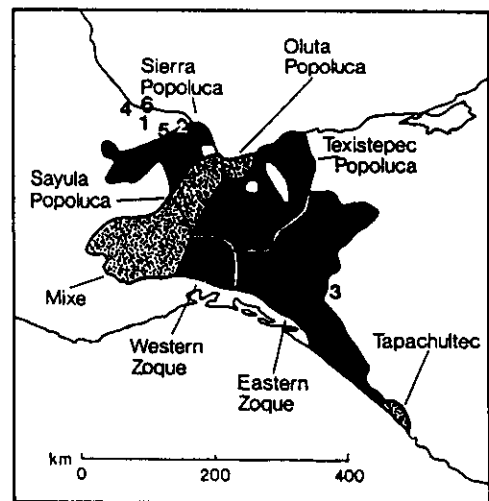


Epi-Olmec Hieroglyphic Writing and Texts

Terrence Kaufman and John Justeson



© 2001 by Terrence Kaufman and John Justeson

Kaufman & Justeson: Epi-Olmec writing and texts

Epi-Olmec hieroglyphic writing

The most well-known epi-Olmec object, the famous stela of La Mojarra, bears one of probably nine known epi-Olmec texts whose discovery spanned the twentieth century. The first to be found was the Tuxtla Statuette (figure 1), discovered at the beginning of the 20th century near Catemaco, Veracruz. It bears a reasonably long text that is almost perfectly preserved; its recorded date of 8.6.2.4.18 is generally placed in 162 CE. Several other monuments that became known by the mid-20th century also bear epi-Olmec texts, but none is both legible and well-documented enough to provide much textual data (figure 2a-e). The earliest of these is Tres Zapotes Stela C, with a recorded date of 7.16.6.16.18 (32 BCE); we examined the stone using artificial lighting in 1997, and find that it contains diagnostically epi-Olmec signs. At least two Early Classic monuments from Cerro de las Mesas, Stela 6 and Stela 8, also bear diagnostically epi-Olmec glyphs; two others at the site had texts that are probably but not demonstrably epi-Olmec. The Alvarado stela has one sign found in the epi-Olmec inventory but that sign was not necessarily limited to the epi-Olmec script.

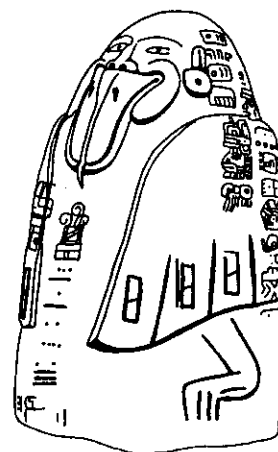


Figure 1. The Tuxtla Statuette.

Four other epi-Olmec texts came to light in the second half of the 20th century. From Chiapa de Corzo, two earlier fragmentary texts (figure 2fg) were discovered in archaeological work by the New World Archaeological Foundation. One is a panel known as "Stela" 2; it bears the oldest clear date in the long count system, but there are no non-calendrical glyphs on what survives of the text. The other is a potsherd. Based on its archaeological context and type, this sherd is thought to date to about 300 B.C.E., and is the earliest known epi-Olmec text. Because it is fragmentary, and because early drawings of the text were inaccurate in a number of features, it did not usefully enter into decipherment work until 1994. It shows that the script was quite stable in its appearance for 400-500 years. The O'Boyle "mask" (figure 2h) surfaced in the art world in the 1970s; it had the longest epi-Olmec text known since the Tuxtla Statuette. The famous stela of La Mojarra was recovered in 1986 (figure 3).

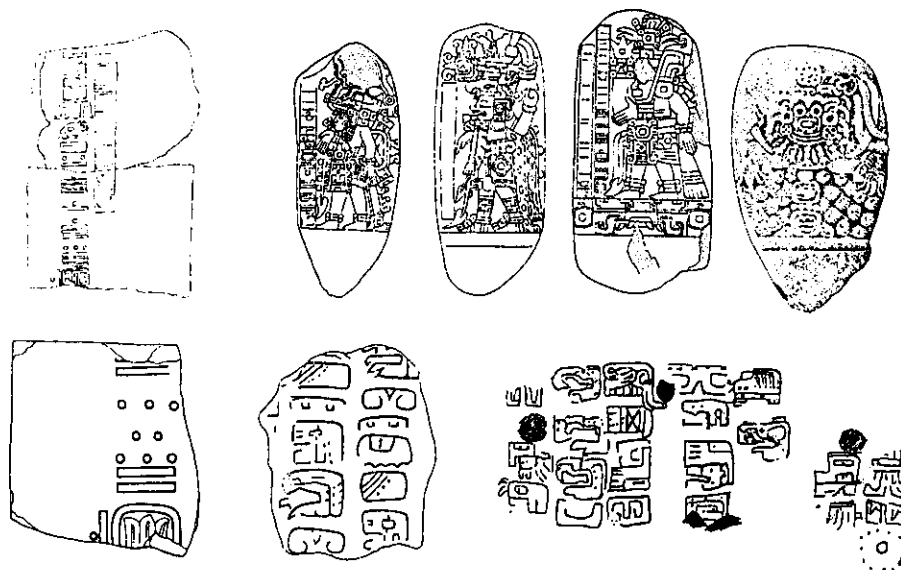


Figure 2. Some epi-Olmec texts. (a) Tres Zapotes Stela; (b) Cerro de las Mesas (MES) Stela 5; (c) MES 6; (d) MES 8; (e) MES 15; (f) Chiapa de Corzo (CHP) Stela 2; (g) CHP sherd; (h) O'Boyle mask. b-e from Stirling 1943; a, f from Coe (1976).

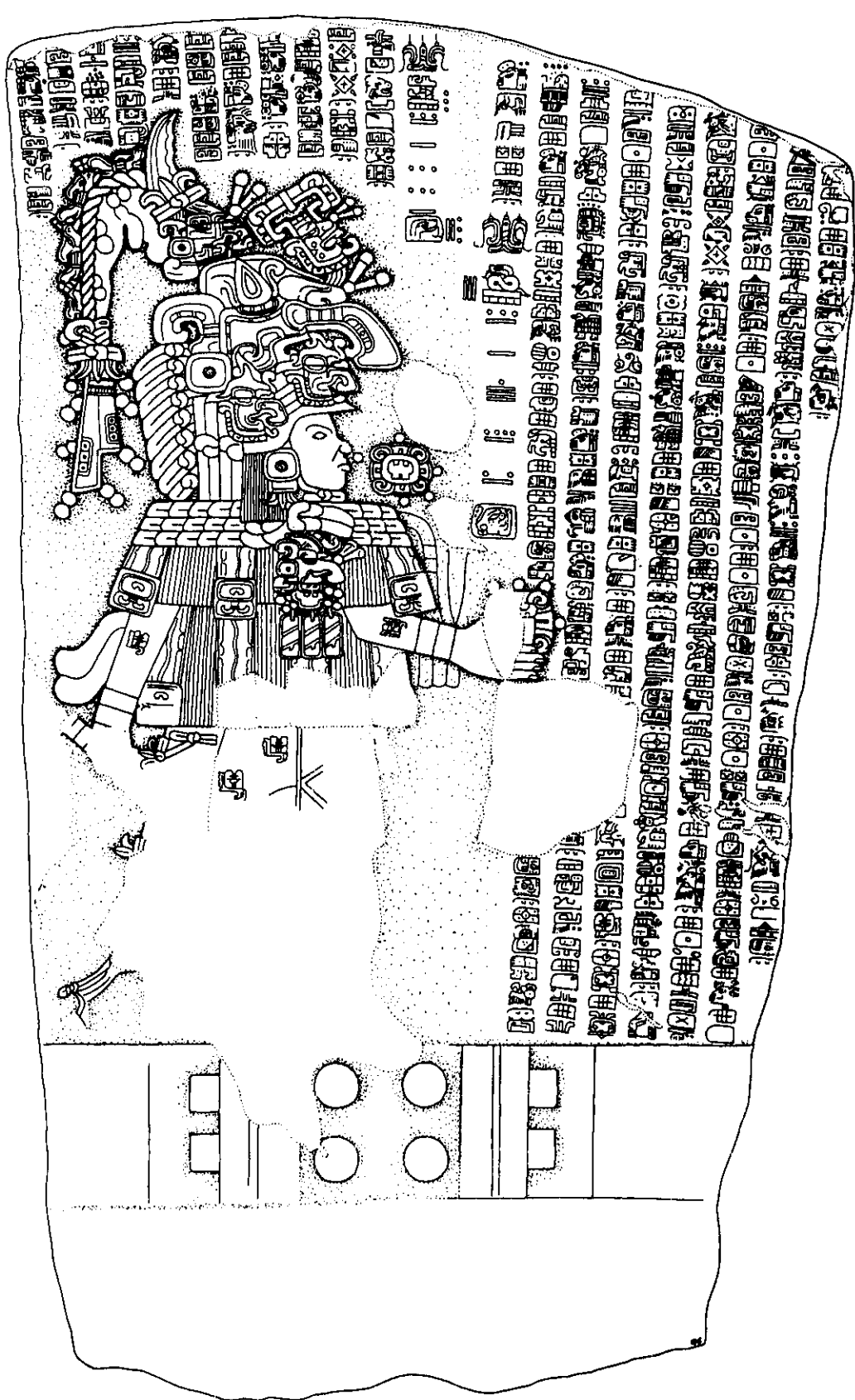


Figure 1. The stela of La Mojarra. Drawing by George E. Stuart.

The long text on the La Mojarra stela, dated 8.5.17.15.2 (157 CE), provides most of the epigraphic evidence toward the decipherment of the epi-Olmec script, but both it and the Tuxtla Statuette were crucial to the process of

decipherment as we actually pursued it together beginning at these meetings in 1991. The Chiapa de Corzo sherd and the O'Boyle mask were not used until 1994, when we were able to make reliable drawings from a photo of the sherd and from the mask itself. They provided useful evidence on points of detail, but mainly showed that the signs that were already read yielded grammatically and semantically coherent results in these new contexts. It is the detailed agreement of all of these texts with Mije-Sokean grammatical structure as well as with Sokean vocabulary that is the most crucial validation of the decipherment.

One text that we will not deal with directly is that on the El Sitio celt (see p.). This object came to light in the vicinity of Izapa, again through NWAf researches but not from archaeological context. Many of the signs in its text resemble epi-Olmec signs closely enough that its script is very likely allied to epi-Olmec. However, the differences between it and the other texts mentioned above are so great that it cannot be demonstrated to be a form of the epi-Olmec script itself.

This workbook does not present an account of our work deciphering the epi-Olmec script, which has been presented at these meetings in some detail on previous occasions. Instead, we follow the practice of these meetings in presenting what we know about the nature of the script and the way epi-Olmec scribes wrote their language, then working through the texts to illustrate this knowledge and bring it to life in the context of its actual use.

1. Signs and sign values

Few epi-Olmec signs closely resemble Mayan signs. Among those that are similar, there are varied reasons for the resemblance. One is that, with similar representational conventions in their visual art, depictions of similar entities are rather similar; the use of those depictions as signs in the two scripts may or may not be to represent similar meanings. As a result, some similar signs have related values, but many do not. The values of epi-Olmec signs had to be worked out from evidence internal to the epi-Olmec texts; only then could they be usefully compared with the values of Mayan signs. The relationship between epi-Olmec and Mayan writing is touched on briefly in §4. Epi-Olmec hieroglyphic writing, like Mayan and Zapotec writing, made use of two basic types of signs: phonetic signs, which represent sounds, and logograms, which represent lexical items and other meaningful units of the language.

1.1. Logograms

As in Mayan writing, many epi-Olmec signs represent lexical items, or their stems. In some cases, we are confident in identifying the lexical item represented, partly because the texts provide phonetic evidence for it (**Table 1A**); in others, we can characterize the meaning of the logogram pretty specifically, and exactly one plausibly early Sokean word has this meaning (**Table 1B**); and in others we can characterize the meaning of a logogram but not precisely enough to identify the specific lexical item that it represents (**Table 1C**).

1.2.1. The epi-Olmec syllabary

Figure 4 gives the epi-Olmec syllabary, to the extent that we have been able to recover it. Most of the readings are supported by substantial evidence. Even a few that are based on the spelling or spellings of just one word are nailed down by highly restrictive grammatical and/or semantic constraints.

Although all of the readings are the most plausible that we have been able to put forward on present evidence, those most likely to be mistaken are accompanied by question marks.

The language has 11 consonants and 6 vowels, which are given in the chart, so there are just 66 different CV syllables in the language. Although it is possible in principle to have several signs representing the same CV syllable, this seems to be rare in the epi-Olmec script, so the total number of CV syllabograms is probably not much more than 66.
















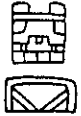





































| | <i>i</i> | <i>e</i> | <i>u</i> | <i>a</i> | <i>u</i> | <i>o</i> |
|-----------|---|---|---|---|--|---|
| <i>p</i> |  |  |  |  |  |  |
| <i>t</i> |  |  |  |  |  |  |
| <i>tz</i> |  |  |  |  |  | |
| <i>k</i> |  |  |  | |  |  |
| <i>7</i> |  | |  |  |  |  |
| <i>s</i> |  | |  |  |  | |
| <i>j</i> |  |  | |  |  |  |
| <i>m</i> |  |  |  |  | | |
| <i>n</i> |  |  |  |  |  | |
| <i>w</i> |  |  |  |  | |  |
| <i>y</i> | |  |  |  | | |

Figure 4. The epi-Olmec syllabary, as of August 1996.

No sign at all is associated with some of the syllables in the chart. At least one sign presumably existed for each of these syllables, but it would take much more text for all of the 66 open syllables of the language to actually appear in texts, and probably still more to find all of them spelled by syllabograms. Syllabograms for a few of the missing syllables might well be present in the texts, among signs that we have yet to interpret or to which we have assigned the wrong value.

1.2. Syllabograms (syllabic signs)

As in Mayan writing, phonetic signs in the epi-Olmec script represent syllables. Also like Mayan, most known epi-Olmec syllabograms represent simple open syllables – syllables consisting of a consonant followed by a vowel. (Closed syllables end with one or more consonants.) These signs are sometimes referred to as CV signs.

For example, the sign represents the syllable /ma/. It spells this sequence in several words, among them:

ma

ma
earlier

ma
sa
masa=
holy

ja
ma
jama
day, animal
guise

Although most syllabograms represent CV syllables, a few have been recognized that represent CVC syllables:



kak



pak



puk



yaj

1.2.1. Language and script: matching and mismatching of CV signs with pronunciations of words

CV syllabograms provide a straightforward way to spell some words, or parts of words. Whenever an epi-Olmec word consists of, or contains, a consonant that is immediately followed by a vowel, that sequence exactly matches the value of a CV syllabic sign, so there is a one-to-one correspondence between the sounds in the spoken word and the pronunciation of the signs in the spelling.

Several words are spelled out completely and straightforwardly by CV signs alone, showing a one-to-one correspondence between the sounds in the signs' values and all of the sounds in the words being spelled out; see **figure 5**. The reason that these spellings correspond perfectly to the pronunciations of the words that they represent is that the words themselves consist exclusively of simply open (CV) syllables.

What happens when a word does not consist exclusively of such syllables – when a word contains a consonant that does not precede a vowel? In such words, there is a mismatch between the structure of that word and what CV signs can spell out straightforwardly.

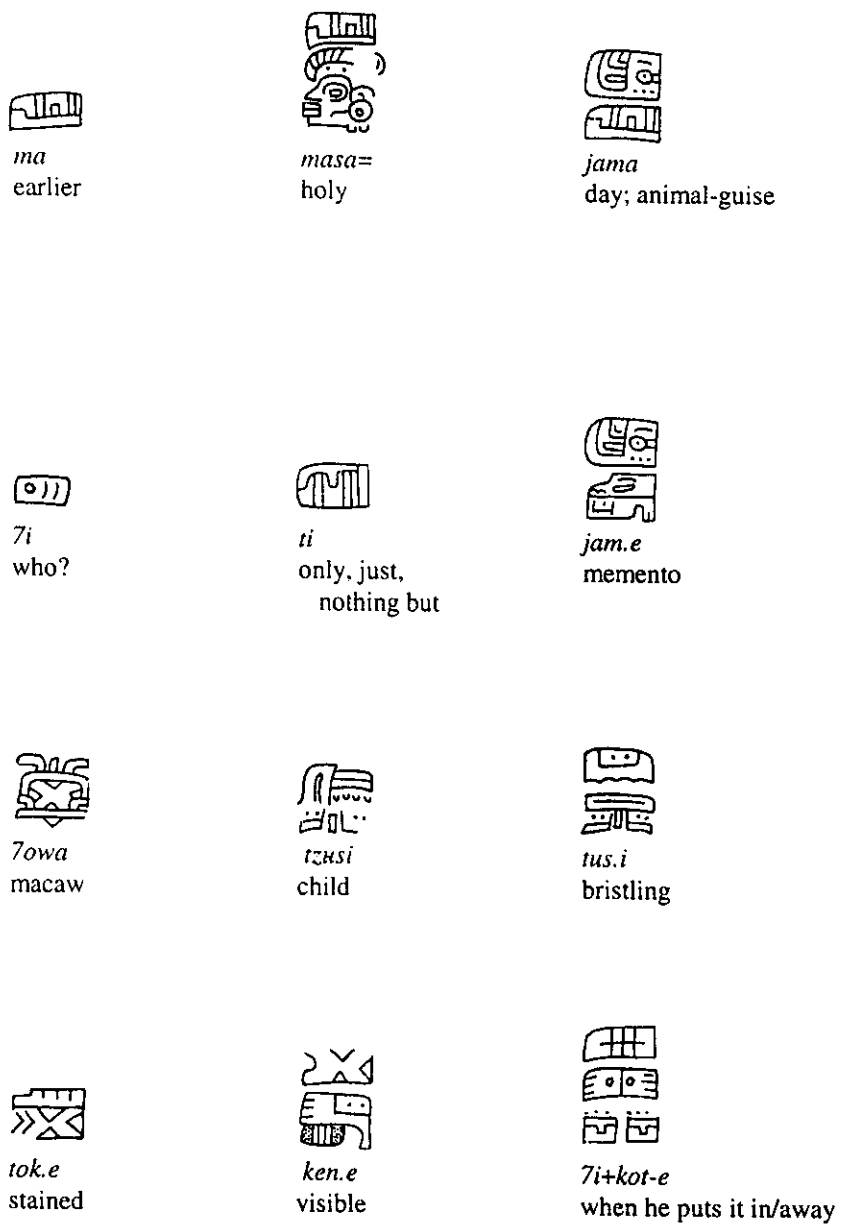
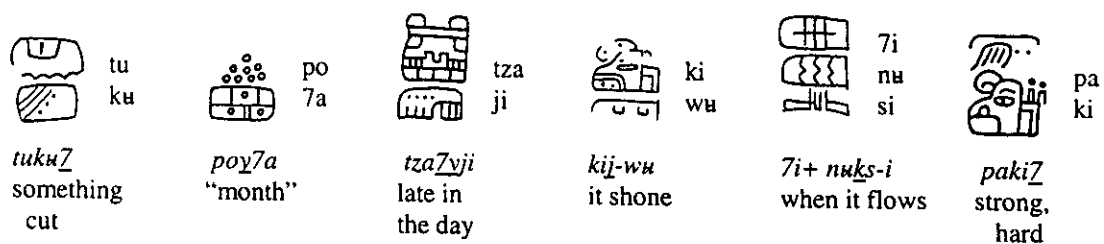
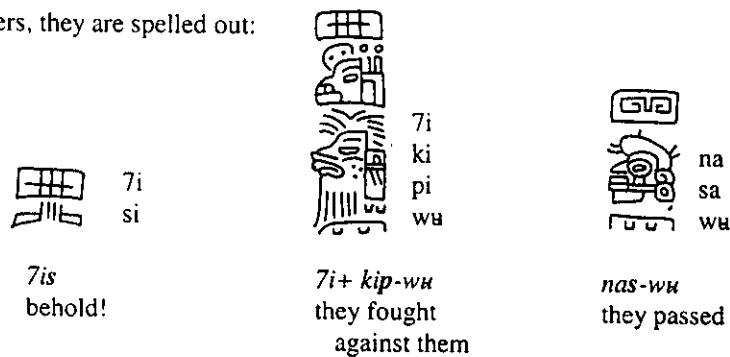


Figure 5. Fully phonetic spellings of words containing CV syllables only.

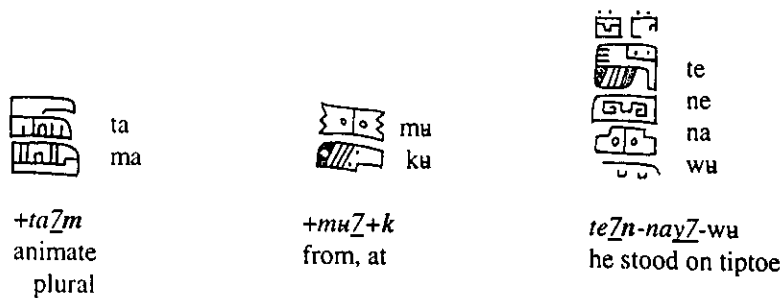
In some of these words, no such consonants are spelled out:



In others, they are spelled out:







In yet others, some such consonants are spelled out while others are not:







It turns out that a few simple rules determine just which consonants are spelled out and which are not. We discuss them below in a section on spelling rules.

All of the textually most common grammatical suffixes in the epi-Olmec language – and in proto-Sokean – consist of a single open syllable, so they are also spelled by a single syllabic sign:

| | | | |
|--|--|--|--|
|  wu |  pa |  ji |  7i |
| -wu completive independent | -pa incompletive independent | -ji completive dependent | -7i optative |








The vast majority of verbs in epi-Olmec texts end with one of these four suffixes; since most sentences have verbs, the signs that spell these suffixes occur very frequently in the texts. Examples are discussed in §3.

Similarly, most of the most common preposed grammatical elements in the epi-Olmec language were open syllables, and so were spelled by a single syllabic sign:

| | | | |
|---|---|---|--|
|  7i+ |  na+ |  7u+ |  ko |
| 7i+ | na+ | 7u+ | ko. |
| third person ergative | exclusive ergative | exclusive absolutive | elsewhere, someone else's |

The functions of all these grammatical elements are introduced later. Almost all grammatical units are almost always explicitly spelled out, and always by syllabograms; exceptions – which are systematic, in that they follow their own rules – are discussed below.

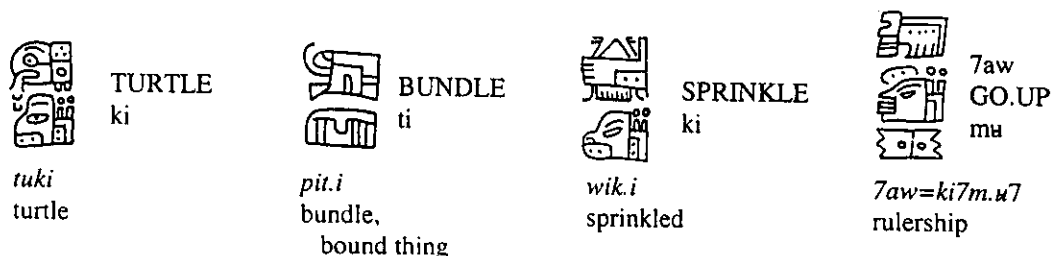
CVC syllabograms always spell CVC syllables:

| | | | | | | |
|---|--|---|---|---|--|---|
|  kak |  kakpe7 |  yaj |  tu |  nu |  DEAL.WITH |  pak |
| wu | pe | 7i | pa | ja | yaj | ku |
| <i>kak-wu</i> it got replaced | <i>kakpe7</i> Scorpius | <i>yaj-7i</i> let it get finished | <i>tun+tup-jay7-yaj wu</i> we shot them with arrows for him | | | <i>pak.kuy7</i> bludgeon |

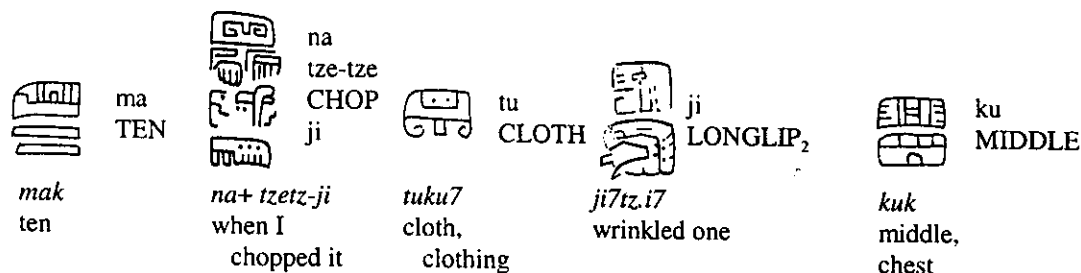
1.3. Mixed spellings

Logograms and syllabograms are often combined, as they are in Mayan and in almost all other logosyllabic scripts. In these combinations, the phonetic signs spell out the part or all of the same word as the logogram, or add grammatical information.

As in other scripts, postposed phonetic signs spell the final sounds of the same word as the logogram:




while preposed phonetic signs spell the beginning sounds of the same word as the logogram:



1.4. Semantic determiners

A few signs seem to serve as semantic determiners.

The sign  occurs only in combinations, attached at the left of some other sign:



It occurs twice in association with the SKY logogram, and once in a designation we interpret as 'rainy-season god', which is said textually to be an attribute of the Venus god 10 Sky (*Mak Tzap*). Thus, all three instances are sky-related. On other grounds, we are fairly sure that its occurrence in the "sky quetzal" sequence is a name of Harvester Mountain Lord or of an allied person, but since the other two instances are associated with a name of or reference to a god, we hypothesize that this "sky quetzal" instance is one in which a person is named or referred to after the name of a god. We cannot interpret the sign lexically as saying either 'god' or 'sky', since 'sky' would be redundant and a different logogram represents 'god'. Therefore, we take this to be a semantic determiner and we gloss it as 'sky god'.

Several signs for titles or offices consist of the face of a human being, with a sign for a bunch of reeds atop the back of his head, and varying signs or sign groups atop the front of his head. The invariant portion in effect is a semantic determiner for a title, while the varying element at the front is diagnostic of a particular title.



2. Rules for phonetic spelling

As in Mayan and in many Old World scripts with syllabograms, CVC signs are much fewer than the CV signs, and represent a fraction of the full set of CVC syllables of the language. Yet many Sokean syllables are shaped CVC or even CVCC or CVCCC. How are such syllables spelled, when signs for these syllables are rarely available?

For most of this audience, the answer to this question is no mystery, because you are used to the spellings used for Mayan words, like

b'a-la-ma
bahlam
jaguar

7u-b'a-ki
u-b'ak
his bone

po-po
pohp
mat

b'u-lu-ku
b'uluk
eleven

YAX-te-7e
yax=te7
ceiba

The general problem is a mismatch between the structure of the language and the structure of the script. In the language, consonants may be followed by vowels or consonants, or, at the end of words, by nothing at all. In the script, sounds are spelled by syllabograms, most of which have CV pronunciations: in these signs, a consonant is always followed by a vowel, so spelling a consonant entails spelling a following vowel – whether it existed in the language or not.

Whenever a consonant in the language does not precede a vowel, the spelling must depart from the actual pronunciation that it represents: either (a) the consonant will be spelled by a CV sign, in which case a vowel is being represented that is not present in the corresponding part of the word, or (b) the consonant will not be spelled at all.

In most CV syllabaries, both options are used; usually they are favored by different circumstances. In Mayan, for example, the *h* of *b'ahlam* is never spelled explicitly in any way. The *h* of *na:h* 'house' is explicitly spelled when the word is spelled by the CVC sign **nah**, but that word is also, rarely, spelled simply **na** (with no representation of *h*) or **na-hi**.

When using a CV sign to spell a simple consonant, it might seem that several signs are available for the purpose. In Mayan, for example, the sign **ki** regularly spells the final *k* of *b'a:k*, while **ka** spells the final *k* of *sak*; both **chi** and **cha** spell the final *ch* of *pa:ch*. Although there are proposals that are correct more often not, no firm rules have been worked out that reliably predict just what CV signs will be used in a given instance.

The Mayan case is unusual in global perspective; usually, the pronunciation of a word is enough to determine whether a CV sign will be used to spell a simple consonant, and which vowel that CV sign must contain. The epi-Olmec case is more typical in this respect: there is a well-defined set of rules that apply with no recognized exception in the existing data.

2.1. Unrepresented consonants

We begin with the most common consonant in the epi-Olmec texts, the glottal stop (represented in our practical orthography by a 7). This consonant is spelled out explicitly when it precedes a vowel; examples illustrated above are the words 7i 'who?' and 7owa 'macaw', the optative suffix -7i and the third person ergative marker 7i+. A large number of spellings show that it is never spelled in any other context. There are two ways this can happen: when it ends a word, and when it precedes a consonant.

2.1.1. Glottal stops

We begin with words ending in 7 whose spellings consist exclusively of syllabic signs. In every case, the spelling is just as it would be if the word-final glottal stop were not present.



ku

ku7
hand



te

te7
aforementioned



je

je7
that



yu

yu7
this



wu

+wu7
relativizer on
nouns and adjectives



si

si7i7
arse



pi

ni
pini7
brother-in-law



pa

ki
paki7
hard, strong



we

ne
wen.e7
something
broken; a piece



tu

ku
tuk.u7
something
cut



ma

wu
maw.u7
something
ruined

Fully phonetic spellings of words never show any reflection of word-final glottal stops. Similarly, phonetic complements that spell the final portions of 7-final words never spell the final glottal stop:



YEAR

me

7ame7
year



kak



SCORPIUS



pe

kakpe7
scorpion,
Scorpius





LOSE






ya



yak=tokoy-a7
overthrower

 ?LOINCLOTH
 pu

ni7.jup.7
ruler's
head-wrap

 GUISE
 PLAY
 tzi

jama=mutz.i7
animal-guise
impersonator

 jo
 mexNEW

jome7
new




The same convention applies to glottal stops that precede consonants:

 ku

+7ku
hand, arm

 je
 tzu



je7-tzu
thus, like that

 7i
 ne
 ji



7i+ne7w-ji
when they were set in order






 ju
 si

ju7ps.i
lashing


 ji₂
 tzi


ji7tz.i7
wrinkled, pleated

 ji
 LONGLIPx?tzi
ji7tz.i7
wrinkled, pleated

 7i
 ko
 LOSE
 pu
 wu









7i+ko.tokoy.pu7-wu
he spilled it out completely
on behalf of others

 nu+pu
nu7pu
buzzard

 su+su
su7k=su7
hummingbird

2.1.2. Other weak consonants (j, w, y)

Three other consonants, far less common than 7, are subject to exactly the same conventions: in phonetic spellings, they are always represented when they precede vowels, and never otherwise. Like all consonants other than 7, they are rare in word-final position in epi-Olmec texts:



















| | | | | | |
|---|----------|---|----------|---|-------------------------------|
|  | 7i |  | pak |  | 7i+ni |
|  | sa |  | ku |  | ko |
| | | | |  | SKY+PILLAR |
| | | | |  | ya |
| <i>7i+sa_j</i> | his wing | <i>pak-kuy₇</i> | bludgeon | <i>7in+ko.tzap=k_{om}+ya_j</i> | your otherworldly sky-pillars |

All three consonants frequently occur before other consonants; in these cases, they are never spelled. Fully syllabic spellings of words or morphemes having weak *y*, *w*, or *j* before a consonant appear in **figure 6**.

As these examples make clear, the most common circumstance under which these weak consonants occur before other consonants is when they end a verb stem that precedes a grammatical suffix, and more generally at morpheme boundaries. But the crucial fact is that they occur in the codas of syllables (consonants occurring after the vowel of their syllable).

2.2. Other consonants (p t tz k s m n)

The other seven consonants in the epi-Olmec language are also relatively rare at the end of words, but they occur frequently before consonants – as in the case of weak consonants, mostly before consonant-initial suffixes. In phonetic spellings, every one of these consonants is always spelled out in phonetic spellings of the sequences in which they occur (with one rule-governed exception, discussed below). And, in every instance, the spellings of these consonants are synharmonic: the vowel of the CV sign that spells the consonant is the last vowel preceding that consonant.

| | | | | | | | |
|---|---------|---|-----------------------------|---|----------------------------------|---|---------|
|  | 7i |  | ki |  | na |  | te |
|  | si |  | pi |  | sa |  | ne |
| | |  | wu |  | wu |  | na |
| <i>7i_s</i> | behold! | <i>7i+kip-wu</i> | they fought against them | <i>na_s-wu</i> | on tiptoe | <i>te7n-na₇</i> | |
|  | tu |  | ta |  | 7i ₂ +ni ₂ |  | mu |
|  | nu |  | ma | | |  | ku |
| <i>tu_n+ we (inclusive) plural</i> | | <i>+ta7m</i> | animate | <i>7in+</i> | your | <i>+mu7-k</i> | from at |

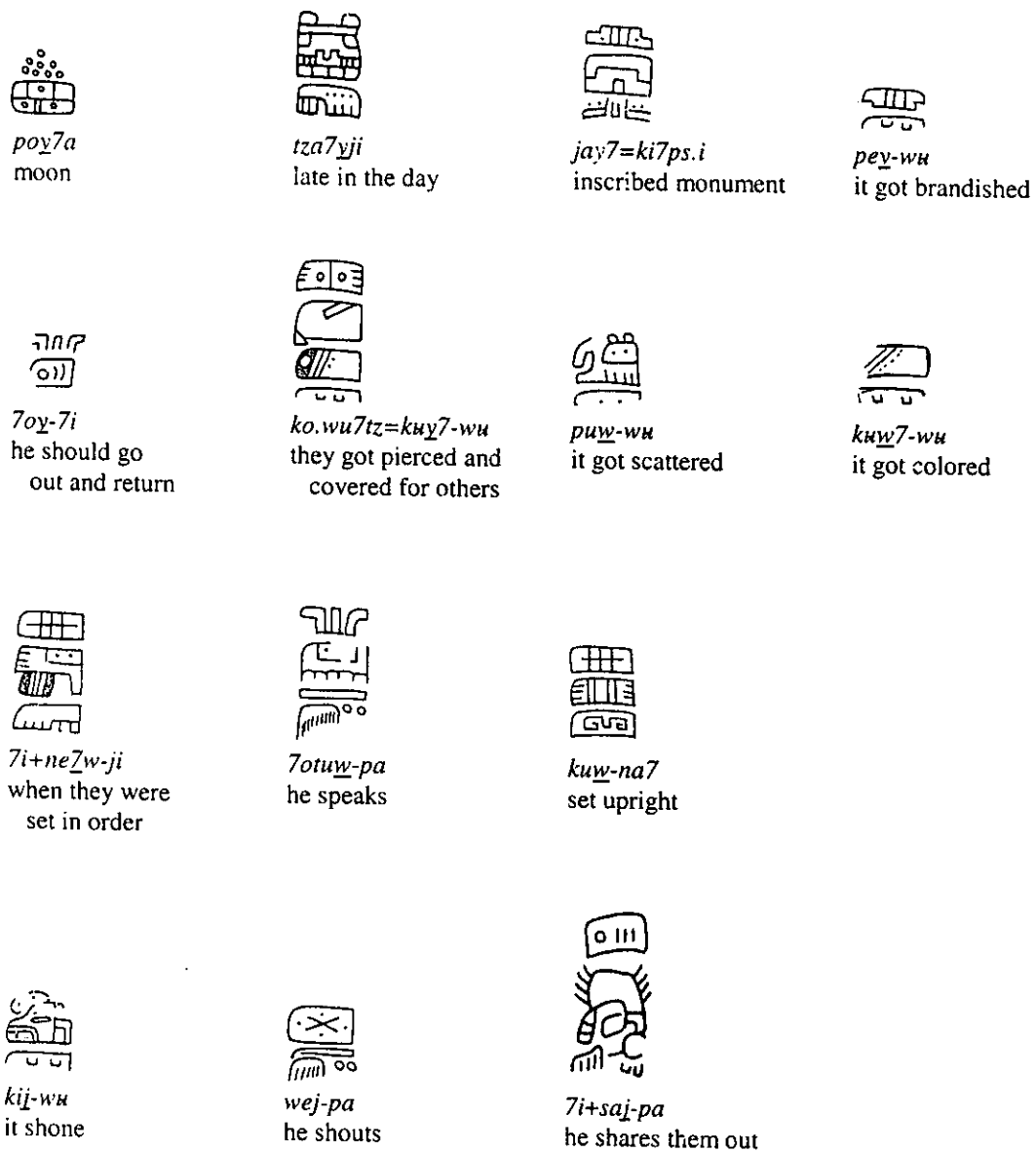











































Figure 6. Weak consonants – *y*, *w*, and *j* – that do not immediately precede vowels do not appear in phonetic spellings.

Synharmony is also the exceptionless rule in those phonetic complements that spell consonants that do not precede vowels:

| | | | |
|--|---|---|--|
|  TWENTY  si <i>7i7p_s</i> twenty |  SKY  pa <i>tzap</i> sky |  LOINCLOTH?  pu <i>ni7.jup.7</i> body-wrap |  na  tze+tze  CHOP  ji <i>na+tzetz-jī</i> when I chopped it |
|  puk  ku  7i <i>puk-7i</i> it should be taken |  PLANT  pi  wu <i>nip7-wu</i> it got planted |  tu  nu  DEAL.WITH  pu  wu <i>tun+tu_p-jay7-wu</i> we shot him with arrows for him |  ko  SPRINKLE  ki  pa <i>ko.wik-pa</i> it got sprinkled elsewhere |

2.3.2. p and k before s

There is one highly restricted context in which “strong” consonants are not represented: *k* is never spelled when it immediately precedes *s*, and *p* is probably not spelled before *s*:

| | | | |
|--|--|--|--|
|  7i  nu  si <i>7i+nuks-i</i> when it flows |  mi  si ₂  na  wu <i>mi7ks-nay7-wu</i> it had been quivering |  7i  BLOOD  mi  si <i>7i+nu7pin=mi7ks.i</i> when it quivered bloodily |  su+su <i>su7ksu7</i> hummingbird |
|  7o  wa  ju  si <i>7owa=ju7ps.i</i> macaw-lashing | | | |

We discuss the reasons for this peculiar pattern in §4.

In summary, epi-Olmec phonetic spellings represent weak consonants – *7, j, w, y* – whenever they precede a vowel; otherwise, they do not represent them. All other consonants are represented in all contexts, except that *k* and *p* were not spelled before *s*.

3. A little grammar

Now that we have shown how words are spelled out, we can illustrate a number of patterns in the shapes of words that help us work out the meanings of text passages.

3.1. Nouns

3.1.1. Possessed nouns

Consider the pattern of the following nouns:

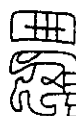
7i+ ???
his offering



7i+ ???
his Macaw.power



7i+ ???
his "eccentric.flint"



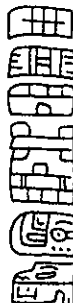
7i+saj
his wing/shoulder



7i+nu7pin +wu7
his bloody thing



7i+kuk=tza7=jam.e
his pectoral stone
memento



7i+kuw.na7=ki7ps.i
his set.aside-symbol



7i+ne7w.e
his set.in.order.stones



7i+yak=tokoy.a7
its/their overthrower




7i+pini7
his brother-in-law



7i+ki7m.u=si7i7-yaj
his/their ascent.buttocks



The sign  *7i* in all of these words spells a 'his', 'hers', 'its', or 'their' – a third person possessive prefix, irrespective of gender or number. In this respect its function is analogous to that of Lowland Mayan 3rd-person singular possessive prefix *u-*. The third person possessive marker was pronounced *7i* in epi-Olmec (and in proto-Sokean and proto-Mije-Sokean). It is the frequent use of this sign as a prefixed morpheme that enabled us to recognize that it spells the syllable *7i*.

An analogous but rarer pattern is found in the use of the sign *na* for the first person possessive prefix, 'my' in the attested examples:

na+ku7
my arm



na+nu7pin
my blood



na+nu7pin +wu7
my bloody (thing)



na+kan=puk.u7
my penis-receiver
(the cloth that the pierced
penis is wrapped in to
staunch the flow of blood)



na+yak=tokoy.e
my overthrown.one



na+tzetz.e
my chopped thing
(the head of his
sacrificial victim)



This marker can also mean 'our' in the "exclusive" sense, i.e., the addressee(s) is/are not referred to, but this does not seem to occur in our texts.

A second person possessor occurs on the Tuxtla Statuette, addressing a god:


7in+ko.tzap=kou-yaj
your otherworldly sky-pillars



7in+ko.tzat7.u
your otherworldly hands-span-measurer



3.1.2. Nominal predicates

Nouns in epi-Olmec texts and in Mije-Sokean languages take another prefix, 7_H+, which is spelled by . This prefix has a different function:

7_H+s_Hw
I am the sun



7_H+t_zHk.i=p_Hn
I am a "deedsman"



This prefix marks the first person exclusive subject of a predicate noun, a predicate adjective, or an equational clause. This prefix, and other prefixes that agree with the subjects of predicate nouns or adjectives and of equational clauses, is known as an absolutive marker. The third person absolutive marker is nothing (zero); in other words, an adjective, a noun, or a noun phrase by itself can also be interpreted as a predication with a third person subject:

pit.i
he was a prisoner



ko.yumi
he was a lord



paki7
he was powerful



3.1.3. Locational expressions

In epi-Olmec, as in Mije-Sokean languages generally, when a noun is used to designate a location, it forms a compound with a following relational noun – a noun that specifies the part of the entity that is the location (top, bottom, middle, inside, surface). The relational noun is followed by a locative suffix, +m_H7 'in, at'; by adding +k after +m_H7, the sense becomes 'from' the specified part. There is an example of this construction in the stela from La Mojarra:

kan=joj+m_H7+k
from inside the penis



3.1.4. Relativizers

The sign **wu** occurs after a number of nouns or noun phrases:



sa7sa7(=pun) +wu7
who is a noble one



sa7sa7(=pun)
WAR.LEADER +wu7
who are noble warleaders



BEARD.MASK +wu7
who was a beard.mask



PRINCE +wu7
who was a prince



TITLE₂ +wu7
who was a TITLE₂



STAR.WARRIOR +wu7
he was a star.warrior one



?? +wu7
who was a "royal" one



na+nu7pin +wu7
it is my bloody one



jama +wu7
which was about
an animal-guise



tok.e +wu7
it is a stained one



tuki +wu7
it is a turtle(shell)
one



tuku7 +wu7
it is a cloth one



tzay7ji +wu7
it was as a late-in
the-day one
[i.e., Venus was
evening star]



tujtu poy7a +wu7
which was for six months



tzusi +wu7
who was a child



pak-kuy7 +wu7
which was a bludgeon

What these cases have in common is that a noun phrase (NP) is made into a relative clause, meaning 'one who/that is (an) NP' or '(an) NP-type one'; many of these clauses are also nominal predications. The sign **wu** in these cases spells a grammatical element **+wu7** that marks relative clauses in many Mije-Sokean languages.

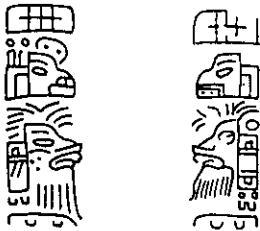
3.2. Verbs

The spellings of verbs turn out to be especially revealing. One key help is that transitive verbs (verbs that have both subjects and objects) look different from intransitive verbs (verbs that have subjects but no objects). This is important for analyzing texts, because most sentences have verbs.

3.2. Transitive verbs

The markers of possession described in §3.1.1 also appear before certain verbs to indicate their subject:

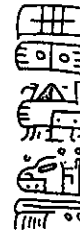
7i+kip-wu
they fought against them



7i+ko.tokoy-pu7-wu
he spilled it out completely
on behalf of others



7i+ko.wik-pa
he sprinkles it elsewhere



7i+7is-wu
he saw it



tun+tup-jay7-yaj-wu
we shot them for him



tun+tup-jay7-wu
we shot him for him



7i+saj-pa
he shares them out



Notice that all of these verbs end with one of two suffixes, *-wu* or *-pa*.










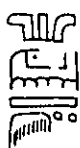

Each word, then, conforms to a pattern of beginning with the spelling of one of a limited set of prefixes, which is followed by a small number of signs spelling a verb stem, which is followed by a limited set of suffixes. What verbs exhibiting this pattern have in common is that they are all transitive verbs – verbs with both a subject and object, in which someone did or does something to someone or something else.

The third person subject is indicated by the sign *7i*, spelling the preposed element *7i+*. The preposed element *tun+* is ‘we’, a first person plural inclusive marker – i.e., the addressee(s) is/are included. The erectors of the La Mojarra stela are talking about what they and their intended audience did together on behalf of their ruler.

Notice that all of these verbs have third person objects, ‘him’ or ‘them’. Nothing appears in any of these words to indicate the object. This is characteristic of Mije-Sokean languages (also of Mayan): nothing appears on a Mije-Sokean verb to indicate that the object is third person; however, if the object is any other person, a grammatical prefix appears which is a marker of that fact. Those prefixes are in fact the same as the absolutive markers that serve as subjects of nominal predications, discussed above in § 3.1.2.

3.3. Intransitive verbs

These same two suffixes, *-wɬ* and *-pa*, end many other verbs that do not have any of the prefixes discussed above:

| | | | |
|---|---|---|---|
|  |  |  |  |
| APPEAR- <i>wɬ</i> it appeared | <i>kij-wɬ</i> it shone | <i>kij-wɬ</i> it shone | <i>ku.jak-wɬ</i> he crossed over |
|  |  |  |  |
| <i>mi7ks-nay7-wɬ</i> it had been quivering/ flapping | <i>nas-wɬ</i> they passed | <i>tuk-pa</i> it happens | <i>wej-pa</i> he shouts |
|  |  |  | |
| <i>ka7j-pa</i> he faints/dies | <i>7otuw-pa</i> he speaks | <i>wan.e=tzɬk-pa</i> he sings | |

What verbs exhibiting this pattern have in common is that they are intransitive – they have a grammatical subject but no object, specifying what someone did, or what was done to or undergone by someone or something. Knowing the structure of intransitive verbs is important, because most verbs in Mesoamerican texts – in ancient times and today – are in fact intransitive.

These intransitive verbs also have in common that their subject is third person. This is because nothing appears on a Mije-Sokean intransitive verb to mark a third person subject. If the subject is any other person, a prefix marking that subject appears, but these do not appear in epi-Olmec texts.

Even actions, like folding, that are encoded in transitive verbs are often described intransitively, using passive or (in epi-Olmec texts) mediopassive forms of the transitive verb – e.g., “it gets folded” rather than “he folds it”:



ko.nu7ks-wh
he got hallowed



kɨ7w-wh
it got colored (dyed)



naks-wh
it got pounded



pey-wh
they got brandished



puw-wh
it got scattered



saj-wh
it/they got shared out



wh=tzɨk-wh
he got bedecked



ne7w-wh
they got set in order



pɨk-wh
it got taken



ko.wu7tz=kɨy7-wh
they got pierced and
covered for others



te7n.na7=kak-wh
it got replaced upright



nip7-wh
it got planted



paks-pa
it gets folded




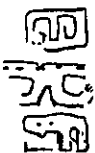

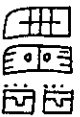
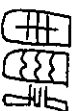



ko.wik-pa
it gets sprinkled elsewhere

The contrasts between the transitive and intransitive pattern is generally similar to Mayan in that the subjects of transitive verbs are marked by one kind of grammatical element – an ergative pronominal prefix – that does not mark the subject of an intransitive verb, but does mark the possessor of a noun. A different kind of grammatical element – an absolutive pronominal prefix – marks the subject of an intransitive verb and the object of a transitive verb. In the case of third person subjects, which predominate, intransitives have no overt marker of the subject while transitives have the subject agreement marker *7i+*.

3.3. Dependent verbs

The ergative markers, spelled by the signs **7i** and **na**, also begin another group of verbs, verbs that have one of two other suffixes: *-ile* or *-ji*.

| | | | |
|--|---|---|---|
|  <i>7i+ne7w-j</i> when he set them in order |  <i>7i+nu7pin=tu7p-j</i> when he set.down/ perched bloodily |  <i>na+tzetj-j</i> when I chopped it |  <i>na+sij-j</i> when I cast.lots.with them |
|  <i>7i+nu7pin=mi7ks.i</i> when he quivers bloodily |  <i>7i+kot.e</i> when he puts it in/away |  <i>7i+nuks.i</i> when it flows |  <i>7i+wu7tz.i</i> when it/they get(s) pierced |

Again, these verbs conform to a pattern of beginning with an ergative prefix and ending with one of two suffixes (*-i* and *-e* are really the same suffix; *-i* occurs when the last preceding vowel was *i*, *u*, or *u*, and *-e* occurs when the last preceding vowel was *e*, *a*, or *o*).

Unlike the preceding group of verbs, this group includes not only transitive but also intransitive verbs. What these verbs have in common is that they are all in dependent (subordinate) clauses, and so are called “dependent verbs”. In contrast, all of the verbs displayed previously occur in independent (main) clauses, and so are called “independent” verbs.

The subject of these dependent verbs is indicated by the ergative marker. For those dependent verbs with objects, that object is third person and so again no marker of the object appears. In the dependent verbs, then, we see the phenomenon of ergative shift: the ergative prefixes act like nominatives, marking the subjects of both transitive and intransitive, and the absolutive prefixes act like accusatives, marking objects only.

3.4. Independent verbs

Most of the independent verbs above, transitive and intransitive, end in the syllabogram **wu**:

| | | | | | |
|---|--|--|--|--|--|
| <i>7i+kip-wu</i> they fought against them | <i>7i+ko.tokoy-pu7-wu</i> he spilled it out completely on behalf of others | <i>tu7n+tu7p-jay7-yaj-wu</i> we shot them for him | <i>tu7n+tu7p-jay7-wu</i> we shot him for him | | |
| <i>7i+7is-wu</i> it appeared | <i>kij-wu</i> it shone | <i>ku.jak-wu</i> he crossed over | <i>mi7ks-nay7-wu</i> it had been quivering/ flapping | <i>nas-wu</i> they passed | |
| <i>ko.nu7ks-wu</i> he got hallowed | <i>ku7w-wu</i> it got colored (dyed) | <i>naks-wu</i> it got pounded | <i>pey-wu</i> they got brandished | <i>puw-wu</i> it got scattered | <i>saj-wu</i> it/they got shared out |
| <i>wu=tuk-wu</i> he got bedecked | <i>ne7w-wu</i> they got set in order | <i>pu7k-wu</i> it got taken | <i>ko.wu7tz=ku7y7-wu</i> they got pierced and | <i>te7n.na7=kak-wu</i> it got replaced upright | |
| <i>pu7k-wu</i> it got taken | <i>ko.wu7tz=ku7y7-wu</i> they got pierced and covered for others | <i>te7n.na7=kak-wu</i> it got replaced upright | <i>nip7-wu</i> it got planted | | |

These all refer to actions as having been completed. Their suffix **-wu** is in fact the epi-Olmec (and proto-Sokean and proto-Mije-Sokean) suffix that marks verbs as referring to completed actions (i.e., they mark completive aspect).

The other independent verbs end in the syllabogram **pa**:

| | | | | | |
|----------------------------|------------------------------|----------------------------------|---------------|----------------|----------------|
| <i>7i+saj-pa</i> | <i>7i+ko.wik-pa</i> | <i>ko.wik-pa</i> | <i>tuk-pa</i> | <i>ka7j-pa</i> | <i>paks-pa</i> |
| he shares them out | he sprinkles it elsewhere | it gets sprinkled elsewhere | it happens | he faints/dies | it gets folded |
| <i>wej-pa</i> he shouts | <i>7otuw-pa</i> he speaks | <i>wan.e=tzuk-pa</i> he sings | | | |

They refer to actions as either being in progress or as being habitually performed. The suffix **-pa**, in epi-Olmec, in proto-Sokean, and in proto-Mije-Sokean, is in fact what marks verbs as referring to actions that have not been completed, and as being either habitual actions or ongoing actions (i.e., they mark incompletive aspect).

In Mije-Sokean languages, these suffixes occur on both transitive and intransitive verbs. Note that this is not true of Mayan languages; it is one of the features that agrees with Mije-Sokean and disagrees with Mayan language structure.

3.5. Spelling grammatical elements

Almost all inflectional affixes in epi-Olmec words are always explicitly spelled out in epi-Olmec texts, and these spellings accord with the spelling rules discussed above. There are two situations that have the appearance of exceptions to this, but probably neither is properly so construed. The two cases are very different and we resolve them with different kinds of observations, and so we discuss them separately.

3.5.1. *i7i*

7i+ is not spelled out in four out of seven epi-Olmec words that follow a word ending in *i*, nor in one word in which the morpheme after *7i+* begins with *7i*; that is, the sequence *i7i* can be spelled as though it were simply *i*. There is no other instance of a *V7V* sequence in epi-Olmec texts, so we do not know if a similar rule applied to any other vowels. Some Sokean languages have similar reductions of *V7V* sequences in fast speech, but these reductions are not the same from one language to another and so we cannot project them back to an ancestral (or even early) stage, and fast-speech rules are not expected in a royal inscription in any case. We therefore treat this as a variable option within the spelling system.

Being phonologically definable in terms of pronunciation, we do not suppose that this practice relates to grammar, because the epi-Olmec script is otherwise so relentless in spelling inflectional affixes out in full. This conclusion cannot yet be confirmed, since we have recognized only one epi-Olmec word (*si7i7*) that contains the *i7i* sequence without containing all or part of the 3rd person singular ergative prefix *7i+*.

3.5.2. Dependent suffix *-i/-e*

The only other seeming exception is that the dependent incomplete suffix (pronounced *-i* or *-e*, depending on the last preceding vowel) is not always spelled out in those instances when the verb stem is spelled by a logogram. This suggests that the dependent suffix is implicit in the logogram when no other suffix is explicitly spelled out. However, the ergative prefix that is obligatorily present in all dependent verb forms is not implicit in the logogram, so this hypothetical basic value as a dependent form could not exist as a word in the language, and we suppose that the basic value or citation form of a logogram is always a real word. In addition, a dependent form would be a syntactically and semantically peculiar choice for the underlying value of a verb logogram.

We believe that the explanation for this pattern is based on the epi-Olmec names for verb logograms. Names in Mije-Sokean languages are always nouns. One set of nouns is pronounced exactly like a verb stem + the dependent complete suffix: these are nominalizations produced from that verb by suffixing *-i* or *-e*. For example, the verb *wu7tz* 'to pierce' takes the dependent suffix *-i*, yielding such words as *na+wu7tz-i* 'when I pierced it' and *7i+wu7tz-i* 'when he pierced it'; the word *wu7tz.i* 'something pierced' is a noun derived from *wu7tz*. The logogram for piercing in fact depicts something pierced, a rectangular field with a shaft entering at the upper right and leaving at the lower left. So the name of the logogram PIERCE is *wu7tz.i*, and this value may be read out in the case of an incomplete dependent form of the verb *wu7tz*. (Another set of verbal nouns is pronounced almost the same, differing only in that the suffix is *-i7*, as in *ji7tz.i7* 'pleated, wrinkled' or *-e7*, as in *wen.e7* 'broken, piece'. This difference has no consequences for spelling since final *7* is never spelled in epi-Olmec writing.)

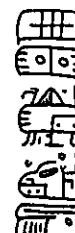


PIERCE
wu7tz.i
'something pierced'



SPRINKLE
wik.i
'result of sprinkling'

As a result, the pronunciation of the logogram has implicit in it the verb stem plus a nominalizing suffix, not the verb plus a dependent suffix; it is useable to spell the verb plus dependent suffix when the nominalizing suffix that is part of the value of the logogram is homophonous with the incomplete dependent suffix. A logogram that represents a verb is applied phonetically for the verb stem, without the implicit nominalizing suffix, whenever that logogram is followed by any explicitly spelled-out suffixes. Thus SPRINKLE by itself can spell *wik.i* 'result of sprinkling', but together with a following *pa* sign it spells *wik-pa*.



7i-ko-SPRINKLE-pa
7i+ko.wik-pa
'he sprinkled it elsewhere'

4. Sign origins

Most syllabograms and many logograms in epi-Olmec writing have so abstract an appearance that it is unclear to us what their iconic source was. As in the case of Mayan and Zapotec writing, however, several epi-Olmec syllabograms are relatively straightforward depictions of things or ideas. In all cases, the phonetic readings of these epi-Olmec signs were worked out on the basis of their contexts, not on the basis of their forms. However, for the signs whose depictive referents are clear, these values appear to have been based on the acrophonic principle: the word for what the CV syllabogram depicts begins with the CV sequence that is the sign's pronunciation.

The following we take to be depictively transparent:



nw: This sign is a rectangular field with wavy lines running across it, reflecting Sokean **nw7* 'water, liquid'.



ne: This sign represents an upside-down hand holding an element with the markings of stone, evidently an action of placing or removing a stone. It reflects Sokean **ne7w.e* '(stone) thing set in order', based on the verb stem **ne7w* 'to set (stones) in order'.



pu: This sign, based on Sokean **puw* 'to scatter, to sprinkle', represents a hand in the position of the Mayan signs SCATTER and *ye* (< **ye7* 'to show').



ki: This sign is iconically derived from the logogram we read as *ki7m.i* 'ascended one/thing' by placing an abstract iconic element over the lips and chin of the logogram, and so evidently derives from **ki7m.i*.



sa: This sign depicts a human being wearing various kinds of face-gear and head-gear, suggesting that the person is of high status. We suppose that it is based on Sokean **sa7sa7(=pun)* 'noble', which is our reading of a similar logogram; it is similar to the sign *saj*, used for both **saj* 'to give, to distribute' and **saj* 'shoulder, wing'.



ko: The iconic origin of this sign is particularly interesting. Justeson (1986) observed that the sign was iconically equivalent to the "feet" of the figure on the El Sitio celt. Mora-Marín (personal communication 1997) observed that figure was in fact a fish, so that the sign represents fish fins. This led us to recognize that the acrophonic origin of the sign was in Sokean **kok7ej* 'fish'. This acrophonic process parallels the Mayan case of the usual sign for the syllable *ka*, which is based iconically on fish fins; its value is derived from a descendant of the Mayan word **kar* for 'fish'.



na: Although the sign is not iconically transparent, it is identified as an icon for 'earth' (Sokean **nas*) by two lines of evidence: it appears in the base panels of epi-Olmec and southern Guatemalan sculptures (Kent Reilly, personal communication 1991), and it appears in the position of the EARTH logogram in an iconically-motivated sign grouping that has been widely compared to the "sun at horizon" group in Mayan writing (David Kelley, personal communication 1988; Stross 1990; Macri and Stark 1993). This association is confirmed by the auxiliary hypothesis that the sign is an icon for 'sky' (Sokean **tzap*), itself confirmed by the appearance of the phonetic complement **pa** after it. Finally, we find evidence that the sign serves as a logogram for 'earth' in one context in the La Mojarra text.





This sign was evidently the source of the most common Mayan sign for the syllable *na*. This was first hypothesized by Stross (1990); Mora-Marín supports this hypothesis by pointing to early Mayan examples that show a greater formal similarity to the epi-Olmec form than do the usual later Mayan examples.





Unbeknownst to us, Stross (1990) had arrived at the proposal that this sign represented the syllable *na* before we did. His line of argumentation we did not consider valid: it was based on the Mayan comparison, the identification with 'earth' on the basis of the Mayan "sun at horizon" glyph grouping, and on the rebus hypothesis for sign origins. We arrived at the hypothesis from grammatical evidence, and only then recognized its acrophonic basis; Mora-Marín's examples strengthen the case that the epi-Olmec sign was the basis for the similar Mayan sign of the same value.


The following are more abstract; it is the combination of their phonetic value and their form that points to their rebus origin:

 **po** This sign represents a stack of spherical objects. We identify them with Sokean **potu* for 'incense', which is so depicted in the Dresden Codex (cf. Lounsbury 1973:xxx).

 **jo** The instance of this sign on the La Mojarra stela spells Sokean **joj* 'inside'; its form, dots inside a series of concentric circles, suggests the concept.

 **wu** This sign consists of two half-circles beneath a bracket; abstract pattern suggested to us that the sign's acrophonic origin was in Sokean **wustuk* 'two'. This is supported by the fact that the numeral 'two' itself is used in place of **wu** in one instance in the La Mojarra text, and by the fact that the Tuxtla Statuette's version of the sign uses two dots within the bracket of the same type that are used in the numeral 2 in its long count date. (The NFAF drawing of the earliest instances of this sign shows two circles rather than two half-circles within the bracket; that drawing is inaccurate in some respects, however, and these circles were not apparent in the photograph that was the basis for our own drawing of the text.)

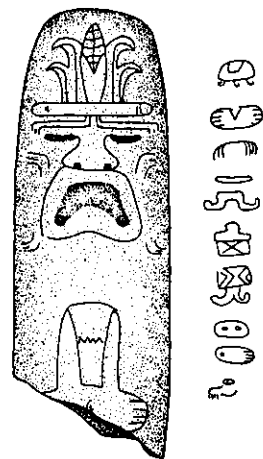
 **tza(7)** All instances of this sign adjoin a preceding STAR logogram. Its interpretation is therefore not clear, but we see no straightforward alternative than to take it as a phonetic complement to the STAR sign (Sokean **matza7*). The markings are generally consistent with early forms of the Mayan logogram/icon 'stone', Sokean **tza7*.

 **tu** The arguably "dripping" elements along the bottom edge of this sign suggest that this phonetic value may be based on Sokean **tuj7* 'rain'.

Several of these signs occur textually spelling the word that is the rebus origin of its syllabic value: **ne** spells the stem **ne7w* in *7i+ne7w-ji*; **pu** spells the stem **puw* in *puw-wu*; **jo** spells **joj* 'inside'. Some serve as logograms for the word that serves as the acrophonic origin of the sign in its phonetic use: **na** appears for **nas* 'earth', **ne** appears for **ne7w.e* 'set-in-order (stone) thing', and **wu**, normally serves as the sign for **wustuk* 'two'.

With only 12 sign values to base our conclusions on, we cannot draw any definitive conclusions about restrictions on the kinds of words that provide the acrophonic basis for epi-Olmec signs. However, certain regularities seem to show up. The first column gives one-syllable origins; the second gives two-syllable origins, with a dot separating the syllables. Sounds neglected in the syllable that provides the acrophonic origin are underlined:

| | |
|-------------------|-----------------------|
| na7 | po.mu |
| sa7 | pu.wV(7) |
| (tza7) | ki7.mi |
| joj | ne7.we |
| tuj7 | ko<u>k</u>.7ej |
| na<u>s</u> | wu<u>s</u>.tuk |



In 2 of the 12 acrophonic bases, the initial syllable of the word is a CV syllable, so that no consonants in the syllable are neglected in creating the sign value. In 7 of the 12, a weak consonant (usually 7, sometimes *j*) is neglected to yield the CV form of the syllable. Thus, in 9 of the 12 cases, the segments that lead to the CV values would be spelled by the resulting value in the context of use of that sign according to the phonetic spelling rules of the script. These cases are numerous enough that weak consonants after the vowel of the word-initial syllable seem especially subject to omission in the acrophonic origins of CV sign values, and also to suggest that the spelling conventions and the acrophonic origins of syllable signs are related.

In contrast, the three remaining cases are too few to support any particular generalizations, and it may be that any syllable-final consonant could be ignored. By analogy with other writing systems, it is plausible that the syllable-final *k* in *kok7ej* 'fish' was ignored because it was identical to the syllable initial consonant; and it is also possible that the two instances involving syllable-final *s* reflect a particular susceptibility of *s* to deletion for the purpose of acrophonic origins.

Epi-Olmec word structure seems to provide a partial explanation for the epi-Olmec spelling rules. One practice is especially suggestive. The failure of epi-Olmec scribes to spell *k* or *p* before *s* undoubtedly owes its origin, in some way, to the rules governing epi-Olmec syllable structure, and in particular the consonant clusters that occur in epi-Olmec and proto-Sokean syllables: *ks* and *ps* are the only "weird" consonant clusters that can occur in Mije-Sokean syllables.

This fact suggests that the failure to represent 7 before consonants may also be an effect of Sokean syllable structure. Consonant clusters only occur at the ends of syllables, and, besides *ks* and *ps*, the only such clusters are the following:

| | <u>C7</u> | <u>7C</u> |
|----|-----------------|---------------------------|
| p | nip <u>7</u> | tu <u>7p</u> |
| t | tza <u>t7</u> | (xx <u>7t</u>) |
| tz | (xx <u>t7</u>) | wu <u>7tz</u> |
| k | (xx <u>k7</u>) | su <u>7k</u> =su <u>7</u> |
| j | tuj <u>7</u> | ka <u>7j</u> |
| s | (xx <u>s7</u>) | ku <u>7s</u> |
| m | (xx <u>m7</u>) | +ta <u>7m</u> |
| n | (xx <u>n7</u>) | te <u>7n</u> |
| w | ku <u>w7</u> | ne <u>7w</u> |
| y | (kuy <u>7</u>) | tza <u>7yji</u> |

(With the possible exception of *tza7yji*, all of these C7 and 7C clusters end a noun or verb root. Parenthesized roots are not currently recognized in epi-Olmec texts.) All of these consonant clusters consist of 7 either before or after any of the other 10 consonants in the language.

Every syllable-ending 7C and C7 is spelled identically to syllable-ending C. Syllable-ending *ks* and probably *ps* are spelled identically to syllable-ending *s*. The result is that every single syllable in the epi-Olmec language is spelled as though it were a CV or CVC syllable. Most non-final syllables happen to be CV or CV7, i.e., they typically do not end in consonants other than glottal stops. By failing to spell 7 before consonants, most non-final syllables therefore happen to be treated under the spelling rules as CV syllables.

The failure to spell *k* or *p* before *s* and the broader failure to spell 7 except before vowels can therefore be seen as effects in part of Mije-Sokean word structure. But the failure to spell *j*, *w*, or *y* when they do not precede a vowel has no such source. This seems to be strictly the result of their being "weak" consonants, like 7. This could be seen as a generalization from the parallel treatment of 7, but it is a fact that many ancient scripts, like Egyptian, do not

always represent weak consonants; in the Egyptian case, acrophonic origins of phonetic signs or sign values treat weak consonants as though they were not present.

Four signs appear to represent CVC syllables, inasmuch as they are used for CVC sequences in different morphemes. Two have known acrophonic origins and two do not. All four happen to spell verb stems.

The sign **saj**, like **sa**, appears to be derived from the logogram for *sa7sa7* 'noble' by the addition of the SKY logogram as part of the ear ornamentation. It is used both for *saj* 'wing' and for the verb stem *saj* 'to give'.

The sign **pak** depicts a bone (Sokean **pak*); it is used to spell the verb stem *pak* 'to hit' in the nominalization *pak.kuy7* 'bludgeon, club (literally, an instrument for hitting)'.

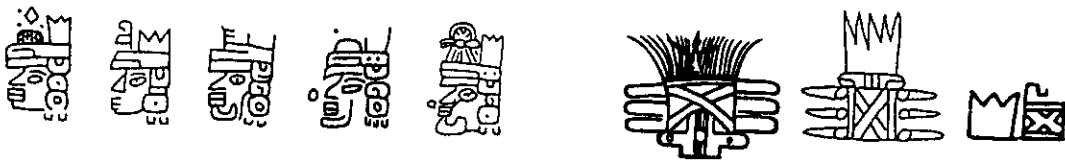
The sign **puk** depicts a container (probably *puk.u7* 'receiver, taker') and occurs in spellings based on the stem *puk* to 'to take, to receive'; Macri and Stark point out that it occurs in Izapa iconography on bird's wings, presumably spelling *puk* 'feather(s), hair(s)'.

The signs **kak** and **yaj** are abstract enough that their iconic sources are not clear, and can really only be guessed at. **kak** spells the stem *kak* 'to exchange, to replace, to succeed in office' in *kak-wu* 'it got replaced' or in its nominalization *kak.u7* 'succession', as well as the first syllable of the word *kakpe7* 'scorpion'. **yaj** spells the 3rd person plural subject/object suffix *-yaj* on verbs and the pluralizing morpheme *+yaj* on "inanimate" nouns, as well as the verb stem *yaj* in *yaj-7i* 'it should be finished'. (It is an oddity of Mije-Sokean languages that the root of the verb 'to finish' serves this pluralizing function, whatever that verb might be in a given language.)

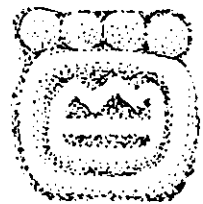
4.3. Relations between epi-Olmec and Mayan writing

Many epi-Olmec signs look similar to signs in Mayan writing. The examples of epi-Olmec **ko** and early Mayan **ka** show that parallel acrophonic processes were sometimes responsible for these similarities.

Shared iconography was also sometimes responsible. We discuss an especially interesting example.



The sign for the day Reed occurs in two epi-Olmec texts, and has the same generic appearance as the surmounting element; they differ in that the surmounting element of the GTB is executed more schematically, with no interior detail. It is the iconographic context that clinches the identification with reeds. The element occurs on the Humboldt Celt in an iconographic complex that also occurs on the Chalcatzingo vase. On the vase, however, it is much more naturalistic, and displays both the tassel that surmounts a reed stalk and the successive "leaves" that project upward and fall down alternately on either side of the stalk. Taube identified them with corn, but neither kernels nor the developed husked cob are ever marked on these depictions.



The structure of the GTB of signs explains a curiosity about a well-known Mayan sign complex. The most common Mayan spelling for the word *7a:ja:w* as a title is by the two-part

sign whose reading as *7a:ja:w* was demonstrated by Lounsbury. This sign consists of a sign similar to late forms of the Mayan **po** syllabogram, followed (in all early examples) by the sign for the day Reed. In fact, a whole series of such titles are known in the Early Classic that consist of different first elements – sky, sun, star, moon, jaguar mat – followed by the sign for Reed. Several of these compound signs represent titles.



The placement of these Mayan title logograms is unusual. Mathews showed that the Reed-based sign for *7a:ja:w* (almost) always surmounts the glyph group to which they pertain, but are in fact read afterward; this is indicated by fact that, when the same person's title and name is spelled instead by any other logogram for the word *7a:ja:w*, that spelling follows the glyph group to which it pertains.

Another peculiarity is that all of these Reed-based signs do not simply precede the glyph group to which they pertain; they surmount it. Most elongated signs, when preposed, can be placed either horizontally upon the following glyphs, or vertically to their left; the Reed-based signs are always placed above them. The epi-Olmec correlates suggests the reason: these compounds were treated as headgear, worn atop the pictured head that depicted the official; in the Mayan case, the glyphic correlate of the epi-Olmec headgear titles continues to be worn as headgear atop the glyph referring to the official. The epi-Olmec data also make it clear that the function of the Reed day sign in the Mayan compound plays a symbolic role that was not based on the approximate phonetic resemblance of Mayan **7a:j* 'reed' to **7a:ja:w* or to the classifier **7aj=*.

Sometimes, though, the signs appear to have been borrowed by one system from the other. The signs **na** and **ma** appear to have been borrowed by Mayans from Mije-Sokeans; the sign **YEAR/DRUM** appears to have been borrowed by epi-Olmecs from Mayans, probably through interaction involving the use of the written format of the long count and associated chronological systems.

The Kaminaljuyu script has some signs known from both Mayan and epi-Olmec writing, others from Mayan but not from epi-Olmec, and still others from epi-Olmec but not from Mayan. We suppose that the script represented a Mije-Sokean or Mayan language – possibly both.

Texts

Codes for grammatical categories and morphemes

absolutive person markers

| | |
|----|------------------------------|
| XA | exclusive absolutive: {7u+} |
| 3A | third person absolutive: {0} |

ergative person markers

| | |
|----|--------------------------------|
| XE | exclusive ergative: {na+} |
| IE | inclusive ergative: {tun+} |
| 2E | second person ergative: {7in+} |
| 3E | third person ergative: {7i+} |

verb-deriving prefixes

| | |
|-------|---|
| AWAY | : {ku>} |
| MOUTH | with the mouth: {7aw=} |
| BODY | on the body: {ni7.} |
| ELSE | in someone else's place: elsewhere, for someone else: {ko.} |
| ASSOC | together, jointly: {nu.} |
| CAU | causative {yak=} |

verb-inflecting suffixes

| | |
|----------|----------------------|
| NDIR | indirective: {-jay7} |
| PRF | perfect: {-nay7} |
| ENTIRELY | : {-pu7} |

plural person marking suffixes

| | |
|----|-----------------------------|
| AP | animate plural: {-ta7m} |
| IP | inanimate plural: {-yaj} |
| 3P | third person plural: {-yaj} |

aspect-mood suffixes

| | |
|-----|---------------------------------|
| II | independent incomplete: {-pa} |
| DI | dependent incomplete: {-e ~ -i} |
| IC | independent complete: {-wu} |
| DP | dependent complete: {-ji} |
| OPT | optative: {-7i} |

stative-deriving suffix

| | |
|------|-----------------|
| STAT | stative: {.na7} |
|------|-----------------|

noun-deriving suffixes

| | |
|------|---|
| PN | passive nominalization: {.e}, {.i}, {.e7}, {.i7}, {.u7} |
| AN | active nominalization: {.u7}, {.a7}, {.i7} |
| NSTR | instrument noun: {.kuy7}, {.7} |

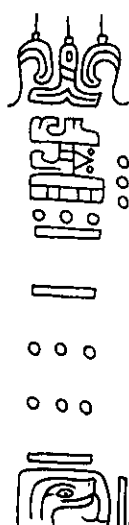
locative enclitics

| | |
|------|------------------|
| LOC | locative: {+mu7} |
| FROM | : {+k} |

subordinating enclitics

| | |
|------|---------------------|
| REL | relativizer: {+wu7} |
| WHEN | : {+7k} |

The Stela of La Mojarra (MOJ)


| | Loc | MS# | Glyph | Reading = Pronunciation |
|------|---|-----|---------------------------|---------------------------------------|
| A1-9 |  | A1 | 95 | CHRON ₁ |
| | | A2a | 110 | PATRON ₁₇ |
| | | A2b | 72 | YEAR/7AME7 OR DRUM, presumably /kowa/ |
| | | A3 | 3 | 3 = /tuka/ |
| | | A4 | 8 | 8 = /maktas=tujtu/ |
| | | A5 | 5 | 5 = /mo(ko)s/ |
| | | A6 | 3 | 3 = /tuka/ |
| | | A7 | 3 | 3 = /tuka/ |
| | | A8 | 5 | 5 = /mo(ko)s/ |
| | A9a | 13 | 13, presumably /mak=tuka/ | |
| | A9b | 155 | DN:SNAKE = /tzajin/ | |

T CHRON₁ LCIG. PATRON₁₇+YEAR//DRUM-3 8.5.3.3.5 13=SNAKE
R tzajin
G
L

FT It was the third day of the seventeenth month;
the long count was 8.5.3.3.5, and the day was 13 Snake.














[1 May 143 CE; A1-3 is the LCIG] {EN1}

B1-4

| | | | |
|---|-----|------|----------------------------|
|  | B1a | 114 | tuk |
| | B1b | 143 | pa |
| | B2 | 125 | SUN = /saw/ {EN2} |
| | B3 | 152b | EAT, presumably /ka7s/ |
| | B4 | 104 | MOON/POY7A OR TWENTY/7I7PS |

T tuk~~x~~pa SUN-EAT MOON
R 0-tuk-pa saw=ka7s.u7 poy7a
G 3A-happen-II sun-eat-AN moon
L it-happens sun=eat-ing moon
FT A sun-eating moon [solar eclipse] took [lit. takes] place.

B5-C7

| | | | |
|--|-----|-----|--------------------------|
|  | B5 | 23 | PIERCE, probably /wu7tz/ |
|  | B6 | 63 | ma |
|  | B7 | 109 | pak |
|  | B8 | 37 | ku |
|  | B9 | 20 | wa |
|  | C1 | 63 | ma |
|  | C2a | 32 | STAR/MATZA7 |
|  | C2b | 30 | tza |
|  | C3 | 31 | ?SHINE, probably /kij/ |
|  | C4 | 20 | wa |
|  | C5 | 74 | tza ₂ |
|  | C6 | 138 | ji |
|  | C7 | 20 | wa |

T PIERCE ma pak-ku wa ma-STAR+tza
R wu7tz.u7 ma pak.kuy7 +wa7 matza7
G pierce-AN earlier beat-NSTR REL star
L piercingly earlier bludgeon -type star

T SHINE-wa tza₂-ji wa
R 0-kij-wa tza7yji +wa7
G 3A-shine-IC late REL
L it-shone late -type

FT Piercingly the bludgeon star [Venus] had shone earlier, as a late in the day one (i.e. as evening star). [EN3]

[A solar eclipse took place somewhere between about 6.30 AM and 10 AM on the morning of 1 May 143 CE, with 60-80% of the solar disk covered; so close to the horizon, such an eclipse was probably visible (Bradley Schaeffer, personal communication, 1995). Venus had shone/appeared as evening star the previous night, on 8.5.3.3.4; at 45° 17' 57" it was not visibly closer to the sun than it was at its maximum eastern elongation of 45° 18' 09", the night before. Venus is represented as a piercer of other heavenly beings or gods in the Dresden codex.



| | | |
|-----|------|---|
| D1a | 129 | KNOTTED.CLOTH |
| D1b | 75 | HALLOW/KO.NU7KS |
| D2 | 63 | ma |
| D3 | 176a | sa |
| D4 | 150 | SPRINKLE/WIK |
| D5 | 127 | ta |
| D6 | 63 | ma |
| E1 | 184 | NOBLE ₁ , possibly /sa7.sa7(=pun)/ |
| E2 | 181 | WAR.LEADER |
| E3 | 20 | wa |
| E4a | 54 | kak |
| E4b | 59 | SUPPORT |
| F1 | 127 | ta |
| F2 | 63 | ma |
| F3 | 38 | 7i |
| F4 | 170 | ki |
| F5 | 179 | pi |
| F6 | 20 | wa |



T KNOT+HALLOW ma-sa-SPRINKLE-ta-ma
 R X+ko. nu7ks.i masa=wik.i-ta7m
 G ?-ELSE-greet-PN god-sprinkle-PN-AP
 L coronated sprinkling-hallowed-ones












T NOBLE WARLEADER wa kak+SUPPORT-ta-ma
 R sa7sa7(=pun) WARLEADER +wa7 kak.e=SUPPORT.{A7}-ta7m
 G noble(+person) ?? REL support-PN-AP
 L noble warleader -type replacement-supporters

T 7i-ki-pi-wa
 R 0-7i+kip-wa
 G 3A-3E-fight-IC
 L they-fought.against-them

FT Coronated ones hallowed by sprinkling fought against noble(s and)
 war-leader-type succession-supporters [would-be successors/usurpers].
 OR

Coronated ones hallowed by sprinkling fought against noble (and)
 war-leader-type succession-supporters [would-be successors/usurpers].







G1-H2

| | | | |
|---|-----|------|---------------------------|
|  | G1 | 63 | ma |
|  | G2 | 165 | ja |
|  | G3 | 63 | ma |
|  | G4a | 96a | TIME _a |
|  | G4b | 136 | SKY _a |
|  | G4c | 163 | ?NIGHT = /tzu7/ OR ?<tzu> |
|  | G5 | 165 | ja |
|  | G6 | 63 | ma |
|  | G7 | 44 | na |
|  | H1 | 176a | sa |
|  | H2 | 20 | wa |

T ma ja-ma TIME_a+SKY_a=?NIGHT ja-ma na-sa-wa
R ma jama tzu7 jama 0-nas-wa
G earlier day night day 3A-pass-IC
L earlier day night day it-passed
FT Earlier a day, a night, and a day had passed;

[The evening of 8.5.3.3.7. The day was 2 Deer, the 5th day of the seventeenth month; 3 May 143 CE.]

H3-I4






| | | | |
|---|----|-----|---------------------------|
|  | H3 | 38 | 7i |
|  | H4 | 101 | si ₂ |
|  | I1 | 13 | 13, presumably /mak=tuku/ |
|  | I2 | 72 | YEAR/7AME7 or DRUM |
|  | I3 | 85 | BUNDLE/PIT |
|  | I4 | 64 | ti |

T 7i-si₂ THIRTEEN YEAR BUNDLE-ti
R 7is mak=tuku 7ame7 0-pit.i
G see ten-three year 3A-tie-PN
L behold thirteen year it-is-prisoner
FT (when) behold, there was a prisoner for thirteen years.

[13 year time increment leads to 8.5.16.3.7. The day was 2 Deer, on the 260th day of the year – quite possibly a ritually significant date in its own right. This was two days, and one or two nights, after a penumbral lunar eclipse, magnitude 66%, which was visible at La Mojarra and the Tuxtla Mountains, and which would have occurred on the 13th anniversary of the beginning of the battle. It was also an approximate Venus anniversary of the date of the Venus event.]

I1-4: cf. N7-8 word play on ‘prisoner’ and ‘bundled’



I5-J5

| | | | |
|---|----|-----|-------------|
|  | I5 | 34 | AND.THEN |
|  | I6 | 85 | BUNDLE/PIT |
| | J1 | 64 | ti |
|  | J2 | 6 | 6 = /tujtu/ |
|  | J3 | 122 | po |
|  | J4 | 49 | 7a |
| | J5 | 20 | wa |

T AND.THEN BUNDLE-ti SIX po-7a wa
R AND.THEN 0-pit.i tujtu poy7a +wa7
G and.then 3A-tie-PN six month REL
L and.then it-is-prisoner six month -type
FT And then there was an imprisonment that was for six months.





[Six-month time increment leading to 8.5.16.9.7, 23 June 156 CE, the day before summer solstice. The day was 5 Deer, the 15th day of the first month.]

J6-8

| | | | |
|---|----|-----|----|
|  | J6 | 97 | 7o |
|  | J7 | 93 | tu |
| | J8 | 143 | pa |

T 7o-tu-pa
R 0-7otuw-pa
G 3A-speak-II
L he-speaks
FT He [HML] speaks:

K1-4

| | | | |
|---|----|---------|----|
|  | K1 | 44 | na |
|  | K2 | 124 | ku |
|  | K3 | 93 | tu |
|  | K4 | 103+101 | si |

T na-ku tu-si
R na+ku7 0-tus.i
G XE-hand 3A-prick-PN
L my-arm it-is-bristling/prickling
FT "My arm is bristling/prickling."

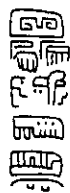
K5-L3



| | | |
|-----|-----|---|
| K5 | 140 | tzu |
| K6 | 101 | si ₂ |
| K7 | 20 | wa |
| L1 | 182 | STB+VENUS+REEDS+BEAD = COMMANDING.GENERAL |
| L2 | 114 | tuk |
| L3a | 119 | MOUNTAIN = /kotzak/ |
| L3b | 57 | LORD/KO.YUMI |

T tzu-si wa COMMANDING.GENERAL tuk MOUNTAIN+LORD
 R tzusi +wa7 COMMANDING.GENERAL tuk.w7 kotzak ko.yumi
 G child REL ?? harvest-AN mountain ELSE-leader
 L child -type commanding.general harvester mountain lord
 FT (said) the youthful commanding general Harvester Mountain-Lord [EN4]

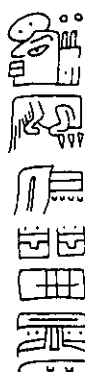
L4-9



| | | |
|----|---------|------------|
| L4 | 44 | na |
| L5 | 133+133 | tze+tze |
| L6 | 115 | CHOP/TZETZ |
| L7 | 138 | ji |
| L8 | 63 | ma |
| L9 | 20 | wa |

T na-tze+tze-CHOP-ji ma-wa
 R 0-na+tzetz-ji 0-maw.w7
 G 3A-XE-chop-DC 3A-ruin-PN
 L when-I-chopped-him/it he-is-ruined
 FT "When I chopped (off his head), he was ruined/it was his ruin."

M1-7



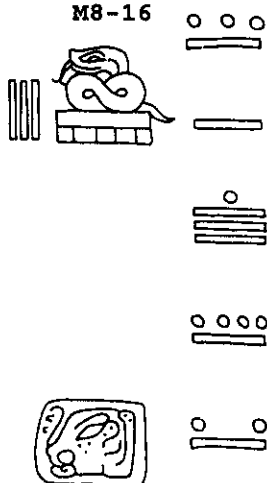
| | | |
|----|---------|------------|
| M1 | 171 | GO.UP/KI7M |
| M2 | 153 | je |
| M3 | 140 | tzu |
| M4 | 56 | te |
| M5 | 38 | 7i |
| M6 | 103+101 | si |
| M7 | 20 | wu |

T GO.UP je-tzu te 7i-si-wu
 R ki7m.u7 je7.tzu te7 0-<7i+>7is-wu
 OR ki7m.i7
 G go.up-AN yon-manner that 3A-3E-see-IC
 L ascent that.way the.latter he-saw-it
 OR ascending.one

FT As for the ascent/installation/accession OR ascending one, that was how the latter/aforementioned (the prisoner) saw/witnessed it/him.

[In this very important clause, the object is focused, and we have OSV word order. The captive would-be usurper saw the scion of the ruling faction he had wanted to displace being installed in office at the same moment that he was executed by him.]

M8-16



| | | |
|-----|-----|-------------------------------------|
| M8 | 95 | CHRON ₁ |
| M9a | 152 | PATRON ₁ |
| M9b | 72 | YEAR/7AME7 OR DRUM |
| M10 | 15 | 15, presumably /yat/ OR /mak=mokos/ |
| M11 | 8 | 8 = /tuka=tujtu/ |
| M12 | 5 | 5 = /mo(ko)s/ |
| M13 | 16 | 16, presumably /mak=tujtu/ |
| M14 | 9 | 9 = /maktas=tujtu/ |
| M15 | 7 | 7, presumably /kuy/ OR /was=tujtu/ |

| | | |
|----------------|-----|----------------------------|
| M16a {effaced} | 5 | = /mo(ko)s/ |
| M16b | 154 | DN:DEER. presumably /ma7a/ |





T CHRON₁ LCIG.PATRON₁+YEAR//DRUM-15 8.5.16.9.7 [5]=DEER
 R ma7a
 G

FT It was the fifteenth day of the first month;
 the long count was 8.5.16.9.7, and the day was 5 Deer.

[M8-M10 is the LCIG]

[The date is June 23, 156 CE, making explicit the date reached by the time count at J2-5]





N1-4

| | | | |
|---|-----|--------|-------------------|
|  | N1 | 4 | 4 = /maktas/ |
|  | N2a | 96a | TIME _d |
|  | N2b | 137b | MONTH = /poy7a/ |
|  | N3 | 116+42 | ?wo |
| | N4 | 63 | ma |

T FOUR TIME_d+MONTH wo-ma
R maktas poy7a 0-wo7m.a7
G four month 3A-sprout-AN
L four month it-is-sprout
FT For four months was the sprouting;

[Four month time increment leading to 8.5.16.13.7. The day was 7 Deer, the 15th day of the fifth month. The date was 11 September 156 CE. These four "months" (80 days) ran from 23 June to 11 September, during the rainy season.]

N5-8

| | | | |
|--|----|-----|--------------------|
|  | N5 | 38 | 7i |
|  | N6 | 171 | GO.UP/KI7M |
|  | N7 | 72 | YEAR/7AME7 OR DRUM |
|  | N8 | 85 | BUNDLE/PIT |

T 7i-GO.UP YEAR BUNDLE
R 7i+ki7m-i 7ame7 0-pit.i
G 3E-go.up-DI year 3A-tie-PN
L when-he/it/they-go(es).up year it-is-bundle
FT When he goes up/ascends, the year is bundled.
OR
When he/they go(es).up/ascend, a(nother) year is (in a) bundle(d).
OR
When he goes.up/ascends, there/it is a year-bundle.
OR





T 7i-GO.UP-YEAR BUNDLE
R 7i+ki7m.u7=7ame7 0-pit.i
G 3E-go.up-AN-year 3A-tie-PN
L his-ascent-year it-was-bundle
FT His ascent/re-accession year was (a) bundled (thing).

N7-8: cf. I1-4 word play on 'prisoner' and 'bundled'

[One year time increment leading to 8.5.17.13.7, 6 September, 157 CE. The day was 3 Deer, on the tenth day of the fifth month.]






N9-12

N9-12

| | | | |
|---|-----|-----|---|
|  | N9 | 147 | pu |
|  | N10 | 20 | wa |
|  | N11 | 38 | 7i |
|  | N12 | 58 | OFFERING, perhaps LOTS or PRECIOUS STONES (or both) |

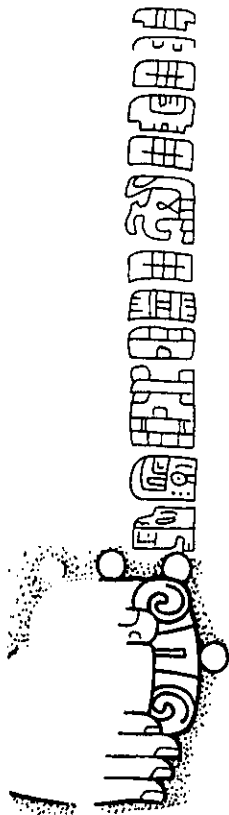
| | | |
|----|-----------------------------|--------------|
| T | pu-wa | 7i-OFFERING |
| R | 0-puw-wa | 7i+OFFERING |
| G | 3A-scatter-IC | 3E-offering |
| L | it-got-scattered | his-offering |
| FT | His offering got scattered. | |

N13-17

| | | | |
|---|-----|-------|---------------------------------------|
|  | N13 | 33 | SKIN, presumably /naka/ |
|  | N14 | 72 | YEAR/7AME7 or DRUM, presumably /kowa/ |
|  | N15 | 55+55 | ?su+?su |
|  | N16 | 153 | je |
|  | N17 | 60 | GOVERNOR('s headdress) |

| | | | | |
|----|--|-------------|-----|----------|
| T | SKIN-DRUM | su+su | je | GOVERNOR |
| R | 0~naka=kowa | su7ksu7 | je7 | GOVERNOR |
| G | 3A-skin-drum | hummingbird | yon | governor |
| L | it-is-skin-drum | hummingbird | yon | governor |
| FT | That governor('s headdress) was a skin-drum (and a) hummingbird. [EN5] | | | |

N18-29



| | | |
|-----|-----|---------------------------|
| N18 | 52 | pe |
| N19 | 20 | wa |
| N20 | 38 | 7i |
| N21 | 51 | MACAW.POWER1 [EN6] |
| N22 | 38 | 7i |
| N23 | 83 | ECCENTRIC.FLINT |
| N24 | 38 | 7i |
| N25 | 37 | ku |
| N26 | 67 | MIDDLE/KUK |
| N27 | 74 | tza ₂ |
| N28 | 165 | ja |
| N29 | 169 | me |

T pe-wa 7i-MACAW.POWER₁ 7i-ECCENTRIC.FLINT
 R 0-pey-wa 7i+MACAW.POWER 7i+ECCENTRIC.FLINT
 G 3A-brandish-IC 3E-?? 3E-??
 L they-got-brandished his-macaw.power his-eccentric.flint




T 7i-ku-MIDDLE-tza₂-ja-me
 R 7i+kuk=tza7=jam.e
 G 3E-middle-stone-remember-PN
 L his-middle-stone-remembrance

FT His Macaw.power, his eccentric.flint, and his pectoral stone memento
 got brandished.

[This clause describes the action that is depicted in the scene on the front of the stela; in a nice interplay of text and image, HML's hand swings into column M just at the end of the clause that describes this very action. Something similar may be happening in the Alvarado stela.]

ABOUT TEN SIGNS MISSING







N*30-32

| | | | |
|---|------|-----|----------------------------|
|  | N*30 | 165 | ja |
|  | N*31 | 161 | BEDECK, possibly /wɐ=tzɐk/ |
|  | N*32 | 20 | wɐ |

T ... ja BEDECK-wɐ
R ... ?? 0-wɐ=tzɐk-wɐ
G 3A-good-do-IC
L ... ?? he-got-bedecked
FT ... (he) got bedecked























[cf. S17-18/21]

N*33-37

| | | | |
|---|-------|-----|--------------|
|  | N*33 | 24 | NOW/...TI |
|  | N*34a | 66 | PRIEST |
|  | N*34b | 125 | SUN = /sɐw/ |
|  | N*35a | 45 | ko |
|  | N*35b | 57 | LORD/KO.YUMI |
|  | N*36 | 145 | BEARD.MASK |
| | N*37 | 20 | wɐ |

T NOW PRIEST+SUN ko+LORD BEARD.MASK wɐ
R ADV₁-ti ko7=sɐw 0-ko.yumi BEARD.MASK +wɐ7
G now head=sun 3A-ELSE-leader ?? REL
L now priest he-was-lord beard.mask -type
FT Now the priest was he who is a lordly beard-mask (wearer);

OR Now the lordly beard-mask wearer was a/the priest.

| | | | | |
|---|------|------|--------------------------------------|---|
|  | N*38 | 89 | AFTER/JUS | |
|  | 01 | 13 | 13, presumably /mak=tuku/ | |
|  | 02 | 53 | ja ₂ | |
|  | 03 | 63 | ma | |
|  | 04 | 21 | ?GOD, possibly /jej.a7/ 'living one' | |
|  | 05 | 168 | LONGLIP ₁ = MACAW.MONSTER |   |
|  | 06 | 54 | kak | |
|  | 07 | 77 | SCORPIUS/KAKPE7 | |
|  | 08 | 52 | pe | |
|  | 09 | 182b | KING | |
|  | 010 | 114 | tuk | |
|  | 011a | 119 | MOUNTAIN = /kotzuk/ | |
|  | 011b | 57 | LORD/KO.YUMI | |
|  | 012a | 171 | GO.UP/KI7M | |
|  | 012b | 112 | THRONE | |
|  | 013 | 91 | APPEAR | |
|  | 014 | 20 | wu | |
|  | 015 | 139 | 7aw | |
|  | 016 | 171 | GO.UP/KI7M | |
|  | 017 | 46 | ma | |

T AFTER THIRTEEN ja₂-ma GOD LONGLIP₁ kak-SCORPIUS-pe
R jus mak=tuku jama jej.a7 MACAW.MONSTER kakpe7
G back ten-three day live-AN ?? scorpion
L after thirteen days god Macaw.Monster Scorpius

T KING tuk MOUNTAIN+LORD GO.UP+THRONE
R KING tuk.u7 kotzuk ko.yumi ki7m.u7=THRONE
G ?? harvest-AN mountain ELSE-leader go.up-AN-??
L King Harvester Mountain-Lord ascension.throne

T APPEAR-wu 7aw-GO.UP-mu
R 0-APPEAR-wu 7aw=ki7m.u7(+mu7)
G 3A-appear-IC MOUTH-go.up-AN-LOC
L appeared (in.) rulership

FT After thirteen days, the god(s) Macaw Monster and Scorpius, and King Harvester Mountain-Lord and (OR on) an ascension throne appeared in rulership.

[13-day time increment leading to the night of 8.5.17.14.0. The day was 3 Macaw, day 3 in month 6, which was the night beginning on 19 September 157 CE. This night was the 9th Venus anniversary (9 x 584 days) of the first Venus event, and like the associated eclipse date, it fell at new moon.]

O18-24



| | | |
|------|------|--|
| 018a | 144a | ?SKY.GOD _d |
| 018b | 144b | SKY/TZAP |
| 019 | 143 | pa |
| 020 | 160 | ?QUETZAL or TROGON, presumably /tu7ki/ |
| 021 | 45 | ko |
| 022 | 170 | ki |
| 023 | 65 | mi |
| 024 | 171 | GO.UP/KI7M |

T SKY.GOD_d=SKY-pa QUETZAL ko-ki-mi-GO.UP
 R tzap tu7ki <7i+>ko.ki7m-i
 G sky trogon 3E-ELSE-go.up-DI
 L sky quetzal when-he-ascends-ELSE
 FT When Sky Quetzal [EN7] was ascending for.others/elsewhere...

O25-26






| | | |
|------|------|-----------------|
| 025 | 75 | HALLOW/KO.NU7KS |
| 026a | 134a | nu ₂ |
| 026b | 151 | SPAN/TZAT7 |
| 026c | 44 | EARTH/NAS |

T HALLOW nu₂=SPAN+EARTH
 R 0-ko.nu7ks.i nu.tzat7.e=nas
 G 3A-ELSE-greet ASSOC.measure-PN-earth
 L it-is-hallowed jointly-handspan.measured-ground
 FT ... (at) the hallowed ground jointly measured by hand spans...
 OR ...the ground jointly measured by handspans had been hallowed.







ABOUT EIGHT SIGNS MISSING

O*27-29

| | | | |
|---|------|----|---------------------------------------|
|  | O*27 | 40 | POUND, probably /naks/ |
|  | O*28 | 20 | wa |
|  | O*29 | 72 | DRUM, presumably /kowa/ OR YEAR/7AME7 |








T POUND-wa DRUM
 R 0-naks-wa kowa
 G 3A-pound-IC drum
 L it-got-pounded drum
 FT The drum got pounded;

O*30-33

| | | | |
|---|-------|-----|-----------------------|
|  | O*30 | 90 | wi |
|  | O*31 | 8b | ?BEFORE/WIN |
|  | O*32a | 105 | FOLD, probably /paks/ |
|  | O*32b | 142 | pa ₂ |
|  | O*33a | 93 | tu |
|  | O*33b | 100 | CLOTH/TUKU7 |

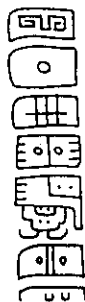
T wi-BEFORE FOLD+pa₂ tu+CLOTH
 R win 0-paks-pa tuku7
 G face 3A-fold-II cloth
 L in.front it-gets-folded cloth
 FT <then> the garments were getting folded in front.

O*34-P2

| | | | |
|---|------|-----|--------------------------|
|  | O*34 | 38 | 7i |
|  | O*35 | 23 | PIERCE, probably /wu7tz/ |
|  | O*36 | 101 | si ₂ |
|  | O*37 | 38 | 7i |
|  | O*38 | 97 | 7o |
|  | P1 | 93 | tu |
|  | P2 | 143 | pa |

T 7i-PIERCE si₂-7i 7o-tu-pa
 R 7i+wu7tz-i <7i+>si7i7 0-7otuw-pa
 G 3E-pierce-DI 3E-buttocks 3A-speak-II
 L when-it-gets-pierced his-buttocks he-speaks
 FT When his buttocks were getting pierced, he [HML] speaks:

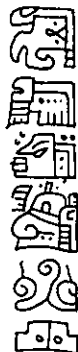
P3-9



| | | |
|----|--------|------------------|
| P3 | 44 | na |
| P4 | 22 | BLOOD = /nu7pin/ |
| P5 | 38 | 7i |
| P6 | 45 | ko |
| P7 | 149+50 | LOSE/TOKOY |
| P8 | 47' | pu |
| P9 | 20 | wa |

T na-BLOOD 7i-ko-LOSE -pu -wa
 R na+nu7pin 0-7i+ko.tokoy-pu7-wa
 G XE-blood 3A-3E-ELSE-lose-ENTIRELY-IC
 L my-blood he-spilled/hid-it-entirely-ELSE
 FT "He [probably the calendar priest (or possibly Sky Quetzal)] spilled/hid my blood in another's place."

P10-15



| | | |
|-----|-----|-----------------------------------|
| P10 | 83 | ECCENTRIC.FLINT |
| P11 | 139 | 7aw |
| P12 | 171 | GO.UP/KI7M |
| P13 | 166 | ?? [undamaged, but uninterpreted] |
| P14 | 96a | ?TIME, possibly /7aw=suw/ |
| P15 | 54 | kak |

T ECCENTRIC.FLINT 7aw-GO.UP ?? TIME kak
 R ECCENTRIC.FLINT 7aw=ki7m.u7 ?? 0-7aw=suw kak.u7
 G ?? MOUTH-go.up-AN ?? 3A-MOUTH-festival replace-AN
 L 'royal' ruler(ship) ?? it-is-time success-ion/-or
 FT (The) royal ruler(ship) is/was (a/the) X time/count success-ion/-or;

P16-18







| | | |
|------|-----|------------------------------------|
| P16 | 69 | ?? (?building, ?mantle, ?headwrap) |
| P17a | 129 | KNOTTED.CLOTH |
| P17b | 75 | HALLOW/KO.NU7KS |
| P18 | 100 | CLOTH/TUKU7 |

T ?? KNOT+HALLOW CLOTH
 R ?? 0-X+ko.nu7ks.u tuku7
 G ?? 3A-X-ELSE-greet-AN cloth
 L ?? it-is-coronation cloth
 FT Y is/was a coronation cloth.

[The syntax is unclear here]











P19-22

| | | |
|---|-----------|-----------------------|
|  | P19a 96a | ?TIME ₂ |
|  | P19b 144a | ?SKY.GOD ₃ |
|  | P19c 94b | RAIN |
|  | P20 63 | ma |
| | P21 10 | 10/MAK |
| | P22a 144a | ?SKY.GOD ₃ |
| | P22b 144b | SKY/TZAP |

T TIME₂+SKY.GOD₃=RAIN ma-TEN SKY.GOD₃=SKY
 R 0-tuj7=7aw=suw=jej.a7 mak tzap
 G 3A-rain-MOUTH-festival-live-AN
 L he-is-rainy season[-spirit] Ten Sky
 FT (The god) Ten Sky is/was a/the rainy season god.

[This date, 8.5.17.14.0, falls in the latter part of the rainy season.]

P23-30

| | | |
|---|----------|--------------------------|
|  | | |
|  | P23 45 | ko |
|  | P24 23 | PIERCE, probably /wu7tz/ |
|  | P25 124 | ku |
|  | P26 20 | wu |
|  | P27 38 | 7i |
|  | P28a 171 | GO.UP/KI7M OR ?RULE |
|  | P28b 101 | si ₂ |
|  | P29 38 | 7i |
|  | P30 87 | yaj |

T ko-PIERCE-ku-wu 7i-GO.UP+si₂-7i-yaj
 R 0-ko.wu7tz=kuy7-wu 7i+ki7m.u7=si7i7-yaj
 G 3A-ELSE-pierce-cover-IC 3E-go.up-AN-buttocks-3P/IP
 L it-got-pierced-and-covered-ELSE their-ascent-buttocks
 OR his-ascent-buttock.cheeks

FT Their [HML and his cronies's] power-assuming buttocks got pierced and covered for others.

OR His [HML's] power-assuming buttock-cheeks got pierced and covered for others.

OR (if P31 is read with P23-30, and <wu> was present immediately after in the effaced part [cf. MOJ V17-18]) Their/His Reeds-Cross-Pillar-type ascension/power-assuming buttock (cheek)s got pierced and covered for others.

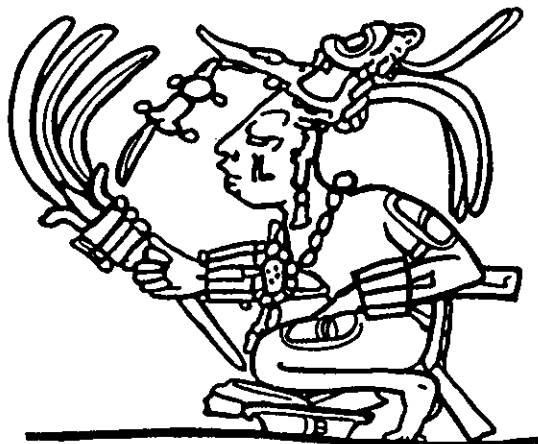
P31 61

TITLE₂ (Reeds+Cross-Pillar) = ancestor/Olmec (?)

[About 6 signs missing]



P*32 38 ? (probably 7i)
 P*33 132 LET.BLOOD
 P*34 107 PENIS = /kan/
 P*35 120 jo
 P*36 46 ma
 P*37 124var ka
 P*38a 76 PRINCE
 P*38b 78 "(ANGLE.)BRACE"
 P*39 20 wa



T (TITLE₂) x x x x x ? LET.BLOOD
 R ancestor(?) 7i+LET.BLOOD.E
 G ?? 3E-let.blood-DI
 L ancestral(?) he-was-blood-letting from-inside-penis

PENIS-jo-ma-ku

kan=joj+ma7+k

penis-inside-LOC-FROM

T PRINCE+BRACE wa
 R PRINCE +wa7
 G prince REL
 L prince -type



FT (ancestral(?)) ... when he was blood-letting from inside the penis, he was a prince-type.

OR (if P31 is read with P23-30) When the ancestral(?) ... was blood-letting from inside the penis, he was a prince-type.

P*40-Q2









P*40 24 NOW/...TI
 P*41 28 pak
 P*42 38 7i
 P*43 97 7o
 P*44 29 wa
 Q1 82 ju OR TIE/JU7PS
 Q2 103+101 si



T NOW pak-7i 7o-wa-ju(7ps)-si
 R ADV₁-ti 0-pak-7i 7owa=ju7ps.i
 G now 3A-take-OPT macaw-lash-PN
 L now it-should-get-taken macaw-lashing
 FT Now a macaw-lashing/?band was supposed to get taken.











Q3-8

| | | | |
|---|----|---------|-----------------------|
|  | Q3 | 63 | ma |
|  | Q4 | 24 [NO] | ke |
|  | Q5 | 149+42 | ne |
|  | Q6 | 105 | FOLD, probably /paks/ |
|  | Q7 | 142 | pa |
|  | Q8 | 100 | CLOTH/TUKU7 |

T ma ke-ne FOLD-pa CLOTH
 R ma ken.e 0-paks-pa tuku7
 G earlier see-PN 3A-fold-II cloth
 L earlier seen/visible it-gets-folded garment/cloth
 FT Earlier, (a) garment/cloth(s) was/were getting folded in plain sight.

[back-reference to O32-33]

Q9-12 (13-14)

| | | | |
|------|-----|---|------------------|
| Q9a | 79 |  | ?? |
| Q9b | 78 |  | "(ANGLE.) BRACE" |
| Q10 | 83 |  | ECCENTRIC.FLINT |
| Q11 | 20 |  | wh |
| Q12 | 121 | {  | ?FLOWER |
| Q13a | 45 |  | ko |
| Q13b | 57 |  | LORD/KO.YUMI |
| Q14 | 145 |  | BEARD.MASK |


















Q9-14

T ??+BRACE ECCENTRIC.FLINT wh ?FLOWER ko+LORD BEARD.MASK
 R ?? ECCENTRIC.FLINT +wh7 0-? ko.yumi BEARD.MASK
 G ?? ?? REL 3A-? ELSE-leader ??
 L 'notable' 'royal' -type he-is-flower lord beard.mask
 FT The notable royal-type X was a flower-lord beard-mask (wearer) [EN8]

OR Q9-12

T ??+BRACE ECCENTRIC.FLINT wh ?FLOWER
 R ?? ECCENTRIC.FLINT +wh7 0-? G ?? ??
 REL 3A-?
 L 'notable' 'royal' -type he-is-flower
 FT The notable royal-type X was a flower.

Q13-25

| | | | |
|---|------|-----|--------------------------|
|  | Q13a | 45 | ko |
|  | Q13b | 57 | LORD/KO.YUMI |
|  | Q14 | 145 | BEARD.MASK |
|  | Q15 | 182 | KING |
|  | Q16 | 114 | tuk |
|  | Q17a | 119 | MOUNTAIN = /kotzuk/ |
|  | Q17b | 57 | LORD/KO.YUMI |
|  | Q18 | 38 | 7i |
|  | Q19 | 45 | ko |
|  | Q20 | 56 | te |
|  | Q21 | 124 | ku |
|  | Q22a | 23 | PIERCE, probably /wu7tz/ |
|  | Q22b | 24 | NOW/...TI |
|  | Q23 | 80 | STAR.WARRIOR |
|  | Q24 | 75 | HALLOW/KO.NU7KS |
|  | Q25 | 20 | wa |
|  | | | |

Q13-25

T ko+LORD BEARD.MASK
 R ko.yumi BEARD.MASK
 G ELSE-leader ??
 L lord beard.mask

T KING tuk MOUNTAIN+LORD
 R (0-)KING tuk.u7 kotzuk ko.yumi
 G (3A-)? harvest-AN mountain ELSE-leader
 L (he-is-)King Harvester Mountain-Lord

T 7i-ko-te -ku
 R 0-7i+kot-e +7ku
 G 3A-3E-put.away-DI WHEN
 L when-he-put.in/on/away-it +when

T PIERCExNOW STAR.WARRIOR HALLOW-wa
 R wu7tz.u7 ADV₁-ti STAR.WARRIOR 0-ko.nu7ks-wa
 G pierce-AN now ?? 3A-ELSE-greet-IC
 L piercingly now star.warrior he-got-hallowed

FT When (the lordly beard-mask (wearer)), King Harvester Mountain-Lord, was putting it [garment?, macaw lashing/band?, beard-mask?, eccentric flint?] away, piercingly now the star-warrior got hallowed.

OR: The lordly beard-mask (wearer) is King HML.
 When he was putting it [garment?, macaw lashing/band?, beard-mask?, eccentric flint?] away, piercingly now the star-warrior got hallowed.

OR Q15-25









T KING tuk MOUNTAIN+LORD
 R KING tuk.u7 kotzak ko.yumi
 G ?? harvest-AN mountain ELSE-leader
 L King Harvester Mountain-Lord

T 7i-ko-te -ka
 R 0-7i+kot-e +7ka
 G 3A-3E-put.away-DI WHEN
 L when-he-put.in/on/away-it +when

T PIERCE:~NOW STAR.WARRIOR HALLOW-wa
 R wu7tz.u7 ADV₁-ti STAR.WARRIOR 0-ko.nu7ks-wa
 G pierce-AN now ?? 3A-ELSE-greet-IC
 L piercingly now star.warrior he-got-hallowed











FT When King Harvester Mountain-Lord was putting it [garment?, macaw lashing/band?, beard-mask?, eccentric flint?] away, piercingly now the star-warrior got hallowed.

Q26-33

| | | | |
|---|-----|--------|-----------------|
|  | Q26 | 52 | te |
|  | Q27 | 135 | ?SING/WAN |
|  | Q28 | 149+42 | ne |
|  | Q29 | 130 | DO/TZUK |
|  | Q30 | 142 | pa ₂ |
|  | Q31 | 165 | ja |
|  | Q32 | 63 | ma |
|  | Q33 | 20 | wa |

T te SING-ne-DO-pa₂ ja-ma wa
 R te7 wan.e=tzuk-pa jama +wa7
 G that sing-PN-do-II guise REL
 L aforementioned he-song-makes animal-guise/day -type
 FT The aforementioned one [HML] sings a song which is about/of an animal-guise/day('s length?):







Q34-42

| | | | |
|---|------|-----|----------------------------------|
|  | Q34 | 24 | NOW/...TI |
|  | Q35 | 44 | na |
|  | Q36 | 107 | PENIS = /kan/ |
|  | Q37 | 28 | puk |
|  | Q38 | 62 | ma |
|  | Q39 | 117 | ?LOINCLOTH, probably /ni7.jup.7/ |
|  | Q40 | 147 | pu |
|  | Q41a | 129 | KNOTTED.CLOTH with straps |
|  | Q41b | 60 | GOVERNOR('s headdress) |
|  | Q42 | 49 | 7a |

T NOW na-PENIS-puk
 R ADV₁-ti na+kan=puk.u7
 G now XE-penis-take-AN
 L now my-penis-receiver

T ma ?LOINCLOTH-pu KNOT+GOVERNOR-7a
 R ma 0-ni7.jup.7 0-"ruler"=ko7=mon7.a7
 G earlier 3A-BODY-cover-NSTR 3A-??-HEAD-wrap-NSTR
 L earlier it-is-body-cover-ing it-is-ruler's-head-wrap






FT "Now my penis-receivers [staunchers] had earlier been a body-covering and a ruler's head-wrap."

| | | | |
|-----|-----|---|-----------------|
| | |  | Q43-47 |
| Q43 | 54 |  | kak |
| Q44 | 77 |  | SCORPIUS/KAKPE7 |
| Q45 | 52 |  | pe |
| Q46 | 170 |  | ki |
| Q47 | 20 |  | wu |

T kak-SCORPIUS-pe ki-wu
 R kakpe7 0-kij-wu
 G scorpion 3A-shine-IC
 L Scorpius it-shone
 FT Scorpius shone.

[Venus was in Scorpius, a propitious situation for warfare among ancient Mayans, and apparently also among other Meso-Americans.]








Q48-R3

Q48 24  NOW/...TI
 Q49 173  ?? NOBLE.SKY.ANIMAL
 R1 152  JAGUAR = /kajaw/
 R2 91  APPEAR
 R3 20  wu

T NOW NOBLE.SKY.ANIMAL JAGUAR APPEAR-wu
 R ADV₁-ti sa7sa7=tzap=ko.pun kajaw 0-APPEAR-wu
 G now noble-sky-ELSE-person jaguar 3A-appear-IC
 L now noble sky animal jaguar it-appeared
 FT Now a noble sky animal jaguar [= Mercury?]
 appeared/got.revealed/shown.forth.

[This was the sign that the first of 23 jaguars should be taken over the course of 23 days by the protagonist.] [EN9]

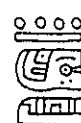
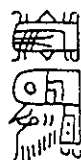
R4-8

R4a 109  pak
 R4b 37  ku
 R5 63  ma
 R6a 32  STAR/MATZA7
 R6b 30  tza
 R7 31  SHINE, presumably /kij/
 R8 20  wu

T pak+ku ma-STAR+tza SHINE-wu
 R pak.kuy7 matza7 0-kij-wu
 G beat-NSTR star 3A-shine-IC
 L bludgeon star it-shone
 FT The bludgeon star [Venus] shone.

[This date was the exact ninth Venus "anniversary" of (9 x 584 days since) the first-mentioned such event, at B7-C4, and was at maximum elongation (47° 00' 44') of Venus as evening star.]

R9-17








| | | |
|-----|-----|--------------------|
| R9 | 89 | AFTER/JHS |
| R10 | 178 | su? |
| R11 | 13 | 9 = /maktas=tujtu/ |
| R12 | 165 | ja |
| R13 | 63 | ma |
| R14 | 152 | JAGUAR = /kajaw/ |
| R15 | 28 | puk |
| R16 | 124 | ku |
| R17 | 38 | 7i |

T AFTER-su NINE ja-ma JAGUAR puk-ku-7i
R jus maktas=tujtu jama 0-kajaw=puk-7i
kajaw 0-puk-7i
G back four-past.five day 3A-jaguar-take-OPT
jaguar 3A-take-OPT
L after nine day he-should-jaguar-take
jaguar it-should-get-taken
FT Nine days later (once again) a (tenth) jaguar was supposed to get taken.
OR: Nine days later he was supposed to take a jaguar [with incorporated Direct
Object]








[nine day time increment leading to 8.5.17.14.9, 28 September 157 CE. The day was 12 Water, day 12 of month 6]

R18-22

| | | | |
|---|-----|-------|-------------------------|
|  | R18 | 33 | SKIN, presumably /naka/ |
|  | R19 | 72 | DRUM, presumably /kowa/ |
|  | R20 | 55+55 | ?su+?su |
|  | R21 | 98 | ya |
|  | R22 | 60 | GOVERNOR('s headdress) |

T SKIN-DRUM su+su ya GOVERNOR
R 0-naka=kowa su7ksu7 ya7 GOVERNOR
G 3A-skin-drum hummingbird this ??
L it-is-skin-drum hummingbird this governor
FT This governor('s headdress) was a skin-drum (and a) hummingbird. [EN5]

R23-27

| | | | | |
|---|------|-----|---|--|
| | R23 | 75 | HALLOW/KO.NU7KS | |
|  | R24 | 61 | TITLE ₂ (Reeds+Cross-Pillar) = ancestor/Olmec (?) | |
|  | R25 | 81 | TITLE ₄ ("x-badge") | |
|  | R26a | 1 | ONE = /tum-u/ |  |
|  | R26b | 72 | YEAR/7AME7 or DRUM |  |
|  | R27 | 167 | MACAW.MONSTER.PERSON [non-verbal predicate of preceding subject?] | |

T HALLOW TITLE₂ TITLE₄
R ko.nu7ks.i TITLE₂ TITLE₄
G ELSE-greet-PN ?? ??
L hallowed ancestor(?) x-badge

T ONE+ YEAR MACAW.MONSTER.PERSON
R tum-u 7ame7 0-MACAW.MONSTER.PERSON
G one-NUM year 3A-??
L one year he-is-Macaw Monster person

FT The hallowed ancestral(?) "x-badge" had had for one year Macaw Monster role/status.

[It was nine days later.









HML was supposed to take a(nother) jaguar; OR a(nother) jaguar was about to be taken.

HML was wearing a hummingbird and a skin drum?

HML had been a Macaw Monster devotee for a year.

cf. ?Associations of hummingbirds with warfare (as in Huitzilopochtli)?]

R27-40










| | | | |
|---|-----|--------|---|
| | R27 | 167 | MACAW.MONSTER.PERSON [subject of following verb?] |
|  | R28 | 38 | 7i |
|  | R29 | 149+42 | ne |
|  | R30 | 138 | ji |
|  | R31 | 53 | ja ₂ |
|  | R32 | 68 | SYMBOL/KI7PS.I |
|  | R33 | 101 | si ₂ |
|  | R34 | 38 | 7i |
|  | R35 | 149+50 | LOSE/TOKOY |
| | R36 | 999 | ya? |
| | R37 | 38 | 7i |
| | R38 | 170 | ki |
| | R39 | 179 | pi |
| | R40 | 20 | wa |

T 7i-ne-ji
R 0-7i+ne7w-ji
G 3A-3E-put.stones-DC
L when-he-put.stones.in.order

T ja₂-SYMBOL-si 7i-LOSE-ya? 7i-ki-pi-wa
R jay7=ki7ps.i 7i+yak=tokoy.a7 0-7i+kip-wa
G write-think-PN 3E-CAU-lose-AN 3A-3E-fight-IC
L written-symbol its-overthrow(er) he-fought.against-him

FT When he [the Macaw Monster player/person] placed stones in order he fought against the overthrow(er)(s) of inscribed monuments.

R41-48

| | | | |
|---|-----|-----|----------------------|
|  | R41 | 38 | 7i |
|  | R42 | 22 | BLOOD = /nu7pin/ |
|  | R43 | 2 | TWO//wa ₂ |
|  | R44 | 38 | 7i |
|  | R45 | 43 | nu |
|  | R46 | 101 | si ₂ |
|  | R47 | 71 | ?? |
|  | R48 | 25 | we |
|  | R49 | 142 | pa |

T 7i-BLOOD wa 7i-nu-si₂ ?? we-pa
R 7i+nu7pin +wa7 7i+nuks-i 0-wej-pa
G 3E-blood REL 3E-go-DI ?? 3A-shout-II
L his-blood thing when-it-goes he-shouts
FT As for his [HML's] blood, when it was flowing, he [HML] shouts:

S1-6



| | | |
|----|-----|------------------|
| S1 | 44 | na |
| S2 | 22 | BLOOD = /nu7pin/ |
| S3 | 45 | ko |
| S4 | 150 | SPRINKLE/WIK |
| S5 | 170 | ki |
| S6 | 143 | pa |

T na-BLOOD ko-SPRINKLE-ki-pa
 R na+nu7pin 0-ko.wik-pa
 G XE-blood 3A-ELSE-sprinkle-II
 L my-blood it-gets-sprinkled-ELSE
 FT "My blood is getting sprinkled for.others/elsewhere."

S7-12



| | | |
|-----|-----|------------------------------|
| S7 | 102 | tu |
| S8 | 43 | nu |
| S9a | 48a | DEAL.WITH = ?SHOOT/TUP [EN9] |
| S9b | 47' | pu |
| S10 | 165 | ja |
| S11 | 87 | yaj |
| S12 | 20 | wa |

T tu-nu-DEAL.WITH-pu-ja-yaj-wa
 R 0-tun+tup-pu7-jay7-yaj-wa
 G 3A-IE-?shoot-?ENTIRELY-NDIR-3P-DC
 L we-dealt.with-him/them-for.him/them
 FT We [the raisers of this stela and their audience] arrow-shot/?dismembered him/them [the rebel(s)] for him/them. [EN9]

S13-21



| | | |
|------|-------|---------------------------------------|
| S13 | 38 | 7i |
| S14 | 22 | BLOOD = /nu7pin/ |
| S15 | 36+44 | SET, presumably /tu7p/ |
| S16 | 138 | ji |
| S17a | 97 | 7o |
| S17b | 29 | wa |
| S18 | 161 | BEDECK, possibly /wu=tzuk/ |
| S19 | 164 | GUISE ₂ /JAMA ₂ |
| S20 | 41 | PLAY/MUTZ |
| S21 | 113 | tzi |

T 7i-BLOOD-SET-ji
 R 7i+nu7pin=tu7p-ji
 G 3E-blood-set-DC
 L when-he-set.down-bloodily




T 7o+wa-BEDECK GUISE₂-PLAY-tzi
 R 7owa=wu=tzuk.i 0-jama=mutz.i7
 G macaw-good-do-PN 3A-guise-play-AN
 L macaw-bedecked he-is-animal-guise-impersonator

FT When he [HML's rival] set down bloodily, the macaw-bedecked one [HML or his rival] was an animal-guise-impersonator [EN10]

[cf. N*31-32]















S22-24

[Begin quote by HML: S22-34 refers to captive would-be usurper]

| | | | |
|---|-----|----|------------------|
|  | S22 | 44 | na |
|  | S23 | 22 | BLOOD = /na7pin/ |
|  | S24 | 20 | wa |

T na-BLOOD wa
 R 0-na+na7pin +wa7
 G 3A-XE-blood REL
 L it-is-my-blood thing
 FT "It/He is my bloody thing/one."

S25-34

| | | | | |
|---|---|-----|------------------|------------------|
|  | S25 | 38 | 7i | |
|  | S26 | 22 | BLOOD = /na7pin/ | |
|  | S27a | 65 | mi | |
|  | S27b | 101 | si ₂ | |
|  | S28 | 64 | ti | |
|  | S29 | 159 | MACAW = /7owa/ | |
|  | S30 | 25 | we | |
|  | S31 | 143 | pa | |
|  |  | S32 | 44 | na |
|  |  | S33 | 22 | BLOOD = /na7pin/ |
|  |  | S34 | 20 | wa |

T 7i-BLOOD-mi+si ti
 R 7i+na7pin=mi7ks-i +ti
 G 3E-blood-quiver-DI
 L when-he-quivers-bloodily only

T MACAW we-pa na-BLOOD wa
 R 7owa 0-wej-pa 0-na+na7pin +wa7
 G macaw 3A-shout-II 3A-XE-blood REL
 L macaw he-shouts it-is-my-blood thing

FT When he/it [HML's rival('s wing)] was doing nothing but quiver/flap bloodily, Macaw [HML] was shouting, "It/He is my bloody thing/one."

S35-43



| | | |
|------|--------|-----------------------------|
| S35 | 24 | NOW/...TI |
| S36 | 22 | BLOOD = /na7pin/ |
| S37 | 56 | te |
| S38 | 149+42 | ne |
| S39 | 999 | ?STEP |
| S40 | 138 | ji |
| S41a | 42b | 7u |
| S41b | 125 | SUN, presumably /suw/ [EN2] |
| S42a | 129 | KNOTTED.CLOTH |
| S42b | 75 | HALLOW/KO.NU7KS |
| S43 | 101 | si ₂ |

T NOW BLOOD-te-ne-?STEP-ji
 R ADV₁-ti <7i+>na7pin=te7n-ji
 G now 3E-blood-tip.toe-DC
 L now when-he-stepped-bloodily

T 7u+SUN KNOT+HALLOW-si
 R 7u+suw X+ko.nu7ks.i
 G XA-sun ?-ELSE-greet-PN
 L I-am-sun coronated

FT Now, when he stepped (on tip-toe) (up, down, in, out, again?) bloodily,
 [he said] "I am the sun, a coronated.one/crowned.prince. [cf EN29]

S44-T6



| | | |
|-----|---------|------------------------|
| S44 | 24 | NOW/...TI |
| S45 | 44 | na |
| S46 | 149+50 | LOSE/TOKOY |
| S47 | 92 | ye |
| S48 | 38 | 7i |
| S49 | 176b | saj |
| S50 | 38 | 7i |
| S51 | 22 | BLOOD = /nu7pin/ |
| T1 | 36+44 | SET, presumably /tu7p/ |
| T2 | 138 | ji |
| T3 | 65 | mi |
| T4 | 103+101 | si |
| T5 | 44 | na |
| T6 | 20 | wa |

T NOW na-LOSE-ye 7i-saj
 R ADV₁-ti na+yak=tokoy.e 7i+saj
 G now XE-CAU-lose-PN 3E-wing
 L now my-overthrown-one his-wing/shoulder

T 7i-BLOOD-SET-ji mi-si-na-wa
 R 7i+nu7pin=tu7p-ji 0-mi7ks-nay7-wa
 G 3E-blood-set-DC 3A-quiver-PRF-IC
 L when-it-hit.the.ground-bloodily he/it-had-quivered

FT Then when my overthrown (rival/one)'s wing/shoulder came to rest bloodily, he/it had been quivering/flapping."

[(Apparent) end of quote by HML]

T7-10



| | | |
|-----|-----|---------------------------------|
| T7a | 38 | 7i |
| T7b | 101 | si ₂ |
| T8a | 146 | ONE = /tum-u/ |
| T8b | 72 | YEAR/7AME7 OR DRUM |
| T9 | 169 | me |
| T10 | 81 | TITLE ₄ ("x-badge"?) |

T 7i+si₂ ONE+ YEAR-me TITLE₄
 R 7is tum-u 7ame7 0-TITLE₄
 G see one-NUM year he-is-badge
 L behold one year "x-badge"
 FT Behold, he [HML?] had been an "x-badge" for one year.

T11-12



| | | |
|-----|----|--------------|
| T11 | 80 | STAR.WARRIOR |
| T12 | 20 | wa |

T STAR.WARRIOR wa
 R 0-STAR.WARRIOR +wa7
 G 3A-?? REL
 L he-is-star.warrior -type
 FT He was a star-warrior-type one.

T13-23



| | | |
|------|-----|-----------------------------|
| T13 | 171 | GO.UP/KI7M |
| T14 | 152 | JAGUAR = /kajaw/ |
| T15a | 104 | MOON/POY7A OR TWENTY/7I7PS |
| T15b | 101 | si ₂ |
| T16 | 3 | 3 = /tuka/ |
| T17 | 89 | AFTER/JHS |
| T18 | 178 | su? |
| T19 | 13 | 13 = /mak=tuka/ |
| T20 | 172 | GUISE ₁ = /jama/ |
| T21 | 28 | puk |
| T22 | 124 | ku |
| T23 | 20 | wa |








T GO.UP-JAGUAR TWENTY+si-THREE
 R ki7m.w7=kajaw 7i7ps-ko-tuka
 G go.up-AN-jaguar twenty-and-three
 L ascent jaguar twenty-three

T AFTER-su THIRTEEN GUISE₁ puk-ku-wa
 R jus mak=tuka jama 0-puk-wa
 G back ten-three day 3A-take-IC
 L after thirteen day it-got-taken

FT After thirteen days ascent/ascending jaguar (number) twenty-three got taken.







[13 day time increment leading to 8.5.17.15.2, 11 October 157. The day was 12 Wind, day 5 of month 7. Ascent Jaguar #23 was taken on the 23rd day/night of jaguar-taking. Evidently, one jaguar was taken each day (or night), and possibly sacrificed on that day, or at the end of the 23 days. Mercury was in the head of Scorpius, very near where Venus had been on the first day of jaguar-taking.]

T24-30

| | | | |
|---|-----|--------|-----------------|
|  | T24 | 56 | te |
|  | T25 | 149+42 | ne |
|  | T26 | 44 | na |
|  | T27 | 54 | kak |
|  | T28 | 20 | wu |
|  | T29 | 68 | SYMBOL/KI7PS.I |
|  | T30 | 101 | si ₂ |













T te-ne-na-kak-wu SYMBOL-si₂
R 0-te7n.na7=kak-wu ki7ps.i
G 3A-tip.toe-STAT-replace-IC think-PN
L it-got-replaced-upright/on.tip-toe symbol
FT The symbol(-stone)s got replaced upright.

T31-36

| | | | |
|--|-----|------|----------------|
|  | T31 | 176b | saj |
|  | T32 | 20 | wu |
|  | T33 | 38 | 7i |
|  | T34 | 37 | ku |
|  | T35 | 44 | na |
|  | T36 | 68 | SYMBOL/KI7PS.I |

T saj-wu 7i-ku-na-SYMBOL
R 0-saj-wu 7i+kuw.na7=ki7ps.i
G 3A-share-IC 3E-stash-STAT-think-PN
L it-got-shared.out his-set.aside-symbol
FT His set-aside symbols [?body-parts] got shared out. [EN12] => [EN9]




T37-46 GME

| | | | |
|---|------|------|------------------------|
|  | T37 | 129 | KNOTTED.CLOTH |
|  | T38a | 148a | ?nu |
|  | T38b | 101 | si ₂ |
|  | T39 | 38 | 7i |
|  | T40 | 179 | pi |
|  | T41 | 70 | ni |
|  | T42 | 102 | tu |
|  | T43 | 43 | nu |
|  | T44a | 48a | DEAL.WITH = ?SHOOT/TUP |
|  | T44b | 47' | pu |
|  | T45 | 165 | ja |
|  | T46 | 20 | wa |

T KNOT-?nu-si₂ 7i-pi-ni tu-nu-DEAL.WITH-pu-ja-wa
R X+ko.nu7ks.i 7i+pini7 0-tun+tup-pu7-jay7-wa
G ?-ELSE-greet-PN 3E-brother.in.law 3A-IE-?shoot-?ENTIRELY-NDIR-IC
L crowned.one his-brother-in-law we-dealt.with-him-for.him
FT We [the raisers of this monument] arrow-shot/?dismembered [EN9] the
crowned one's brother-in-law for him.






[The reference to HML as "the crowned one" seemingly emphasizes the legitimacy of his position vis-a-vis his brother-in-law's.]

U1-3

| | | | |
|---|----|-------|--------------------|
|  | U1 | 87/88 | yaj |
|  | U2 | 38 | 7i |
|  | U3 | 99 | DROPS.as.SACRIFICE |







T yaj-7i SACRIFICE
R 0-yaj-7i SACRIFICE
G 3E-finish-OPT ??
L let-it-be-finished sacrifice
FT The dripping sacrifice was supposed to be finished/used.up.

U4-8

| | | | |
|----|-----|---|--------------|
| U4 | 38 |  | 7i |
| U5 | 45 |  | ko |
| U6 | 150 |  | SPRINKLE/WIK |
| U7 | 170 |  | ki |
| U8 | 143 |  | pa |

T 7i-ko-SPRINKLE-pa
 R 0-7i+ko.wik-pa
 G 3A-3E-ELSE-sprinkle-II
 L he-sprinkles-it-ELSE
 FT He [HML] was sprinkling it for others/elsewhere;

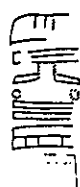

U9-14

| | | | |
|---|-----|--------|----------------|
|  | U9 | 25 | we |
|  | U10 | 149+42 | ne |
|  | U11 | 68 | SYMBOL/KI7PS.I |
|  | U12 | 63 | ma |
|  | U13 | 176b | saj |
|  | U14 | 20 | wa |

T we-ne SYMBOL ma saj-wa
 R wen.e7 ki7ps.i ma 0-saj-wa
 OR we7n.e
 G break-PN think-PN earlier 3A-share-IC
 OR split-PN
 L piece/broken symbol earlier they-got-shared.out
 OR some
 FT the symbols [?body-parts] had gotten shared out earlier in pieces.
 OR broken symbols had gotten shared out earlier.
 OR a few symbols had gotten shared out earlier.

There is a column (V) of 35 heavily eroded glyph groups on the side of the stela to the viewer's right of column U. Discovered by Sergio Vásquez and Fernando Muñiz in November 1995, in several particulars it confirms readings or analyses previously announced.







V1-5

| | | | | |
|---|---|----|---------|---|
|  |  | V1 | 38 | 7i |
| | | V2 | 103+101 | si |
| | | V3 | 12 | 13 = /tuka=metz-a/ (possibly 12 = /mak=metz-a/) |
| | , | V4 | 72 | YEAR/7AME7 OR DRUM |
| | | V5 | ?? | TITLE _x |

T 7i-si 13 YEAR TITLE_x
R 7is mak=tuka 7ame7 0-TITLE
G see ten-three-NUM year 3A-??
L behold thirteen year he-is-TITLE
FT Behold, there/he was for thirteen years a TITLE (?regional overlord).


[If the recorded numeral is 12, and is added to the last preceding date, this brings the date to within 58 days (8.6.9.15.2, or later) of the end of an Epi-Olmec decade, a major period-ending, 8.6.10.0.0, 13 Macaw. 13 Macaw is also the last day of the ritual calendar. The events that followed may have continued up to the period-ending. But the number is more likely to be a 13. In either case, the reference may not be to a time count but rather to the ruler's age; he was referred to as being a /tzusi/ 'child' just 475 days earlier. This seems likely since V6-8 and V11-18 are plausibly retrospective.]

V6-8

| | | | | |
|---|---|-----|-----|-----------------------|
|  |  | V6a | nn | ? |
| | | V6b | 34 | AND.THEN |
|  |  | V7a | 93 | tu |
| | | V7b | 100 | CLOTH/TUKU7 |
|  |  | V8a | 105 | FOLD, probably /paks/ |
| | | V8b | 142 | pa ₂ |

T ?+AND.THEN tu+CLOTH FOLD+pa
R ? AND.THEN tuku7 0-paks-pa
G ? and.then cloth 3A-fold-II
L ? and.then clothing it-gets.folded
FT And then a garment was getting folded;















V9-10

| | | | | |
|---|---|-----|----|---------------------------------------|
|  | , | V9 | ?? | "UTTER" [verb of speaking or singing] |
| | | V10 | 20 | wa |

T [UTTER]-wa
R 0-UTTER-wa
G 3A-??-IC
L he-{uttered}













FT He [uttered]:

V11-18

| | | | |
|---|---|------------|--|
|  |  | V11 38 | 7i |
|  |  | V12 149+42 | ORDER.STONES/NE7W |
|  |  | V13 153 | je |
|  |  | V14 140 | tzu |
|  |  | V15 68 | SYMBOL/KI7PS.I |
|  |  | V16 ?? | ? |
|  |  | V17 61 | TITLE ₂ (Reeds+Cross-Pillar) = ancestor/Olmec (?) |
| | | V18 20 | wa |

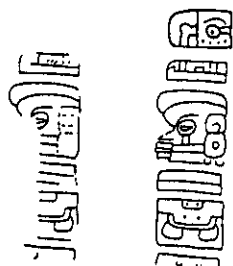
T 7i-ORDER.STONES je-tzu SYMBOL ? TITLE₂ wa
R 7i+ne7w.e je7.tzu 0-ki7ps.i ? TITLE₂ +wa7
G 3E-put.stones-PN yon-manner 3A-think-PN ? ?? REL
L his-set.in.order.stones that.way it-is-symbol ancestor(?) -type
FT -- The stones that he set in order were thus symbols, ancestral(?) -type
ones --

V19-24

| | | | |
|---|---|-------------|---|
|  |  | V19 44 | na |
|  |  | V20 133+133 | tze+tze |
|  |  | V21 123 | PLANT/NIP7 |
|  |  | V22 38 | 7i |
|  |  | V23 20 | wa |
|  |  | V24 114 | ?tuk [sign identification not definite] |

T na-tze+tze PLANT-7i wa-tuk
R na+tzetz.e 0-nip7.i 0-wa=tuk.i
G XE-chop-PN 3A-plant-PN 3A-good-harvest-PN
L my-chopped-thing it-is-planted-thing it-is-well-harvested-thing
FT "What I chopped has been planted and harvested well."
OR "What I chopped is a planting and a good harvest."

V25-30



| | | |
|-----|-----|---|
| V25 | 164 | GUISE ₂ /JAMA ₂ or <ja> |
| V26 | 63 | ma |
| V27 | 176 | sa |
| V28 | 70 | ni (or DRUM OR YEAR/7AME7) |
| V29 | 91 | APPEAR |
| V30 | 20 | wa |

| | | |
|----|--------------------|----------------------------------|
| T | GUISE ₂ | ma-sa-ni-APPEAR-wa |
| R | jama | 0-masa=ni7.APPEAR-wa |
| G | guise | 3A-god-BODY-appear-IC |
| L | animal-guise | it-appeared-divinely-on.his.body |
| FT | An animal-guise | appeared divinely on his body. |

END OF LA MOJARRA STELA 1

Running translation of the La Mojarra Stela
repeated themes (words and phrases) are underlined

A1-9 It was the third day of the seventeenth month; the long count was 8.5.3.3.5, and the day was 13 Snake.

B1-4 A sun-eating moon [solar eclipse] took place;
B5-C7 Piercingly the bludgeon star [Venus] had shone earlier [the day before], late in the day.

D1-F6
Coronated ones hallowed by sprinkling fought against noble (and)
war-leader-type succession-supporters [would-be successors/usurpers].

G1-H2 Earlier a day, a night, and a day had passed,

[[two-day time increment leading to 8.5.3.3.7]]

H3-I4 (when) behold, there was a prisoner for thirteen years.

[13 (and 2 day) year time increment leading to 8.5.16.3.7, 23 June 156 CE, the day before summer solstice]

I5-J5 And then there was an imprisonment that was for six months.

[six months time increment leading to 8.5.16.9.7]

J6-8 He [HML] speaks:

K1-7 "My arm was bristling/prickling,"

L1-3 (said) the youthful (boy-type) commanding general Harvester Mountain-Lord.

L4-9 "When I chopped (off his head), he was ruined/it was his ruin."

M1-7 As for the ascent/installation/accession (OR ascending one), that was how the latter/aforementioned (the prisoner) saw/witnessed it/him.

M8-16 It was the fifteenth day of the first month; the long count was 8.5.16.9.7, and the day was 5 Deer.

[13 years 6 months and 2 days after previous long count]

N1-4 For four months (is/was the) sprouting.

[four month time increment leading to 8.5.16.13.7]

N5-8 When he goes up, another year is in a bundle.

When he goes.up/ascends, the year is bundled.

OR

When he/they go(es).up/ascend(s), a(nother) year is (in a) bundle(d).

OR

When he goes.up/ascends, there/it is a year-bundle.

His ascent/re-accession year was (a) bundled (thing).

[one year time increment leading to 8.5.17.13.7]

N9-12 His offering got scattered.

N13-17 That governor('s headdress) was a skin-drum (and a) hummingbird.

N18-29 His Macaw.sign, his eccentric.flint, and his pectoral stone memento got brandished.

[ABOUT TEN SIGNS MISSING] [was the "spiller" mentioned here?]

N*30-*32 ... (he) got bedecked.

N*33-*37 Now the priest was he who is a lordly beard-mask (wearer).
OR, Now the lordly beard-mask wearer was a/the priest.

N*38-O17 After thirteen days, the god(s) Macaw Monster and Scorpius, and King Harvester Mountain-Lord and/on the ascension throne got revealed/appeared in rulership.

[13 day time increment leading to 8.5.17.14.0, 3 Face, day 3 in month 6: 9th Venus anniversary at new moon]

O18-26 When Sky Quetzal was ascending for others (OR elsewhere)
(at) the hallowed ground jointly measured by handspans ...
OR the ground jointly measured by handspans had been hallowed.

[ABOUT EIGHT SIGNS MISSING] [was the "spiller" mentioned here?]

O27-31 The drum got pounded;

O30-33 <then> the garment(s) was/were getting folded in front
[win paks-pa tuku7] [cf. Q3-8]

O34-P2 When his buttocks were getting pierced, he [HML] speaks:

P3-9 "He spilled/hid my blood in another's place."

P10-15 (The) royal ruler(ship) is/was (a/the) X time/count
success-ion/-or;

P16-18 Y is/was a coronation cloth.

P19-22 (the god) Ten Sky is/was the rainy season god.

P23-30 Their [HML and his cronies's] power-assuming buttocks got pierced and covered for others.

OR His [HML's] royal buttock-cheeks got pierced and covered for others.

P*31-*39 [ABOUT 6 SIGNS MISSING] When the ancestral(?) ... was
blood-letting from inside the penis, he was a prince-type.

P*40-Q1 Now a macaw-lashing was supposed to get taken.

Q3-8 Earlier, (a) garment/cloth(s) was/were getting folded in plain sight.
[ma ken.e paks-pa tuku7] [cf. O30-33]

Q9-14 The ?notable royal-type X is/was a/the flower lord beard-mask (wearer).

Q15-25 King Harvester Mountain-Lord, when he was putting it [cloth/garment?, macaw lashing?, eccentric.flint?, beard-mask?] away, piercingly now the star-warrior got hallowed.

Q9-12 The notable royal-type one is a flower.

Q13-17 The lordly beard-mask (wearer) is King HML.

Q18-25 When he put it (etc.) away, piercingly now the star-warrior got hallowed.

Q26-33 The aforementioned one sings a song which is about/of an animal-guise/day('s length):

Q34-42 "Now earlier my penis-receivers [staunchers] had been a body-covering and a ruler's head-wrap."

Q43-47 Scorpius shone. [Venus was in Scorpius, just past its head.]

Q48-R3 Now a noble heavenly animal jaguar [= Mercury?] appeared/got revealed/shown.forth.

R4-8 The bludgeon star [Venus] shone.

R9-17 Nine days later (once again) a (tenth) jaguar was supposed to get taken.

[nine day time increment leading to 8.5.17.14.9]

R18-22 This governor('s headdress) was a skin drum (and a) hummingbird.

R23-27 The hallowed ancestral(?) "x-badge" had for one year Macaw Monster status/role.

R27-40 When he [the Macaw Monster player] placed stones in order he fought against the overthrow(ers) of inscribed monuments (lit. symbols).

R41-48 As for his [HML's] blood, when it was flowing, he [HML] shouts:

S1-6 "My blood is getting sprinkled for others/elsewhere."

S7-12 We [the raisers of this stela] arrow-shot/?dismembered them [the rebel(s)] for him.

S13-21 When he [HML's rival] set down bloodily, the macaw-bedecked one [HML or his rival] was an animal-guise-impersonator.

FT When he [HML's rival] set down bloodily, the macaw-bedecked one [HML or his rival] was an animal-guise-impersonator [EN10]

S22-24 "It/He is my bloody thing/one."

S25-34 When he/it [HML's rival('s wing)] was doing nothing but quiver/flap bloodily, Macaw [HML] was shouting: "It/He is my bloody thing/one."

S35-43 Now, when he [HML] stepped (on tip-toe) bloodily, [he said] "I am the sun, a coronated.one/crowned.prince.

S44-T6 Then when my overthrown (rival/one)'s wing came to rest bloodily, it/he had been quivering/flapping."

T7-10 Behold, he [HML?] had been an "x-badge" for one year.

T11-12 He was a star-warrior-type one.

T13-23 After thirteen days ascent jaguar (number) twenty-three got taken.

[13 day time increment leading to 8.5.17.15.2]

T24-30 The symbol(-stone)s got replaced upright.

T31-36 His [HML's] set-aside symbols [?body-parts] got shared out.

T37-46 We [the raisers of this monument] had arrow-shot/?dismembered the crowned one's brother-in-law for him.

U1-3 The dripping sacrifice was supposed to be finished/used.up.

U4-8 He [HML] was sprinkling it for others;

U9-14 The symbols [?body-parts] had gotten shared out earlier in pieces.

V1-5 Behold, there/he was a thirteen (OR twelve)-year ?regional.overlord.

[possible 12- or 13-year time increment]

V6-8 And then a garment was getting folded

V9-10 He uttered:

V11-18 -- The stones that he set in order thus were symbols, ancestral(?)-type ones --

V19-24 "What I chopped has been planted and harvested well."

OR "What I chopped is a planting and a good harvest."

V25-30 An animal-guise appeared divinely on his body.

END

The Tuxtla Statuette (TUX)

A1-7



| | | |
|-----|-----|---|
| A1a | 96c | TIME ₂ |
| A1b | 106 | PATRON ₁₄ |
| A1c | 72 | YEAR/7AME7 OR DRUM, presumably /kowa/ |
| A2 | 8 | 8 = /tuka=tujtu/ |
| A3 | 6 | 6 = /tujtu/ |
| A4 | 2 | 2 = /metz-a/ OR /was.tuk/ |
| A5 | 4 | 4 = /maktas/ |
| A6 | 17 | 17 = /yat-ko-metz-a/ OR /yat-ko-was.tuk/ OR /mak=was=tujtu/ |
| A7a | 8 | 8 = /tuka=tujtu/ |
| A7b | nn | ?? 7u |
| A7c | 131 | DN:QUAKE = 7us |

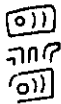


T TIME₂+PATRON₁₄+YEAR//DRUM 8.6.2.4.17 8=7u+QUAKE
R 7us
G

FT It was the fourteenth month; the long count was 8.6.2.4.17,
and the day was 8 Earthquake.

[The date was 22 February 162 CE. This was the 260th day of the year, and the sixth 365-day anniversary of the "captivity" date 8.5.16.3.7 on MOJ:H3-I4]

B1-3







| | | |
|----|----|-----------------|
| B1 | 39 | 7i ₂ |
| B2 | 97 | 7o |
| B3 | 39 | 7i ₂ |

T 7i 7o-7i
R 7i 0-7oy-7i
G who 3A-take.trip-OPT
L who he-should-go.and.return
FT "Who should go on a trip? [EN13]







B4-C3

B4 73 7u₂

| | | | |
|---|-----|-----|--|
|  | B5a | 185 | DO ₂ /TZHK or DEEDSMAN, pronounced /tzuk.i pan/ |
|  | B5b | 171 | ki |
|  | B6 | 145 | BEARD.MASK |
|  | C1 | 175 | ?sa7 |
| | C2 | 183 | NOBLE ₂ /SA7SA7(=PUN) |
| | C3 | 20 | wu |












T 7u₂-DEEDSMAN+?ki BEARD.MASK sa7-NOBLE wu
 R 7u+tzuk.i=pan BEARD.MASK sa7sa7(=pan) +wu7
 G XA-do-PN-person ?? noble-person REL
 L I-am-a-"deedsman" beard-mask noble(man) -type
 FT I am a "deedsman", a beard-mask (wearer), a noble one.

C4-8

| | | | |
|---|-----|-----|------------------|
|  | C4 | 4 | 4 = maktas |
|  | C5a | 39 | 7i ₂ |
|  | C5b | 141 | ni ₂ |
|  | C6 | 45 | ko |
|  | C7 | 126 | SKY+PILLAR/KOM |
|  | C8 | 162 | ?ya ₂ |

T FOUR 7i₂+ni₂-ko-SKY+PILLAR-ya₂
 R 0-maktas 7in+ko.tzap=kom+yaj
 G 3A-four 2E-ELSE-sky-pillar-IP
 L it-is-four your-ELSE-sky-pillars
 FT Four are your elsewhere (otherworldly) sky pillars;

C9-D6






| | | | |
|---|-----|-----|-----------------|
|  | C9a | 108 | to |
|  | C9b | 26 | ke |
|  | C10 | 20 | wa |
|  | D1a | 39 | 7i ₂ |
|  | D1b | 141 | ni ₂ |
|  | D2 | 45 | ko |
|  | D3a | 151 | SPAN/TZAT7 |
|  | D3b | 73 | 7a ₂ |
|  | D4 | 158 | TURTLE/TUKI |
|  | D5 | 170 | ki |
|  | D6 | 20 | wa |

T to+ke wa 7i₂+ni₂-ko-SPAN-7a₂
R 0-tok.e +wa7 7in+ko.tzat7.a7
G 3A-stain-PN REL 2E-ELSE-measure-AN
L it-is-stained/painted -type your-ELSE-spann-er

T TURTLE-ki wa
R tuki +wa7
G turtle REL
L turtle -type

FT Stained (with blood?) is your elsewhere (otherworldly) handspan measure which is made of turtle(-shell)."

D7-11

| | | | |
|---|-----|-----|----------------------------|
|  | D7 | 22 | BLOOD = /na7pin/ |
|  | D8 | 8 | 8 = /tuka=tujtu/ |
|  | D9 | 75 | HALLOW/KO.NU7KS |
|  | D10 | 20 | wa |
|  | D11 | 999 | [3-4 signs effaced/eroded] |

T BLOOD EIGHT-HALLOW-wa
R na7pin 0-tuka=tujtu=ko.nu7ks-wa
G blood 3A-three-past.five-ELSE-greet-IC
L blood it-got-hallowed-eight.times
FT (With) blood (?it = turtle-shell or D11) got hallowed eight times.

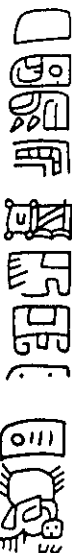
E1-3



| | | |
|----|-----|-----------------|
| E1 | 123 | PLANT/NIP7 |
| E2 | 180 | pi ₂ |
| E3 | 20 | wa |

T PLANT-pi-wa
 R 0-nip7-wa
 G 3A-plant-IC
 L it-got-planted/buried
 FT It (?turtle-shell, ?blood, D11) got buried.

F1-10











| | | |
|------|--------|--|
| F1 | 21 | GOD, possibly /jej.a7/ |
| F2 | 165 | ja |
| F3 | 118 | ji ₂ |
| F4 | 113 | tzi |
| F5 | 62 | TITLE ₃ = Macaw.sign+Slantbar |
| F6 | 149+42 | ne |
| F7a | 93 | tu |
| F7b | 100 | CLOTH/TUKU7 |
| F8 | 20 | wa |
| F9 | 39 | 7i ₂ |
| F10a | 177a | sa ₂ |
| F10b | 142 | pa ₂ |

T GOD-ja ji₂-tzi TITLE₃-ne tu+CLOTH wa 7i₂-sa₂+pa₂
 R jej.a7 ji7tz.i7 TITLE₃ tuku7 +wa7 0-7i+saj-pa
 G breathe-AN wrinkle-PN ?? cloth REL 3A-3E-share-II
 L god wrinkled "title 3" cloth -type he-shares.out-them
 FT The god Longlip₂ was sharing out the ?Macaw-Slantbar cloth things.







[Is somebody impersonating the god on this occasion? Is this a real ritual, or one enacted in the traveler's mind? Is more than one person involved in these events?]

F11-G3

| | | | |
|---|------|--------|-----------------|
|  | F11 | 149+42 | ne |
|  | F12 | 27 | ke |
|  | F13a | 129 | KNOTTED.CLOTH |
|  | F13b | 75 | HALLOW/KO.NU7KS |
|  | G1 | 68 | SYMBOL/KI7PS.I |
|  | G2a | 93 | tu |
|  | G2b | 100 | CLOTH/TUKU7 |
|  | G3 | 20 | wa |

| | | | | | |
|----|--|-----------------|-------------|----------|------|
| T | ne-ke | KNOT+HALLOW | SYMBOL | tu+CLOTH | wa |
| R | ne(7)k.e | X+ko.nu7ks.u | ki7ps.i | 0-tuku7 | +wa7 |
| G | stack-PN | ?-ELSE-greet-AN | think-PN | 3A-cloth | REL |
| L | stacked/set.aside coronation | symbol | it-is-cloth | -type | |
| FT | The stacked/set.aside coronation symbol(s) are/is made of cloth. | | | | |

G4-8

| | | | |
|---|-----|--------|--|
|  | G4 | 61 | TITLE ₂ (Reeds+Cross-Pillar) = ancestor/Olmec (?) |
|  | G5 | 149+42 | ne |
|  | G6 | 84 | ?? yaj ₂ |
|  | G7a | 93 | tu |
|  | G7b | 100 | CLOTH/TUKU7 |
|  | G8 | 20 | wa |

| | | | | |
|----|--|------------------|----------|------|
| T | TITLE ₂ -ne | yaj ₂ | tu+CLOTH | wa |
| R | TITLE ₂ | yaj | 0-tuku7 | +wa7 |
| G | ?? | IP | 3A-cloth | REL |
| L | ancestor(?) PL | it-is-cloth | -type | |
| FT | The ancestral(?) headbands(?) are made of cloth. | | | |

[-yaj marks plural of an inanimate noun, which ends in /...e(7)n/, /...ne/, /...nej/, /...ne7/, /...new/, or /...ney/. The object is a cloth headband bearing the symbols of glyph MS61 or relating to the office or status designated by MS61.]

G9-11



| | | |
|------|------|---|
| G9 | 171b | SLEEP, presumably /mow/ better: DIE, presumably /ka7j/ pa |
| G10 | 143 | |
| G11a | 20 | wa |
| G11b | 65 | mi |

T SLEEP-pa wa+mi
R 0-mow-pa ?
G 3A-sleep-II ?
OR 3A-die-II
L he-sleeps ?
OR he-faints
FT The ? was sleeping;

G12-H2



| | | |
|-----|-----|---------------------------------|
| G12 | 35 | AND.THEN ₂ |
| G13 | 157 | (ANIMAL.) FAMILIAR (or ?VISION) |
| H1 | 91 | APPEAR |
| H2 | 20 | wa |

[2 false start glyphs]

T AND.THEN FAMILIAR ?? APPEAR-wa
R AND.THEN FAMILIAR ?? 0-APPEAR-wa
G and.then ?? ?? 3A-appear-IC
L and.then familiar ?? it-got-revealed/shown.forth
FT And then a familiar animal got revealed/appeared [in a vision].

I1-5



| | | |
|-----|------|---------------------------------------|
| I1a | 148a | nu |
| I1b | 148b | pu ₂ |
| I2 | 164 | GUISE ₂ /JAMA ₂ |
| I3 | 63 | ma |
| I4 | 143 | pa |
| I5 | 170 | ki |

T nu+pu₂-GUISE₂-ma pa-ki
R nu7pu=jama 0-paki7
G buzzard-guise 3A-powerful
L buzzard animal-guise it-is-powerful
FT The buzzard (= vulture) animal-guise is/was powerful.

END OF TUXTLA STATUETTE

Running translation of Tuxtla Statuette
Words and themes paralleled on MOJ are underlined.

A1-7 It was the fourteenth month; the long count was 8.6.2.14.17,
and the day was 8 Quake.

B1-3 "Who should go on a trip?

B4-C3 I am a deedsman, a beard-mask (wearer), a noble one.

C4-8 Four are your elsewhere (otherworldly) sky(-?face) pillars;

C9-D6 Stained (with blood?) is your elsewhere (otherworldly) handspan-measure
which is made of turtle(-shell)."

D7-11 (?With) blood (?it = turtle-shell) got hallowed eight times.

E1-3 It (?turtle-shell, ?blood) got buried.

F1-10 The god Longlip, was sharing out the **Macaw.sign**-Slantbar cloth things.

F11-G3 The stacked/set.aside coronation symbol(s) are/is made of cloth. G4-8
The ancestral(?) headbands(?) are made of cloth.

G9-11 The ? was sleeping (will pass out/was losing consciousness);

G12-H2 And then a familiar animal got.revealed/appeared [in a vision].

I1-5 The buzzard animal-guise is/was powerful.

END

A1-10 establishes the date.

B1-C3 addressing a god, speaking in public, or speaking to himself, the
protagonist establishes his identity and what he will do.

C4-8 addressing a god, the priest names the far travel point of the priest's
trip.

C9-D7 addressing the god, the priest names (one of) the implement(s) of the
ritual.

D8-E3 describes (part of) the ritual.

F1-G8 names what the priest imagines accompanies his ritual acts or what he
expects to see on his trip.

G9-12 says that the priest fell asleep or fainted.

G13-H2 states that a familiar animal appeared to the priest.

I1-5 says that the priest shape-shifted into a buzzard or gained power over a
buzzard spirit.

A1-10 establishes the date.

The birds of the Tuxtla Statuette

The boat-billed heron. The human figure represented by the Tuxtla Statuette is wearing features of costume that are commonly thought to be representations of a duck's bill and other bird parts, such as claws and wings. Dr. Ron Pine of the Field Museum in Chicago (personal communication, 1995) suggests that the bill belongs, not to a duck, but to a boat-billed heron (*Cochlearius cochlearius*). This 2.5-foot tall bird is nocturnal, has eyes that glow red in the dark, and in Mexico is found in and near the Central and Southern Gulf Coast only.

Although this bird is not a true heron, it is lumped with herons in the native folk taxonomies of Mije-Sokeans who know these birds. Words for 'heron' that are comparable in M-S languages are SOT /wojnɔ/, COA (lowland Mije) /woon/, TEC (colonial Soke) <veng>, MAR /wo7nhja7/, MIG /wonhja7/. The pronunciation with /nh/ is limited to Soke, while that with /n/ is found in both a Mije and a Sokean language and thus more likely to be original. The SOT pronunciation /wojnɔ/ is probably close to the ancestral form, which probably ended in /ɔ/ from the evidence of MAR and MIG, but may show metathesis from earlier *wonju7. The Soke form in [nh] may show assimilation of *n to a following velar *j. Thus an approximation to the Sokean ancestral form is *wonju7. The /a/ of Western Soke may show vowel harmony from earlier /u/ by assimilation to the /o/ of the first syllable. To this would have been preposed a modifier that would distinguish it from other 'herons'; but such modifiers are often omitted when the identity of an animal or plant can be determined contextually. In any case, if the name for boat-billed heron were spelled out in EO, it would be spelled <wo-nɔ>, <wo-na>, <wo-no>, <wo-no-ju>, or <wo-no-ja>.

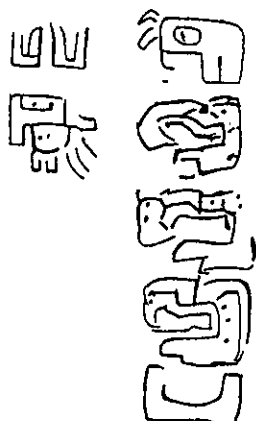
Such a word is unlikely to be spelled out on TUX. We have readings for the syllables <wo>, <nu>, and <na>. None of them is found on TUX. While our reading for <wo> could be wrong, it is unlikely that our readings for <nu> and <na> are wrong. 'Heron' might also be spelled logographically with phonetic complement: <HERON-nɔ>, <HERON-na>, <wo-HERON>, <HERON-ja>, <HERON-ju>. None of these is to be found on TUX, either. If spelled purely logographically, the only place HERON might appear is at G14, with MS157, which we have read FAMILIAR.ANIMAL because of the overall context: it does not resemble a boat-billed heron, but we should perhaps not rule that reading out.

The buzzard (vulture). At I1-5 we have the stretch <x+?pu-GUISE-ma-pa-ki>. This can and should be parsed 'animal-x animal-guise (is) strong'. Thus <x+?pu> should be an animal name. The best fit is pM-S *nu7pu 'vulture'. There is no other plausible fit, even if a bird-name were not being sought. This yields a new reading <nu> for the the glyph at I1a, MS148a.

This reading produces an interesting problem. The statuette depicts a man wearing costume paraphernalia representing a boat-billed heron, but the text refers to a buzzard. These cannot be the same creature. The simplest solution/interpretation is to assume that the boat-billed heron represents some kind of spiritual patron of shape-shifting, and that the buzzard is the one achieved by the protagonist on the date in question.

The O'Boyle Mask Inscription (OBM)

A1-B4



| | | |
|-----|-----|----------------------------------|
| A1 | 56 | te |
| A2a | 94b | RAIN, doubtless /tuj7/ |
| A2b | nn | BEANS, doubtless /suk/ |
| A3 | 138 | ji |
| B1 | nn | LONGLIP ₂ /JI7TZ.I7-1 |
| B2 | nn | LONGLIP ₂ /JI7TZ.I7-2 |
| B3 | nn | LONGLIP ₂ /JI7TZ.I7-3 |
| B4 | 104 | MOON/POY7A OR TWENTY/7i7ps |

T te RAINxBEAN
R 0-te7 tuj{7}=suk
G it-is-that rain-bean L that rain-bean

T ji-LONGLIPx1 LONGLIPx2 LONGLIPx3 MOON
R ji7tz.i7 tum-a ji7tz.i7 metz-a ji7tz.i7 tuka poy7a
G wrinkle-PN one-NUM wrinkle-PN two-NUM wrinkle-PN three month

L Longlip 1 Longlip 2 Longlip 3 month

FT (During) the months Longlip 1, Longlip 2, and Longlip 3 (there) are/were the [known, given] rainy-season bean <harvest>.

[These were a set of three successive months.]





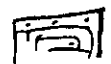



C1-3



| | | |
|-----|-------|------------------------------|
| C1b | nn | BEANS, doubtless /suk/ |
| C1a | 161 | BEDECK, possibly /wa=tzak/ |
| C2 | 37+nn | ku=?CROSS, probably /ku+jak/ |
| C3 | 20 | wa |

T BEANSxARRAY ku=CROSS-wa
R suk wa=tzak.i 0-ku+jak-wa
G bean-good-do-PN 3A-AWAY-cut-IC
L bean bedecked he-crossed.over
FT The bean-bedecked one (Jome7 Suk) crossed over.

C4-E1

| | | | |
|---|----|--------|--------------------|
|  | C4 | 150 | SPRINKLE/WIK |
|  | C5 | 44 | na |
|  | D1 | nn | ?CAST.LOTS = /sij/ |
|  | D2 | 138 | ji |
|  | D3 | 149+42 | ne |
|  | D4 | 20 | wa |
|  | D4 | 120 | jo |
|  | E1 | 169+nn | mexNEW/JOME7 |

T SPRINKLE na-CAST.LOTS-ji
 R wik.i 0-na+sij-ji
 G sprinkle-PN 3A-XE-gamble-DC
 L sprinkled when-I-cast.lots.with-them

T ne-wa jo-mexNEW
 R 0-ne7w-wa jome7
 G 3A-put.stones-IC new
 L they-got-set.in.order new-ones

FT When I cast lots with the sprinkled (stone) things, the new (stone) ones got set in a row.

[Possibly, divination to produce an interpretable set of stones, set in rows as in Yukateko (Bruce Love, personal communication), Ixil (Benjamin N. and Lore Colby) and K'iche' (Barbara Tedlock) divination.]








E2



E2 nnx123 LONGLIP₂/JI7TZ.I7xPLANT₂/NIP7

T LONGLIP₂xPLANT₂
 R 0-ji7tz.i7 nip7.i
 G 3A-wrinkle-PN plant-PN
 L it-is-wrinkled planting
 FT It was Longlip planting month.

F1-G4

| | | | | | |
|----|-----|---|------------|--|------------|
| F1 | 169 |  | me | | |
| F2 | 133 |  | tze | | |
| | |  | nn | | |
| | |  | 103+101 | | |
| | |  | si | | UPROOT/WIS |
| | |  | te | | |
| | |  | PLANT/NIP7 | | |

T me-tze=UPROOT-si te PLANT
R 0-metz=wis.i te7 nip7.i
G 3A-two-uproot-PN that plant-PN
L it-is-uprooted-by-twos that planting
FT That planting has/had been uprooted by twos (i.e., two stalks at a time, one in each hand).

[Beans are harvested by uprooting the withered stalks with both hands, at least among Mayans and Mije-Sokeans.]

The Epi-Olmec text

te7 tuj7=suk ji7tz.i7 tum-a, ji7tz.i7 metz-a, ji7tz.i7 tuka poy7a.
suk=wa=tzük.i ku.jak-wa.
wik.i na+sij-ji, ne7w-wa jome7.
ji7tz.i7 nip7.i.
metz=wis-i te7 nip7.i.







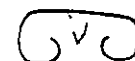
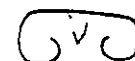
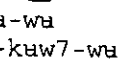
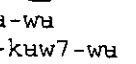
English translation

The months Longlip 1, Longlip 2, and Longlip 3
are that rainy-season bean <harvest>.
The bean-bedecked one (Jome7 Suk) crossed over.
When I cast lots with the sprinkled (stone) things,
the new (stone) ones got set in a row.
It was Longlip planting month.
That planting has been uprooted by twos.

The Chiapa de Corzo Sherd (CHP-sh)

A1 138 J ?ji
A2 ?? / ??
...

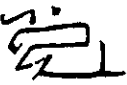







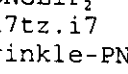
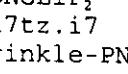
B1-5

| | | | | |
|---|---|----|-----|--------------------------------|
|  |  | B1 | 124 | ku |
|  |  | B2 | 20 | wa |
|  |  | B3 | 138 | ji |
|  |  | B4 | nn | LONGLIP ₂ /JI7TZ.I7 |
|  |  | B5 | 100 | CLOTH/TUKU7 |

T ku-wa ji-LONGLIP₂ CLOTH
R 0-kuw7-wa ji7tz.i7 tuku7
G 3A-dye-IC wrinkle-PN cloth
L it-got-dye-d pleat-ed cloth
FT The pleated cloth got dyed.

...

C1-5

| | | | | |
|---|---|----|-----|--------------------------------|
|  |  | C1 | nn | LONGLIP ₂ /JI7TZ.I7 |
|  |  | C2 | 100 | CLOTH/TUKU7 |
|  |  | C3 | 20 | wa |
|  |  | C4 | 93 | tu |
|  |  | C5 | 124 | ku |

T LONGLIP₂ CLOTH wa tu-ku
R ji7tz.i7 tuku7 +wa7 0-tuk.u7
G wrinkle-PN cloth REL 3A-cut-PN
L pleat-ed cloth -type it-is-cut
FT The thing that is made of pleated cloth has been cut.

C6 138 ji

...



ENDNOTES

[1] (MOJ:A1-9) The epi-Olmec long count had the same base as the Mayan in the ritual calendar, but its base in the vague year was one month earlier: see Justeson and Kaufman 1996 [1992]:22-23 for details. The result, demonstrated in part by the stated astronomical correlates of the La Mojarra text, is that an Epi-Olmec long count date fell 20 days earlier in absolute time than it would have among the Mayans.

[2] (MOJ:B2, S41b) 'Sun' is *jama in Sokean, as is 'day', and 'animal-guise of shapeshifting shaman'. But while 'shape-shifter' is /ko.jama/ in some forms of Sokean, in others it is /ko7-sunh/. 'Calendar priest' is /ko+xu/ in some forms of Mije, and probably keeps the earlier meaning. Since we know that 'sun' was *saw in proto-Mije-Sokean, /ko7-sunh/ strongly suggests that /saw/ 'sun' probably still existed for some time after /jama/ was introduced for 'day', and we interpret MS125 as representing /saw/ in all cases.

[3] (MOJ:B7-C7) That it is Venus that is the "bludgeon star" is confirmed by the occurrence of this same clause, "the bludgeon star shone", exactly on the ninth Venus-year anniversary of the event. (Justeson and Kaufman 1996 [1992] indicate that the span was 9 x 584 -1, but this calculation was from the long count date, while the Venus reference was to the previous evening.) The name presumably reflects the military import of Venus, well-established in Mayan texts and twice reflected on MOJ.

[4] (MOJ:K5-6) The word /tzu:si/ 'child' refers to prepubescent children, so HML was probably not yet born, or was only a baby, at the time of the original battle.

[5] (MOJ:N13-16) It is not clear what a "skin drum hummingbird" would be, but the hummingbird fits in with the bird associations and identities of HML and other participants in this narrative, and that of TUX, and it has warlike associations.

The reading "hummingbird" is based on the possibility that MS55 is a reduplicated sign. If so, it would likely represent a word that could be spelled with the same sign written twice. A search of our databases yields only pM-S *su:7ksu7 'hummingbird' as a likely possibility, that would be spelled <su-su>; other possibilities are Gulf Sokean *nono7 'tree ear' – not very evocative, or Mijejan *ka7ka 'basket', which has the advantage of resembling <kak>, but is from the wrong branch of the family and does not seem like a very likely symbol for rulership.

[6] (MOJ:N21) this sign [MS51] appears to depict the item in HML's outstretched hand, and the object hanging in front of HML's face, evidently a form of verbal expression that has a physical embodiment. The same object (or its elaborate border) is found on the back of a Macaw Monster on an Early Classic Mayan vase showing a blowgunner aiming at him [See Guernsey-Kappelman 1997, illustration 2.23 referring to Justin Kerr's *Maya Vase Book*], though the border has a U-shape in it like that of MS62. The basic shape of MS51, and the interior of the objects in the iconography of MOJ, is found on the forehead band of the Main Bird God [AKA "Principal Bird Deity"] (Longlip, Macaw Monster) on an Early Classic Mayan Tzakol bowl illustrated in Guernsey-Kappelman on p 314, figure 2.64a. These variants seem possibly/probably equivalent in meaning. It seems to be a major symbol associated with overlordship (i.e. supreme authority). Because of its association with the Main Bird God throughout southern Meso-America, we label it MACAW.POWER₁. MS62 at TUX:F5 has a simplified version of this sign (with a U-shape in the middle) as the left-hand part.

[7] (O18-20) <?SKY.GOD₁-SKY-pa QUETZAL> represents /tzap tu7ki/ 'Sky Quetzal': evidently the use of sky god name marked as such by MS144a as a name or epithet of a ruler. This may be a name of the protagonist or the name of an identity assumed by him. Shape-shifting ability is attributed to K'iche' kings in the early Colonial ethnohistoric sources [Q'u:7=kumatz <3ucumatz> in *Po:po! Wu:j* and Tekum u-Ma:m in ???], and apparently also in Lowland Mayan iconography [SAY WHERE]. Q'u:7=kumatz means Quetzal Snake, and Tekum u-Ma:m is said to have changed (shape-shifted) into a quetzal in at least one account of his famous battle with Pedro de Alvarado. A Classic Mayan ruler of Copán was named Quetzal Macaw, and both these names are found in the present text. Quite likely, the protagonist was called both Quetzal and Macaw.

[8] (MOJ:Q9-14) This sentence seems to say that the beard mask-wearer was a royal personage, maybe the same as

them as referring to the same individual. It is still possible that the ‘macaw-bedecked shape-shifter-impersonator’ (*7owa=wh=tzuk.i jama=mtz.i7*) of S17-21 is HML, but he could equally as well be HML’s rival. If HML’s rival was not bedecked as a macaw, then it is probable that it was as some other bird.

[12] If we take <SET> here in <7i-BLOOD-SET-ji> to be spelling {tap} ‘to shoot with arrows’ (rather than {tu7p} ‘sun to set, bird to perch’), then we can read this as /7i+nu7pin=tap-ji/ ‘when he got shot bloody with arrows’. Several iconographic representations and textual descriptions depict captured enemies, tied to trees or wooden frameworks, being killed by shooting them with arrows. In the story of Tolk’om <tol4om> in the Xajil Narrative (*Annals of the Kaqchikels*, sec. 37), Tolk’om is dressed up in a costume, tied to a tree, and enemy warriors dance and sing, firing arrows at him until he is killed; then, amidst a great deal of blood, his body is dismembered, and his parts distributed to seven different towns; later these body parts are thrown into a lake. Conceivably, some such event is related on MOJ.

On some of the Tajín murals, men are shown being dismembered, and disembodied/cut-off arms are shown in other places. Disembodied/cut-off heads are common and well-known in Meso-American iconography.

[13] (TUX:B1-3) Here begins a speech by someone in trance or seeing a vision of an otherworldly creature and place. /7oy/ (B2) ‘to go and come back, to make a round trip’ refers to the spirit/soul journey being taken by the transformation animal who leaves the shape-shifter’s body and returns to it when he changes back; the possible presence of a second person ergative marker /7in+/ (C5, D1) reflects that the traveler is addressing the spiritual being that he sees or senses; the use of /ko./ (C6, D2) ‘elsewhere’ on both /tzap=?win=kom/ ‘sky-?face pillar’ and “tool” (?/tzat7.u/) suggests that their homes are in another world. /7i/ (B1) ‘who?’ rhetorically establishes that a dialog is going on; /7u+/ (B4) ‘I (exclusive absolutive subject)’ identifies the speaker; /7in+/ (C5, D1) ‘your (second person ergative possessor)’ identifies the hearer’s property.

Epi-Olmec Vocabulary

Bolded forms are partially or entirely spelled out with syllabograms. Underlined forms are proto-Sokean forms that correspond to the inferred semantics of logograms. Unmarked forms are roots from which attested derived forms occur in Epi-Olmec texts.

ca 115 roots, ca 30 affixes

unacc = an intransitive (single-argument) use of a transitive (dual-argument) stem where only the patient is expressed

unerg = an intransitive use of a transitive stem where only the agent is expressed

| | |
|------|---|
| s | noun // sustantivo |
| sv | verbal noun // sustantivo verbal |
| pcp | participle // participio |
| vt | transitive verb // verbo transitivo |
| vi | intransitive verb // verbo intransitivo |
| adj | adjective // adjetivo |
| adv | adverb // adverbio |
| sr | relational noun // sustantivo relacional |
| dem | demonstrative // demostrativo |
| num | numeral // número |
| pron | pronoun // pronombre |
| int | interrogative // interrogativo |
| rel | relativizer // relativizador |
| med | mediopassive // mediopasivo |
| M-S | Mije-Sokean (Mijean & Sokean) |
| S | Sokean (Gulf Sokean & Soke Proper) |
| Soke | Soke Proper (Eastern Soke & Western Soke) |

Sources of Reconstructed/Read Forms

TK (1963), SW (1991 & 1995), 1991 (TK), 1992 (TK), 1993 (TK), 1994 (TK), 1995 (TK), 1996 (TK), 1997 (TK), 1998 (TK), 1999 (TK), 2000 (TK)

[TK = Terrence Kaufman; SW = Søren Wichmann]

The following information is given in each entry or subentry:

- the Epi-Olmec form
- grammatical class
- English gloss(es)
- how spelled, in angle brackets
- what level reconstructible to: authority for reconstruction

Individual spellings of verbs list the actual prefixes and suffixes that happen to be attached to the verbs.

LEXICAL ITEMS

- 7ame7** s year. Spelled <DRUM/YEAR, DRUM/YEAR-me>. (M-S: TK)
- 7i** pron:int-rel who?. Spelled <7i>. (S: TK)
- 7i7ps** num twenty. Spelled <MOON/TWENTY-si>. (M-S: TK)
- 7is** vt/unerg to see. Spelled <7i-si-wa>. (M-S: TK)
7is expl lo!, behold! Spelled <7i-si>. (M-S: 1991)
- 7otuw** vi to speak. Spelled <7o-tu-pa>. (S: SW)
- 7owa** s macaw, parrot. Spelled <7o+wa, MACAW>. (M-S: 1992)
- 7oy** vi to go (and return), to take a trip. Spelled <7i-7o-7i>. (M-S: TK)
- jak** vt/vi to cut. (S: TK)
ku.jak vi to cross over. Spelled <ku-CROSS-wa>. (S: 1993)
- jam** vt to remember. (S: TK)
kuk=tza7=jam.e. pectoral stone memento. Spelled <7i-ku-MIDDLE-tza-ja-me>. (S: TK+1993)
- jama** s day; shape-shifter's animal guise.
 Spelled <ja-ma, ja₂-ma, GUISE₁, GUISE₂>. (TK+1991)
nu7pu=jama ss buzzard animal guise. Spelled <nu-pu-GUISE₂-ma>.
- jay7** vt/vi to write. (M-S: TK)
jay7=ki7ps.i sv < v + v inscribed monument. Spelled <ja₂-SYMBOL-si>
- je7** dem that. Spelled <je>. (M-S: TK)
- je7.tzu** dem thus, like that. Spelled <je-tzu>. (S: 1992)
- jej.a7** sv < vi god: 'living one'. Spelled <GOD-ja>. (S: 1994)
- ji7tz** vt/vi to (get) wrinkl(ed). (S?: 1994)
ji7tz.i7 sv < vt wrinkled, pleated; earthly Longlip god. Spelled <ji-LONGLIP₂, ji-tzi>. (M-S?: 1994)
- joj** sr inside. Spelled <jo>. (S: TK)
- jome7** adj new. Spelled <jo-me-NEW>. (M-S: TK)
- jup** vt to cover. (M-S: TK)
ni7.jup.7 sv body-covering. Spelled <?LOINCLOTH-pu>
- ju7ps** vt to lash, to tie something onto something else (Soke: SW)
7owa=ju7ps.i sv macaw-lashing. Spelled <7o-wa=ju(7ps)-si>.
- jus** adv after[ward]. Spelled <AFTER, AFTER-su>. (M-S: 1993)
- kajaw** s jaguar. Spelled <JAGUAR>. (M-S: TK)

kak vt/unacc to (get) replace(d). Spelled <kak-wu>. (S: SW)

kak.e sv < vt exchange, replacement. Spelled <kak>.

kak.u7 sv < vt replacer, successor. Spelled <kak>. (Soke: 1992)

kakpe7 s scorpion; Scorpius. Spelled <kak-SCORPIUS-pe>. (M-S: TK)

ka7i vi to die, to lose consciousness. Spelled <DIE>. (S: TK)

kan s penis. Spelled <PENIS>. (M-S: 1992)

ken vt to see. (Soke: 1993)

ken.e pcp < vt seen: visible, public. Spelled <ke-ne>. (Soke: 1993)

kij vi to give light, shine. Spelled <SHINE-wu, ki-wu>. (M-S: SW)

ki7m vi to go up, accede. Spelled <7i-GO.UP>. (S: TK)

ki7m.u7 sv < vi accession, rising, ascent, installation. Spelled <GO.UP>. (S: SW)

7aw=ki7m vi to rule. (S: SW)

7aw=ki7m.u7 sv < vi rule(rship).

Spelled <7aw-GO.UP, 7aw-GO.UP-mu>. (S: 1991)

ko.ki7m.i sv < vi accession/one.who.accedes on behalf.of.others/elsewhere.
Spelled <ko-ki-mi-GO.UP>.

kip vt to fight against. Spelled <7i-ki-pi-wu>. (M-S: SW)

ki7ps.i sv < vt symbol(stone) [celt, figurine, stela; badge, token, memento, souvenir].
Spelled <SYMBOL-si>. (M-S: TK+1992)

ko7=suw s priest. Spelled <PRIEST-SUN>. (M-S: 1993)

kotzuk s mountain, hill. Spelled <MOUNTAIN>. (S: TK)

kom s notched house-post, pillar. (M-S: TK)

tzap(=?win)=kom s type s sky(-?face) pillar. Spelled <ko-SKY-?FACE-PILLAR>

ko.yumi s lord. Spelled <ko-LORD-mi>. (S: TK)

kot vt to put away. Spelled <7i-ko-te>. (S: TK)

kowa s drum. Spelled <DRUM/YEAR>. (M-S: TK)

kuk=tza7=jam.e s pectoral stone memento. Spelled <7i-ku-MIDDLE-tza-ja-me>.

kuw vt to raise; to put up/away. (Soke: SW+1994)

kuw.na7 adv < vt raised; put up/away. Spelled <ku-na>. (Soke: SW+1992)

kuy or **wus=tujtu** num seven. Spelled <ONE-ONE-FIVE>. (Soke or M-S: TK)

ku7 s hand, arm. Spelled <na-ku>. (M-S: TK)

ku7s vt to eat. Spelled <EAT>. (S: TK)

kuw7 vt/unacc to (get) dye(d). Spelled <ku-wu>. (S: 1993)

Kaufman & Justeson: Epi-Olmec writing and texts

kuy7 vt/unacc to (get) cover(ed). (M-S: SW)

ko.wu7tz=kuy7 vt + vt/unacc to get pierced and covered for others. Spelled <ko-PIERCE-ku-wu>. (S+M-S: SW)

ma adv earlier. Spelled <ma>. (M-S: TK)

mak num ten. (M-S: TK)

mak tzap num+n Ten Sky (a god). Spelled <ma-FIVE-FIVE-SKY>. (M-S: TK+1992)

mak=metz-a num twelve. Spelled <ONE-ONE-FIVE-FIVE>.

mak=tuku num thirteen. Spelled <ONE-ONE-ONE-FIVE-FIVE>.

mak=mo(ko)s or **yut** num fifteen. Spelled <FIVE-FIVE-FIVE>. (Soke: TK)

mak=tujitu or **yut ko tum-u** num sixteen. Spelled <ONE-FIVE-FIVE-FIVE>.

mak=wus=tujitu or **yut ko metz-a** num seventeen. Spelled <ONE-ONE-FIVE-FIVE-FIVE>.

mak=tuku=tujitu or **yut ko tuku** num eighteen. Spelled <ONE-ONE-ONE-FIVE-FIVE-FIVE>

maktas num four. Spelled <ONE-ONE-ONE-ONE>. (M-S: TK)

mak(ta)s=tujitu num nine. Spelled <ONE-ONE-ONE-ONE-FIVE>. (M-S: TK)

masa(n) n/adj holy (thing), god. (M-S: TK)

masa=wik.i sv something/someone hallowed by sprinkling. Spelled <ma-sa-SPRINKLE-ta-ma>. (S: 1992)

masa=ni7.APPEAR vi to appear divinely on the body. Spelled <ma-sa-ni-APPEAR>

matza7 s star. Spelled <ma-STAR-tza>. (M-S: TK)

maw.u7 pcp < vt ruined, destroyed. Spelled <ma-wu>. (Soke: TK)

metz= num by twos. Spelled <me-tze>. (M-S: TK)

metz-a num two. Spelled <ONE-ONE>. (M-S: TK)

mak=metz-a num twelve. Spelled <ONE-ONE-FIVE-FIVE>

mi7ks vi to quiver. Spelled <7i-BLOOD-mi-si, mi-si-na-wu>. (M-S: SW)

mo(ko)s num five. Spelled <FIVE>. (M-S: TK)

mak=mo(ko)s num fifteen. Spelled <FIVE-FIVE-FIVE>

mon7 vt to wrap. (M-S: TK)

RULER=ko7=mon7.a7 sv ruler's head-wrap. Spelled <KNOT+GOVERNOR-7a>.

now vi to sleep. Spelled <SLEEP>. (S: TK)

nu7a s deer. Spelled <DN: DEER>. (S: TK)

mutz vi to play. (S: TK)

mutz.i7 sv < v impersonator. Spelled <PLAY-tzi>. (S: 1994)

naka s skin. Spelled <SKIN>. (S: TK)

naks vt/unacc to (get) beat(en) [drum]. Spelled <BEAT>. (M-S: TK)

nas vi to pass. Spelled <na-sa-wu>. (M-S: TK)

nas s earth. Spelled <EARTH>. (M-S: TK)

nu.tzat7.e=nas adj < vt + s ground jointly measured by hand-spans. Spelled <nu₂-SPAN=EARTH>.

ne7k vt to set aside. (S: SW)

ne7k.e pcpcp < vt set aside. Spelled <ne-ke>. (S: SW+1993)
OR: *nek stacked

ne7w vt to set stones in a row/wall/circle (M-S: SW)

ne7w.e sv/pcp (stones) set in order. Spelled <ORDER.STONES = ne>.

nip7 vt/unacc to plant, sow; bury. Spelled <PLANT-pi-wu>. (M-S: TK)

nip7.i sv < vt planting, planted (thing). Spelled <PLANT, PLANT-7i>. (M-S: SW)

ko.nu7ks vt to bless, hallow. Spelled <HALLOW-wu>. (M-S: SW)

ko.nu7ks.u sv hallowing. Spelled <HALLOW>

ko.nu7ks.i pcpcp < vt blessed, hallowed. Spelled <HALLOW-si, KNOT-?nu-si>. (M-S: SW)

nu7pu s buzzard (= vulture). Spelled <nu-pu>. (M-S: TK)

nu7pu=jama ss buzzard animal guise. Spelled <nu-pu-GUISE₂-ma>.

nu7pin s blood. Spelled <BLOOD>. (M-S: TK)

nuks vi to go along. Spelled <7i-nu-si>. (M-S: TK)

pak.kuy7 sv bludgeon. Spelled <pak-ku>. (S: 1992)

paki7 adj hard, strong, powerful. Spelled <pa-ki>. (S: SW)

paks vt/unacc to (get) fold(ed). Spelled <FOLD-pa>. (S: SW+1992)

pey unacc to get waved/swung. Spelled <pe-wu>. (S: SW+1993)

pini7 s brother-in-law of man. Spelled <pi-ni>. (S: TK)

pit vt to tie (in a bundle) (M-S: TK)

pit.i sv < vt bundle; prisoner. Spelled <TIE, TIE-ti>.

poy7a s moon; month, veintena. Spelled <po-7a, MOON, MONTH>. (M-S: TK)

saw=ku7s.u7 poy7a s type s sun-eating moon, solar eclipse. (S: TK)

puw vt/unacc to (get) scatter(ed). Spelled <pu-wu>. (S: 1991)

puk vt/unacc to (get) take(n)/acquire(d)/achieve(d). Spelled <puk-7i, puk-ku-7i, puk-ku-wu>. (M-S: TK)

sa7sa7=tzap=ko.pun s noble sky animal (Soke: 1999)

sa7sa7(=pun) s noble, aristocrat. Spelled <sa₂-NOBLE₂>. (Soke: SW+1993)

saj vt/unacc to (get) share(d) out. Spelled <7i₂-sa₂+pa₂, saj-wu>. (M-S: SW)

saj s wing; shoulder. Spelled <7i-sa>. (M-S: TK)

si7i7 s backside, butt. Spelled <si-7i>. (S: 1992-1994)

sij v to cast lots. Spelled <GAMBLE>. (Soke: 1994)

- su7ksu7** s hummingbird. Spelled <suxsu>. (M-S: SW)
- suk** s bean(s). Spelled <BEANS>. (M-S: TK)
- saw** s sun. Spelled <SUN>. (M-S: TK)
7aw=saw s time-span. (S: 1993)
ko7=saw s priest. Spelled <PRIEST-SUN>. (?M-S: 1993)
- te7** dem the aforementioned; the latter; it; that. Spelled <te>. (M-S: 1992)
- te7n** vi to stand (on tip-toe), to step (on) (S: TK)
te7n.na7 adv upright(ly), on tip-toe. Spelled <te-ne-na>. (S: TK+1992)
- tok** vt to stain
tok.e pcp stained. Spelled <to-ke>. (S: 1993)
- ko.tokoy(-pu7)** vt to cover up/over OR to spill on.behalf.of.others/elsewhere. Spelled <7-ko-LOSE-pu-wu>. (TK+1992)
(yak=)**tokoy.a7** sv < v overturning/upsetting/dumping OR agent etc. Spelled <7i-LOSE-ya>. (M-S: TK+1992)
(yak=)**tokoy.e** sv < v overturned/upset/dumped one. Spelled <na-LOSE-ye>. (M-S: TK+1992)
- tui7** s rain. Spelled <RAIN>. (M-S: TK)
- tuitu** num six. Spelled <ONE-FIVE>. (M-S: TK)
tuku=tuitu num eight. Spelled <ONE-ONE-ONE-FIVE>. (M-S: TK)
wus=tuitu num seven. Spelled <ONE-ONE-FIVE>. ([M-JS: TK)
mak=tuitu or **yut ko tum-u** num sixteen. Spelled <ONE-FIVE-FIVE-FIVE>
mak=wus=tuitu or **yut ko metz-a** num seventeen. Spelled <ONE-ONE-FIVE-FIVE-FIVE>.
mak=tuku=tuitu or **yut ko tuku** num eighteen. Spelled <ONE-ONE-ONE-FIVE-FIVE-FIVE>
- tuk** vi to happen. Spelled <tukxpa>. (S: TK)
- tuk** vt to cut, harvest. (M-S: TK)
tuk.u7 sv < vt harvester. Spelled <tuk>.
tuk.u7 pcp < vt having been cut. Spelled <tu-ku>.
wu=tuk.i sv well-harvested (thing). Spelled <wu-tuk>.
- tuki** s water turtle. Spelled <TURTLE-ki>. (S: TK)
- tu7ki** s trogon, quetzal. Spelled <TROGON>. (TK 1997) [Final /i/ implied by omission of following <7i>.]
- tuku7** s cloth, garment. Spelled <CLOTH, tu+CLOTH>. (M-S: 1992)
- tuku** num three. Spelled <ONE-ONE-ONE>. (M-S: TK)
mak=tuku num thirteen. Spelled <ONE-ONE-ONE-FIVE-FIVE>. (M-S: TK)
- tum-u** num one. (S: TK)
- tus** vt to prick, sting. (S: TK)
tus.i adj < vt with hair standing on end. Spelled <tu-si>. (S: 1992)

tup vt to shoot with arrows.

Spelled <tu-nu-ARROWSHOOT-pu-ja-wu>, <tu-nu-ARROWSHOOT-pu-ja-yaj-wu>. (M-S: TK)

tu7p vi sun to set, bird to land. Spelled <SET>. (S: SW)

tza7 s stone. (M-S: TK)

kuk=tza7=jam.e s pectoral stone memento. Spelled <7i-ku-MIDDLE-tza-ja-me>.

tza7yji adv late in the day. Spelled <tza-ji>. (Soke: SW+TK)

tzaiin s snake. Spelled <DN:SNAKE>. (M-S: TK)

tzap s sky. Spelled <SKY, SKY-pa>. (M-S: TK)

mak tzap num+n Ten Sky (a god). Spelled <ma-FIVE-FIVE-SKY>. (M-S: TK+1992)

tzat7 vt to measure by hand-spans. (M-S: SW)

tzat7.u7 sv hand-span measuring device. Spelled <7i₂-ni₂-ko-SPAN-7u₂>.

nu.tzat7.e=nas adj < vt + s ground jointly measured by hand-spans. Spelled <nu₂-SPAN=EARTH>.

tzetz vt to chop (off). Spelled <na-tze-tze-CHOP-ji>. (M-S: SW)

tzetz.e sv < vt chopped off (thing). Spelled <na-tze+tze>.

tzu7 s night. Spelled <TIME-SKY₂-NIGHT>. (M-S: TK)

tzuk vt to do (< to touch). Spelled <DO>. (Soke < M-S: TK)

wu=tzuk vt/vi to array, adorn, bedeck. Spelled <BEDECK>. (Soke: 1993)

tzuk.i=pun sv deedsman. Spelled <DO₂×ki>.

tzusi s child under 12. Spelled <tzu-si>. (S: TK)

wan.e sv < vi song, chant. Spelled <SING-ne>. (S: TK)

wan.e=tzuk vi:incorp to perform a chant (Soke: TK+1992)

wej vi to shout. Spelled <we-pa>. (S: TK)

wen.e7 sv < vt (something) broken, piece. Spelled <we-ne>. (S: SW+1992)

OR **we7n.e** sv < vt a few, some. Spelled <we-ne>. (M-S: SW+1992)

wik vt/unacc to (get) sprinkle(d). (S: 1992)

ko.wik vt/unacc to (get) sprinkle(d) for others/elsewhere.

Spelled <7i-ko-SPRINKLE-ki-pa, ko-SPRINKLE-ki-pa>. (S: SW+1992)

wik.i sv < vt result of sprinkling. Spelled <SPRINKLE>. (S: SW+1992)

masa=wik.i sv something/someone hallowed by sprinkling. Spelled <ma-sa-SPRINKLE-ta-ma>. (S: 1992)

win sr in front. Spelled <wi-BEFORE>

wis vt to uproot. (M-S: SW)

wis.i pcpc < vt uprooted. Spelled <UPROOT-si> or <wi₂-si>.

wo7m vi to sprout. (S: SW)

wo7m.a7 s sprout. Spelled <wo-ma>.

wu7tz vt/unacc to (get) pierce(d). Spelled <7i-PIERCE+i>. (S: SW+1993)
wu7tz.u7 sv piercingly, as a piercer. Spelled <PIERCE>.
wu7tz=kuy7 vt + vt/unacc to get pierced and covered. Spelled <ko-PIERCE-ku-wu>. (S+M-S: SW)

wu adj good. (S: TK)
wu=tuk.i sv < vt well-harvested (thing). Spelled <wu-tuk>.
wu=tzok vt to bedeck, adorn, array. Spelled <BEDECK>. (Soke: TK+1993)

wus.tuk num two. Spelled <ONE-ONE>. (M-S: TK)
wus=tujtu num seven. Spelled <FIVE-ONE-ONE>. ([M-JS: TK)
mak=wus=tujtu or yut ko metz-a num seventeen. Spelled <FIVE-FIVE-FIVE-ONE-ONE>

yaj vi:med to be finished. Spelled <yaj>. (S[elite]: TK)

yu7 dem this. Spelled <yu>. (M-S: TK)

yut or mak=mo(ko)s num fifteen. Spelled <FIVE-FIVE-FIVE>. (Soke: TK)
yut ko tum-u or mak=tujtu num sixteen. Spelled <ONE-FIVE-FIVE-FIVE>
yut ko metz-a or mak=wus=tujtu num seventeen.
 Spelled <ONE-ONE-FIVE-FIVE-FIVE>.
yut ko tuku or mak=tuku=tujtu num eighteen.
 Spelled <ONE-ONE-ONE-FIVE-FIVE-FIVE>

AFFIXES AND CLITICS READ (33)

these are all spelled out with syllabograms

| <u>form</u> | <u>gloss</u> | <i>when reconstructed</i> |
|--------------------------------|---|-------------------------------|
| adverbial particle | | |
| ma | 'earlier' | TK |
| absolute person markers | | |
| 7u+ | X Abs | TK |
| Ø | 3 Abs | TK |
| ergative person markers | | |
| na+ | X Erg | TK |
| tun+ | I Erg | TK |
| 7in+ | 2 Erg | TK |
| 7i+ | 3 Erg | TK |
| verb-deriving prefixes | | |
| 7aw= | with the mouth | TK |
| ko. | in another's place: on behalf/instead of others, in someone else's place, elsewhere: glossed interlinearly ELSE | TK |
| ku. | away | TK |
| ni7. | on the body | ?? |
| nu. | associative | TK |

| | | |
|---------------------------------------|--|------|
| verb-inflecting suffixes | | |
| -pu7 | completely | TK |
| -jay7 | indirective | TK |
| -nay7 | perfect/progressive | TK |
| plural person marking suffixes | | |
| -ta7m | 1,2 plural; animate noun plural | TK |
| -yaj | 3 plural | TK |
| aspect-mood suffixes | | |
| -pa | independent inceptive | TK |
| -wu | independent completive | TK |
| -e | dependent inceptive | TK |
| -i | dependent inceptive | TK |
| -ji | dependent completive | SW |
| -7i | optative | TK |
| stative-deriving suffix | | |
| .na7 | v > adv | 1992 |
| noun-deriving suffixes | | |
| .kuy7 | v > n:instrument | TK |
| .e(7) | v > s (esp. non-active) | TK |
| .i(7) | v > s (esp. non-active) | TK |
| .u7 | v > s (esp. active) | TK |
| .a7 | v > s (esp. active) | TK |
| .7 or .0 | v > s (with prefix/incorporee) | TK |
| locative enclitics | | |
| +mu7 | generic locative | TK |
| +k | from | TK |
| subordinating enclitics | | |
| +wu7 | he who/that which is N/A/#/D [RELativizer] | TK |
| +7ku | when [relative subordinator] | 1993 |
| other enclitics | | |
| +ti | only, just, nothing but | TK |