

Formulaic Patterns in the Maya Script

Author(s): Martha J. Macri

*Proceedings of the Eleventh Annual Meeting of the Berkeley Linguistics Society* (1985), pp. 216-225

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

---

*The Annual Proceedings of the Berkeley Linguistics Society* is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

# Formulaic Patterns in the Maya Script

Martha J. Macri  
University of California, Berkeley

## Introduction

The culture identified as the Classic Maya was located in the southern part of the Yucatan peninsula and the northern lowlands of Guatemala. One of the diagnostic characteristics of Classic Maya culture is the system of hieroglyphic writing which has been preserved on carved limestone stelae, altars, stucco tablets, wooden and limestone lintels, and on painted murals and ceramics. Although basically the same system of writing was still in use among Yucatec speakers at the time of the Conquest, discussion in this paper is restricted to the writings of the Classic Period, which lasted approximately from A.D. 250 to 900. Although it appears that more than one language was recorded, the bulk of the Classic inscriptions were probably the creations of speakers of a Cholan or possibly a Tzeltalan, language.

In the last 20 years glyphic studies have progressed to the point that the Maya script can no longer be characterized as a pictographic or partial writing system incapable of recording a language. Topics currently under investigation include phonetic values of specific glyphs as well as questions regarding word order, ergativity, and the presence of transitive constructions. Although the script clearly records language, the degree to which the Classic Maya were a literate society has not been established.

One of the characteristics of oral recitation is the presence of formulaic expressions. These set phrases function as units which can be strung together in various patterns to facilitate composition by orators, and to hold the attention of a listening audience. In a setting where a missed word or sentence cannot be checked by looking back at a text, or waiting for the statement to be repeated on the Eleven O'clock News, it allows the poet or reciter to keep the focus on the important information by making the mode of presentation as predictable and free from distraction as possible.

It is frequently the case that when a written literature contains a large proportion of formulaic expressions it is because it is the product of a society which is only partially literate, either because writing has only recently been acquired, or because literacy is limited to a particular social group within it. Familiar examples of this phenomenon include the Homeric Epics and early Anglo-Saxon poetry. Evidence of written texts which are a product of a primarily oral society is also present in the writings of the ancient Maya, both in the highly structured manner in which the texts are organized, and in the

formulaic expressions which make up such a large proportion of the texts. In the first part of this paper I describe the basic compositional units of the Classic inscriptions, and look at how these are combined into larger texts. I then discuss in greater detail a few of the formulaic expressions which are such a prominent part of these writings.

### **Composition of the texts.**

There is no reason to believe that the extant Maya texts in any way represent a complete corpus. Because of the humidity in most of the Maya area, none of the bark paper books from the Classic Period have survived in a readable state. The main sources of texts besides the carved monuments and tablets are the hieroglyphics found on pottery. Texts found on funerary ceramics, while not well-understood, tend to follow a set pattern that Coe (1973) terms the Primary Standard Sequence. The focus in this paper, however, is limited to the texts of the monumental inscriptions, which, partially because of their calendrical information, have provided the greatest success in decipherments.

There are three types of compositional units found in the inscriptions: calendrical statements, verbal expressions, and name phrases. The most frequent patterns in the inscriptions begin with dates. Calendrical statements may be divided into three groups. The first, found only at the beginning of a text, is a full Initial Series date which includes a Long Count (the number of days since the beginning of this era about 3000 B.C.), and various supplementary information about the lunar cycle, the nine-cycle, and the Calendar Round (which places any day within a period of 52 years). The second type is a date calculated by adding or subtracting a specified number of days (a distance number) from a date given previously in the text. A third type is simply a Calendar Round date (a day number, day name, month number, month name) found either at the beginning of an inscription or within a text at the beginning of a subordinate statement.

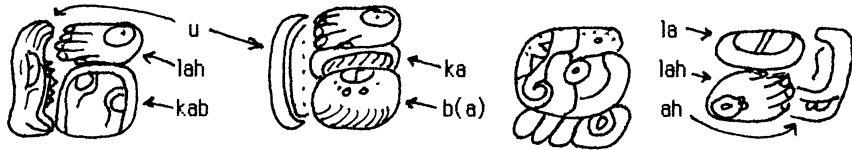
Mayan languages are verb-initial, and in the Quichean, Yucatecan, and Western Mayan families the unmarked word order is VOS. This is the word order found in Maya writing. Following the calendrical units, the preposed time adverbials, we find verb phrases, event glyphs, followed by the names of historical persons. Verbs usually have only one argument, even though they are frequently prefixed by *u*, the ergative third person. Since ergative person-markers are also used to indicate possession on nouns, some argue that these verbal phrases are actually nominal constructions, or possibly antipassives, while others believe that some are true transitive expressions with the direct object incorporated in the verb glyph itself. Examples of this will be given below.

Event glyphs which have been deciphered include birth, heir-designation, accession to power, death, anniversaries of these events, and blood-letting rituals which were performed in honor of these events and in celebration of new year dates and period endings.

The event glyphs are followed by the name phrases of the subject, which include one or more name glyphs, and often a series of titles, epithets, and parentage information. The basic pattern of date+event+subject may be repeated many times within a text. A single inscription may give several events in the life of one individual, or it may, like the Tablet of the Sun at Palenque, for example, give the birth and accession dates for an entire series of rulers at a single site.

**Formulaic verbal expressions.**

Lounsbury (1980:113f) identified a variant of the 'birth' glyph, which is actually the phrase 'to touch the earth'. Similar metaphors for birth are found in modern Cholan languages. The glyph consists of a hand placed over *kab* 'earth'. *Kab* can be indicated either by the day sign Caban, which represents the earth, or by the syllabic spelling T25:501, *ka + ba*. The ergative/possessive person-marker which is prefixed to the glyph indicates that the expression is either transitive and signifies 'he touched the earth', or it is nominal and signifies 'his earth-touching' (the more common birth glyph, the up-ended frog, never has the ergative *u* prefix because it is an intransitive verb 'be born').



'touch the earth'                      'touch the earth'                      'be born'                      T24:713.181

Although the person-marker and the word 'earth' can be read, a phonetic reading for the hand signifying 'touch' has not been proposed. This hand (T713)<sup>1</sup> is sometimes read phonetically as *lah*. Kelley (1976:137ff) originally assigned the reading *lah* to T217, another hand variant, on the basis of a connection noted by Thompson (1950:280) between the Yucatec root *lah* which means 'to end, finish', and *lah* meaning 'to buffet with the palm of the hand'. T217 is frequently found associated with dates which end

various time periods. This glyph is virtually identical to T713, the only apparent difference being that T713 is larger, that it is a main sign rather than an affix.

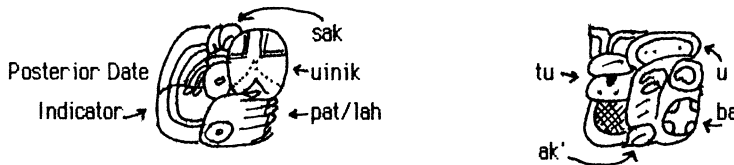
There is additional support for reading T713 as *lah* in the sorts of affixes frequently associated with it, which I would read as phonetic complements. It is frequently followed by T181, *ah*. Since this is a common verbal affix, it is not in itself significant. However, it is frequently preceded by T24 which Schele (1982) and MacLeod (n.d.) consider a possible candidate for *a*/, *la*, or possibly *v*/. Thompson's Catalog (1962:303f) list 27 examples of the sequence T24:T713.181 ( *la* + *lah* + *ah*) in which the first affix, and possibly the last, may be functioning as phonetic complements.

A *lah* reading has not, to my knowledge, been suggested for T713 in the birth metaphor, and it is possible that here it signifies 'touch' apart from any phonetic reading. It is not, however, too far afield to notice the association between the meanings 'slap' and 'touch', although the only language in which I have been able to find *lah* with the meaning of 'slap' is Yucatec. The case for a *lah* reading would be stronger if it were also common in modern Cholan or Tzeltalan languages. This 'birth' variant, although not frequent, is repeated four times in the inscriptions of the three temples of the Group of the Cross, dedicated to Chan Bahlum at Palenque. They occur in the birth expressions of GI, GII, and GIII, the mythological personages which make up the Palenque Triad.

Another example of formulaic expressions comes from the main tablet of one of these temples, the Temple of the Cross. The tablet is divided in half by a scene in which Chan Bahlum is shown facing his father Pacal. The first half of the inscription begins with an Initial Series date almost 7 years before the beginning of this era. It gives the dates of the birth of the mother of the gods and her offspring, the gods of the Triad, and it gives the date of her accession to power. The right half of the tablet records the birth and accession dates of nine historical rulers. Although there are several ways to indicate 'accession to power' the same phrase is used ten times in this inscription. Each ruler's phrase begins with a distance number or a Calendar Round date followed by a birth glyph and the name of the ruler. A posterior date indicator is prefixed to the accession statement so that typically an entire phrase reads something like, "On such a date, or it was so-many-days since was born [ruler's name], until his accession. . . ." The accession statement itself is composed of two glyph groups. The first element may be

prefixed by the posterior date indicator 'until'. Schele (1984:28) translates the rest of the phrase as 'he took office as *sak uinik* of the succession'.

The first part of the phrase is a hand (T713) beneath the symbol *sak* 'white, pure, gleaming' and the glyph for the 20 day period, *uinal* or *uinik*. The second word, *uinik*, may also mean 'man' or '20'. Schele's interpretation is that the first part of the glyph signifies the title *sak uinik* 'resplendent or pure man' (literally 'white, bright man', in Colonial Yucatec applied to the Spanish). Schele, following the reading proposed by Taak (1976:47), interprets the hand beneath *sak uinik* as *pat*, which may mean 'back' as in 'back of the hand' and 'to take office'. The existence of parallel expressions with different titles given above the hand support this interpretation.



T713/757 Accession Phrase

If, however, we interpret T713 as *lah*, the reading discussed in relation to 'touch the earth', then the phonetic rendering of the first part of the phrase is *sak uinik lah*. In Laughlin's Tzotzil dictionary (1975:371) there is an intransitive verb listed in the entry for *vinik* 'man' (the Tzotzil cognate of *uinik*) which means 'to be born': *vinkilah*. It could be that here we have another expression for birth, and that this 'accession' phrase actually reads 'from his illustrious birth to his accession'. There are two examples of *uinik* + *lah* without a preceding *sak* among the stucco fragments of Temple 18 at Palenque (Schele 1982: Charts 8:17, 120:2). However, before a solid case can be made for the 'birth' reading, some explanation for the alternate titles above the hand in similar phrases must be given. At this point, a *pat* reading is favored.

The second part of the phrase is the sequence T89(or 92).1(or 204):757. It is the jog glyph preceded by phonetic signs for *tu* and *u*. T757 is a very common glyph. It has several functions, one of which is as a syllabic sign for *ba*. Its most common function is as a verb, identified by Schele (1982:57ff) as a general verb used in auxiliary constructions. In a paper read at the Taller Maya VII (Macri 1984) I have proposed that

in verbal contexts the sequence T1.60.757 should be read *u ak' (u) b'a* 'to present oneself, to offer oneself'. The fact that the verb is reflexive accounts for its being preceded by the ergative person marker.

In modern Tzotzil we find the phrase *Tak' b'a ta k'ob' kahvaltik* (Laughlin 1975:40) which means 'to partake of the sacraments', literally, 'to offer oneself into the hand of god'. Thompson (1950:32) points out that 'hand of god' (in Yucatec) was a metaphor for the sacrificial knife. I believe that this phrase is found in the inscriptions in T757 followed by the Ahau-in-hand glyph, a sequence associated with ritual blood-letting events. So, in addition to its function as the syllabic sign *ba*, T757 also means to 'offer oneself' in the context of ceremonial blood-letting.

In the accession expression T757 is preceded by T89 or T92 which has the value *tu*, and in this case would appear to be a contraction of the preposition *ta* or *ti* and the ergative person marker *u*. The entire phrase would then read either, 'count until his taking office as *sak uinik* for/of/by his offering himself' or 'from his white (illustrious) birth, to his offering himself', that is, to his accession blood-letting rites.

### Formulaic nominal expressions.

A possessive construction typical of Mayan languages is the possessive pronoun prefixed to the possessed noun, followed by the possessor. The first example is from Chol, the second from Tzotzil:

|       |                     |       |        |                               |
|-------|---------------------|-------|--------|-------------------------------|
| iy -  | išim                | k     | tyat   |                               |
| 3POSS | maize               | 1POSS | father |                               |
|       | his                 | maize | my     | father                        |
|       | 'my father's maize' |       |        | (Warkentin and Scott 1980:26) |

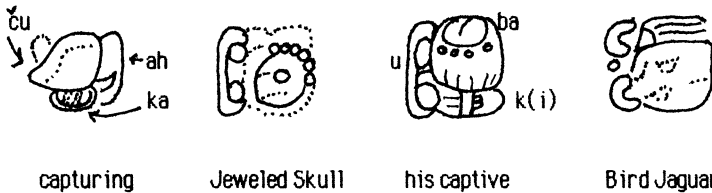
|       |                    |     |        |                 |
|-------|--------------------|-----|--------|-----------------|
| s -   | k'ob               | ti  | bolom  |                 |
| 3POSS | hand               | the | jaguar |                 |
|       | his                | paw | the    | jaguar          |
|       | 'the jaguar's paw' |     |        | (Cowan 1969:56) |

I would like to point out two examples of this construction found as formulaic expressions in the glyphs. The first is associated with scenes of capture and consists of the ergative/possessive person-marker *u* followed by *bak* 'captive' spelled with the

syllabic signs *ba* and *k(i)*. This is then followed by the name of a ruler. The phrase is sometimes preceded by the capture glyph and the name of the captive. The phrase reads:

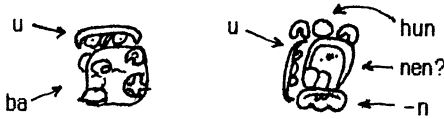
(ču + ka + ah ([name of captive])) u ba + k(i) [name of captor]  
 čuk - ah " u bak "  
 'capture' GERUND? " 3POSS 'captive' "  
 '(the capturing of [name of captive]), [name of captor]'s captive'

Schele (1982: Chart 34) lists over 17 examples of this construction. The example given below is from Yaxchilan, Lintel 8, A3-4, E1-2:



'The capturing of Jeweled Skull, Bird Jaguar's captive.'

The second phrase I would like to discuss has been identified as 'child of mother' (Schele 1982: Chart 133:1-12). It occurs after the name phrase of a ruler and before the name of his mother. I would like to suggest that this is a possessive phrase similar to the last part of the captive expression. The first glyph is the jog glyph discussed above, here, I believe, used phonetically for *ba*. It is prefixed by the ergative/possessive person-marker *u* and is followed by T606, a glyph of unknown meaning which itself is prefixed by *u* and a single dot or circle representing the number one. It is followed by the affix for the syllable *na* or *an*. In both Tzotzil of San Andres (Hurley Vda. de Delgaty and Ruiz Sanchez 1978:17) and Tzotzil of Zinacantan (Laughlin 1975:75) *ba* is listed as having the meaning 'first-born'. The 'child of mother' phrase might then be interpreted as follows:



u      ba      hun      unen [name of mother]  
 3POSS first-born #1      child      "  
 '[name of mother]'s firstborn child'

The exact reading of the last part of the phrase remains uncertain. The placement of the single circle for 'one' varies with respect to the prefix *u*. Of the 12 examples given in Schele's Chart 133, 7 show the glyph for *u* spanning the length of both the circle for 'one' and T606, indicating that *u* is to be read first. Two of the examples are drawn in such a way that they suggest the 'one' is to be read first, one example is ambiguous, and two have only one of the two elements. One explanation for the variation may be that the 'one' is intended as a semantic determinative, indicative of the fact that the phrase identifies the ruler as the woman's first child, and is not meant to be read phonetically.

It is interesting to note the occurrence of T191.I:606:23 twice on the tablets of the Temple of the Inscriptions at Palenque. The first is on the middle panel at F7, and the second is at A1 on the west panel. In both cases Pacal is named as the mother of the gods of the Palenque Triad. Since more than one child is named T757, *ba*, as the modifier 'first' does not occur.

If we exclude the circle for 'one' as a phonetic indicator, we are left with two remaining phonetic clues. One is the prefix *u*, which may stand for the sound *u*, or for the third person ergative/possessive prefix. The other is the suffix T23 which may stand for the sound *na*, *an*, or a final *n* following a syllable containing any vowel according to the principle of neutral vowel complementation (Justeson 1978:292ff). This would then give us a reading *u*\_\_\_*n*.

In the entries for *ba* in both of the dictionaries mentioned above, there is also the phrase *ba unen* 'first-born child'. This phrase matches with most of the reading for the 'child of mother' phrase, except that until the value of T606 has been established, we cannot be certain that the last word is actually *unen*. If T1.606:25 is *unen*, then the expected value of T606 would be *ne* or *nen*. The identification of the object represented by the sign is not clear, and what few examples there are of it in contexts other than the

'child of mother' phrase, shed little light on the problem, except to show that even in other environments it may occur with T25 affixed (for example, Palenque Tablet of the Sun, P4, and Piedras Negras Throne 1 (Schele 1982: Chart 21:6,16)), suggesting that the word signified ends in *n*.

The word for 'mirror' is *nen* in many Mayan languages, including the Western Mayan subgroup, but the glyph most commonly associated with 'mirror' is T617 which is distinct from T606, but shares the features of curved lines across the lower section of the glyph and of often having a partial, rather than a full, outlining cartouche. Although the exact reading of the phrase is uncertain, it clearly follows the pattern of a Mayan possessive noun phrase.

It is of interest that in the middle panel in the Temple of the Inscriptions at Palenque where Pacal is named as the mother of 0I, 0II, and 0III of the Palenque Triad where the 'child of mother' is actually plural 'children of mother' the jog glyph is absent from the phrase. That is, the *u ba* 'her firstborn' is deleted, and we have only *u unen* 'her child(ren)' (in most Mayan languages number marking on nouns is optional).

### **Summary.**

In this paper we have looked in detail at four different formulaic expressions found in Maya writing. I have tried to demonstrate how glyphicists approach some of the problems presented by the glyphs, and at the same time to show how patterns in the glyphs reflect patterns common to formal styles of oral recitation. Although it has not been possible to give examples from modern Mayan languages, the use of similar rhetorical devices can be found among Mayan speakers today.

Glyphic studies have advanced to the point that they must be taken seriously as attested sources of Mayan languages which can contribute to our knowledge of Mayan historical linguistics in important ways. Maya writing is also of interest to the study of writing itself. Because it developed apparently without influence from the Old World, the Maya script offers some unique solutions to the problems of visually recording language.

### **Footnote**

1 Schele refers to the hand in this phrase as the 'inverted hand', but in fact, it follows the same rotation pattern as affixes, always keeping the same side adjacent to the main sign, or in this case, since both signs are the same size, keeping the same side adjacent to

the sign it occurs with. Therefore when T713 is at the top the fingers point to the left, and when it is at the bottom they point to the right.

### References

- Coe, Michael D. 1973. *The Maya scribe and his world*. New York: The Grolier Club.
- Cowan, Marion M. 1969. *Tzotzil Grammar*. Tlalpan, Mexico: SIL.
- Hurley Yda., A. and A. Ruiz Sanchez. 1978. *Diccionario Tzotzil de San Andres con variaciones dialectales*. Mexico, D.F.: SIL.
- Justeson, John S. 1978. *Maya scribal practice in the Classic Period: a test-case of an explanatory approach to the study of writing systems*. Unpublished dissertation, Stanford University.
- Kelley, David H. 1976. *Deciphering the Maya script*. Austin: University of Texas Press.
- Laughlin, Robert A. 1975. *The great Tzotzil dictionary of San Lorenzo Zinacantan*. Washington, D.C.: Smithsonian Institution.
- Lounsbury, Floyd G. 1980. Some problems in the interpretation of the mythological portion of the hieroglyphic text of the Temple of the Cross at Palenque. In Merle Greene Robertson, ed. *Third Palenque Round Table, 1978.*, pp. 99-115. Austin: University of Texas Press.
- MacLeod, Barbara. n.d. *An epigrapher's annotated index to Cholan and Yucatecan verb morphology*. Unpublished ms.
- Macri, Martha J. 1984. *Una nueva interpretacion de T757*. Paper presented at the Taller Maya VII, Merida, Yucatan.
- Schele, Linda. 1982. *Maya glyphs: the verbs*. Austin: University of Texas Press.
- \_\_\_\_\_. 1984. *Notebook for the Maya hieroglyphic writing workshop at Texas*. March 10-11, 1984. Austin: Institute of Latin American Studies, University of Texas.
- Taack, George. 1976. Accession glyphs on Maya monuments: A linguistic approach. *Anthropological Linguistics* 18.1:29-52.
- Thompson, J. Eric S. 1950. *Maya hieroglyphic writing, an introduction*. Washington: Carnegie Institute.
- \_\_\_\_\_. 1962. *A catalog of Maya hieroglyphs*. Norman: University of Oklahoma Press.
- Warkentin, Viola and Ruby Scott. 1980. *Gramatica Ch'ol*. Tlalpa, Mexico: SIL.