



## **Glyphs on Pots**

### **Decoding Classic Maya Ceramics**

Materials for presentations by David Stuart, Barbara Macleod, Yuriy Polyukhovich, Stephen Houston, Simon Martin, and Dorie Reents-Budet

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# Glyphs on Pots: Decoding Classic Maya Ceramics

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## *Part I. Historical Background*

David Stuart

The study of glyphs on Maya pottery more or less parallels the advances in Maya decipherment over the past two decades. In fact, one could easily make the case that the rapid progress in the decipherment in the 1980's and early 90's was driven by the detailed analysis of repetitious and highly formulaic pottery texts. When the same words are written by hundreds of scribes over several centuries, the variations and substitution patterns are bound to reveal the basic workings of the script. The patterns that led to the "code breaking," as it were, were relatively easy to spot within such a well-defined and restricted environment.

Of course, the seminal work in the structural analysis of pottery texts goes back to Micheal Coe's *The Maya Scribe and His World* (1973) wherein he identified of the so-called "Primary Standard Sequence" (what many simply call the "PSS"). Mike was not able to read the PSS inscriptions at that time, but he set the stage for all later structural and phonetic analyses. He simply noted that Maya pottery often bore the same glyphs over and over again, and in a fairly rigid order of appearances. Some were long and some were short, but all of the inscriptions followed a standard and discernable arrangement. Mike continued to study the PSS through more and more examples that he published in several other catalogs of Maya pottery – all considered classics in Maya art and archaeology. Throughout this time, in the 1970s and early 80s, the stimulus for the study of art and writing on Maya ceramics was Justin Kerr, who was steadily compiling his now famous photographic archive (see [www.mayavase.com](http://www.mayavase.com)). Together, Mike and Justin laid the foundation for all work on Maya pottery, and it should become clear to all that this in turn had profound effects on Maya decipherment and iconographic interpretation in general.

Another key publication in this time was *The Maya Book of the Dead*, by Francis Robicsek and Donald Hales. The interpretations within have not necessarily stood the test of time, but again it was the countless images by Justin and others that gave epigraphers and iconographers the raw material for making advances. I well remember Linda Schele, Peter Mathews and I sitting on a couch in San Cristobal de las Casas in 1981, pouring our eyes over every page and coming up with several exciting observations. By the mid-80s, enough examples of the formulaic texts on pottery had been compiled to make important strides in decipherment.

The story of deciphering glyphs on pots begins a few years earlier, with Peter Mathews' seminal discovery of a hieroglyphic nametag on a jade earspool from Altun Ha, Belize. He noticed one phonetically transparent glyph **u-tu-pa**, which he read as *u-tuup*, "her earspool." John Justeson soon noticed precisely the same term on jades from Chichen Itzá, and in 1982, I noticed that many of the bones from Burial 116 at Tikal bore

the glyph **u-b'a-ki**, for *u-b'aak*, “his bone.” From this it seemed that other such possessed nouns could be found on different sorts of artifacts.

As we now know, ceramics are the most common examples of this practice. In the mid-1980's, Steve Houston and Karl Taube noticed that a few painted plates bore the possessed noun **u-la-ka**. As luck would have it, *lak* is a widespread Mayan term for “dish” or “plate.” By structural comparison with other ceramics, it quickly became apparent that liquid containers were marked by the so-called “wing-quincunx” first noticed by Mike Coe over a decade earlier. This, it was clear, was the possessed noun for something like “vase” or “cup,” but without good readings for the prefix and the wing sign, the precise reading was left hanging. The phonetics soon became clear with contributions from Barbara Macleod and Brian Stross, who suggested a reading based on an instrumental noun derived from *uk'*, “to drink.” It was clear by the mid 80's that a good number of glyphs on pots were in their essence name tags for the objects themselves – some simple, some curiously elaborate.

Another advance around this time was my identification of the glyph for “chocolate” on numerous vessels, read as the recognizable word *kakaw* (**ka-ka-wa**). In fact, Lounsbury had much earlier identified a *kakaw* glyph in the Postclassic codices, but its form was very different from the familiar “fish” in the Classic period pottery texts. This led to the realization that many of the glyphs following the possessed noun (“his/her cup”) were, if not a personal name, often specifying the contents intended for the vessel. This chocolate identification saw welcome confirmation in 1984, when excavations in Río Azul, Guatemala, revealed a “lock-top” jar with two *kakaw* glyphs. The caked residue of the vessels interior was identified by chemists in Hershey, PA (where else?!) and good markers of *theobroma cacao* – the native form of chocolate cultivated in the New World tropics, and relished by elites throughout ancient Mesoamerica. Steady advances showed that chocolate was not the only beverage for which decorated cups were used. Another of Barbara Macleod's insights was the reading of the “atole” (*ul*) glyph, common on a number of low bowls. Today, a good deal of work still remains to be done on the descriptive terms for chocolate and other specified vessel contents.

Many pottery texts show several glyphs before the “name-tag,” and these long stood as a source of frustration for the few epigraphers then working on it. One of the fairly consistent glyphs was what Coe called the “fire-imix” combination. In 1984, James Fox and John Justeson identified a similar glyph in the *Madrid Codex* as spelling **tz'i-b'i**, for *tz'ihb'*, “to write, paint.” I saw that the same word was quite common in the troubling “preamble” of the PSS, and saw that it could be alternatively written as **tz'i-ba**. It seemed, then, that “paint” was a common term, perhaps simply modifying the noun being possessed, as in “painted is his cup...” This supposition was quickly confirmed, when I noticed that the term *tz'ihb'* alternated on some vessels with the so-called “*lu*-bat” glyph, but only on glyphs that were carved, molded, or incised. It seemed, then, that the *lu*-bat must therefore semantically cover a range of meanings like “carve, etch, incise, etc.” Confirmation came within months with the revelation of the so-called “Emiliano

Zapata Panel,” a fragmented tablet from Palenque that depicts a man carving a stone object; the verb in the accompanying text is the *lu*-bat.

Other important efforts focused on the very first glyphs of the PSS, what Coe called the “introducing glyph” as well as various verbs that seem to describe what the vessels actually “do.” The most common opening verb was written as either the head of the old God N or as a step with an ascending footprint – clearly variants of the same thing. Remarkably, the same verbal constructions appear on a very wide-range of objects and monuments, and it seems quite clear that we are dealing with a highly formalized dedicatory formula used by scribes to mark the activation of precious things and monuments. To study glyphs on pots, one must study the tradition of writing on a wide variety of artifacts.

Many epigraphers have contributed to the gradual accumulation of knowledge over the last quarter century or so, and many contributions we will discuss in the weekend Hieroglyph Forum. As we will see, many fine-points still remain to be resolved about the PSS inscriptions, but it is safe to say that we understand its basic intent: to mark ownership of important ritual objects. In more elaborate examples, it records the dedication date and manner of decoration of the object itself. Within the courts in which these objects were manufactured, such inscriptions were extremely important in marking social and political relationships among members of the nobility. Pots, jewels of jade and shell, bone implements, as well as cloth mantles, were the “stuff” of the palace economy dominated by patterns of gift exchange and tribute. When we read nametags and markers on pots, we are in a real sense looking into the inner workings of Maya palaces and courts, and the interpersonal relations that defined them.

In our presentations and discussions this weekend, we will spend some time looking at the dedicatory formulae of Maya pots and other related objects. This may be of interest for those of you who wish to see the nuts-and-bolts of Maya epigraphic research, but it will also be important to step back and view these artifacts in their larger social, political and religious settings. The questions are deceptively simple: How were the inscribed vessels actually used? Why were polychrome ceramics produced and distributed within a fairly short span, and in a fairly restricted region? Can we tie them to specific sorts of ritual activities within the court and beyond? As prized and gifted objects among elites, how do their designs and distributions reflect the social and political relationships of the time? Why do they bear the designs of history, myth, and (as I hope to argue at the Hieroglyph Forum) more macabre aspects of rulership and sorcery?

### *A Change in Terminology*

Since Coe’s definition of the “Primary Standard Sequence” in 1973, Maya epigraphers have grown accustomed to the “PSS” label for the familiar rim texts on pottery and their counterparts on many other kinds of objects. Here at the 2005 Maya Meetings I would like to suggest a change, proposing that we call them examples of the *Dedicatory Formula*. This more accurately describes the function of writing on these varied sorts of objects, and is a bit easier on the ear and tongue as well.

*Part II. Selected Topics*

David Stuart

# 1. Tagging Objects

To place the inscriptions on vessels in their proper context, we should look at the wider and probably very old tradition of marking the ownership of important valued objects. Glyphic inscriptions on all sorts of objects made of bone, shell, jade and ceramic bear name tags specifying the name of the owner. As one might imagine, the structure of these sorts of texts can be very simple, no more than stating “so-and-so’s bone.” many ceramics are marked in this way, too, as in “so-and-so’s plate.”

A few examples illustrate this old tradition of Maya scribal practice:

The two jade earspools from Altun Ha, Belize, (just one is shown here) show a text that begins with **U-tu-pa**, which Peter Mathews demonstrated to be the spelling of *u-tuup*, “her earspool.” The second and third glyphs provide the name of the woman who owned them.



*u-tuup*

We find the same tag used on some jades recovered from the cenote at Chichen Itza, a pattern first noticed by John Justeson.



Similar to the simple tags on jades is the expression **U-b'a-ki** on a series of bones excavated at Tikal.

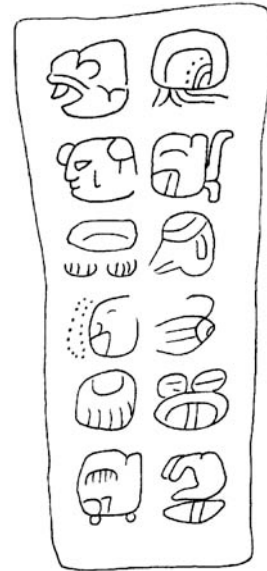
*u-b'aak K'uhul Mutul Ajaw*

The bone (object) of the Holy Mutul Lord

TIK: Miscellaneous Text 181 (drawing by A. Seuffert)

Also from Tikal (according to Tatiana Proskouriakoff's notes) comes this inscribed jade, bearing the initial tag **U TUUN-ni**, for *u-tuun*, "her jade." Although it means generally "stone" in most modern sources, *tun* is specifically in the colonial *Diccionario Motul* (Yukatek) as "piedra preciosa"

(Drawing by D. Stuart)



Tagged objects are found nearly everywhere, on a seeming endless variety of things. Some terms for types and categories of objects remain poorly understood or not deciphered at all. A good example of an opaque label is found on this bone, probably looted from a tomb at Naranjo (the owner, named in the final three glyphs, is a known ruler of that kingdom). The initial glyph is simply **u-ja-cha**, for *u jach*, "his *jach*." Often this is spelled **ja-chi**, for *jaach*, and a variation on the overall term is *jaach bak*, "his/her *jaach* bone." The meaning of *jach* requires further research and discussion.

(drawing by D. Stuart)



## 2. The Dedication Formula

More often than not, Maya scribes wanted to mark the ownership of valued things in more formal statements and sentences. For this they developed at some unknown early date a highly rigid and repetitious text formula that could include a date, a verb, and mention of how the object was decorated (carved or painted being the two main options, it seems). This is what we find on hundreds of Maya ceramics, in the highly repetitive series of glyphs that Michael Coe first recognized, and called the “Primary Standard Sequence.” In the mid 1980s, it became clear that the same written formula graced any number of object categories, ranging from small portable accoutrements and objects to much larger monumental buildings and spaces. If a thing large or small could be associated with a particular individual lord, then it could conceivably take on this sort of marking – what I prefer to call simply the “Dedicatory Formula.” In its most complex form, the Dedicatory Formula could have a date and an event referring to the manufacture or presentation of the named object.

We will learn more about the varieties of this Dedicatory Formula as well as its internal breakdown, but for now we can look over its widespread use on a number of different media. In my view, the Dedicatory Formulae represents a very archaic and elemental scribal genre within Classic Maya culture – probably much older than the narrative content we find in later historical inscriptions.



### A Shell from Oxkintok, Yucatan

This drawing is of an engraved shell pendant from a royal tomb excavated at Oxkintok, Yucatan, by the late Ricardo Velasquez. Notice that the initial five glyphs reproduce the PSS exactly in its structure. The term for the object (written in the sixth block) is different, as one might expect: *ik'nal*, apparently a Classic word used for shell pendants, found also examples from Tikal and elsewhere.

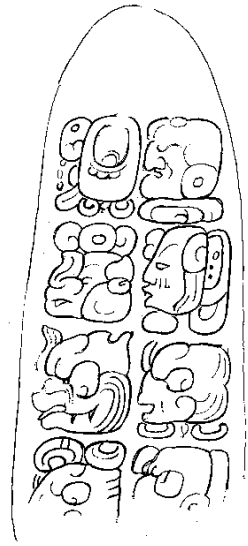
Oxkintok shell pendant (drawing A. Lacadena)

### A Celt from Quirigua

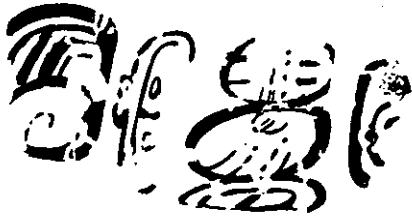
This inscribed greenstone celt, said to have been recovered in a field near Quirigua, we find the Dedication Formula based on the possessed noun **U ka-ya wa-ka**, *u kaywak*, “his *kaywak*.” Evidently, *kaywak* was an ancient term for “celt,” known from a handful of other examples (the word was likely derived in part from on *kay*, “fish.”).

The drawing is a preliminary sketch of the celt’s back, based on a rubbing. the front depicts a standing warrior in profile, holding a round shield and a K’awiil sceptre.

(drawing by D. Stuart)



### On Clothing



Even clothing could be inscribed with the Dedication Formula. In the paintings of Bonampak, some of the skirts and mantles worn by nobles bear hieroglyphic texts that are virtually the same as what we find on pottery. Unfortunately, in these handful of texts we never see the word for “skirt” or “clothing,” since the words are always obscured or hidden.

Bonampak Murals, Room 3, textile inscription  
(drawing by S. Houston)

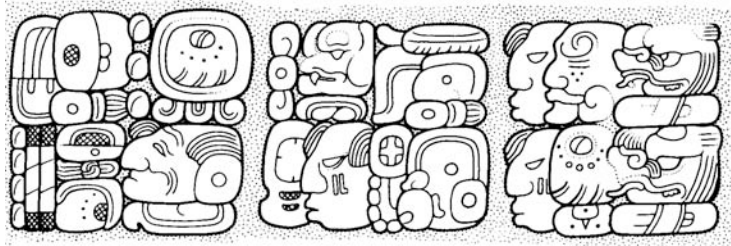
We can easily trace the Dedicatory Formula to large-scale monuments, architectural features, and even large buildings.

In this image of a lord seated on a throne, we see several badly preserved glyphs on the face of the seat. Enough remains to read the text as a Dedicatory Formulae based on the possessed noun *u-teem* (**U-te-mu**), “his throne.”

A similarly inscribed throne was excavated by J. Eric S. Thompson as San Jose, Belize. The glyphs there are in stucco, and again mark the monument as a *teem*.



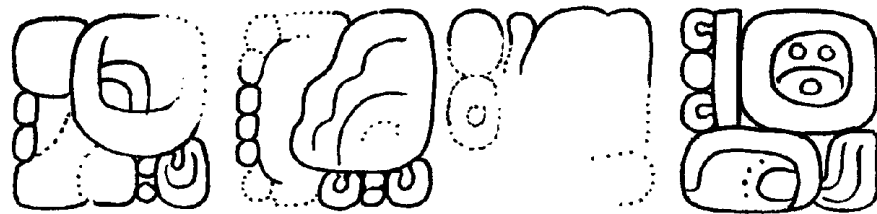
from K1524



In this text from Lintel 25 at Yaxchilan, the Dedicatory Formula centers on the possessed noun *y-otoot*, “her house.”

(drawing by I. Graham)

### Stela 2 from Lagunita, Campeche

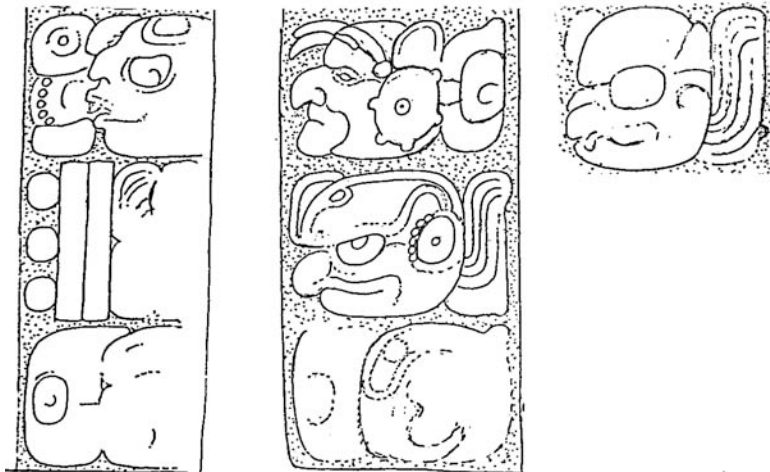


(drawing by D. Stuart, based of field sketch by E. Von Euw)

The little known site of Lagunita or La Lagunita, Campeche, was visited by Eric Von Euw in the 1970s, when he recorded a stela with this interesting Dedicatory Formula. The object is simply called the “his carved 6 Ajaw Stone.” The stela dates to the K’atun ending 9.14.0.0 6 Ajaw 13 Muwan.

### Hieroglyphic Panels from Pomona, Tabasco

Pomona, Hieroglyphic Panels 1 and 4 (Field drawings by I. Graham)



This excerpt from a series of inscribed stone panels at Pomona offers another good example of how the placement of stone monuments could be commemorated through the dedicatory formula. The date is 9.13.0.0, and the subject of the God N verb is “the 13 K’atun Stone.” The text closes with the two glyphs simply stating “it is his stela.” That is, a stela or some other major monument is dedicated on the Period Ending.

### 3. The Dedication Formula on Vessels

On vessels, we find the Dedication Formula can assume very simple and very complex formats. Here is a good example of a simple nametag on an incised vessel using the same format we saw earlier on other types of objects:

**(a) POSSESSED NOUN – NAME**

**yu-k'i-b'i b'a-je wa-CHAN-na-TOOK' b'a-ka-b'a**  
*(u)y-uk'ib' b'aje.. ? Chan Took' b'akab'*  
 the drinking cup of B'aje..? Chan Took', the b'akab'

The final three glyphs of the caption, running vertically, name the seated lord as the owner of the vessel. This is the simplest type of inscription on a vessel, although the terms for the objects can of course vary with the form of the vessel. As described below, a common nametag on plates, for instance, is *u-lak*, “the plate of...” (see “Terms and Types of Vessels”).



K7669

**(b) POSSESSED NOUN – PREPOSITIONAL PHRASE – NAME**

On pottery texts a prepositional phrase can intercede between the possessed noun and the name of the owner, describing what the vessel was used for (“his cup for ...”). The name of the person (not illustrated) follows the last glyph (*kakaw*).



**yu-k'i-b'I TA-yu-ta-la IXIM TE'-e-le ka-ka-wa NAME**  
*(u)y-uk'ib' ta y-ut-al iximte'-el kakaw NAME*  
 His drinking cup for his food/drink “maize tree” cacao ... NAME

(c) (DATE) – VERB PHRASE - POSSESSED NOUN (- PREPOSITIONAL PHRASE) - NAME

On pottery and many other types of dedicated objects, the possessed noun for the item is regularly preceded by some verb or verb phrase referring to the object's dedication or ritual activation. A number of different verb glyphs can serve this role (see "Dedication Verbs" below), but the most prominent is the "step" (and its "God N" equivalent).

Although its phonetic reading is not completely certain, it probably means "to go up, ascend," referring to the presentation of the object to a ruler or noble in a court setting.

Also basic to this introductory verb phrase is the initial glyph recently read as *alay* by Barbra Macleod and Yuriiy Polyukhovich.



**a-ALAY T'AB'-yi yu-k'i-b'i NAME**

*alay t'ab'-ay (u)y-uk'ib' NAME*

Here ascends the drinking cup of... NAME

Often the text can be further elaborated by mentioning the mode of decoration on the surface of the object. This appears directly after the verb and before the possessed noun. Only two options are known: "painted" or "carved, modeled" (see "Painted or Carved?" below), and often this takes the suffix **-na-ja**.



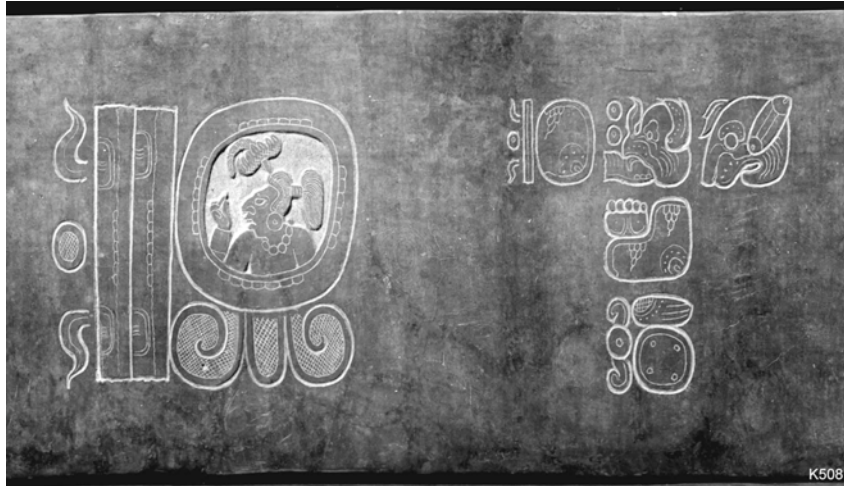
**a-ALAY T'AB'-yi U-tz'i-b'i na-ja yu-k'i-b'i TI-u-lu NAME**

*alay t'ab'-ay u-tz'ib-n-aj(-al) (u)y-uk'-ib' ti ul NAME*

Here ascends the painted drinking cup for atole of NAME

## 4. Vessel Dedications as History

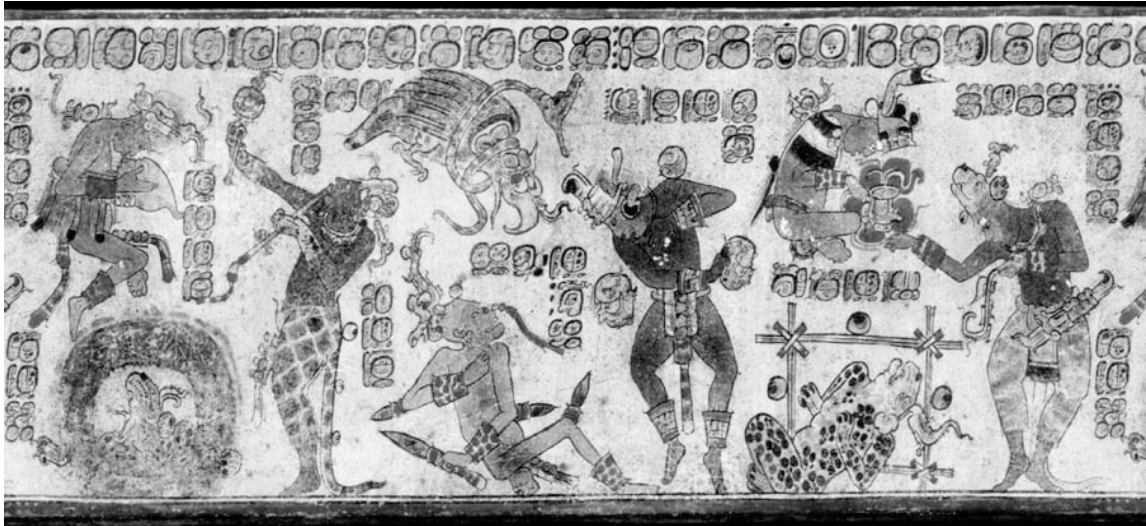
As important ritual objects, decorated and inscribed ceramics were important historical “actors” in the own right, commemorated in texts that tie them to specific times and places. Several dedicatory texts on pottery show Calendar Round dates, and stylistic traits of the painting or other clues sometimes allow us to place the objects firmly in history.



9.17.2.3.19 6 Kawak 2 Sotz' (in 11 Ajaw)  
March 29, 773

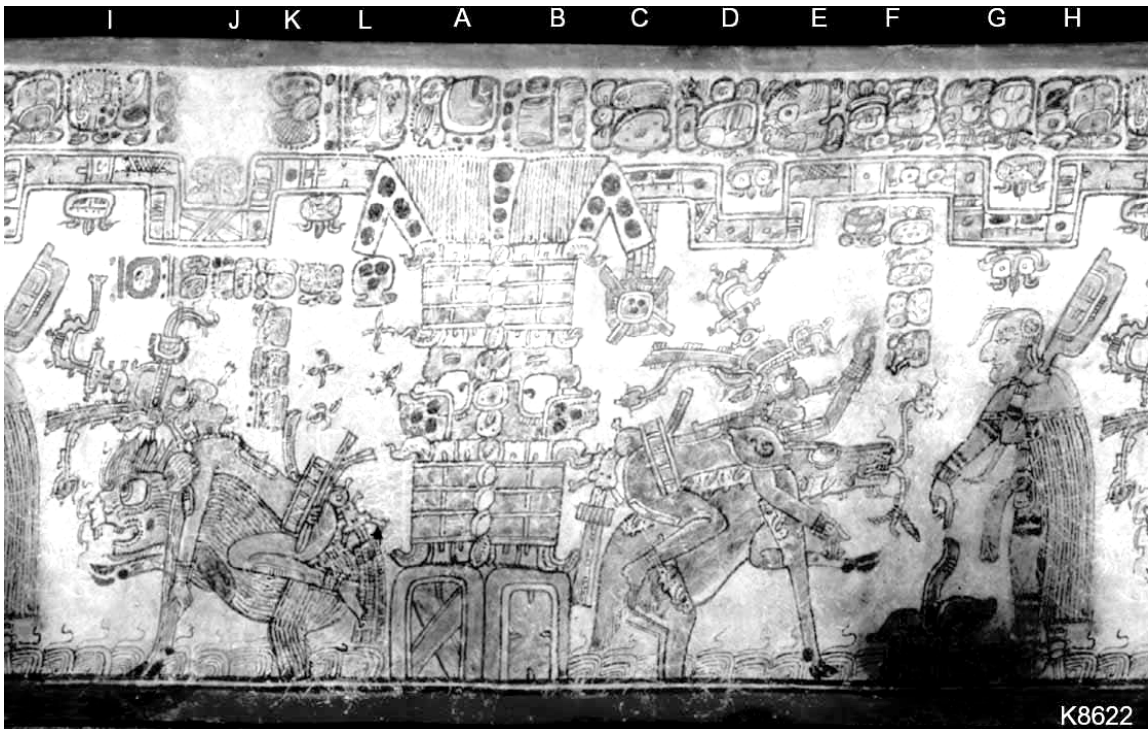
A very simple example can be seen here on K508, a Late Classic incised and gouged vessel probably from Campeche. The large day sign cartouche is “11 Ajaw,” and presumably it names a major Period Ending -- 9.18.0.0.0 11 Ajaw 18 Mak is a reasonable placement. The CR of the dedicatory text is different, written as 6 Kawak 2 Sotz'. If we assume that the “11 Ajaw” names the K'atun within which the CR fell, the result is 9.17.2.3.19 6 Kawak 2 Sotz', or 29 March, 773. The inscription continues with a standard formulae (the “step” verb is odd-looking, but recognizable) centered on ...y-uk'ib ch'ok, “...the cup of the youth.”

Another example, below, comes from the well-known vessel (K791) by the “Altar Vase” painter of the Ik' kingdom (around western Lake Peten Itza). Here the dedicatory text along the rim opens with the CR 4 Ix 12 Kumk'u, probably 9.16.3.13.14, or 18 January, 755.



K791

9.16.3.13.14 4 Ix 12 Kumk'u  
January 18, 755



K8622

9.14.9.15.10 7 Ok 13 Yax  
August 24, 721

## 5. Vessel Typology and Terms

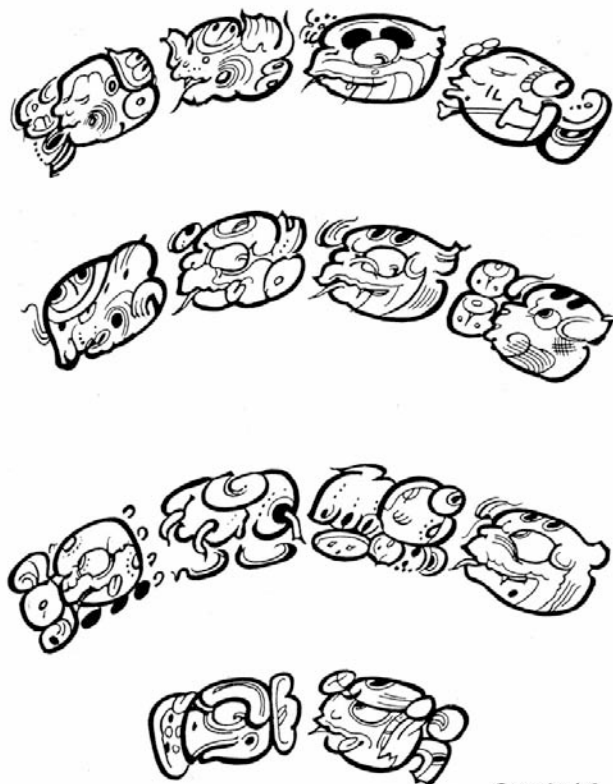
At present we can identify several terms the Maya used for different types of ceramics vessels. In general, any tall cylinders used for cacao drink were called *uk'ib'*, “drinking cup,” or *jaay*. Low plates and dishes seem to have had a variety of terms, including *lak*, “dish,” and *jawante'*, for footed plates. There was also some overlap among these different terms. The examples presented in the following pages do not provide an exhaustive list of vessel terms, but they give us an idea of the basic variations.

### *u-lak*, “his/her plate”

U-la-ka



Plate from Tomb 4, Calakmul (drawing by Simon Martin)





### *y-uk'ib*, “his/her drinking cup”

The most common term found on Maya ceramics, deciphered in the 1980s through efforts of Barbara Macloed, Brian Stross, and Stephen Houston. Usually this is presented as a sequence of three syllables: *yu-k'i-b'i*, giving the possessed instrumental noun *y-uk'ib'*, which is ultimately derived from the verb root *uk'*, "to drink." Sometimes **UK'** is written as a logogram showing a lower face with a "water" element in its mouth. Either way, the result is "his/her drinking cup."

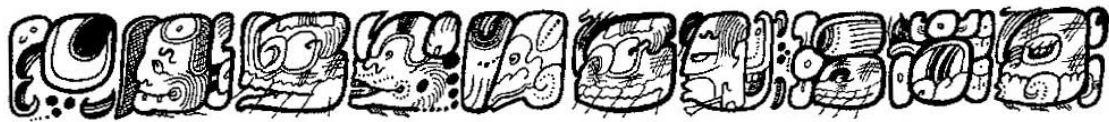
### *u-jaay*. “his/her cup”



The glyph **U-ja-yi** or (in rare late examples **U-ja-ya**) was recognized early on as a term for some sort of vessel, but the meaning of “his/her *jaay*” was for a long time a mystery to epigraphers. Sometimes *u-jaay* stands alone as a term for a vessel, as here (at right) on a Chochola style pot (K4463) probably produced at or near Oxkintok. The owner is a woman.



Elsewhere *u-jaay* can appear together with *y-uk'ib'*, suggesting a strong degree of semantic overlap with “drinking cup.” For instance, on the rim text of the well-known “Regal Rabbit” vase (a.k.a., the “Bunny Pot”) we see that *u-jay* (now with a short vowel cued by the synharmonic spelling **ja-ya**) immediately precedes *y-uk'ib'*



The same strong relationship appears here on K5466, where the two large glyphs are simply *u-jaay* and *y-uk'ib'*



Other simple pairings of *u-jaay y-uk'ib* are found on carved vessels in the Chochola style, but they seem to be common throughout the central lowlands.

The word *jay* appears in modern lowland languages as an adjective meaning “thin,” which have led many to wonder if its use on Classic vessels is to highlight the fine thin walls of cylinder bowls. But the role of **u-ja-yi** glyph as a stand-alone noun would argue against this particular interpretation.

A welcome resolution to the meaning of the *jaay* glyph came in 1995, when Alfonso Lacadena noticed the following straightforward entry in Ulrich and Ulrich’s Mopan vocabulary: *jaay*, “tazon de barro” (clay cup). Obviously this is our answer. When paired with the *y-uk'ib* label, the inscription reiterates “his clay vessel, his drinking cup...”

***u jawante'*, “his/her footed plate”**



The Late Classic plate on the preceding page goes by a different name **U-ja-wa-TE'**, possibly for *jawante'*. The term is found on several footed plates, but never on a simple dish (*lak*) without supports.

The text here records the dedication of the jawte' on the day "12 Ajaw," possibly a Period Ending of the Long Count. The owner was named *Yukul Chan K'awiil*, "Lord of Hixwitz."



Two details of texts painted on footed plates. Both make use of the term *jawte'*, although the larger dedicatory formula in each case is a bit different. Note the

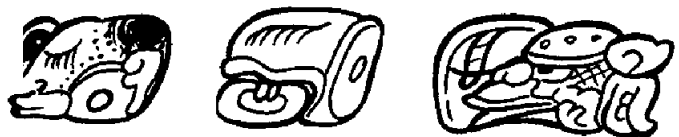
K4469



***u-we-ib'***, "his/her eating thing"

Marc Zender has noted that two plates from the El Zotz or Uaxactun areas bear similar texts marking them as *we'ib'*, "eating vessels." These are highly restricted terms, apparently, and no other cases are known.

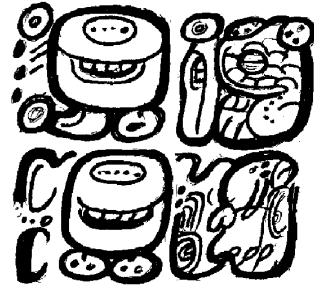
K6080



(drawing by M. Zender)

### *y-ajib'(?), "his/her ?"*

A handful of plates bear the spelling **ya-ja-ji-b'i**, which is very difficult to analyze. Obviously it is another possessed noun, and the **-b'i** ending is likely to indicate an *-Vb'* instrumental noun ending. We are left with *ajaj* or *ajij* as the noun root, but this is semantically obscure. One possibility is that it is based on the verb *aj*, meaning "to awaken" –



### **A unique brush cleaner**



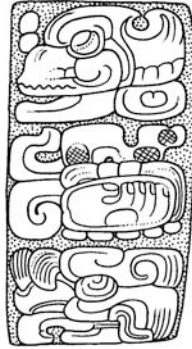
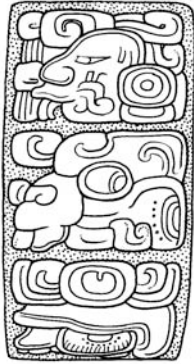
Several years ago a remarkable vessel (K7786) came to light, inscribed with a unique dedicatory label. The low bowl is not called a drinking cup, but rather bears the glyph **u-po-ko-lo ch'e-e-b'u**, *u pokol ch'e'b'*, "his clean brush." It is likely a brush cleaner, owned by a scribe or artisan from a noble court of the eastern Peten district – perhaps even the master calligrapher who painted the vessel. The owner was named Ahk Nikte', "Turtle Flower," and he was the *ajk'uhun* of a ruler of a site possibly named *Yootz* (**yo-tzi**) or possibly *Yomootz* (**yo-mo-tzi**). This unknown locale is mentioned in the texts of Naranjo and is presumably a ruin somewhere in the surrounding area (Holmul?).



*alay t'abay utz'ibnaj(al) u-pokol ch'ehb Ahk Nichte' y-ajk'uhun K'ahk' Ohl Yootz Ajaw*

Here ascends the painted brush-cleaner of Ahk Nichte', the *ajk'uhun* of K'ahk Ohl the Holy Yootz Lord

## 6. Vessels with Proper Names



**IXIM TUUN yu-UK'**  
<sup>2</sup>**ka-wa K'AHK'-NEH-chi-hi XOOK**

*Ixim tuun y-uk'(ib')*  
*(ta) kakaw K'ahk' (u-)neh chih xook*

Maize Stone is the name of the cup for cacao of K'ahk' Unehchih Xook

Early Classic stone vessel, Santa Rita, Belize (drawing by D. Stuart, based on original by Steve Houston)



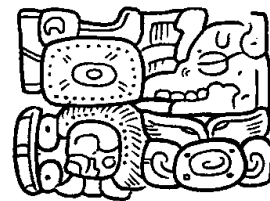
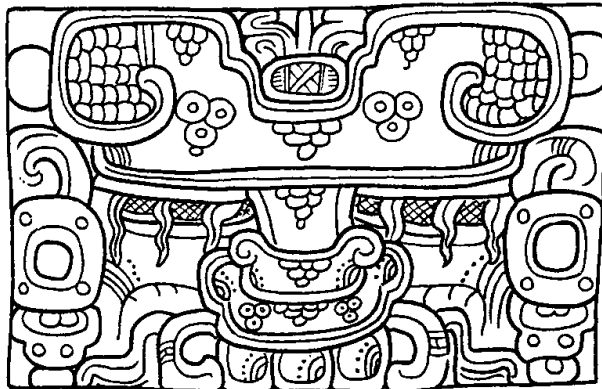
**IXIM ja-yi U-K'ABA' yu-k'i-b'i**  
**IXIM-TE' ka-wa 9-TZ'AK-b'u AJAW**

*Ixim jaay u-k'ab'a' y-uk'ib'*  
*Iximte' kakaw B'olon Tz'akb'u Ajaw*

Maize Cup is the name of the drinking vessel for the maize-tree cacao of the Nine Ordered Lords.

Uaxactun, stuccoed tripod (drawing by D. Stuart, based on photo by M. Van Stone)

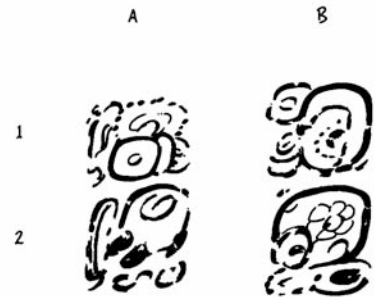
The drawing below is part of the decoration and text on a Tzakol footed cylinder from the Tikal region. It names the vessel as a “cave” named *Ho' Janahb' Ch'een*



## 7. Vessels as “Houses”

Oddly enough, “house” is a fairly common label on ceramic vessels and containers of various types.

Several so-called “poison bottles” are also described as “houses” in their hieroglyphic tags. For example, a small “codex style” flask bears the inscription *y-otoot u-may Ahk Mo’*. “It is the ‘house’ of the tobacco of Ahk Mo’.”



We also find “house” used on plates, cylindrical vases and lided cache vessels., such as this important example from Tikal's Cache 198, in the South Acropolis. Contrary to some other interpretations, the “house” here must refer to the vessel, and not to the building in which it was deposited.



*alay t'ab'ay(?) y-otoot k'uhunil b'olon tz'akb'uil  
ajaw Ehb' Xook Wak Chan ?*

Here it ascends, the ‘house of veneration’(?) of the Nine Ordered Lords, of Ehb' Xook, of Wak Chan ?. He venerates (them) (??) , Chak Tok Ihch'aak, the Tikal Lord



## 8. Overview of Drinks and Vessel Contents

Ritual drinks play a major role in ceremonies both large and small in traditional Mesoamerican culture.

Beyond simply tagging a vessel as “his/her cup” or “his/her plate,” a common elaboration is the inclusion of a simple prepositional phrase after the possessed noun. The phrase, usually (but not always!) introduced by *ta-* or *ti-*, “for, with,” specifies the kind of drink or food intended for the vessel. The phrases are fairly standardized over time and space, but they show some internal variation, and in some important words within them have defied translation. Much of the structural analysis of the Dedicatory Formula on pottery has concentrated on the readings of these glyphs, and some significant work no doubt remains to be done. Here is a sample of the common variety of drink descriptions we find, from simple to complex. Many of them contain still poorly understood terms. These will be discussed in some detail later on.

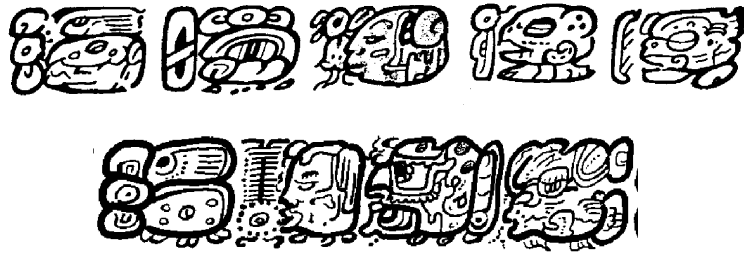
K3064



- (1) *y-uk'ib ta kakaw* NAME, “so-and-so’s drinking cup (for) cacao.”
- (2) *y-uk'ib' ta yutal kakaw* NAME, “so-and-so’s drinking cup for *yut* cacao”
- (3) *y-uk'ib ta iximte'el kakaw* NAME, “so-and-so’s drinking cup for ‘maize tree’ cacao.”
- (4) *y-uk'ib ta tzih* NAME, “so-and-so’s drinking cup for *tzih*”
- (5) *y-uk'ib ta tzih kakaw* NAME, “so-and-so’s drinking cup for *tzih* cacao”
- (6) *y-uk'ib ta tzih te'el kakaw* NAME, “
- (7) *y-uk'ib ti tzih iximte'el kakaw* NAME, “so-and-so’s drinking cup for *tzih* ‘maize tree’ cacao.”
- (8) *y-uk'ib ta yutal iximte'el kakaw* NAME
- (9) *y-uk'ib ta ul* NAME

## 9. *Iximte'el kakaw*

By far the most common descriptive term for the chocolate contents of vessels is *iximte'(el) kakaw*. Here are a few selected examples of how we find this written, almost always after the “cup” glyph.



The meaning of this phrase is not so easy to figure out, but we can begin with evidence for the reading of the human-looking profile sign as the logogram **IXIM**. There is no doubt that the head we find in this phrase is that of the Maize God. This is especially clear in Early Classic examples, such as this one from MT 56 at Tikal, and another vessel from Uaxactun:



Two revealing examples show that the maize head can take the prefix *i-*, seemingly as a phonetic complement to its reading. The example at left is taken from the “Altar Vase,” and another appears on K791, perhaps by the same artist. Given that no logogram had yet been identified such an important word, I proposed in 1995 that this is simply **IXIM**, “maize.”

However, it is important to realize that the botanical term *iximte'* is not the same thing as *ixim*, “maize.” In Mayan languages *iximte'* or *iximche'* can refer to a variety of different plants, some of them important in ritual or medicinal usage (Yukatek *ximche'*).

Simon Martin has recently offered the intriguing suggestion that *iximte'* should not be understood as a specific plant name – that is, as an additive to the cacao beverage. Instead he believes that *iximte' kakaw* was a more florid description for the precious fruit and its drink, linking it directly to the “maize tree” of sustenance. One good piece of



evidence comes from this Early Classic image of the “cacao god,” who strongly resembles world like the Maize god with cacao pods attached to his body. The accompanying text simple labels him as *iximte'* (**IXIM-TE'** in the second block). Simon’s more nuanced and conceptual analysis of the *iximte'el kakaw* phrase has a good deal of merit, and it may help to finally explain what has been a troubling term. Still, I wonder if more research into the botanical and medicinal properties of the plants today known as *iximte'* or *iximche'* may ultimately prove useful in our understanding of the glyphic phrase.

Drawing by Simon Martin



# 10. The Mythical Origins of Cacao

Tikal, MT 56

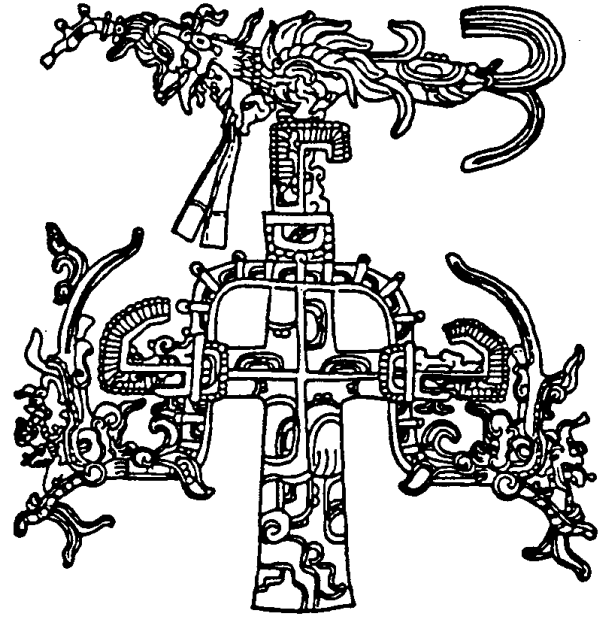
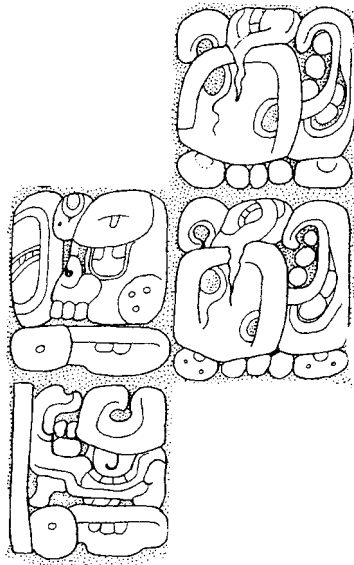


The Cosmic Plate as a  
“Holy Sprouting”

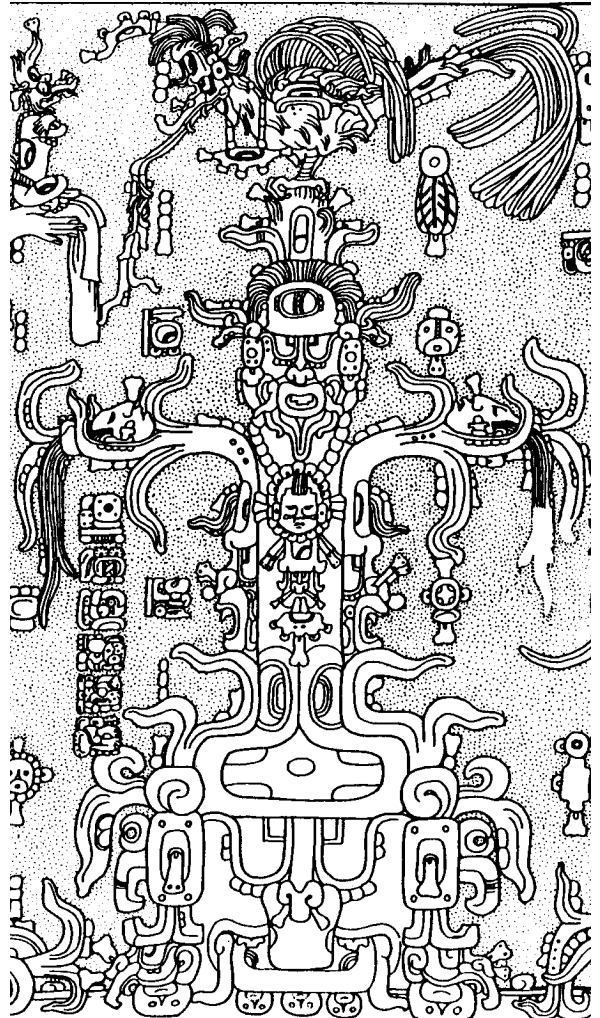
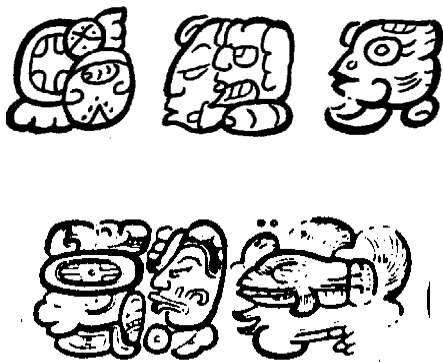


Emergence of the “Shiny Jewel Tree”  
(The eastern tree of jade and wealth)

“Celt”-UH-TE’



Cacao and *K'an Nahb* “the Precious Sea”



## 11. Rare Varieties of Cacao

The glyph for *kakaw* was first recognized by the late Floyd Lounsbury, and discussed in his now classic 1973 paper on what was then called the “Ben-Ich” superfix, where he correctly proposed its value as **AJAW**. In building his case for the reading, Floyd turned his attention to the T128 sign we today know well as **wa**, noting its appearance in the Dresden Madrid codices after the doubled sequence **ka-ka-**. The scenes associated with these glyphs consistently show deities holding bowls of fruit pods or seeds, leading Floyd to the sensible decipherment **ka-ka-wa**, “cacao.”

In the early 1980s I noticed another more common spelling of *kakaw* on Classic period ceramics. The glyph is always dominated by the fish head variant for **ka**, which can be read as a doubled sign or sometimes with the addition of a “comb” **ka**.



In this example (K625), we see that the standard *kakaw* glyph in the final block shown follows **K'AN-na**, in the full phrase *y-uk'ib' ta yut(al) k'an kakaw*. I know of no other examples of *k'an* as a modifier for chocolate, but in this instance it probably conforms to its attested meaning as “ripe.” The full phrase would then read “his cup for (?) ripe cacao.””

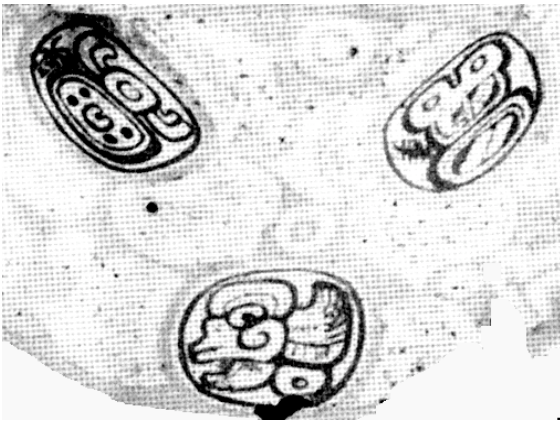
On this Early Classic vessel text (K7529) the modifier is the Naranjo emblem. However, it seems equally plausible to think that the sign preceding *kakaw* refers is *sa'*, another type of drink (an additive?), as Nikolai Grube and Werner Nahm have suggested.

In the next three examples, we find a set of unique descriptors for *kakaw*, both again from Early Classic vessels. At right below is the main inscription from “The Deletaille Tripod”, where in front of *kakaw* we see a sign of a snake passing through a flower (?) before **na-la**.





The vessel text above is from Río Azul, and is odd in describing two unusual varieties of cacao (**wi-ti-ki ka-ka-wa** and **ko-xo-ma mu-lu ka-ka-wa**)



The label at left contains a unique modifier before *kakaw*, in the glyph at upper right.

K1446

Local varieties of cacao may be indicated in a handful of cases, where place names seem to precede the *kakaw* glyph. Only two such place names are known to me, Naranjo and Ixtutz. Here we have an example of the Ixtutz emblem main sign (**5-KAB** or *Ho'kab'*) before *kakaw*.



K4681. The painter of this vessel also painted K8245, where we find a similar *ho-kab'* glyph before *kakaw*.





K7529

(drawing by D. Stuart)

An Early Classic vessel from eastern Peten has a modifier on *kakaw* that may be read *sa'*. Alternatively, this may be the Naranjo emblem glyph, another toponymic label marking the chocolate as being from "Naranjo."

## 12. *Ul*, atole (maize gruel)

Barbara Macleod first deciphered the glyph for “atole,” spelled simply as **u-lu**. It is not as common as *kakaw* on ceramics, but its regular appearance shows that atole was an important beverage within Maya court, though perhaps not so ritually significant and *kakaw* drinks.



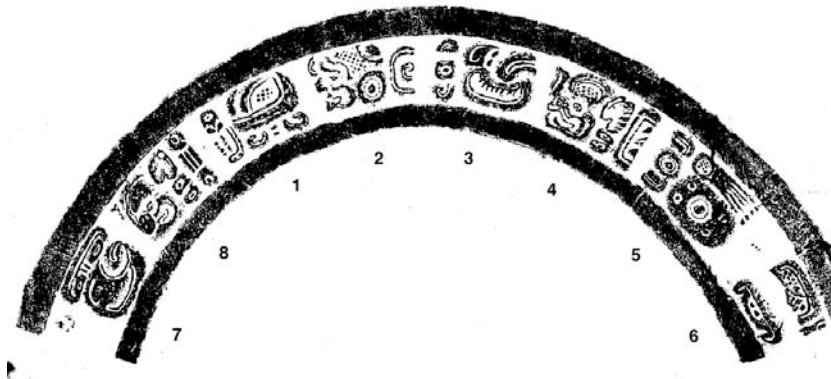
Without exception, atole vessels are shallow bowls, either rounded or with flat bottoms, as in the example shown here above. The *ul* glyph is never to my knowledge found on the tall cylinder forms reserved for chocolate concoctions, nor does it appear on vases decorated with very elaborate iconography.



*alay t'ab'ay u-tz'ib'naj(al) y-uk'ib' ti ul*



*alay tz'ib' naj-ich y-uk'ib ta ul*



*y-uk'ib ta k'an ul*, “it is his/her cup for ripe atole” (rubbing courtesy of Seichi Nakamura, Proyecto La Entrada)

### 13. What is *tzih*?

A common but poorly understood glyph is **tzi-hi**, sometimes simply written as **tzi** or logographic **TZIH**. Vessels that are said to be “for *tzih*” are especially common in the painted cylinders of the northeastern Petén, from workshops in the area of Xultun and Río Azul, among others. A good example is shown here at right, excavated at Río Azul, showing the tag “his cup for *tzih*” followed by the local polity or toponymic title.



Río Azul sherd (courtesy of Fred Valdez)

A few examples for comparison:



K4388 Xultun region



K5646 Bowl with Hizwitz toponym, probably from Zapote Bobal – El Pajal area



K8728 Xultun region

In some cases, as we have seen, *tzih* is a modifier for *kakaw*, as in:



K8402 Early Classic lidded tripod, probably from Naranjo region

In texts from Chochola ceramics, near the Puuc region of Yucatan and Campeche, we find the *-il* ending routinely added to *tzih*, directly before *kakaw*

*u jaay y-uk'ib' ta tzihil kakaw*





One interpretation of *tzih* sees it as a simple adjective meaning “raw,” “fresh” or “pure” (proto-Ch’olan *\*tzih*, “raw”) as first suggested by Barbara Macleod, who noticed that in colonial Tzotzil the especially suggestive term *tzeel kokov*, “pure chocolate” (> *tze*, “green, raw, unripe”). This may well be parallel to a similar hieroglyphic phrase found by Marc Zender on a vessel (K8713), read *ti ach’ kakaw*, “for new cacao”:



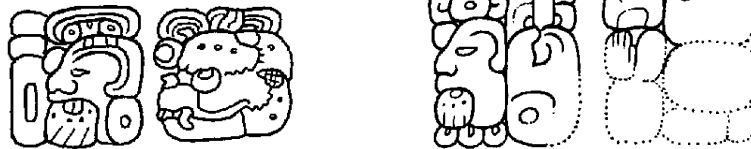
What remains unexplained, however, is why *tzih* often appears on vessels as a stand-alone term, without any noun to modify.

Alternatively, it is perhaps significant that in K’iche’ *tzi* is the word for soaked corn kernels (nixtamal) sometimes mixed with chocolate drinks.

## 14. Where's the pulque?

Pulque, the fermented juice of the agave plant, is a major ritual drink in Mesoamerica, but its use among the ancient Maya is poorly understood.

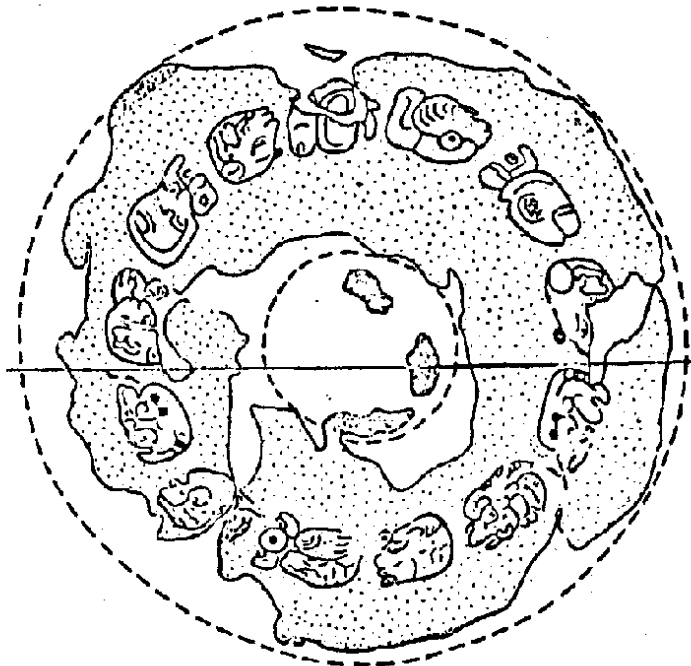
The Classic word for pulque was *chih*, attested in a handful of spellings as **chi-hi**. This appears as a simple glyph on jugs represented in narrative scenes on pottery. Probably the best examples are on two altars at Copan, in both cases following verbal constructions based on *uk'*, "to drink."



In the second of these examples, the name of the Copan ruler Yax Pabsaj Chan Yopaat follows "he drinks the *chih*," giving us a clear indication that Maya rulers partook of pulque at least from time to time. The important question to consider, though, is why do we not find *chih* ever specified as the contents for drinking vessels?

We do, at least once...

Tikal, MT 219 (lid of vessel with stucco covering)



yu-k'i-b'i TA CHIH



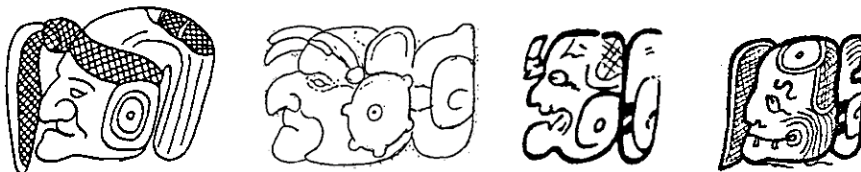
## 15. Dedicatory Verbs

The vast majority of Dedicatory Formulae employ as its principal verb a variant of the so-called Step glyph, or else its old God N head variant. Both long known to be sign variants for a single intransitive verb root. The suffix on both forms is *-yi*, which spells a possible medio-passive marker *-Vy*. These are common intransitive verbs that describe motion or changes of state.



A meaning like “go up, ascend” is certainly suggested by the visual origin of the glyph, showing a footprint ascending two or three steps of a platform. Notice how in late examples, as the form of the sign became increasingly abstracted, some ancient scribes were unaware of graphic origin.

the God N is a clear head variant form, known also from many early examples.



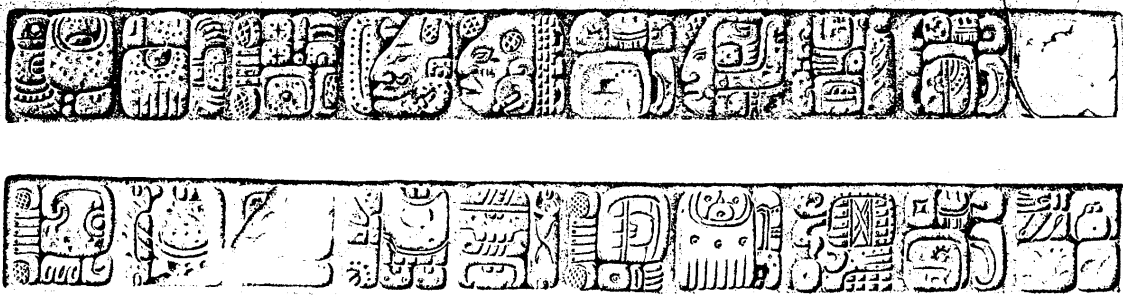
A third form of the same verb seems to show a death's head with its *ik'* "breath, spirit" ascending skyward.



Again, something like “go up” is suggested by the presentation of the sign, but it gives us nothing about the verb's phonetic reading.

However, an important clue comes from at least two examples of the Dedicatory Formulae in inscriptions from Yucatan, where the verb spelled phonetically *?-b'a-yi*,

presumably for *Cab'-ay*. On Lintel 1 from Ikil, we see this in the second glyph, after the initial sign. The dedicated object is a *wayb'il* shrine for a female ancestor.



Ikil, Lintels 1 and 2 (drawings by G. Stuart)

In my view *t'ab'-ay*, “to go up,” seems the best possible reading, although it is far from solid.

Several other verbs can appear in the same opening portion of the Dedicatory formula. One important one, little studied, is the “*haab'* hand,” sometimes with the number four prefixed. The head looks to be a portrait of Itzamnaaj (the one holding the sign?).



## 16. The Nagging *-ich*

We have already seen in many examples that the spellings **yi-chi** or **ji-chi** is a common part of the introductory segment of the Dedicatory Formula, before the possessed noun. A fairly typical example of this pattern is:

**a-ALAY-ya tz'i-b'i na-ja ji-chi yu-k'i-b'i-la**

**a-ALAY-ya T'AB'?-yi yi-chi yu-k'u-b'i**

The **ji-chi** and **yi-chi** are closely tied to the introducing verb, wither it be a dedicatory verb or another based on *tz'ihb'-n-aj*, “is painted.” In this example, the **yi-chi** precedes the *u-tz'ihb'-il* before the noun:



a-ALAY T'AB'?-yi yi-chi U tz'i ...  
K3055

The variation between **ji-chi** or **yi-chi** seems to be conditioned by the last consonant on the verb suffix in the preceding block, as noted by John Justeson and Terry Kaufman (personal communication). Where we find a verb ending in *-aj*, the next glyph tends to be **ji-chi**; where the verb ending is *-Vy*, the following glyph tends to be **yi-chi**. The pattern holds remarkably well, despite some exceptions. There is good reason to believe that both the spellings are cueing a suffix *\*-ich* on these verbs. Terry Kaufman suggested in 2002 that the pattern points to the likelihood that *-ich* is a reflex of the proto-Mayan enclitic *\*-ik*, meaning “already.”

There are, though, some odd appearances of *ich* that do not fit any such pattern. A bowl now in the Museum of Fine Arts in Boston is said to be the *y-ichil jay*, where *ich* looks to have an adjectival role. Given the different setting, this could well be another word, however.



## 17. Carved or Painted?

The initial section of the Dedicatory Formula routinely includes an indication of the vessel's mode of decoration. There are two terms to know, one based on the verb *tz'ihb'*, "to paint, write," and the other based on a still undeciphered verb known as "*lu-bat*" glyph. The *tz'ihb'* glyph occurs on painted vessels, but the *lu-bat* is found only on carved, incised or molded vessels. Presumably it must mean something like "to carve," but the root (*ul?* or *uCVI?*) remains unspecified. These two words are in direct contrast to one another, and occupy exactly the same structural niche within Dedicatory Formula on vessels and monuments.

Notice how in the following comparisons the term *u-tz'ihb'* alternates directly with the *lu-bat*, after the God N dedicatory verb and before *y-uk'ib'*



U-tz'i

b'a-li



yu-?-lu-li

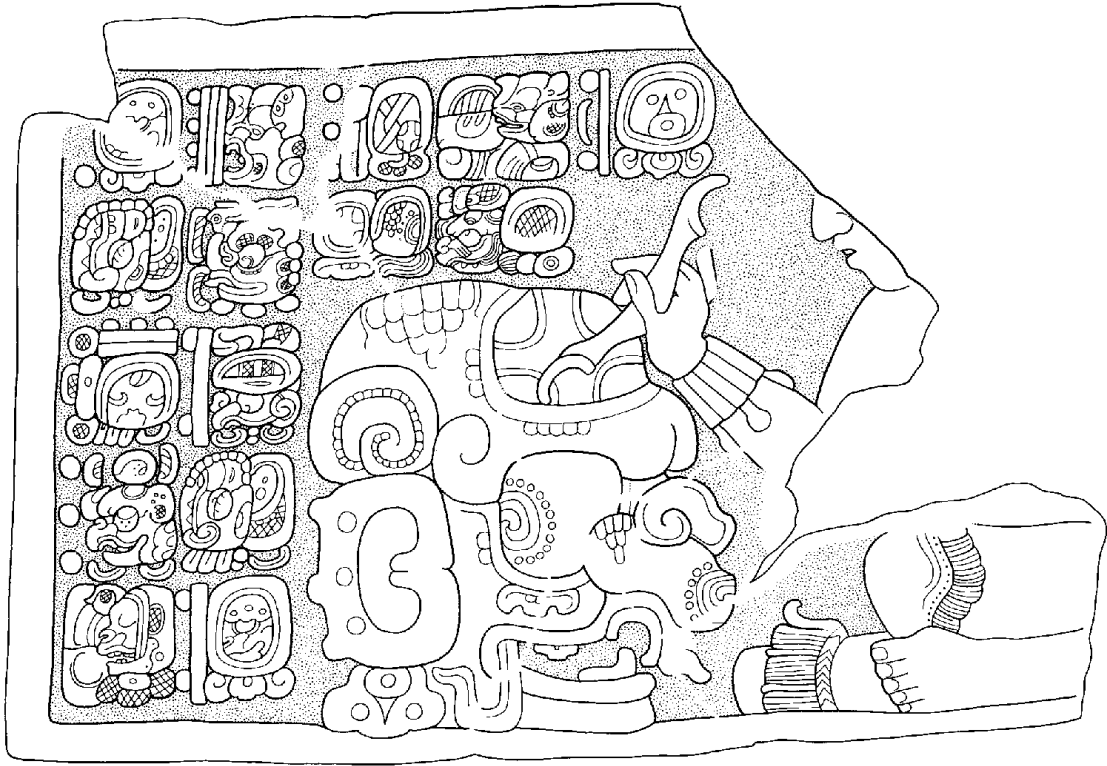
K4340, an incised vessel

Similarly this molded vessel takes the *lu-bat* glyph.



K8799

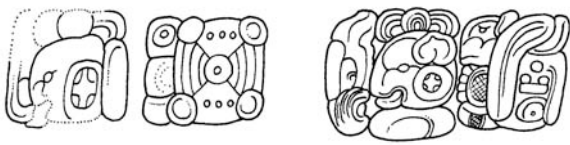
The Emiliano Zapata Panel (drawing by D. Stuart)



## 18. Vessel Owners as Deified Impersonators

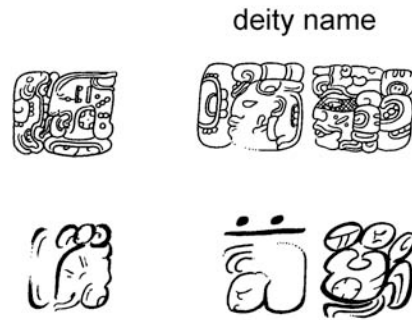
The royal owners of particular vessels were sometimes named as “impersonators” of certain deities, such as the sun god K'inich Ajaw. These pots were presumably intended for drinking in rituals that involved ceremonial role-playing.

Two impersonation phrases:



*u-baah ahn* ... DEITY NAME - RULER NAME

(see Houston and Stuart 1996)



K791





On this well-known “Holmul Dancer” vessel from the Naranjo region, the owner is described as an impersonator of the Sun God, with his full name Wuk Chapaht Tzikin (?), K’inich Ajajw, “Seven Centipede Bird, the Sun Lord”

K633

