K'U: The Divine Monkey

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In the Maya script an image of a "monkey's head," often referred to as the God C head, apparently had a phonetic value of k'u at the time of the Spanish invasion. The Yucatec Maya word k'uh 'divine, deity' also closely fits later interpretations of the same "monkey" head in the Classic Maya inscriptions. The fact that a monkey head represents the word meaning 'divine, deity, sacred, holy' suggests that at some time the monkey was seen as something like divine, and/or the word for 'monkey' was at some time in the history of the script homophonous, or nearly so, with the word for 'holy,' allowing thus for a rebus usage (where an easily depicted thing is used to refer to a more abstract concept that sounds similar to it). Based on further investigation of this theme, it is concluded here that Mayan languages, elements of the Maya script, and some Mayan oral narratives, provide substantial evidence that the monkey may well have been held in high esteem, and also that near homophony could underlie use of a monkey image to mean 'divine' or similar meanings in the Maya script. The fact that a Mixean word maax 'divinity, holy' is nearly homophonous with a lowland Mayan word root (max. ma'ax. or ma'x) that means '(spider) monkey' raises the possibility that a bilingual Mixean / Mayan speaker could use a picture of a monkey as a rebus to reference the concept of 'divinity', and therefore also the possibility that bilingual Mixean / Mayans were involved at some point in the development of the Maya script. The evidence is presented below, with reasons why the monkey might be so viewed, along with a short argument supporting earlier proposals of Mixe-Zoguean linguistic and graphic influence on the Maya script (cf. Stross 1982, 1983, 1990).

Introduction: Glyphic Monkey

In the Maya script a spider monkey head or full body can substitute for other forms of the glyph known as **ahaw**, particularly in the day name **<Ahau>** (Thompson 1971). The word **ahaw <Ahau>** means 'lord, master, ruler, owner' in numerous Mayan

¹ Orthography here employed for Mayan languages is for each language referenced by a subset of the standardized set of letters approved by Academia de las Lenguas Mayas de Guatemala in 1986 for transcribing. Phonemes are represented by **p t tz ch k**, **q' b' t' tz' ch' k' q' s x j h ' m n nh l r w y i e o a u ii ee oo aa uu ï ë ö ä ü .** The orthography is a normalized phonemic one, deviating from Amerindianist practice in that **x** replaces the IPA's **š** (**ʃ**), **j** replaces the IPA's voiceless velar fricative **x**, **nh**

languages, and the day name clearly refers to 'lord', 'master', and/or 'ruler'. Therefore it would seem that a monkey must in some way symbolize something related to 'ruler' or 'rulership' in the Maya script, whether that be through the kind of homophony or near homophony that constitutes rebus writing (where an easily depicted thing is used to refer to a more abstract concept that sounds similar to it), or in some other way. This association between the concepts of 'monkey' and 'ruler' in itself indicates an association with notions similar to 'blessed', 'divine', or 'sacred', since there is much in Maya iconography to indicate that the ruler was viewed as a divinity on earth.

Also in the Maya script, a full figure image of a howler monkey represents 'sun' or 'day' (k'in). Because we know that the Maya perceived the sun to represent a very important deity, one who is equated in many current Mayan cultures with Jesus Christ, here too we can see an apparent association of the monkey with divinity and sacredness.

A monkey is represented yet again in the Maya script, in the name of the day known as **Chuwen <Chuen>**, which can be represented by the head of a monkey appearing to be a howler monkey. This third category of monkey representations does not by itself supply strong connections to divinity apart from its appearance in the 20 day names of the sacred Maya almanac, or *Tzolkin*.

A fourth category can be called the "monkey faced god." In the Maya script, a God C head, Thompson's glyph 1016 (Thompson 1962)—a glyph sometimes known as

replaces IPA's \mathbf{g} , $\ddot{\mathbf{a}}$ replaces the midcentral vowel called shwa, \mathbf{ch} replaces alveolar affricate often written $\ddot{\mathbf{c}}$ (\mathbf{tf}), \mathbf{tz} replaces IPA's dental affricate \mathbf{c} (\mathbf{ts} '), and the apostrophe represents a glottal stop or glottalization of the preceding stop. Mixe-Zoquean orthography is a normalized version of Wichmann's usage (1995), with a couple of modifications, initial glottal stops are not indicated, and $\ddot{\mathbf{i}}$ replaces barred- $\dot{\mathbf{i}}$ (which is generally pronounced as an unrounded high or mid-central vowel). Indigenous words and phonemes are bolded rather than italicized for easier recognition. Other conventions observed in this paper include an asterisk * preceding a reconstructed word, single quotes around word meanings, angle brackets around native words spelled as in the source, and proper names capitalized in indigenous words also. In these conventions, I follow a common practice of Mayanists. Names of Mayan languages and of the *Popol Vuh* are given in their older standardized form rather than using the currently more correct spelling. A previous version of this paper has benefited from comments by Randa Marhenke and Lidia Marte as well as from an anonymous reviewer.

that of the "monkey-faced god"—is currently thought to represent the sacred substance, the vital fluid, blood, and perhaps other important fluids (Schele and Miller 1986:48). Because the God C head substitutes in the Maya Codices for other deities, it is also interpreted as something like a generic notion of deity (Thompson 1970, Schele 1987, Ringle 1988, Taube 1992). If the God C head is indeed that of a monkey, then this monkey too must symbolize 'deity' or 'divinity'. In Classic Maya society, where the ruler was considered divine, there is no category disjunction in the notion of a single entity symbolizing both 'ruler' and 'deity'. The God C head, in addition to appearing as a marker of blood or other precious sacred substances, is notably present on the world tree [n.b. Mixe **kuy** 'tree'], and this is usually interpreted as a sign of the sacredness of the world tree. That more may be involved is a subject to be discussed below.

With such an interpretation of 'deity, divinity, sacred', the God C head would in Yucatec be pronounced **k'uh** or **k'uhul**. This interpretation certainly fits the 16th century Yucatec version of the Maya script as copied by the Bishop Diego de Landa, who then presented it to the King of Spain in his manuscript now published as *Relacion de las Cosas de Yucatan*. In the manuscript it is clear that the lower of the two prefixed phonetic complements given for the month of **kumk'uh <Cumku>** is a God C head (John Carlson p.c. 1987), and this God C head supplies the **k'u** syllable component in the month name **kumk'uh <Cumku>** (Ringle 1988).

Such evidence makes it virtually certain that, for post-Classic Yucatec Maya at least, the head of a monkey-faced deity, the God C head, symbolizes 'deity' or 'sacredness' and also has a phonetic value of **k'u**. For the Classic Maya too it is likely that the God C glyph would symbolize (or in some way refer to) 'deity, sacredness,' and God C's inscriptional counterpart may also have had a phonetic value of **k'u** at that time, in at least some contexts. In fact, even though the expected word in Classic times for 'deity, sacredness' should perhaps have been **ch'u**, **ch'uh**, or **ch'ul**, (because a Cholan language was apparently the base for Classic Maya script), the **k'u** from the Postclassic Yucatec interpretation of the script as reported by Landa is so compelling that the monkey head glyph is currently read in Classic Maya glyphs also as **k'u**.

There are some structural substitutions in the script that reinforce the same conclusion (Barbara MacLeod p.c.).

To this point we can see that at least two representations of monkeys in the Maya script clearly indicate associations of the monkey with deity and sacredness (ahaw 'ruler' and k'in 'sun'), and a third glyphic representation that has been viewed by many as a "monkey faced god" is even more explicit in its connection with deity and sacredness in terms of both meaning and, at least in post-Classic times, sound (k'u[h] 'sacred, holy').

Nevertheless it is also possible that the earliest inscriptional counterpart of the post-Classic God C head had no syllabic value in early Classic Maya times, but rather only a logographic value of **max** 'divine, holy.' Phonetic uses of T1016 are rare even in the Late Classic.

This suggestion derives its impetus from observations presented below suggesting possible lexical borrowing from Mixe-Zoquean by Mayan languages, of words related to the monkey, combined with a short argument supporting earlier suggestions of Mixe-Zoquean linguistic and epigraphic influence on the Maya script (cf. Stross 1982, 1983, 1990).

Mixean Influence on the Maya Script

In essence this argument for Mixean influence on the Maya script is that a Maya word for 'monkey,' (max), was very close in sound to a Mixean word for 'sacred, holy, divine, blessed,' (maax), so that contact between Mixeans and Mayans could have resulted in the Maya script using an image of a monkey as a rebus indicating 'divinity' and 'sacredness.'²

² Proto-Mixe-Zoquean *maasan 'mana (inherent power, sacredness)' has been reconstructed by Wichmann (1995:375), and in Proto-Mixean this would be *maaxan. Totontepec Mixe has maaxün which can be glossed 'holy, sacred' (cf. also tsa-maaxün '(stone) idol/deity'), maaxy 'great', and maax 'soul, spirit, divinity' as fossilized in such compound words as maax-onük 'baby'; Sayula Popoluca

If the sound coincidence is not accidental, then a plausible scenario would have late Preclassic Mixe-Zoquean speakers, probably Mixean, employing a glyphic script in which a picture of a being's head with a particular headdress represented the word for 'holy' or 'esteemed' or 'divine', because the being himself was held in high esteem, as a ruler, deity or culture hero. As Mayans borrowed components of their script, including that glyph with the head that would have been pronounced by Mixeans as maax or maaxan meaning in a Mixean language 'divine, divinity, sacred' the Mayans might have interpreted the head as depicting a monkey and borrowed this glyph along with the Mixean pronunciation **maax** and the Mixean meaning 'divine' (see Figure 1). Interpretation of the head as that of a monkey would have been facilitated if max or ma'x was already a word for 'monkey' or 'spider monkey' in the Mayan language of the borrowers, which could have led subsequent representations of the glyph to even more closely approximate a monkey's appearance. In this circumstance, the image of a "monkey" together with a meaning of 'divine' would be motivated by the borrowing and the sound similarity of the terms in the two languages would have been enough to maintain and even enrich the perception of the monkey as related to sacredness or divinity. Kaufman and Norman (1984:125), however, suggest that #ma'x 'monkey' may only be reconstructable in Mayan languages to Early Classic times, as it seems to be internally diffused among Mayan languages.³ If so, then the diffused Mayan word #ma'x for '(spider) monkey' could be seen as having developed around the time that the God C head came to be employed in the Maya script.

maaxan means 'noble, upper class'; Oluta Popoluca maaxa?n 'spirit, soul'. The Zoque cognate masan means 'holy, sacred, divine, deity, divinity, god'

³ If a Mayan word like **ma'x** or **max** for 'monkey' can only be traced to Early Classic times, then such a scenario of interlanguage interaction during script development would presumably date to no earlier than Early Classic times. In Kaufman's Mayan etymological dictionary on the FAMSI website this item is reconstructed to Proto-Mayan, but the notation "diffused" is retained (2003).

FIGURE 1

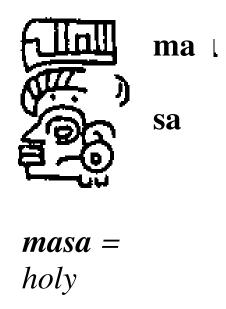


Figure 1. A possible model for the interpretation of a human or deity head as part of the glyph block meaning holy in a M-Z text, viewed from a Zoquean perspective (after Kaufman and Justeson 2001)

In most situations of borrowing it is reasonable to assume that bilinguals are involved, able to command, to at least some degree, both the donor and the borrower languages. Once we make this assumption, it suggests that bilingual Mixean / Mayan speakers oversaw or at least participated directly in the creation of some part of the Maya script. They could have been Mixeans who had learned a Mayan language, Mayans who had learned a Mixean language, or some of each. If bilinguals were present in such a situation, possibly as scribes, possibly as advisers, and/or possibly as members of the ruling nobility, they would have been able to see the great rebus potential for using the term for a concrete concept, such as can be manifested in a term for monkey, as a term referencing a much less concrete concept such as sacredness or divinity, when the Mixean term for the latter is so similar to the Mayan term for the former (see Figure 2). As we will see, if such a bilingual rebus developed on the basis

of Mixean / Mayan interaction in the development of the Maya glyphic script, it is most easily explained as a rebus based on this sound similarity between Mixean **maax** 'divinity' and Mayan **max** '(spider) monkey)'. And if such was the case, then it would also be the case that at least at some point in the early stages of the Maya script, the inscriptional glyph of the God C head may have represented a logographic value of **max** 'sacred, divine', whereas later it seems certain that it had a logographic value of **k'u** 'sacred, divinity' and a syllabic value of simply **k'u**.

FIGURE 2



Figure 2. Classic Period Maya version of God C glyph.

However the fact that the glyph that we now see as a "monkey head," at least in Postclassic times, and possibly earlier, had the sound value of **k'u** along with a meaning of something like 'sacred, divinity' clearly requires a more complex explanation, along with additional explanatory data. The data for this fuller explanation is embodied in sets of words, portions of which involve cognate sets, that can be referred to as "monkey words." These will be presented, discussed, and then used to develop an explanation both of why the monkey might be seen as sacred in Maya script and Maya thought, and how the monkey head came to represent phonetic (syllabic) **k'u** in the Maya script of the Postclassic period.

Four Monkey Words

Two different kinds of monkeys live in the Maya region, the spider monkey and the howler monkey. Some Mayan languages today don't distinguish between them, while most do. Some Mayan languages have ceremonial terms for one or both of these monkey species, and some have separate terms for the males and females of each. Simplifying the argument somewhat, let us begin with four basic words for monkey in various Mayan languages today. To facilitate the discussion I will use the forms **batz'**, **chuwen**, **max** and **k'ul** to reference these four basic sets, whether cognate or diffused, of monkey words.

First there is **batz**', which would seem to have primary reference to the howler monkey (see table 1).

TABLE 1

LANGUAGE	WORD	MEANING
Proto-MAYAN	*ba'tz'	howler monkey
HUASTEC	baatz'-	to receive
YUCATEC	bàatz'	howler monkey
LACANDON	ba'atz'	howler monkey
MOPAN	baatz'	howler monkey
ITZA	baatz'	howler monkey
Proto-CHOLAN	*batz'	howler monkey
CHOL	batz'	howler monkey
CHOLTÍ	batz'	howler monkey
TZELTAL	batz'	howler monkey
	batz'il	genuine, true
TZOTZIL	batz'	howler monkey
	batz'i	genuine, true
TOJOLABAL	batz'	howler monkey
	batz'a	paint, daub, smear, anoint
CHUJ	wohte batz'	howler monkey
USPANTEC	baatz'	howler monkey
QUICHÉ	baatz'	howler monkey
	[batz']	thread, yarn, spin
CAKCHIQUEL	baatz'	howler monkey
TZUTUJIL	baatz'	howler monkey
POKOMCHÍ	baatz'	howler monkey
KEKCHI'	batz'	howler monkey
	batz'ul	toy

From this table it is clear that **batz'** represents a widespread set of cognate forms meaning 'howler monkey.' It is also apparent that closely related Tzeltal and Tzotzil have homophonous roots relating—at least by homophony— 'howler monkey' to 'genuine' or 'true,' while Tojolabal, a neighbor of Tzeltal, has a homophonous root referencing 'anointing' or 'daubing,' which could be seen as having connotations relating to the sacred, and to 'painting,' which relates to monkeys, in that monkeys (and rabbits) are depicted as scribes in Classic Maya iconography (Milbrath 1999:92), and in that the "monkey twins" of the sacred Quiché narrative the Popol Vuh are said to be sculptors and writers of glyphs (Thompson 1971:80). If Cholan languages are to be considered the most direct descendants of the language of the Classic Maya, as many do, then the **batz'** set of monkey words provides at least indirect evidence of the sacredness of monkeys in earlier times.

Next we consider **chuwen** (**Chuen**), which represents what we can tentatively call a set of possible cognates (but perhaps internally diffused forms), that is considerably less widespread than the **batz'** set (see Table 2).

TABLE 2

LANGUAGE	WORD	MEANING	
YUCATEC	chuwen	the day name Chuen, monkey	
MOPAN	chuwen	burned, scorched	
ITZÁ	chujaan	burned, scorched	
Colonial TZELTAL	chiw	female howler monkey	
Colonial TZOTZIL	chiv	monkey	
	chivan	to bare teeth, wrinkle nose	
TOJOLABAL	chapin	person from Guatemala	
CHUJ	chabin	spider monkey, day name	
Colonial QUICHÉ	[choven]	monkey (one of the "monkey	
		twins")	
Proto-Mixe-Zoquean	*tzaawi	monkey	

The Yucatec Maya day name **<Chuen>** corresponds to the Aztec day **<Ozomatli>** 'monkey,' and is pronounced **chuwen**. This day name corresponds to the day **Batz'** in most of the other Mayan languages for which data is available—Chuj being a notable exception, with an eleventh day name that sounds more closely related to Yucatec's **Chuen**—and **batz'** generally refers to 'howler monkey' when the spiders and howlers are terminologically differentiated.

In the book length Colonial period narrative of creation and history of the Quiché Maya, the *Popol Vuh*, the "hero twins" have older half-brothers often called the "monkey twins" because their names are **Hun Batz'** and **Hun Choven** (often glossed One Howler and One Monkey). Significantly, in the narrative these monkey brothers are lured by the "hero twins" into climbing a tree, perhaps the "world tree," where they are turned into monkeys. Both the tree and the elder brother characteristics of the monkey brothers are explored below.

Table 2 at the bottom shows reconstructed Proto-Mixe-Zoquean *tzaawi 'monkey,' which suggests by its sonic similarity to various members of the chuwen 'monkey' set, that a word ancestral to this set may have been borrowed by one or more Mayan languages from a Mixe-Zoquean language and then internally diffused within the Mayan family. In essence, except in two of the languages, the words in this set reference the monkey, and for the two that instead have meanings of 'burned' and 'scorched,' it appears that these meanings could be seen as appropriately tying the howler monkey to the sun as do generally the glyphs of the Classic Maya script.

A third set of monkey terms can be called **max**, a word generally used for 'spider monkey,' and a set that is supposed to be internally diffused. Such internal diffusion doesn't mean that there could not have been a Proto-Mayan etymon from which the set developed (cf. Kaufman 2003). It might mean only that such an etymon is more difficult to reconstruct because of the internal borrowing. On the other hand it suggests the

possibility that there is no Proto-Mayan etymon for the set of monkey terms that is here referred to as **max** (see Table 3).

TABLE 3

Reconstructed MAYAN	#ma'x	spider monkey
YUCATEC	ma'ax, màax	spider monkey,
		shield
		craving, desire
LACANDON	äh ma'ax	spider monkey
MOPAN	ma'ax	spider monkey
ITZÁ	ma'ax	spider monkey
		delicate, cry-babyish
Proto-Cholan	max	spider monkey
CHOL	max	spider monkey
CHORTI	ma'x	monkey (generic)
CHOLTI	max	spider monkey
TZELTAL	max	spider monkey
TZOTZIL	max	monkey (generic)
	maxil	gossip, conversation
CHUJ	max	respect address to old man
JACALTEC	max	spider monkey
MAM	x-maaxh	spider monkey
Colonial QUICHE	maxan	small monkey
	maxan	large leaf for wrapping
KEKCHÍ	max, maax	spider monkey
Proto-MIXEAN	*maax,	god, deity
	*maaxan	holy, sacred, divine

It is clear from the table that this **max** set of monkey words is used to name the spider monkey with a couple of exceptions. In the Mayan Highlands, for example, while Jacaltec Mayan has the word <u>max</u> 'spider monkey', its close relative Chuj uses the form **max** as a respectful term of address for an old man. Since age for most Mayans is equivalent to increased wisdom, power, and vision, one can see here a relatively direct linguistic linkage between the concepts 'monkey' and at least 'worthiness of respect' if not 'divinity.'

Although Fox (1978) reconstructs *ma'x 'spider monkey' for proto-Mayan, it is not certain that this form goes back further than the Classic period. The Guatemalan forms could be borrowings from a lowland Mayan language, which in turn could have been borrowed from a Mixean language. Kaufman and Norman (1984) opine that the form is internally diffused, suggesting the possibility that the word has been borrowed from a Mayan language by other Mayan languages. They do not speculate on how it might have arisen in the donor Mayan language, nor who borrowed it, nor when. In this connection it is worth noting the fact that another term for 'spider monkey' is attested in Mayan languages, and thus, a borrowed term ma'x could have replaced such a term, or perhaps become incorporated into the language with a closely related meaning, if that language preserved both terms.

A Mixean language could be seen as a likely donor judging from the sound of the word in reconstructed Proto-Mixean, if only it meant 'monkey;' but Proto-Mixean *maaxan means not 'monkey', but rather 'holy,' 'sacred,' or 'divine.' Without some intervening factors, a language would not be likely to borrow a word for 'sacred' to name an already familiar animal, the monkey, unless perhaps the monkey was already

⁴ Monkeys, both of the spider and howler types, are important to current Mayan societies and the two types were terminologically differentiated. Proto-Mayan *batz' is most likely to reference the howler monkey. The "monkey words" max and k'oy both generally reference the spider monkey, the former in the lowland Maya region and the latter in the highlands. If max was innovated in a lowland language around the beginning of Classic times and then diffused, it is difficult to imagine where it might have been recruited from within a Mayan language, and if it was borrowed from a Mixean language, it would have had to come by means of a process involving developments in the Maya script.

considered sacred, and/or a special "ceremonial" term for the animal was needed.5 This is one possibility, though unattested.

It is pertinent to remember, however, that a picture of what has been seen by some as a "monkey head" or "monkey faced god" has approximately these same meanings of 'holy, sacred, divine' in the Maya script, allowing for a hypothetical borrowing of the term **maax** or **maaxan** by Mayans from Mixeans as the sound value for the Maya glyph meaning 'sacred, divine'. Wichmann reconstructs ***maasan** for Proto-Mixe-Zoquean and glosses it with a term 'mana' referring to an inherent animating power that could be seen as divine or sacred, and to bring the point home he adds, "From the descendant meanings it is clear that this could have referred to, among other things, ancient godlike rulers" (1995:375). It is relevant to note here that /**s**/ in the Zoquean branch of Mixe-Zoquean corresponds to /**x**/ in the Mixean branch.

There is some evidence, primarily in the highland Guatemalan languages, of a Maya cognate set of monkey words resembling **k'u**, the phonetic (syllabic) value of the monkey head glyph alternatively known as the God C head (cf. Kaufman 2003); and there is much evidence of a word set with similar sounds that refer to 'god', 'sacred', 'holy', and 'divine,' as can be seen in Table 4.

⁵ Lacandón is one Mayan language that maintains special terms for particular animals, differing from the everyday terms for them. The special terms, whether arising from or utilized for hunting magic, or based on some other criteria, have been called ceremonial names or ceremonial terms for those animals. Other Mayan languages, such as Tzeltal, Tzotzil, and Yucatec, also have ceremonial terms for some animals, suggesting terminological systems once extant that now are disappearing, leaving only tantalizing traces. The two kinds of monkeys, spider and howler, that are present in the Lacandón region are terminologically differentiated on the basis of gender and on ceremonial versus everyday names.

TABLE 4

LANGUAGE	WORD	MEANING	
Proto-MAYAN	*k'uuh	holy (thing) (K&N 1984:119)	
HUASTEC	k'uul	palo de rosa (tree)	
YUCATEC	k'uh	god, saint divinity, reverence, divine female genitals (of animals),	
	k'ul, k'uhul		
	k'ùul		
		sacrum	
	k'uyen	divine, sacred, blessed	
	k'oy	semen; incise, engrave	
	k'u'	nest	
LACANDON	k'ulel	male spider monkey (emblem of	
		the solar deities),	
		whirlwind	
	k'u(h)	god, sacred, spirit	
MOPAN	k'ululu	raccoon squirrel species bird sacrum, coccyx	
	k'uri'		
	k'uul		
	k'u-	holy, sacred	
	k'u'	nest	
ITZA	k'u-	holy, sacred	
	k'ulu'	raccoon	
	k'u'	nest	
Proto-CHOLAN	*ch'uh	God, holy thing	
	*ch'uy	(pick up) hanging	
CHOL	ch'ul	benediction, holy, drops of liquid permanent, sacred	
	ch'uhul	spirit, pulse	
	ch'uhlel		
CHONTAL	ch'ul	benediction, holy, drops of liquid	

TABLE 4 (Continued)

CHORTI'	ch'ur	spirit, saint, deity, sacred	
	k'ul	guard, watcher	
	k'ul	penis	
CHOLTI'	k'ul, k'u'ul	penis	
TZELTAL	ch'ul	holy, sacred	
Colonial TZELTAL	ch'uj	red, vermilion, scarlet	
TZOTZIL	ch'ul	holy, sacred	
Colonial TZOTZIL	ch'uj	red, vermilion, scarlet	
CHUJ	c'u, k'uh	sun, day	
MAM	k'ooyat	angry face, disgusted face	
IXIL	k'oy	spider monkey	
AGUACATEC	k'oy	spider monkey	
USPANTEC	k'ooy, k'oy	spider monkey	
QUICHÉ	k'ooy, k'oy	spider monkey	
CAKCHIQUEL	k'ooy, k'oy	spider monkey	
TZUTUJIL	k'ooy, k'oy	spider monkey	
POCOMAM	k'oy	spider monkey	
POCOMCHI	k'oy, K'ooy	spider monkey	
KEKCHI	k'ul-aank	to guard, watch over	
	k'ul-uk	to receive	
MIXE	koy	rabbit	
	ku'y	large red squirrel	
	maxi-kuy	hog plum tree	
	kuy	tree	
Proto-MIXE-ZOQUEAN	*koy	to paint	
	*kuy	tree	
	*ham-kuy	hog plum tree	

K'uh means 'god, deity, divinity' in Yucatec Maya, while k'ul (short for k'uhul) means 'sacred or divine (thing)'. In the closely related Lacandón Maya language, k'u(h) means 'god', 'sacred,' or 'spirit', while k'ulel means 'male spider monkey (emblem of the solar deities)' (Perera and Bruce 1982:31). To put this in historical perspective, in the Classic Maya glyphs a full figure image of a howler monkey represents sun or day (k'in), while the image of a spider monkey represents the day named <Ahau> 'lord, owner, ruler, master.' We might therefore expect the Lacandón word for 'male spider monkey' to have instead named the howler monkey in order to accommodate the sun associations. Nonetheless, here we have in a single Mayan language, a word for monkey that is partly homophonous with, and likely historically related to, a word for 'god, deity, divinity.' And this near homophony suggests a rebus explanation for the fact that an image of a monkey head is the glyph that means 'sacred, divine' in the Maya hieroglyphic script as it was delivered in early colonial times to a Spanish cleric by a Yucatec Maya speaker, and given a sound value of k'u.6

The **k'u** set not only illustrates both meanings in the same language, it also involves a set of words in which the ones from the highland Guatemala Mayan languages refer to the spider monkey, while the ones from the lowland Mayan languages refer to holiness and divinity. For example Quiché **k'ooy** 'spider monkey' sounds rather like the root part of Yucatec **k'uyen** 'divine, sacred, blessed' or like Yucatec **k'ul** (from **k'uhul**) 'sacred' (though not much like its current Chol cognate **ch'ul** 'holy, benediction'). One could imagine a bilingual speaker of Quiché and Yucatec noting the similarity between the two words might produce a glyphic image of a spider monkey to stand rebus fashion for the more difficult to depict concept of the sacred. This same reasoning could apply to the Cholan languages, currently viewed as most closely related to the development of the Classic Maya glyphic script, but it would only be applicable prior to the Cholan and Tzeltalan sound change in which the earlier **k'** became the current **ch'** in Cholan **ch'uh** 'god, holy thing'. At an earlier stage

⁶ Yucatec **k'u'** means 'bird' nest, and Ruth Krochock has found at Chichen Itza a glyph of a bird in its nest where an interpretation of phonetic **k'u** is completely appropriate (Krochock 1988:96-100), constituting another example in Maya script of a rebus usage where the easily pictured thing references a concept much less easily depicted.

in development of the Cholan languages, possibly in early Classic times, or earlier, the Cholan word for 'sacred, holy' would have been **k'ul** or **k'uhul**, though the time of the sound shift remains problematic.

While it might seem improbable for Quiché k'ooy 'spider monkey' to be a member of the cognate set that includes the Chol and Yucatec words referring to 'sacred, holy,' forms do not have to be cognate in order to explain rebus usages, such as, for example, using a picture of a word for 'monkey' when one is conveying the meaning of 'sacred.' It is the sound similarity that is important, and one often looks to homophony (same sound, different meanings) or polysemy (multiple meanings of the same word) in a single language for rebus sources. We have approximately the relevant near homophony in Lacandón to suggest a possible source for such rebus usage, but a Cholan rather than a Yucatecan language would be more appropriate to look for the rebus possibilities, since the language of the Classic Maya script is currently thought to be a Cholan language. The relevant near homophony may not exist within a Cholan language repertoire, but it might between a Greater Quichean language and a Yucatecan language (Quiche k'ooy or k'oy 'spider monkey' and Yucatec k'uy- 'divine, sacred, blessed') or between a Greater Quichean language and a Cholan language at the time when the early Maya glyphic script was being developed when the pre-Cholan word for 'god, holy thing' prior to the **k' > ch'** sound change was ***k'uh** 'god, holy thing' and 'sacred, holy, divine' was *k'uhul (Kaufman & Norman 1984).7

So, in addition to there being a basis in Lacandon for a rebus connection between '(male spider) monkey' and 'sacred' (and one that is based on a form clearly related to the Postclassic glyphic sound value of **k'u**, which appears to exemplify that same rebus), a potential basis exists for an interlanguage rebus usage in which one language could have been a Cholan language, provided that bilingual speakers of those

⁷ Kaufman and Norman have pointed out that Proto-Mayan *k' became *ch' in Cholan languages (except in environments where the change was blocked), and also that in a number of cases of roots with *oo that in Cholan became *u in Common Cholan (1984:86-87), so, for example, the k'uy- part of Yucatec k'uyen 'sacred, divine, blessed' could conceivably be cognate with the Quiché monkey word k'ooy, and possibly even with Cholan *k'uh or glyphic k'u.

languages were involved in the development of the Maya script. There is also the possibility of cognacy between the Quichean and the Cholan words referred to above. Reducing the long vowel to a short one, and changing the vowel o to u is known to have happened in the history of the word for 'stone', from Proto-Mayan *toon to ton (as in Tzeltalan) and to tun (as in Cholan), and a parallel development could be seen in a more hypothetical *k'ooy 'monkey' > k'oy > k'uy > k'uh > k'u 'sacred, divine, deity' that would also require a meaning change and a dropping of the final y in the glyph as it developed a syllabic value as well as a change from y to h at some point in the word's journey.

And there are other possibilities open for relating monkey to sacred by means of homophony. The "monkey = sacred" rebus could have been introduced to the script based not only on homophonic possibilities within a single Mayan language, nor only based on bilinguals recognizing homophonic possibilities in two different Mayan languages. It could also have been based on bilinguals recognizing homophony between words in a Maya language and in an unrelated Mixe-Zoquean language. That too would presuppose bilingualism on the part of some individuals, at least at the time of the rebus' introduction and it would imply that these bilingual individuals participated in some way in the construction or development of the Maya script. A Mixe-Zoquean language would be a good candidate to consider for the other language in that (at least some of) the Olmecs were Mixe-Zoquean speakers (Campbell and Kaufman 1976), and following the apparent decline of Olmec civilization, Mixe-Zoqueans were responsible for the Isthmian script that preceded and overlapped with the development of the Maya script (Justeson and Kaufman 1997). Additionally there is some evidence that Isthmian script influenced the Maya script (Stross 1990, Justeson and Kaufman 1993, 1997).

It will be useful now to explore the solar connection with the monkey as well, recalling that the (howler) monkey represents the 'sun, day' concept in the Classic Maya script, and also that in contemporary Lacandón the (spider) monkey is an emblem of the sun deities (Perera and Bruce 1982:31). Table 5 presents lowland words for 'sun' and

some apparent homophones as well as partial homophones that could be etymologically related to the word for 'sun'.

TABLE 5

LANGUAGE	WORD	MEANING	
HUASTEC	k'inim	hog plum / jocote	
LACANDÓN	k'inim	hog plum	
	k'in	sun	
Proto-Cholan	*k'in	sun	
CHORTÍ	k'inam	wild hog plum	
CHOLTÍ	k'inim	hog plum / jocote	
CHUJ	k'u, k'uh	sun, day	
MAM	q'iinun	hog plum	
TECO	q'eenuum	hog plum	
QUICHÉ	q'inom	hog plum	
CAKCHIQUEL	q'enom	hog plum	
TZUTUJIL	q'inom	hog plum	
Proto-Mixe-Zoquean	*ham-kuy	hog plum	
	*hama	sun	
	*kuy	tree	
MIXE	maxi-kuy	hog plum	

Three things stand out in Table 5. The first is that in one Mayan language (Chuj) the word for 'sun, day' **k'u** or **k'uh**, corresponds precisely to the sound value of the "monkey faced god" glyph that in Classic Maya script meant 'sacred, divine.' The second is that a word for 'hog plum (tree)' in several Mayan languages is based on a root that may be related to, and certainly is at least homophonous or nearly so with, the proto-Cholan root **k'in** meaning 'sun, day.' It appears that a similar situation is found in proto-Mixe-Zoquean *ham-kuy 'hog plum (tree)', where *hama is 'sun' and *kuy is 'tree.' The third thing is that while proto-Mixe-Zoquean 'hog plum (tree)' can be seen

as the "sun tree," in Mixean it might also be seen as "divine tree," based on the word **maxi-kuy** 'hog plum tree', in which **maxi** appears to come from the Mixean word for 'sacred, divine' (Wichmann 1995:568).⁸

Put another way, regarding observations derived from Table 5, the word for 'hog plum tree' suggests a close relationship of that particular tree with the sun both in Mayan languages and in Mixe-Zoquean languages, and in some Mixean languages the qualifier preposed to "tree" in the name of the hog plum is **maxi** or **max**, which greatly resembles both the Mixean word for 'sacred, divine' (**maaxan**) and a Mayan word for spider monkey (in several Mayan languages). Within Mixean it would seem to relate both the sun and the tree to sacredness and divinity; to a bilingual Mixean-Mayan speaker it could relate the sun to spider monkey on the basis of sound similarities; and we already know from the glyphs that the sun can be related to the howler monkey, while from contemporary Lacandon Maya it would appear that the sun can also be related to both the spider monkey and the howler monkey. The latter's relation to the sun is made explicit only with respect to the female. While the male howler monkey (**ba'atz'**) is called **k'ooch** in Lacandon, or **in k'ooch ba'atz'**, the female is called **na' k'in** (literally "mother sun").

We should note as well, from Tables 4 and 5, that the Mixe-Zoquean word for tree, **kuy**, if one were to add glottalization to the **k** in this word, closely approximates the lowland Maya word **k'uh** 'sacred, divine' in the glyphic script and also approximates the highland Maya word **k'oy** (or **k'ooy**) for 'monkey.' Thus the bilingual Mixean / Mayan speaker would be likely to notice the similarities in situations where a rebus usage of 'monkey' would be useful to signal 'divine, sacred'. Furthermore, in the Classic Maya inscriptions trees are frequently depicted with a God C "monkey" face in the trunk, which

⁸ It is possible that the maxi- of Mixean maxi-kuy 'hog plum' is unrelated to Mixean maaxan 'divine, holy', in that maaxan-kuy (literally 'divine tree') is a Mixean name of the cedro (*Cedrela mexicana*). For Mayans it seems that the cedro (*Cedrela mexicana*) is also the 'divine' or 'God' tree. For example in Cakchiquel the cedro is called tiox che' (literally "god tree," from Spanish Diós), and in Chuj it is k'u te' while in Yucatec the cedro is k'u che'. In Colonial Tzeltal and Colonial Tzotzil the cedro is named with the cognate form ch'u te'.

is currently interpreted as a designation of sacredness for the tree, and which could also be interpreted as designating the specific tree known as the *cedro*, since the *cedro* is named the "sacred tree" in several Mayan languages; for example Yucatec **k'uh-che'** 'cedro/Cedrela mexicana', Lacandón **k'uh che'** 'tropical cedar', Chol **ch'uh-te'** 'cedro/Cedrela mexicana' (Aulie et al 1996:177), and Colonial Tzeltal **ch'u-te'** 'cedro/Cedrela mexicana'.

The Totontepec Mixe word for 'monkey', **tzaa'y** plausibly derives from, and at the very least is related by sound similarity—i.e. homophony, which is the basis for rebus writing—to the Proto-Mixe-Zoquean word **tzaay'** for 'to roast,' and represents a term possibly borrowed by the Jacaltec and Mochó languages as reflected in their words for 'sun' (see Table 6).

TABLE 6

LANGUAGE	WORD	MEANING
Proto-Mixe-Zoquean	*tzaawi	monkey
Totontepec MIXE	tzaa'y	monkey
JACALTEC	tz'ayik	sun
MOCHÓ	tz'a'ik	sun
CHUJ	k'u, k'uh	sun, day

Roasting is of course what happens when one sits in the sun, suggesting, at least slightly, another means for relating the sun to monkeys in Mixe-Zoquean, reinforcing the linkage gained by looking at the hog plum tree.

Chuj Maya **k'u(h)** means 'sun, day' using a term for the sun that in Yucatecan languages would be the word for 'holy, sacred, divine, divinity,' **k'u(h)**; a word that is cognate with the Cholan and Tzeltalan words for the same concept of sacredness and divinity. Taken together, the Mixe-Zoquean and Mayan words for 'sun,' 'sacred,' 'monkey,' and 'hog plum' demonstrate some semantic linkages between 'sacred,'

'monkey,' and 'sun' These linkages show up clearly in the Maya glyphic system where a monkey image denotes 'sacred, divinity' and where a spider monkey stands for 'lord' or 'divine lord' while a howler monkey stands for 'day' or 'sun' (but cf. Milbrath 1999:92). Within the Mixe-Zoquean language family no such direct linkage is apparent between 'monkey' and 'sun', nor is there any obvious linguistic relationship between either 'monkey' or 'sun' and 'sacred, divinity ' except perhaps in names for the hog plum tree.

Within the Mayan language family a clear lexical linkage between 'monkey' and 'sun' is found only in Yucatec (maax 'monkey, shield [a solar emblem]') and in Lacandón (k'ulel 'monkey [emblem of solar deities]', na' k'in 'female howler monkey'). Only in Lacandón is 'monkey' linked to 'sacred, divinity' (k'u). Lacandón k'ulel 'monkey' appears to be cognate with Tzeltal ch'ulel 'sacred, divine, holy.' Tzeltal and Tzotzil uniquely link 'monkey' and 'true, genuine,' and that could itself ultimately be a result of the 'monkey' and 'sacred, divine' linkage found in the language(s) of the glyphs.

Monkeys, Squirrels, and Rabbits

Although features similar to those of monkeys are found in some representations of God C from the Maya script and in Classic Maya iconography, in others the features are more likely to recall a squirrel, or even occasionally a rabbit (without the distinctive ears). This suggests the possibility that an iconographic source other than a monkey might be found; one that has a sound value of **k'u**, which we know the God C monkey to have had at the time of the Spanish invasion. The possibility as a hypothesis will be explored here, although I do not believe the evidence favors it iconographically.

While squirrels and monkeys are inalienably associated with trees and have long tails, rabbits have short tails and are not closely associated with trees. However In Tzeltal folk classification the only place where we have information on this point, the monkey, squirrel, and rabbit are considered together as belonging within the same subcategory of animals which Hunn calls the "Monkey Complex" (1977:203-206).

If we were looking in Mixean for an animal to serve as an iconographic source for the Maya script's God C glyph with a phonetic value of **k'u** and a meaning of 'sacred, divinity,' an obvious choice might be the squirrel. Totontepec Mixe **ku?u** 'squirrel', for example, refers to a tree loving animal with a long tail (a notable feature of monkeys too), and reflects reconstructed proto-Mixe-Zoquean *ku'y, *ku'uy, or *ku"y 'squirrel.' None of these is very different from the **k'u** of Classic Maya script and of Yucatec Maya, except for the **k** that in Mixean is unglottalized and that in the Mayan is glottalized (**k'**). Relevant to this distinction is the fact that Mixe-Zoquean languages have no glottalized consonants, and of more importance, when a Mayan language borrows a word from a Mixe-Zoquean language that has a velar stop in initial or final position, that consonant often becomes glottalized in the Mayan language, as for example when the word for 'turkey' (Zoque tu'nuk) was borrowed into Tzeltal as tuluk' (Campbell and Kaufman 1976:82). A bilingual rebus using a Mixe squirrel image (ku'u) to represent a Mayan concept of 'divinity, sacred' (k'u[h]) seems at least somewhat plausible on the surface, especially if God C can be identified in at least some early instances as a squirrel.

Lacking the long ears that to most of us are important to identify a rabbit, God C would seem unlikely to have ever represented a rabbit. There are reasons, however, to consider the possibility. One reason is that the rabbit shares a taxonomic space with the monkey, at least in the Tzeltal language, where it is part of the "monkey complex." Second, the word for 'rabbit' in Mixean, **koy** (or **koya**) looks like it could have been borrowed by the Eastern branch of Mayan languages as **k'ooy** 'spider monkey' (cf. Table 4, noting too the glottalization of initial and final velar stops that apparently characterizes Mayan borrowings of Mixean words), but only if there are more similarities that can be found between a rabbit and a monkey. But first, let it be acknowledged that Huastec, a Mayan language from Veracruz and San Luis Potosí, is known to have borrowed the word **koy** from a Mixe-Zoquean language with the meaning 'rabbit' and without glottalizing the initial velar.

'Rabbit' is a Mixean name given to the eldest son (Beals 1973:53) who would of course be the "older brother" to any subsequent sons, recalling the "hero twins" of the

Quiché *Popol Vuh*, whose older brothers [actually half-brothers] were the "monkey twins" [hun batz' and hun choven]. Less relevant is the fact that the Mixean rabbit term koy is rather similar in sound to Mixean kuy 'tree', the latter being indexical of monkeys and vice versa. Not only do monkeys and rabbits share a taxonomic subcategory in Tzeltal; both rabbit and monkey were symbols of scribes in Classic Maya times (Schele and Miller 1986:40, 141).

Regarding the possible borrowing of a Mixean **koy** into a Mayan language as **k'oy**, we have Colonial Yucatec **k'oy** 'incise, scratch with finger or small instrument, engrave', suggesting the work of the scribe, represented in Maya imagery as a rabbit or a monkey. In Mixean, it might also be noted, **koy** means 'to paint' so it is possible that while Yucatec might have borrowed Mixean **koy** as **k'oy** to refer to scribal activities, the Mixean 'rabbit' word (**koy**) might have been borrowed into eastern highland Mayan languages as **k'oy** 'monkey'.

Returning to monkeys, I recall being intrigued by the word <holomax> used in the sacred Quiché book, the *Popol Vuh*. It is used in the context of "owl messengers" substituting blood red sap nodules from a tree called the [**Ch'uh Kaq Chee**] "cochineal red tree" for the actual heart of the young woman "Blood Moon" within whose womb were the "hero twins," in order to fool the underworld lords who had ordered her heart removed. In the narrative Blood Moon called this tree sap "blood" and then referred to it as "blood/sap nodules" according to Tedlock's translation (1990:100-101), identifying the tree from which the sap was extracted as the cochineal croton (*Croton sanguifluus*).

The word <holomax>, translated as 'nodule' by Tedlock (1990:263) reminded me of a plant called holomax chi'in by Tzeltal speakers, a *Xanthosoma* species [possibly *X. violaceum*], with the heart shaped leaves that are sometimes called "elephant ears" in the US, whose fist-like root is edible, accounting for the chi'in 'edible tuber, edible root' part of the name. Also edible are the young heart shaped leaves,

⁹ For a contemporary Yucatec dialect Bricker (1998:157) has **k'óoy** 'dig, hollow out, scoop', illustrating dialect diversity or meaning change through time.

sometimes used for wrapping food, which recalls the 'large leaf for wrapping salt and tamales' from Quiché **maxan**, a word that also means 'a small monkey' (Edmonson 1965:71). For Tzeltal, Berlin *et al* (1974:460) discuss a **noromax chi'in**, the constituents of which they gloss as 'spherical monkey edible root' that is also a species of *Xanthosoma*. Analogously, the constituents of **holomax chi'in** should be glossed 'monkey head edible root', and **holomax** should be simply 'monkey head'. Since there is a **max** word in Colonial Quiché for 'monkey', and **holom** means 'head', the Quiché **holomax** could also be glossed 'monkey head', which could well be seen as a metaphor for 'nodule'.

There is another piece of evidence bearing on the meaning of **holomax**. A Chol Maya plant name **x-hol max** literally "monkey head" refers to the *Talauma mexicana* (Aulie, Aulie and Stairs 1996:263), which in Spanish is called 'flor de corazon' (literally "flower of heart" i.e. "heart flower") or **yolosóchil**, a term borrowed from Nahuatl in which it means "heart flower." The plant is used medicinally for heart problems, and thus it could be called a heart medicine.

The inference could be drawn from the above evidence that in the *Popol Vuh* the **holomax** "nodule," to be returned to the lords of the Underworld as a fake human heart, and that may be literally a "monkey head," then metaphorically referred to some other vital or divine essence, such as a lump of holy substance, like red sap, the "blood" of a tree, ...or a human heart. It should then be translated, in the context of Blood Moon's substitution of congealed red tree sap for a heart, as the metaphor for 'heart' that it very likely represents. It is a plausible metaphor, in that a spider monkey's head is roughly the size and shape of a human heart, and if the monkey is seen as sacred or divine, then the plausibility is multiplied. Thus it appears to be relevant that the Quiché form **maxan** 'small monkey' is very similar to Proto-Mixean **maaxan** 'sacred, divinity, holy'. ¹⁰

¹⁰ Note that Quichéan apparently borrowed a Mixean word containing **matza** and meaning 'morning star, Venus' as **kumatz** 'serpent, snake', based on a close identification of Venus with "the feathered serpent."(Fox 1979), so borrowing and resignifying is known to occur with Quichean; and other Mixean words have been borrowed by various Mayan languages. Because of the meaning similarity it seems more likely that Quiché borrowed its **max** word from a lowland Mayan language, but the fact that the Quiché is **maxan**, which doesn't occur in the lowland Mayan languages is cause for withholding judgment

It could further be inferred that in lowland Classic Maya speech a word like **holomax** should literally mean 'monkey head', that it could have been a metaphorical reference to a bloody human heart, and that this fits very well with the fact that a so called "monkey head" glyph of God C that means 'divine, holy, sacred', occurs in contexts where it is dripping droplets of a substance that many Maya iconographers and epigraphers currently interpret as blood, a truly sacred substance holding the essence of life itself.

If the **max** of Quiché **holomax** is cognate with the **max** that means '(spider) monkey' in lowland Mayan languages, its use in a "monkey metaphor" for 'heart' gives some substance to a speculation that **maax** or **maaxan**, 'sacred, divinity' in Mixean (but not Zoquean) languages, may indeed be historically related to the God C glyph and its meaning of 'sacred, divinity'.

The form *maasan 'sacred, holy, divinity' can be reconstructed for Proto-Mixe-Zoquean, datable through glottochronology to 1500 BC or earlier, and this would have been *maaxan in Proto-Mixean by the beginning of the Christian era. The Maya word max, though found in several Mayan language as a word for 'monkey' or 'spider monkey' is not reconstructed for Proto-Mayan by Kaufman and Norman; instead it is said to be "internally diffused" (1985:125). The internally diffused nature of the Mayan word suggests a Classic (or possibly late pre-Classic) Maya introduction of the meaning fitting this sound combination and a subsequent spread of the same.

Given the fact that we cannot reconstruct a proto-Mayan word *max with the meaning 'monkey' or any other meaning for that matter, the possibility exists that the word was borrowed from Mixeans with the meaning 'sacred, holy, divinity', soon coming to mean 'monkey', after which it diffused relatively widely in Mayan languages. That the donors would be Mixeans rather than Zoqueans is suggested by the sound x in medial

in the matter of whether it was borrowed from a Lowland Mayan language during Classic times, or from a Mixean language.

position, which represents what is currently thought to be a Mixean innovation [Proto-Mixe-Zoquean **s** became **x** in Mixean]). It is also a plausible hypothesis that a metaphorical meaning 'monkey' could have been borrowed or constructed, along with the focal meaning, later to become the only Mayan meaning for the word **max**.

Conclusion

It is perhaps not an immediately obvious metaphor by which in the Maya script a 'monkey' can symbolize 'deity' and 'lordship', 111 but if a metaphor is involved, then it is at the least a surprising coincidence to find the meaning 'deity, divinity' accompanying the sound sequence maax in Mixean languages, when approximately the same sound sequence in lowland and some highland Mayan languages means 'monkey'. It is quite possibly not an accidental coincidence, however. One can imagine the use of a picture of a monkey (Yucatec maax) to stand rebus fashion for the non-depictable meaning of 'divinity' or 'deity' (Mixean maax); this would be a bilingual rebus. It would imply knowledge of Mixean by Maya speakers (and/or knowledge of a Mayan language by Mixean speakers) at a time when the Maya script was incorporating the use of a "monkey head"—or at least what was perceived by some as a monkey head—to stand for 'deity', even if it were actually a Mixean ruler's head misperceived as representing a monkey. This could come about either if some Mayans also understood some Mixe-Zoquean language, or if some Mixe-Zoqueans also understood a Mayan

¹¹ In Mayan oral literature, of course, in keeping with general Mesoamerican tradition, the monkey represents remnants of a failed former attempt on the part of the gods to create humans, and thus in a very real sense monkeys are seen as ancestral to humans. In this way, and in societies for whom the ancestors, or the souls of their ancestors, are part of the supernatural environment, then monkeys can be seen as natural representatives of "deified" supernaturals. In this way, then, perhaps such a metaphor can be more easily understood.

Furthermore, the monkey is inextricably associated with the tree environment, whether in real life in the jungles of Mexico and Guatemala or in the once oral literature that became the Popol Vuh where the clever "monkey twins" (Hun Batz and Hun Chuen) climb a tree and become monkeys. Thus we might naturally expect God C's countenance to peer forth from sacred trees in what is then a double or conjoined statement of holiness and of "monkeyness".

The monkey and the tree are ever present in the iconography of Maya rulership, it may be noted. The ruler has the tree and God C on his loincloth among other places, and in effect he is saying that he <u>is</u> the tree. And just as today a chicken is sacrificed when putting up the "tree of life" in the Volador ceremony, the king must place a few drops of his blood from his own "tree / pole" into some kind of hole or recipient. The ruler, as lord tree, the monkey tree, thus represents the ancestor, for the monkeys are the ancestors of humans, and the tree is their world tree environment.

language. It would also benefit from, but not require, an already existing Mayan word similar to **maax** and meaning 'monkey' in the region where the Maya script was being developed (see Table 1).

A similar hypothetical scenario involving Mixean / Mayan bilinguals might have utilized the picture of a squirrel head (Mixean **ku'y** or **ku'u**), or some head that would later be perceived as a monkey, to serve as the more abstract concept 'sacred, divinity', which in Yucatecan, or Cholan prior to the **k'** > **ch'** sound change, would have been **k'u** or **k'uh**. The use of a God C head to supply the phonetic value **k'u** in later Yucatec Maya script does not by itself require that the God C head (T41) had a sound value of **k'u** in the earlier Maya script of Classic times, although many epigraphers have accepted the value of **k'u** for this glyph in the Classic period Maya script (e.g. Montgomery 2002).

A third possibility depends on the possible metaphor noted above, in which an originally Mixe-Zoquean image interpreted by Mayan speakers as a monkey head stands in place of a "sacred" heart, which itself can be easily imagined to represent a concept of 'deity, 'divinity', or 'sacredness'. Such usage, similar to the use of a bird depiction to represent a penis as in the post-Classic Mayan Dresden Codex (Thompson 1970:253) might be expected to have a linguistic basis, and we have seen above that the Quiché word **holomax** (literally "monkey head") lends itself to the metaphorical meaning '(human) heart' in the sacred book of the Quiché, the *Popol Vuh*. This interpretation relies once again, on a **max** word for 'monkey'.

A fourth explanatory scenario can be contemplated, also necessarily involving Mixe-Zoquean in the development of the Maya script. In this hypothetical case a Mayan **max** word for 'monkey' might have arisen only after a similar sounding glyph with the meaning 'divinity, sacred' had been borrowed (both sound value and meaning). The developers of the Mayan script could have borrowed a Mixe-Zoquean glyph (perhaps from the Isthmian script) of a human head, with a meaning of 'god', 'deity', 'divinity', or 'holy' and a sound value of **maax**, **maaxy**, or **maaxan**. Later, as the glyphic image

became stylized, it came to be perceived as the head of a monkey, perhaps in part because the spider monkey and howler monkey were already associated with the day meaning 'lord, ruler' and with the sun respectively, and therefore was already associated with some sort of divinity. Conceivably also in part because Mixeans have been described as facially more prognathic than their neighbors (Beals 1945, 1973:12-13), and so a glyph of a Mixean ruler or deity might also have had the requisite prognathism to facilitate visual identification of the head glyph as that of a monkey, or at least as being monkeylike. Table 7 schematizes the four scenarios.

TABLE 7

Scenario	Donor	M-Z Image	Maya Image	Borrower
	M-Z L.	Figure 1	Figure 2	Mayan L.
1	maax 'deity'	("II" III		maax 'monkey',
	'divinity'		_	used as a rebus for
		KOTT)	OTHER)	'deity'. Came to
		(a)	2000	mean 'deity' as
		音為	-1000	script didn't need
				this glyph to mean
				monkey
2	ku'u			k'u 'deity, divinity'
	'squirrel'			
3	hon			holomax
	'bird'			'monkey head'
	maax 'deity'			metaphor for
				'sacred heart' =
				'sacred deity'
4	maax			maax 'deity'
	'deity'			'divinity'
	'divinity'			becomes maax
				'monkey'

If either the first or the fourth scenario described above represent some portion of the actual explanation for the God C glyph's history, then the God C head would have initially been introduced as a logogram with a sound value of **max** and a meaning value of 'sacred, divinity', and by post-Classic times or earlier the sound value of the glyph would have changed to the **k'u** that is currently attributed to it, and that certainly is the sound value given it by Bishop Diego de Landa in his Relación de las Cosas de Yucatán.

Any of the scenarios involving a Mixean language in the development of the Maya script, would appear to involve numbers of Mixean speakers in regions where the Maya script was being developed, and for at least early stages in the development of that script. There is already evidence that Mixeans interacted with Mayans to the extent that various Mayan groups are known to have borrowed some Mixe-Zoquean words, and some have suggested early Mixe-Zoquean presence at Kaminaljuyu (Guatemala City area) and at Izapa (near Tapachula, Mexico) (Kaufman 1976, Justeson et al 1985:4, 67, Campbell 1988). Of interest to note is the fact that of the words known to be borrowed by different Mayan languages from Mixe-Zoquean languages (e.g. '(calendar day name) dog', 'to exist', 'penis', 'incense', 'to roast') a substantial number at least are what might be called cosmological terms, rather than the names of trade items or other words that might be expected to emerge from trading relationships.

I have proposed here and elsewhere (1982, 1990) that Mixe-Zoquean scribes were employed in Mayan communities during the development of the Maya script. They were already privy to a script of their own—later stages of which have been termed Isthmian—and it is possible that during these early stages Mayans were being ruled or at least overseen by Mixe-Zoqueans, though that would by no means be necessary to account for the scenarios I have introduced here.

REFERENCES CITED

Aulie, H. Wilbur, Evelyn W. de Aulie, and Emily F. Scharfe de Stairs. 1996. *Diccionario Ch'ol de Tumbalá, Chiapas, Con Variaciones Dialectales de Tila y Sabanilla*. Mexico: Summer Institute of Linguistics.

Beals, Ralph L. 1973. Ethnology of the Western Mixe. New York: Cooper Square Pubs., Inc.

Berlin, Brent, Breedlove, Dennis E., and Peter H. Raven. 1974. *Principles of Tzeltal Plant Classification*. New York: Academic Press.

Bricker, Victoria R., Poót Yah, Eleuterio, and Ofelia Dzul de Poót. 1998. *A Dictionary of The Maya Language As Spoken in Hocabá*, *Yucatan*. Salt Lake City: The University of Utah Press.

Campbell, Lyle. 1988. *The Linguistics of Southeast Chiapas*. (Paper no. 1) Provo, Utah: New World Archaeological Foundation.

Campbell, Lyle, and Terrence Kaufman. 1976. A linguistic look at the Olmecs. *American Antiquity* 41 pp. 80-89.

Edmonson, Munro S. 1965. *Quiche-English Dictionary*. New Orleans: Middle American Research Institute, Tulane University, Publication 30.

----. 1971. *The Book of Counsel: The Popol Vuh of the Quiche Maya of Guatemala*. New Orleans: Middle American Research Institute, Tulane University, Publication 35.

Fox, James A. 1978. *Proto-Mayan Accent, Morpheme Structure Condition, and Velar Innovations*. Ph.D. dissertation, University of Chicago.

----. 1979. The etymology of Quichean kumats "snake" and the linguistic affiliation of the Olmecs. In: *Proceedings of the Annual Symposium of the Deseret Language and Linguistic Society*, edited by John S. Robertson. Provo, Utah: Brigham Young University Press.

Hunn, Eugene. 1977. Tzeltal Folk Zoology. New York: Academic Press.

Justeson, John S. and Terrence Kaufman. 1993. A decipherment of epi-Olmec hieroglyphic writing. *Science* 259:1703-1711.

----. 1997. A newly discovered column in the hieroglyphic text on La Mojarra Stela 1: A test of the Epi-Olmec decipherment. *Science* 277:207-210.

Justeson, John S., William M. Norman, Lyle Campbell, and Terrence Kaufman. 1985. *The Foreign Impact on Lowland Mayan Language and Script*. New Orleans: Middle American Research Institute, Tulane University.

Kaufman, Terrence. 1976. Archaeological and linguistic correlations in Mayaland and associated areas of Meso-America. *World Archaeology*, 8(1): 101-118.

----. 2003. *A Preliminary Mayan Etymological Dictionary*. Final FAMSI Report. http://www.famsi.org/reports/01051/pmed.pdf.

Kaufman, Terrence, and John Justeson. 2001. *Epi-Olmec Hieroglyphic Writing and Texts*. Texas Maya Meetings Foundation. http://www.albany.edu/anthro/maldp/EOTEXTS.pdf.

Kaufman, Terrence, and William Norman. 1984. An outline of proto-Cholan phonology, morphology and vocabulary. In: *Phoneticism in Mayan HieroglyphicWriting*, edited by John Justeson and Lyle Campbell. Albany: Institute for Mesoamerican Studies, State University of New York at Albany.

Krochock, Ruth. 1988. The Hieroglyphic Inscriptions and Iconography of Temple of the Four Lintels and Related Monuments, Chichen Itza, Yucatan, Mexico. Ph.D. dissertation, University of Texas at Austin.

Milbrath, Susan. 1999. Star Gods of the Maya. Austin: University of Texas Press.

Montgomery, John. 2002. *Dictionary of Maya Hieroglyphs*. New York: Hippocrene Books, Inc.

Pereira, Víctor, and Robert Bruce. 1982. *The Last Lords of Palenque*. Berkeley: University of California Press.

Ringle, William M. 1988. Of mice and monkeys: The value and meaning of T1016, the God C hieroglyph. *Research Reports on Ancient Maya Writing* 18. Washington, D.C., Center for Maya Research.

Schele, Linda. 1987. Maya Hieroglyphic Workshop Notebook. Austin: University of Texas.

Schele, Linda, and Mary Miller. 1986. The Blood of Kings. Fort Worth: Kimbell Museum

Stross, Brian. 1982. Maya hieroglyphic writing and Mixe-Zoquean. *Anthropological Linguistics* 24 (1982), 73-134.

----. 1983. The language of Zuyua. American Ethnologist 10: 150-164.

----. 1990. Mesoamerican writing at the crossroads: The late Formative. *Visible Language* 29:38-62.

Swadesh, Mauricio, Alvarez, Ma. Cristina and Juan R. Bastarrachea. 1970. *Diccionario De Elementos del Maya Yucatco Colonial*. Mexico City: UNAM, Centro de Estudios Mayas, Cuaderno 3.

Taube, Karl. 1992. *The Major Gods of Ancient Yucatan*. Washington, D.C.: Dumbarton Oaks Research Library and Collection, Studies in Pre-Columbian Art & Archaeology, No. 32.

Tedlock, Dennis. 1996. Popol Vuh. New York: Simon and Schuster.

Thompson, J.E.S. 1962. A Catalog of Maya Glyphs. Norman: University of Oklahoma Press.

----. 1970. Maya History and Religion. Norman: University of Oklahoma Press.

----. 1971. Maya Hieroglyphic Writing. Norman: University of Oklahoma Press.

Wichmann, Søren 1995. The Relationship Among the Mixe-Zoquean Languages of Mexico. Salt Lake City. University of Utah Press.

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