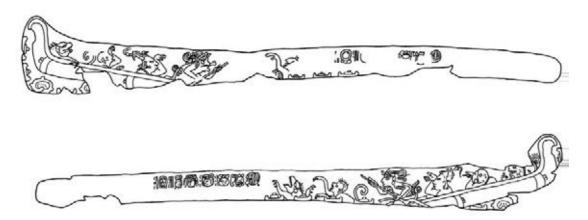


Figure 13. Sinking canoe depicted on incised bones from Burial 116 at Tikal (drawings by Linda Schele).

## A LOOK BACK AND AHEAD

The death of the Maize God can also be seen in agricultural terms, as has been pointed out by Simon Martin (2010; Miller and Martin 2004: 52-62): after the harvest Maize God dies, to be reborn with the rains. This cycle of death and resurrection can be seen as mythological only – or with clear agricultural connections. In Maya imagery and mythology this sequence of episodes is represented as an eternal battle between life and death in the form of the Maize God and God L, with later versions juxtaposing Jesus and Rilaaj Mam.

Going back to the glyph representing bodies of water, or *nahb* (see Figure 1a-b). What we are looking at is in fact a compacted segment of stylized and conventionalized Maya water band. The diagnostic segment of the sign is the **le** sign and the whole water band can actually be reduced to the sign representing the syllabogram **le** which here does not read *le* but is a fossilized sign with an unknown origin serving as an attributive or semantic determinative that imbues the overall logogram with meaning. However, similar to the origin of the **na** sign that in all likelihood has an Isthmian origin (Lacadena 2010), the **le** sign might also represent something watery, a water plant, or a leaf in neighboring languages, such as Mije-Sokean.

As regards the sign **NAB**, we also have it painted on the northeastern corner of Tomb 12 at Río Azul with a **NAL** sign on top of the **NAB** sign, as well as a suffix **la**. All this is preceded by number six. On the opposite side of the tomb we can find something similar: the potential **PALAW** sign, accompanied by a **wa**-syllabogram. These are flanked with the same signs as on the northeastern corner, producing **6-PALAW?-wa-NAL-la**. The same sign is also represented on bench of Temple XIX at Palenque in relation to the pre-current-era decapitation of Waay Pat Starry-eared-Alligator at the God D accession ceremony. The blood of this creature is said to be "oceaned", if the reading of the sign actually means "sea" or "ocean", much alike the blood that is being "pooled" at places like Naranjo and Dos Pilas. The grammar of the sentence still eludes full decipherment, with the enigmatic **na-ka-PALAW?-wa-a** reference after the **u-K'IK'?-le** phrase.

Much remains to be done regarding the recognition of Maya aquatic imagery and expressions. One of these is the use of the all-embracing word ha to indicate various bodies of water, the water itself, as well as, for example, locative suffixes in place names. It is equally important to go back to all **HA** signs in the glyphic corpus and to see what the actual referent in each case is. Moreover, it is worth looking at the representation of aquatic symbolism of other Mesoamerican traditions, as well as

the language and mythology related to watery themes, and to compare these to the Maya counterparts, in order to get a more comprehensive understanding of the semantics of water in Mesoamerica.

Bineen tu chi' a' k'a'naabej i yutzil wabin uja'il

Fui a la orilla del mar y que bonito es su agua I went to the seashore and how beautiful is its water (Hofling and Tesucún 1997 [1979.12/18.12])

## APPENDIX: WATER IN VARIOUS MAYAN LANGUAGES

## Ch'olan languages

# Proto-Ch'olan (Kaufman 2003)

\*k'äk'-nahb sea

# Ch'ol (Aulie & Aulie 1978)

abanlagunapetemlagunañajbmarcolem abanmar

## Ch'olti (Morán 1695)

<ha> agua, río?

<yaxha> agua clara, berde, azul

<polau> mar
<cahnab> mar

# Chontal (Knowles 1984)

ha' water
ha'-a rain
ha'yuw-a(n) to rain
ha'-tzih sneeze
k'ak'-nap' sea

*náp'* body of water

# Chontal, Tabasco (Keller & Luciano G. 1997)

nab laguna grande, mar, océano

to'o lago, laguna, arroyo

pa' lago, laguna, arroyo, popal, río

## **Ch'orti'** (Wisdom 1950; ALMG 2000)

xukur river

noh xukur great river (Río Jocotan)

nohta'ha' any large body of water, lake

nohoh ha' large lake noh ha' lake

noxi'ha' sea (noxi', 'tall, high, adult, old, long')

noxi'witz' high waterfall

ha' ocean, stream (to'or e ha' 'over the ocean, over a stream')

ha' water, stream

tzah ha' any fruit beverage (tzah 'tasty, savory, anything tasty, tasty fruit')

yax ha' clear water, clean or fresh water, drinking water

ha' water, stream, body of water, rain, spirit of water and bodies of water,

juice or sap of fruits, vegetables, and plants, soup, plant excretion, liquid

k'ihna' < k'ihn.ha warm water, hot water, hot spring

k'as ha' rain

mut ha' any aquatic bird

cha' haha'ar k'in second rainy season of the year (la segunda)

haha' watery, rainy, aquatic, living or found in water or marshes

haha'ar rain, rain period, a fall of rain, raining

haha'ar k'in rainy season (May to November); pertaining to the rainy season

# Tzeltalan languages

# Tzeltal (Slocum 1950)

ja' agua ja'al lluvia

## Tzeldal (Ara 1548)

<nabil> laguna, mar

## Tzotzil (Haviland 1981)

ha'aguaho'aguaja'aguavo'aguanablagunauk'umrío

## Tzotzil (Hurley & Ruíz 1978)

jo'aguanablagonablagunats'anleb jo'lagunamuk' ta nabmaruk'umrío

# Yukatekan languages

```
Yukatek (Barrera Vásquez 1980; Bastarrachea et al. 1992)
    a'
                          agua
     ha'
                          agua, lluvia
    k'ak'nab \sim k'anaab
                          mar
    ak'al
                          laguna, ciénaga
    k'oba'
                          lago o laguna de agua; piedra de lago o de río
    ts'onot
                          abismo, profundidad, lagos de agua dulce muy hondos o pozos
                          o bolsas así
    uk'um
                          laguna, río
    x-okola'
                          río
    yok'a
                          río
    cháak
                          lluvia
Itza' (Hofling & Tesucún 1997; ALMG 2001b)
    ja'
                          water, lago, lluvia, río
    bekan
                          river
    ok ia'
                          river
    k'abnaab, k'a'naab
                          sea
    ajnoj-ja'
                          lake
                          lake
    ixnoj-ja'
    noj-ja'
                          lake
    k'a'-
                          mar / sea (only in compounds)
    k'ah-
                          mar / sea (only in compounds)
    k'abnaab
                          mar / sea
Itza' (ALMG 2001)
    ia'
                          water, lago, lluvia, río
    k'a'naab
                          mar
    nab
                          water lily
Mopan (Schumann 1997)
    ja'
                          agua, lluvia, río
    nojja'
                          río
Lakantun (Bruce 1968)
    ha'
                          agua
```

# Q'anjobalan languages

ha'ha'

petha'

## Q'anjobal (ALMG 2003b)

 $a'ej \sim ej \sim ja' \sim a'$  agua

najab laguneta, laguna

lluviosísimo

lago

nab lluvia

# Chuj (ALMG 2003d)

ha'niwan río grande ha niwan ha' playa

nhab playa nhab lluvia

# **Tojolabal** (Furbee-Losee 1976)

ha' water, rain k'ab to rain

# Mamean languages

# **Mam** (ALMG 2003c)

a' agua a' río

# Tektitek (ALMG 2003f)

a' agua kyichbil laguneta smayun lluvia

## Awakatek (ALMG 2001a)

chook canal lluvia a' agua, río

# K'iche'an languages

# K'iche' (ALMG 2004a)

ja' agua
cho lago, laguna
nïm ja' ~ nimaja' ~ nima' río

## Sakapultek (ALMG 2001d)

ya' agua jab lluvia nem ya' río

# Sipakapense (ALMG 2001e)

ya' agua jab lluvia tik'lik ya' lago nima ya' río

# Poqomam (ALMG 2003e)

ha' agua, río nim ha' río

# Poqomchi' (ALMG 2001c)

ha' agua

chooh lago, laguna

nimha' ~ nim ha' río palaw mar

# Q'eqchi' (ALMG 2004b)

ha' agua

*k'ak'naab* laguna, laguneta

hab lluvia nima', nimha' río palaw mar

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