

The Teo Mask of King Ngbe of Ahuelican, Mexico

The **Teo mask** is from a private collection of Olmec artifacts. The mask is very important because it provides a large corpus of Epi-Olmec symbols. The Epi Olmec writing is usually assigned to the late B.C. period. In this paper we discuss information that the Epi Olmec script may have been in use as early as 600-900 BC, because the personage mentioned on the artifact: Ngbe, is also mentioned in two other Olmec artifacts from Guerrero that date back to the earlier period. The artifacts archaeologist find through excavation can never tell us what language was spoken by a dead civilization several millennia ago, without the aid of written documents. We do not know what language was spoken by the Olmec people, but linguist have made three hypothesis regarding the original language spoken by the Olmec people: 1) the Otomangue theory (Marcus, 1989), 2) Mixe-Zoquean theory (Campbell & Kaufman, 1976; Justenson, Williams, Campbell, 1985) and 3) the Mande theory (Wiener, 1921; Winters, 1979, 1980, 1997, 1998).

Marcus (1989) is strong supported of the Otomanguean language theory for the Olmec. He believes that the Olmec religion is best explained by the Proto-Otomangue religion (Marcus, 1989, 148-151). This hypothesis is not accepted because of the absence of linguistic material in support of the hypothesis.

Campbell and Kaufman (1976) support the Mixe-Zoquean hypothesis for the Olmec language. This hypothesis is based on the geographical distribution of Mixe-Zoquean speakers in areas where the Olmec civilization existed; and the evidence of Mixe Zoquean loan words in Mayan languages "diagnostic" of Olmec culture (Campbell,

1999, pp.365-366; Kaufman, 1976).

Campbell (1999) argues that the cultural content of the alleged Mixe-Zoquean loans for ritual, calendric, incense terms. For example loans from Mixe-Zoquean into Quichean and Pocomchi, are the twenty year period and the number twenty; into Yucatec we find the Mixe-Zoquean loan for 'calendar priest'; and into K'iche and Kaqchikel we find Mixe-Zoquean word for calendar (Campbell, 1999). Below are the

major Mixe-Zoquean loans into the Mayan languages. They represent Mayan words that failed to meet the canonical form for Mayan roots:

Mixe-Zoquean		Mayan
*koya	tomato	s-ko:ya
*pom V	copal (insense)	porn
*cimah	dipper gourd	*cima
poh	moon	*poya?
may	'twenty'	may 'to count

The alleged Mixe-Zoquean loans in the Mayan languages are not systematic. As indicated above by the appearance of a Mixe-Zoque word in this or that Mayan language, for example *koya in Quichean, or kusi for calendar priest in Yucatec, the Mixe -Zoquean hypothesis is not based on a systematic finding of Mixe-Zoquean loans in the Mayan language.

This has led some researchers to reject this hypothesis, because the spatial distribution of Mixe-Zoquean languages does not support this hypothesis. Thomas A. Lee (1989) noted that: ". ..closely [related] Mixe, Zoque and Popoluca languages are spoken in numerous villages in a mixed manner having little of no apparent semblance of linguistic or spatial unity" (p.223). This linguistic fragmentation led Lee (1989) to make the following observation:

"the general assumption, made by the few investigators who have considered the situation, is that the modern linguistic pattern is the result of the disruption of the modern linguistic pattern is a result of the disruption of an old homogeneous language group by more powerful neighbors or invaders..." (p.223).

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In summary there are three problems with Justenson and Kaufman decipherments of

Epi-Olmec: 1) there is no clear evidence of Zoque speakers in Olmec areas 3200

years ago, 2) there is no such thing as a "pre-Proto-Soquean/Zoquean language,

3)there is an absence of a Zoque substratum in the Mayan languages.

First of all ,Justenson and Kaufman in their 1997 article claim that they read the Epi-Olmec inscriptions using "pre-Proto-Zoquean". This is impossible ,a "Pre-Proto" language refers to the internal reconstruction of vowel patterns, not entire words. Linguists can reconstruct a pre-proto language , but this language is only related to internal developments within the target language.

Secondly, Justenson and Kaufman base their claim of a Zoque origin for the Olmec language on the presence of a few Zoque speakers around mount Tuxtla. Justeson and Kaufman maintain that the Olmec people spoke a Otomanguan language. The Otomanguan family include Zapotec, Mixtec and Otomi to name a few. The hypothesis that the Olmec spoke an Otomanguan language is not supported by the contemporary spatial distribution of the languages spoken in the Tabasco/Veracruz area.

As mentioned earlier Thomas Lee in R.J. Sharer and D. C. Grove (Eds.), Regional Perspectives on the Olmecs, New York: Cambridge University Press (1989, 223) noted that "...closely Mixe, Zoque and Popoluca languages are spoken in numerous villages in a mixed manner having little or no apparent semblance of linguistic or spatial unity. The general assumption made by the few investigators who have considered the situation, is that the modern linguistic pattern is a result of the disruption of an Old homogeneous language group by more powerful neighbors

or invaders...."

If this linguistic evidence is correct, many of the languages in the Otomanguean family are spoken by people who may have only recently settled in the Olmec heartland, and may not reflect the people that invented the culture we call Olmecs today.

In a recent article in by S.D. Houston and M.D. Coe, asked the question "Has Isthmian writing been deciphered", in the journal Mexicon .In this article Houston and Coe attempted to use Justenson and Kaufman's Epi-Olmec vocabulary to read the inscriptions on the Teo Mask and found that they were not helpful at all. They note that "The text does not provide much assurance that Justeson and Kaufman are on the mark....Would not persuasive decipherment have led, as did Michael Ventris' brilliant work on Linear B or Tatiana Proskouriakoff's on Maya, to compelling references to the context at hand , in this case a mask, or to its owner?"(Houston & Coe, 2003, p.159).

The Justenson and Kaufman hypothesis is not supported by the evidence for the origin of the Mayan term for writing. The Mayan term for writing is not related to Zoque.

Mayan tradition make it clear that they got writing from another Meso-American group. Landa noted that the Yucatec Maya claimed that they got writing from a group of foreigners called Tutul Xiu from Nonoulco (Tozzer, 1941). Xiu is not the name for the Zoque.

Brown has suggested that the Mayan term c'ib' diffused from the Cholan and Yucatecan Maya to the other Mayan speakers. This term is probably not derived from Mixe-Zoque. If the Maya had got writing from the Mixe-Zoque, the term for writing would probably be found in a Mixe-Zoque language.

The fact that there is no evidence that 1)the Zoque were in the ancient Olmec land 3200 years ago, 2)there is no Zoque substrate language in Mayan, 3) you can not read the Epi-Olmec inscriptions using the Justenson and Kaufman method, an 4) there is no such thing as "pre-Proto-Zoque" falsifies Justenson and Kaufman hypothesis.

The noted scholar Cyrus H. Gordon, in <Forgotten Scripts>, claims that he has deciphered Linear A or Minoan, using the Semitic languages. Although he has made this claim, the decipherment is not accepted because it does not have collateral evidence to support the decipherment.

Maurice Pope in The story of Archaeological Decipherment (1975), maintains that you reject a decipherment theory out right on three grounds: the decipherment is arbitrary, the decipherment is based on false principles, or the decipherment has been ousted by a better decipherment. The Kaufman decipherment must be rejected because it is arbitrary and based on false principles.

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The fact that there is no evidence that 1)the Zoque were in the ancient Olmec land 3200 years ago, 2)there is no Zoque substrate language in Mayan, and 3) there is no such thing as "pre-Proto-Zoque" falsifies Justenson and Kaufman hypothesis.

Due to the lack of evidence for a Mixe origin of the Olmec writing Houston and Coe (2003) believe that that the Olmec must of spoken another language. They suggest that the language may have been Huastec (Houston & Coe, 2003).

The Huastec hypothesis is not supported by the linguistic evidence. The linguistic evidence suggest that around 1200 B.C., when the Olmec arrived in the Gulf, region of Mexico a non-Maya

speaking group wedged itself between the Huastecs and Maya. (Swadesh 1953) .This linguistic evidence is supplemented by Amerindian traditions regarding the landing of colonist from across the Atlantic in Huasteca.

As a result, the presence of alleged Mixe-Zoquean loan words in different Mayan languages in a non-systematic pattern representing diffusion from Mixe-Zoquean as suggested by Campbell (1999) ; this linguistic evidence of Mixe-Zoquean loans in the Mayan languages, may be more indicative of the adoption by the Mayan and Mixe Zoquean speakers of loan words from some other linguistic group. This would explain Swadesh's evidence for the separation of the Huastecas from the Maya around 1200 BC, and evidence of Lee (1989) suggesting an invasion of the Mexican area that caused the break up of Mixe, Zoque and Popoluca unity.

This latter hypothesis may not be too far off the mark. Mixe oral traditions maintain that much of their culture came from outsiders who entered their land long ago.

This Mixe traditions leads to two possible hypothesis 1) the Mixe speakers may have obtained many aspects of their culture from a culturally superior non Mixe Zoquean group; and 2) that the Mixe-Zoquean speakers are not the archaeological Olmec

people. If the Mixe-Zoquean people are not the archaeological Olmec people as assumed by Campbell (1999), who were the Olmec speakers.

Mande-Olmec Hypothesis

Winters (1979,1980, 1997) maintains that the Olmec people spoke a Mande languages. This hypothesis is supported by the evidence of Malinke-Bambara (one of the Mande languages) loan words in many Mexican languages (Weiner, 1921), and the discovery of an Olmec artifact at Tuxtla (Weiner, 1921) and LaVenta (Winters, 1979, 1980, 1997) that were inscribed with symbols common to the Vai writing system used by the ancient Mande speaking people (De lafosse, 1899; Winters, 1983).

The Proto- Olmec or Manding people formerly lived in North Africa in the Saharan Highlands: and Fezzan (Winters, 1986) . Here the ancestors of the Olmecs left their oldest inscription written in the Manding script (which some people call Libyco Berber, eventhough they can not be read in Berber) : was found at Oued Mertoutek and dated by Wulsin (1940). This indicates that the Manding hand writing 2000 years before they settled the Gulf of Mexico.

These Proto-Olmec people lived in the Highlands of the Sahara. Here we find numerous depictions of boats engraved in the rock formations that these people used to navigate the Sahara before it became a desert. The Proto-Olmec probably used these boats to sail to Africa. r

The Olmec, the first Americans to develop a number and math system, influenced their Mayan neighbors. Mayans borrowed much of their art and architecture from the Olmecs, including the pyramid structures that the Mayans are so famous for. The first of these great Mayan structures appeared between 400 B.C. and 150 A.D.

Although Wiener (1922) and Sertima (1976) believe that the Manding only influenced the medieval Mexican empire, the decipherment of the Olmec scripts and a comparative analysis of the Olmec and Manding civilizations show correspondence. (Winters 1979,1980,1981) The most important finding of Wiener (1922) was the identification of Manding inscriptions on the Tuxtla statuette. Although Wiener (1922) was unaware of the great age of the Tuxtla statuette his correct identification of the African origin of the signs on the statuette helped us to decipher the Olmec script and lead to the determination that the Olmec spoke a Manding language.

The linguistic evidence suggest that around 1200 B.C., when the Olmec arrived in the Gulf, region of Mexico a non-Maya speaking group wedged itself between the Huastecs and Maya. (Swadesh 1953).

The Manding speakers were early associated with navigation/sailing along the many ancient Rivers that dotted Mica in neolithic times (McCall 1971; McIntosh and McIntosh 1981). These people founded civilization in the Dar Tichitt valley between 1800-300 B. C, and other sites near the Niger River which emptied into the Atlantic Ocean. (Winters 1986a) .

The Manding languages are a member of the Mande family of languages (PlatieI1978; Galtier 1980). Mann and Dalby (1987) give Mande a peripheral status in the Niger-Congo superset.

The Olmec (Mande) language has a high frequency of disyllabic roots of the CVCV,CV and CVV kind. Monosyllabic roots of the CV kind often reflect the proto-form for many Manding words (Winters ,1979, 1997).

In the Olmec language, words formed through compounding CVCV and CV roots, e.g., (gyilji 'water') **da-ji** 'mouth-water, saliva', **ny -ji** 'eye-water:tear'. Olmec (Mande) has a well established atfxial system, typified by the use of suffixes as useful morphemes expressing

grammatical categories. Although tone is important in the Mande languages, it was least important in the Olmec group.

The Olmecs spoke a Manding language. (Wuthenau 1980) This has been proven by the decipherment of the Olmec inscriptions (Winters, 1979, 1980, 1997). Due to the early spread of the Manding language during the Olmec period we would expect to find a large number of Olmec (Malinke-Bambara) loan words Amerind languages.

The Mayan languages have adopted a number of loan words from other Meso American languages. In this paper we will review the evidence for Olmec (Malinke Bambara/Manding) loan words in the Mayan languages.

Socialization is the main determinant for lexical borrowing by a linguistic community not lexical need (Romaine, 1995). The primary motivation for borrowing terms is prestige (Grosjean, 1982; Hock & Joseph, 1996; Romaine, 1995; Weinreich, 1968).

Borrowing is generally the result of two factors need and prestige (Hock & Joseph, 1996; Grosjean, 1982; Romaine, 1995; Weinreich, 1968). Weinreich (1968) noted that: "lexical borrowings can be described as a result of the fact that using ready-made designations is more economical than describing things afresh" (p.57).

Whenever speakers of different languages are in contact borrowing can occur. Terms that are borrowed may effect the phonology, syntax and morphology of the recipient language (Romaine, 1995; Weinreich, 1968). As a result, terms can be partly or fully assimilated in the recipient language.

Nouns are the most frequently borrowed terms. But borrowing can occur in 'core' vocabulary (body parts, numbers, personal pronouns, etc.) (Scotton & Okeju, 1973). The primary motivation behind borrowing terms in the core domain is prestige (Gorsjean, 1982; Weinreich, 1968).

There are a number of motivations behind borrowing. In general borrowed words usually reflect specialized forms of discourse, new technology, new artifacts and cultural items (Hock & Joseph, 1996). As a result, many borrowed lexical items refer to foreign fauna and flora and prestigious religious terms.

We would therefore assume that if the Olmec spoke a Mande or Manding language we would find Olmec (Mande) loan words in the Mayan, and other languages spoken in Mexico. Below we will test this hypothesis in relation to Chol, Quichean and Yucatec.

Quichean and Malinke-Bambara

In figure 1, we see a list of Manding loan words in the Quichean languages. These Quichean terms are from Tedlock (1996) and Campbell (1977). The manding terms for this comparison come from Delafosse (1955), and Winters (1986).

Figure 1: Mande Loans in <u>Quichean</u>		
Quiche		Malinke-Bambara
saq'e	daytime, sunlight	sa 'heaven, sky'
K'i	many	kika
Ja	lineage, family	ga, gba
Ja	water	Jl
q'aq	fire	ga-ndi
palo	lake, sea	ba, b'la
k'oto	to carve, cut	ka
k':um	squash	kula, kura
Ba	father	fa
Ba	lord	Ba 'great' (Person)
ka'land, earth'		ka 'suffix joined to names of lands, etc.

ich	eye	n'ya
Ie	the, that, this	Ie
ma	no	ma
naal	parent, mother	na
m	point, at the point	na
cah	earth, land	ka (see above)
balam	jaguar/tiger	balan 'leopard worship'
sib'	smoke	· SISI
xolo:m	head	ku
xuku?	boat, canoe	kulu
ca<al	neck	ka
quI	neck	ka
k'u?sh	chest	kesu
k'o:x	mask	ku
pu:m	stomach	furu
pach	bark	far a
Sh-ko:ya: ,	tomato	koya

The Quiche loan words in Malinke-Bambara show the following phonological patterns:

a----->a	c----->s
o----->u	c----->k
u----->a	z----->s
x	s k----->k
x	k p----->f
q----->k	ch----->k

There are some interesting morphological features associated with Malinke-Bambara loans which were nativized by the Quechuan speakers. For example, we find that the Malinke-Bambara loans adopted by the Quiche with an initial <k> were nativized in the recipient language through the use of the Quiche <ch> sound as illustrated in figure 2.

Figure 2: Mande loans in <u>Quichean</u> with ch < k shift		
Quiche	Olmec (Malinke-Bambara)	
ch'ich'	bird	kono
achi	man	kye
chi>ic	bite	ki
chhix	rock	kaba

It is also interesting to note that many Quiche words beginning with *Ix'* which is pronounced 'sh', correspond to Malinke-Bambara words with an initial *Is'* as illustrated in figure 3.

Figure 3: <u>Quiche</u> nativization of Malinke-Bambara words with initial <s>		
Quiche	Malinke-Bambara	
Xab'	ram	sa
Ixa?	Seed	SI
Uxe	root	sulu, sum

This indicates that the Quiche nativized the phonology of some Malinke-Bambara loans through the substitution of <x> for the Malinke-Bambara <s> sound.

Yucatecan and Malinke -Bambara

Below we compared Yucatec and Malinke-Bambara terms. The Yucatecan Mayan terms are Maurice Swadesh, Critina Alvarez and Juan R. Bastarrachea's,

This is interesting in relation to the Mayan languages. In the Mayan languages we see a similar contrast between Mayan <*t> and <*c>, <*ch>. Below are examples from

Cholan and Yucatec:

Chol	Yucatec
ti mouth	chi
te tree, stick	che

In Yucatec , we also have **ca** 'excrement' and **ta** 'excrement'. We also have **ti** 'eat' and **chi** 'eat'.

Justeson, Williams, Campbell and Kaufman (1985) have suggested that shift in Mayan <t> to <ch> before *iii* and *lei* took place in Pre-Classic times. These authors believe that this change may have resulted from early Cholan and Yucatec contact.

I agree with this hypothesis, and might add that given the appearance of a similar sound shift in Malinke-Bambara, of a contrast between *Isl* and *Itl*, that this particular shift in Yucatec and Chol may have occurred under the influence of the Malinke Bambara speaking Olmecs. This view is supported by the fact that many of the Malinke Bambara loans beginning with an <s> have been nativied in the Mayan languages by giving them the <c> (Yucatec) *andl* or <ch> (Chol and Quiche) sound.

If this hypothesis for a Malinke-Bambara is correct there should also be evidence of Olmec (Malinke-Bambara) loans in the Otomangue and Mixe-Zoque languages. Below we will test this hypothesis in relation to Mixe languages in Qaxaca and Otomi (an Otomangue language).

Otomi and Malinke-Bambara

Otomi and Manding also share many features in grammar, phonology and morphology. This is interesting because Dixon (1923) and Marquez (1956, pp.179-180) claimed that the Otomi had probably mixed in the past with Afficans. Quatrefages (1889, pp.406-407) also believed that Afficans formerly lived in Florida, the Caribbean and Panama. Gonzalo Aguirre Beltran (1972, p.107) admits a profound influence of Manding slaves in colonial America, but due to their enslavement the slavery period can not account for the genetic relationship which exist between Otomi and Manding.

Manding is closely related to old Otomi, rather than the Mezquital dialect. As a result most of the terms compared herein are taken from Neve y Molina (1975) and Manuel *Orozcoy y Berra's Geografia da las lenguas y Carta Ethgrafica de Mexico.*

Although Neve y Molina's work is over 200 years old, most of the terms he collected agree with contemporary Otomi terms in most details, except for the lack of diacritic marks and nasalized vowels or glottalized consonants. For example, whereas in the Muger Otomi dialect we find **danxu** 'woman', Neve y Molina (NyM) had **dansu**; Mudurar dialect **da** 'ripe, mature', NyM **da** 'id.' ;Ojo **Na daa** 'eye', NyM **daa** 'id. '; Hija **ttixu** 'son', NyM **ti**; and Diente **Na tzi** 'tooth', NyM tsi.

The phonology of contemporary Otomi can be explained by evolution. The sound change transformed s > z in the terms for 'woman' and s > x for 'tooth', can be explained as a normal historical transition from one Otomi phoneme to another. The addition of the Otomi possessive **na** to the actual words for 'eye and 'tooth'.

The orthography for Otomi dialects has been a focus of controversy for many years. D. Bartholomew (1968), is a leading advocate for the illustration of tone in any discussion of

Otomi. HR. Bernard (1980) on the other hand, has noted the desirability of vowels in a practical spelling/orthography of Otomi. But, both in Otomi and Manding, tone plays an important role.

Other affinities exist between Otomi and Manding. As in Maya, the phonemic syllable in Otomi is primarily CV and a tone.

All of these languages are agglutinative. In both Olmec/Manding and Otomi the words are formed by adding two different terms together or an affix. Manual Orozco (p.129) records ka-ye as the Otomi word for 'holy man'. This term is formed by ka 'holy' and ye 'man'. Another word is da-ma 'mature woman'. This word is formed by ma 'woman' and da 'mature,ripe'.

Otomi and Olmec/Manding share grammatical features. The Otomi ra 'the', as in ra c, 'the cold' agrees with the Manding -ra suffix used to form the present participle e.g., kyi-ra 'the envoy'.

The Otomi use of bi to form the completed action agrees with the Manding verb 'to be' hi. For example, Otomi hi du 'it died' and hi zo-gi 'he left it' ,is analogous to Manding a bi sa. Otomi da is used to form the incomplete action e.g., ci 'eat': daci 'he will eat'. This agrees with the Manding da, la affix which is used to form the factitive or transitive value e.g., la bo 'to take the place'. In addition Otomi ? no , is the comple-tive e.g., bi ?no mbo ra 'he was inside his house'. This shows affinity to the Manding suffix of the present participle -no, e.g., ji la-sigi-no 'dormant water'.

The Mezquital Otomi pronominal system shows some analogy to that of Manding, but Neve y Molina's, Otomi pronouns show full agreement:

	First	Second	Third
Otomi	ma	i,e	a
Manding	n', m'	i,e	A

There are also several Malinke- Bambara loans in Otomi from the basic vocabulary including:

English	Otomi	Manding
son/daughter	t?i,ti	de,di
eyes	da	do
brother	ku	koro
sister	nkhu	ben-k
lip	sine	sine
mouth	ne	ne
man	ta/ye	tye/kye

The Otomi and Manding languages also have similar syntax e.g., Otomi ho ka ra 'ngu

'he makes the houses', and Manding a k nu 'he makes the family habitation (houses)'.
Mixe and Malinke-Bambara

There are a number of Malinke-Bambara loans in Mixe. The Mixe discussed in this section is Qaxacan, and include words from Mazatec, Chinantec, Mixtec and Chatino.

The Mixe has surprising Malinke-Bambara loans. These loans presented in Figure 9, include parts of the body, nouns for wind, house night and village, agricultural terms (land of cultivation, maize, tomato) plus political terms such as lord, village and king.

As among the Mayans, the Mixe like the Malinke-Bambara prefix their pronouns.

Mixe: n' 'me,!'; m 'you; yi, y 'he, she, it, the'

n' amido:y "I ask"

y pe tp "he will sweep it'

In Malinke-Bambara we would have a ba " his mother"; a be so " he is at home', <a>

= 'she, he, it'.

Figure 9: Malinke-Bambara loans in Mixe		
Cahp	heaven	sa
Cl	squach	SI
Su	night	su
Co:n	to leave	ta, tyo
It	place	ta
Kahp	small town	Ka, suffix joined to the name of a locality
Kam	planting field	ga, gba, ka
Ko/ku	head	ku(n)
Koh	to plant, build	ko 'to create'
Ko:ng	king, lord	ko 'person deserving respect'
Koya	tomato	koya
Kok	maize flower	Ka
kats	black maize	ka
Kushi	calendar priest	jose 'priest of a cult'
may	'to divine'	ma 'happy issue; to understand'
lll:P	to plant	mgba
Po:b	white	bo, po (superlative of white)
Poh,po'	wind	fo 'arid air'
Purap	cultivating tool	faalo, faara 'hoe'
shi	day, sun	SI-sora
Sho:sh	snake	Sa

Tuk	house	Tu, du
Tun	hill	Tu 'heap, raising ground'
Uk	dog	wulu

Among the Malinke-Bambara loans in Mixe, there was full correspondence between the *Itl*, *Im!* and *Ik/* in both languages. In other cases there was contrast between:

p-----f p----- b
sh----- s t----- d
c -----s n ----- m
c ----- t

The contrast between the Mixe *Icl* and Malinke-Bambara *It I* is most interesting because we have also observed this same pattern in the Mayan languages. It also interesting to note that many Malinke-Bambara loans in Mixe that begin with the *Isl* consonant have been nativized by changing this *Isl* into a *lei*, just as the Yucatec speakers had done for their Olmec loans beginning with <s>.

It is interesting to note that the Mixe loan **po'** 'wind', is derived from Malinke Bambara **fo I po** 'wind'. This is surprising because we find that in Mixe some words with an initial *If I* are pronounced with a *Ipl* sound, e.g., **pishka d** 'highest dignitary', a Nahuatl loan word.

The Olmec appear to have played an important role in introducing agriculture to the Mixe. This is obvious not only in the large number of loans for plants in Mixe, but also the term they use for cultivation.

The Mixe make it clear that cultivation takes place on the humid bottom land they call **ta : k kam** . This Mixe word can not be explained in Mixe-Zoque. But when we look at this word from the perspective of the Olmec language we find that it comes from three Malinke-Bambara words **ta ka ga** 'this is the place of cultivation':

ta 'place'

ka 'to be'

ga 'terrain of cultivation, act of planting, to plant'

The loans in Mixe make it clear that they were probably hunter-gatherers when the Olmec (Malinke-Bambara) speaking people came to Qaxaca in search of minerals to make their giant heads and jade for their many artifacts.

The Mixe appear to have used the loan **ko** 'head of something' , to construct many words in Mixe. For example:

Mixe		Bambara	
ko ca'ny	'chief snake'	kun-sa	'head snake'
kocu	'of the night'	ku su	'head night'
kodung	'mayor'	ku(n)dugu	'head amland, chief'

The Mixe term for calendar priest or **kushi** is probably also a loan ITom Olmec. The Olmec (Malinke-Bambara) term for 'time' is **sinye** and **san** means 'year, sky'. This suggest that the Mixe term **kushi** 'calendar priest, head priest', may come ITom the combination of Olmec **ko** 'head' and **sinye** 'time' or **ko-sinye** 'head time (keeper)'.
The Mixe nativization of **ko-sinye** > **kushi** , would not be too surprising, since the Mixe, if they were originally hunter-gatherers would have had no need for a person to record the seasons" a calendar priest', until they began the domestication of the crops

introduced to Qaxaca by the Olmec people when they settled the region to exploit the rich mineral deposits found in this part of Mexico.

Finally, the widespread adoption of Olmec/ Malinke-Bambara lexical and grammatical features in the Mayan, Mixe and Otomi languages indicate a close relationship among the speakers of these languages in Pre-Classic Mexico. The shared diffused grammatical, lexical and phonological features discussed in this paper are probably the result from an extended period of bilingualism in ancient Mexico involving the Malinke-Bambara speaking Olmecs, and their Otomi, Mayan and Mixe neighbors. The comparison of Chol, Quiche and Yucatec to the Malinke-Bambara languages is a valid way to illustrate the ancient relationship between the Pre-Classic Maya and Olmec people who spoke a Manding language related to Malinke-Bambara.

Some researchers might claim that the Malinke-Bambara loan words in the Mayan, Mixe and Otomi languages may have been adopted after Spain conquered Mexico. They might hold this view because millions of African slaves came to Mexico after 1500.

It is improbable to suggest that borrowing and coincidence can account for the pronominal agreement between Malinke-Bambara and Mayan languages, along with shared grammatical features and demonstrated sound shifts for two reasons (1) the accepted historical date for the meeting of the speakers of these languages is far too late to account for the grammatical affinities and corresponding terms found within these languages; and (2) borrowing is very rare from a culturally subordinate linguistic group (the African slaves) into a culturally dominant linguistic group (the Amer-indians), particularly in the basic vocabulary areas.

The shift between Mayan <c> , <ch> and <t> is believed to have taken place in Pre

Classic times. This is far too early for the presence of African slaves in Mexico. Moreover,

the European slave traders moved from north to south in their recruitment of slaves. As a

result, we find that up until the 1550's most African slaves taken to Spanish America

came from areas above the Gambia river. Most of the earliest Mande speaking slaves did

not begin arriving in the Americas until slaves began to be exported from the Gambian

region of West Africa. By this time African slaves and Amerinds lived in separate

worlds, with the Africans on the plantations and the Maya in their native villages.

The slave hypothesis of the introduction of Malinke-Bambara loans into Maya must

also be rejected because people become bilingual mainly for status raising. There was no

way that the status of the Mayan people would have risen by the adoption of terms

spoken by slaves.

The archaeological data make it clear that many Pre-Classic Mayan sites

were

already settled by the Olmec when the Maya arrived as indicated by the first, Olmec ruler

at Palenque. This suggest that the Mayan speakers adopted many Olmec terms to enhance

their social political, commercial and economic oportunities in the Olmec urban centers.

The fact that the Malinke-Bambara loans in the Mayan languages reflect the high culture

associated with the archaeological Olmec confirms the Mande-Olmec hypothesis.

It

confirms that theory that socialization is the main determinate behind lexical borrowing by a linguistic community, not lexical need.

It is interesting to note that many of the alleged Mixe-Zoque loans in the Mayan languages can be explained by Malinke-Bambara items. In figure 10, we list some of these Mize-Zoque loan words.

Figure 10: Mixe-Zoquean Loans				
Mayan		Mixe-Zoquean	English	Malinke-Bambara
*pat			bark, skin	fata
chowen	pMZ	*cawi	monkey	sula
me'	pZO	*m 'a	deer	m'na 'antelope'
	pZO	*sah	WIng	si 'insect wing'
c'iwan	pMi	*ciwa	squash	SI
koya	Mi	Koya	tomato	koya
to'	pM i	:to:h	raIn	tyo, dyo 'precipitation,2

The theory of Campbell (1999), Kaufman (1976) and Justeson, Williams, Norman, Campbell and Kaufman (1985) that the Olmec spoke a Mixe-Zoque language is not confirmed by the linguistic and historical evidence. The oral traditions of the Mixe maintain that agriculture and many other cultural features were introduced into Qaxaca by strangers. The presence of Malinke-Bambara loans for Mixe cultivated crops and even the calendar priest, support this Mixe oral tradition. This confirmation of the Mixe oral tradition, and make it impossible to claim that the Mixe-Zoque speakers were the archaeological Olmec, since the Mixe point to another, more advanced group as the stimulus behind their civilization.

The Teo Mask

If the Olmec spoke a Mande language we should be able to read the Teo Mask using the

Olmec/Mande language.

The **Teo mask** is from a private collection of Olmec artifacts. The

mask is

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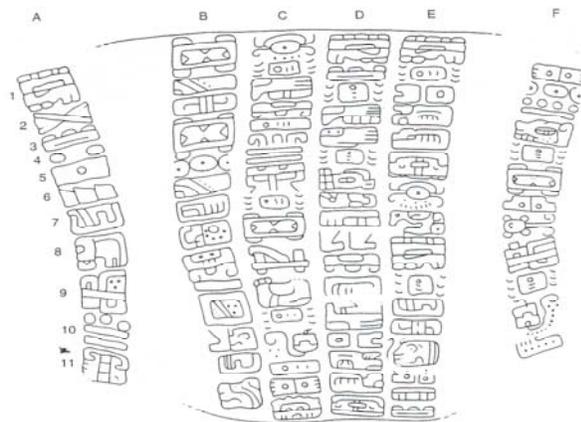
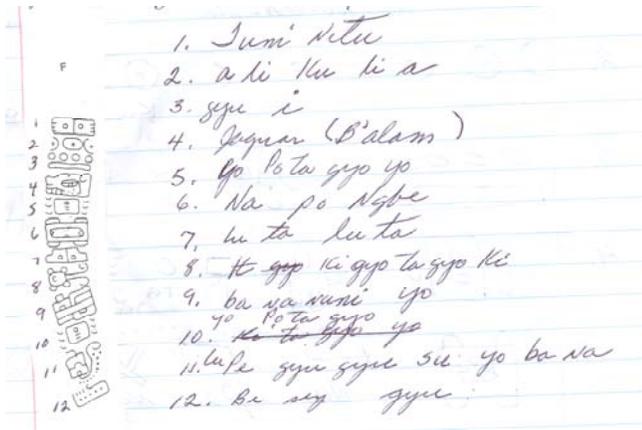
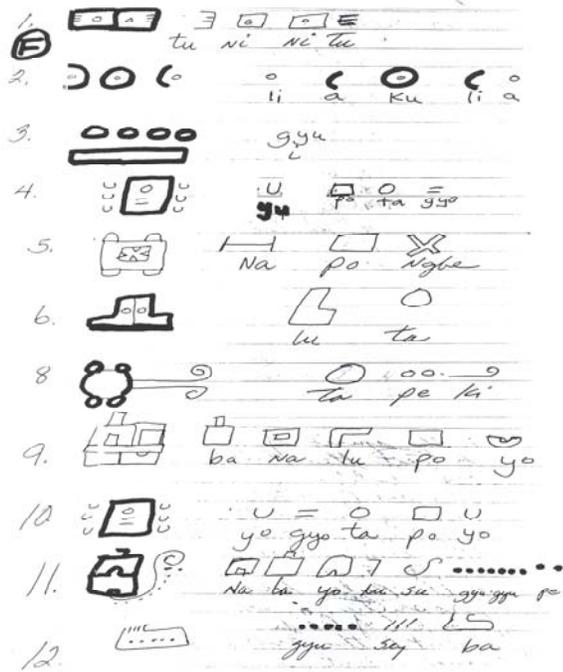


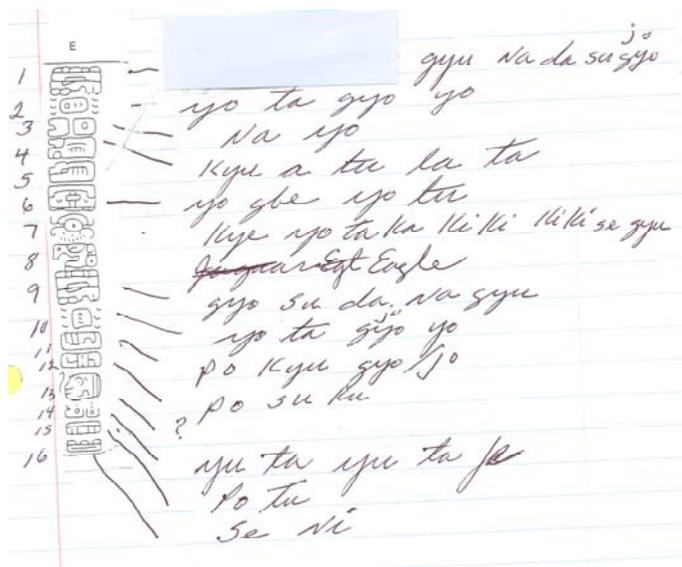
Figure 2. The Teo Mask, text (drawing by Stephen Houston, based in slight part on drawing by David Joralemon; checked against object).

- Coe and Houston have divided the inscriptions on the Teo mask into six columns labeled A-F. Above we see column F, which in reality is column A, since the Olmec writing is read from right to left. In this figure you can see how each sign in column F has been broken down into its constituent parts. Once this is done you can clearly see the syllabic Olmec character which was used to make the hieroglyphs in column F.



Column F, reads as follows:

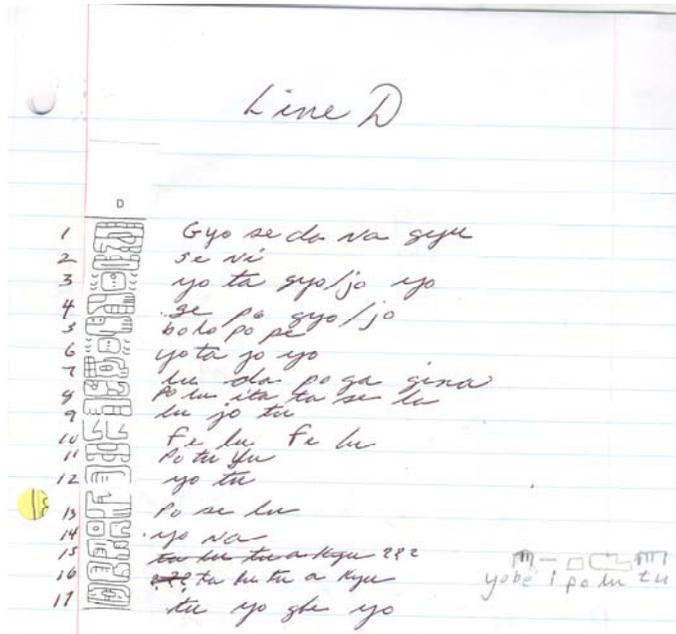
•“(1) Cause (here) the conferring of all virtue to this very good abode.(2)Admiration indeed (Oh) Governor. Indeed (you are) wonder. (3) Thou (art) a spirit of tranquility .(4) (Thou art like) the Jaguar (a master of the bush).(5) Righteousness takes root here in this tomb of (6) Na Po Ngbe.(7) This habitation of the devotee (is) a habitation of propriety. (8) Order (Na Po Ngbe) this object of respect to be an envoy on a mission (9) (to) hold upright purity. He who is a powerful spirit (in) thine tomb.(10) Righteousness takes root here (in your) tomb.(11) [Na Po Ngbe] A boundless source of great spiritual tranquility (your) abode. The tomb is powerful.(12) lay low (the celebrity) [in the tomb] to realize spiritual tranquility.”



Column E reads as follows:

•1. The spirit of tranquility treats the Ruler’s abode (like) a talisman consecrated to the divinity. 2, Righteousness take root here in the tomb. 3. Bring out the vital spirit. 4. The astonishing sepulcher of the Ruler [Ngbe] holds upright propriety. 6. The unblemished soul [of Po Ngbe in this] tomb is obedient to the order. 7. The soul’s inheritance is the order for the Governor [Po Ngbe] to be like a raising star to realize a spirit of tranquility . [He is like] the Eagle. 9. The spirit of tranquility to treat the Ruler’s abode (like) an amulet.10. Righteousness take root in this tomb.11. The pure offering of the Governor. 13.???? 14. Give birth to propriety. The solitary soul is void of life. 15. The Pure Ruler. 16. [Possess] a Superior Existence.

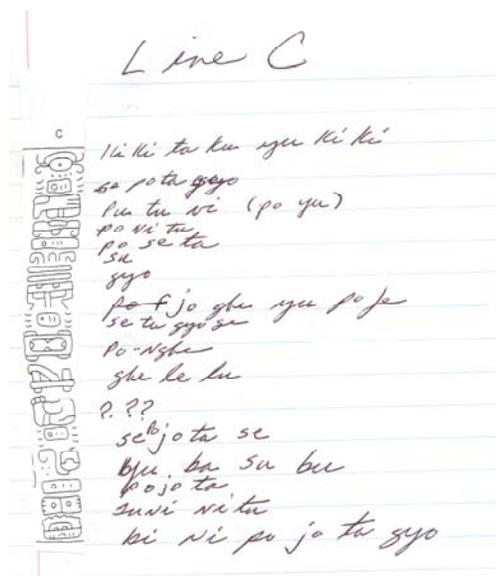
Below is Column D.



The signs in column D read as follows:

- 1. The spirit of tranquility to treat the Ruler's abode (like) a talisman effective in providing one with virtue. 2. [Here a} Superior existence. 3. Righteousness take root in this tomb. 4) To realize purity and virtue. 5) [It] is a vestibule of prodigious purity and virtue. 6. Righteousness take root in this tomb. Hold upright at this moment purity (for) the family habitation is endowed with mysterious

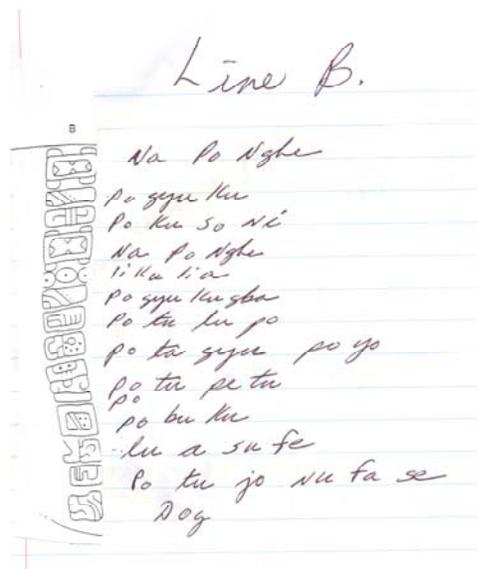
faculties. 7. The pure habitation of the family is sacred (and) merits propriety. 8. The family habitation is a talisman consecrated to the divinity and subject to [the authority] of the Order. 9. LOVE hold it upright. Love hold it upright. 10. (This is) the pure refuge of the soul. 11. This tomb is is a place of rest. 12. Hold upright merit and Purity. 13. Bring out the vital spirit. 14. This place of rest holds holds upright thine pure heart's existence. 15. The astonishing sepulchre of the Ruler holds upright propriety. 16. The unblemished soul in the tomb is obedient to the Order.



Column C reads as follows:

- 1. The tomb, like the raising of a star, this place is tops (as is) the Law. 2. A superior place of the divinity (for) the Supporter. 3. A place of pure propriety [this] pure tomb. 4. The pure soul of the ruler 5. Is a pure talisman effective in providing one with virtue (from) the mystic order. 6. Offer up libations, 7. to the Divinity, 8. This sacred object of consecrated to the divinity and virtue (is) a tomb (that) loves Purity. 9. Po Ngbe's 10. Virtue envelopes the entrance to this family habitation. 11.????? 12. A superior place for the imbibitions (of) the Supporter. 13. The strong tomb (is) to be honored as a overflowing libation (to God). 14. A Pure talisman effective in providing one with virtue (from) the mystic order. 15. Cause (here) the conferring of all [Po Ngbe's] virtue on this very good abode. 16. At this present moment the pure soul (like) the divinity of the cult, existing in a unique state (of) solitary rest (as a) talisman effective in providing one with virtue.

Column B is below

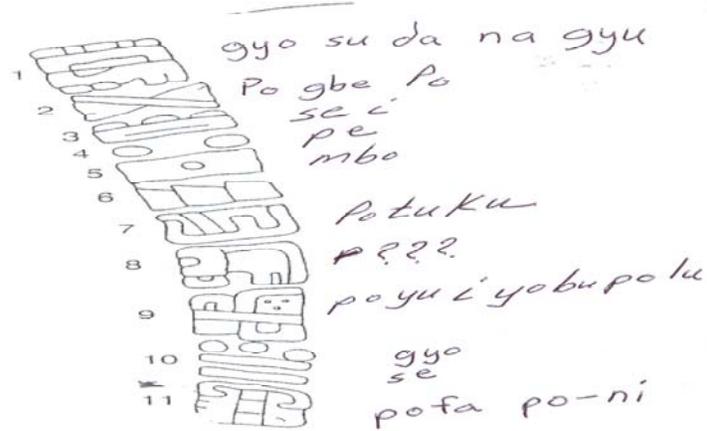


Column B reads as follows:

- 1. Po Ngbe 2. The pure spirit of tranquility (exist in) the Governor's home.
- 3. The pure soul offering [of Po Ngbe] 4. Is the foundation of pure virtue. 5. Oh Governor, indeed (you are) wonder. 6. The pure spirit of tranquility (in) the Governor's Home. 7. The Pure Ruler hold's upright purity, 8. This pure sacred object is the pure raison d'etre a pure vivid image of the race . 9. The pure habitation of prodigious Law. 10. Purity. 11. The pure house of the Governor. 12. The family habitation it (is) an abode to uphold LOVE (for all), 13. The pure [Ngbe] is full (of) merit. 14. [He is faithful to the Order like] a dog [to his Master].

Below is Column A.

Line A



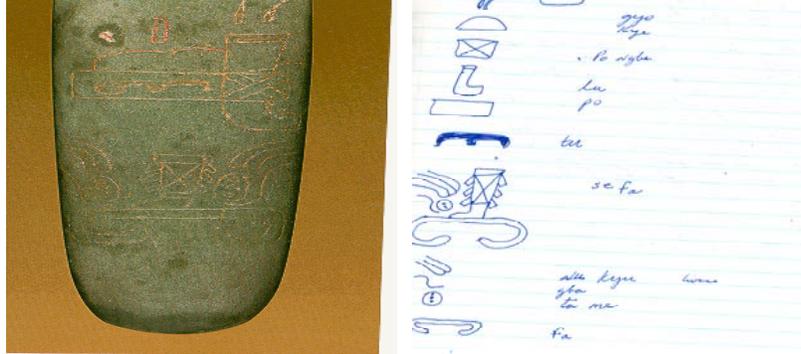
Column A reads as follows:

•1. The spirit of tranquility to treat the Ruler's abode (like) a talisman effective in providing one with virtue. 2. [Now] sanctified. 3????? 4?????. 5 abundance. 6. [Oh] celebrity. 7?????, 8. A pure sojourn for the Governor. 9. The pure family habitation is a large tomb. Thine tomb is pure. 10. [It is] capable of acting as a amulet. 11. Plenitude (for this) pure soul. 12????

• It is clear from this decipherment of the Teo Mask that Po Ngbe was recognized as a Ruler. He was also recognized as the representative of his God on earth and his tomb held immense power. The Teo Mask makes it clear that Po Ngbe's tomb was recognized as a source of spiritual power, like a talisman.

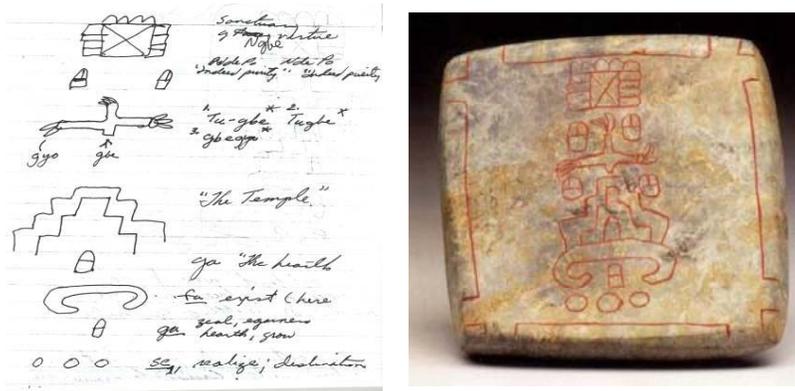
There are two other Olmec artifacts that mention Po Ngbe. These artifacts are made of the same material as the Teo Mask and record additional information about Governor Po Ngbe. They are presently held in private collections like the Teo Mask.

The
craftsm



This celt also makes it clear that Ngbe was probably buried in a pyramid. This view is supported by the Ahuelican, Guerrero Tablet. This artifact was made of the same stone as the Teo mask and the Guerrero celt.

Ahuelican



•(Sanctuary) Po

Ngbe

•Nde po Nde po

•Tu gbe Tu gbe

•Gyo gbe

•The Pyramid (Temple)

•Ya

•Fa

•Ga

•Se

•“The sanctuary of Po Ngbe. Indeed purity is King Gbe. Ngbe (was) obedient to the order; the unblemished society consecrated to the cult. The temple (tomb??),the heart (here) purity exist. The growth (of purity to be) realized (here).

The decipherment of the Teo Mask makes it clear that the writing on the Mask is in the Olmec (Mande) language. It is clear that the artifacts we have deciphered in this paper are

made of the same material. They are all found in a private collection of Olmec artifacts and may have been found at the same site, given the fact that they are concerned with the life of Po Ngbe. •The Teo Mask and celts discussed in this paper represent the traditional artifacts associated with being an Olmec ruler: a death mask, celt denoting royalty and an interesting document discussing the tomb of Po Ngbe. The Teo Mask is very important to Olmec history because it is the obituary of an Olmec ruler, and provides keen insight into the religion and culture of the Olmec.

End Notes

¹In the Mayan transcription system <c'> represents an ejective affricate, <c> being the simple affricate *Is/*. Consequently it has as one of its components an *Isl* sound, but it is not itself such a sound. (Another transcription of the same sound is <tz'>.) Depending on transcription, <c> can represent either *Ik/* or *Is/*. The development of the <c'> sound in the Mayan languages is probably the main feature substitution of the native <c> phonemes for the Olmec (Malinke-Bambara) <s> phoneme, so the new Olmec terms in the domain of religion could be integrated into Mayan morphology in Pre-Classical times.

The linguistic evidence also makes it clear that the Olmec loans in the Mayan and Mixe cultures relate to specialized forms of discourse in the area of religion and agriculture. An examination of the seventy plus loans in the Mayan languages include

terms for cultivated plants (gourd, squash, maize and tomato), religion (sky, holy, serpent, sun, sacred rain torch), polity (village, house, lord, truth, law, land), arrows, boat, and other terms. The adoption of these term agree with the great role the Olmec people are believed to have played in the raise of Mayan civilization. The gratuitous borrowings of terms already in the Mayan language, probably gave the Mayan immigrants entry into the Olmec world. There presence in Mixe, Mayan and Otomi are sharp indications of the assimilative power of Olmec society.

2 In Olmec the ty and dy arc palatal plosives. They would be pronounced as the following: English *tune* (*tyuun*) and *due* (*dyuu*).

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