A GRAMMATICAL DESCRIPTION OF THE EARLY CLASSIC MAYA HIEROGLYPHIC INSCRIPTIONS

by

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ABSTRACT

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The purpose of this thesis is to describe the grammatical system of Classical Ch'olti', the language of the Classic Maya hieroglyphic inscriptions, as attested in inscriptions of the Early Classic (approximately AD 200-600). Around 300 Lowland Maya Hieroglyphic inscriptions have been dated to the Early Classic or before, nearly one third of these remain unpublished. Previous work on the monumental inscriptions of the Early Classic (Mathews 1985; Proskouriakoff 1950) have examined Early Classic monuments primarily as works of art. Mora-Marin (2001) examined the language of inscriptions found on early portable texts, a small subset of the corpus here examined. In great part, however, this study of the language of Early Classic inscriptions breaks new ground.

The body of the thesis consists of a description of the linguistic system attested in Early Classic texts, with particular emphasis on morphology. The corpus is divided into three general sections according to date: Cycle 8 Texts, including all texts which date prior to the end of the Eighth Baktun in AD 435; Early Ninth Baktun Texts, covering the years between AD 435 and AD 534 (9.0.0.0.0-9.5.0.0.0 in the Maya Long Count), and 'Terminal Early Classic' Texts, which includes texts from between AD 534 and AD 633 (9.5.0.0.0-9.10.0.0.0).

With these divisions it is possible to track the development of the attested linguistic system of the Early Classic inscriptions. It is discovered that the core elements of that system are already in place by the end of the Baktun 8. The morphological features first attested during the Eighth Baktun continue in use for the duration of the Early Classic, though in both of the subsequent time periods new features are added to the inventory of Early Classic morphemes. The static nature of the language, as suggested by its apparent continuity throughout the centuries which comprise the Early Classic, is consistent with the prestige status proposed for that language by Houston et al. (2000).

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John Robertson and Stephen Houston deserve particular recognition for the thousands of emails they have exchanged with me over the past two and a half years which have molded my thinking about Language and about the Maya almost beyond recognition. Stephen Houston taught me how to read the glyphs and charitably agreed to advise my thesis even after moving from BYU to the other side of the continent. John Robertson can take credit for putting on my current path by hiring me to work on Colonial Ch'olti' with him and giving me a deep appreciation for the beauty of Mayan Languages.

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Chapter 1 - Introduction

1.1 INTRODUCTION

The Classic Lowland Maya civilization has intrigued the western world since 1841, when John L. Stephens and Frederick Catherwood first published the best-selling account of their travels among the ancient ruined cities of Chiapas, Mexico, and the Yucatan Peninsula. It was a civilization as developed as any contemporary European civilization—more so than some—boasting a complex understanding of mathematics and astronomy, a complex political structure (though the best model for this structure is somewhat debated—see Demarest 1992, Houston 1993, Gillespie 2000, and Inomata and Houston 2001), and a spectacular esteem for artistic expression.

Perhaps the most important accomplishment of the Classic Maya, from a linguistic standpoint, is their establishment of a standardized system of hieroglyphic writing with which they recorded information on a variety of historical and mythological topics. All of this, frequently engraved on durable stone or molded with stucco, was written in a standardized 'prestige' language ancestral to the modern Mayan language Ch'orti' (Houston et al. 2000, see below). This writing system was in use in the Maya lowlands as early as 300 BC (National Geographic Feb. 2006), and continued in use until

the arrival the Spanish missionaries in the 16th century AD, who successfully 'purged' all knowledge of the script from the minds of the Maya people.

It is the linguistics of the earlier texts that are the focus of this study, encompassing a period of almost one-thousand years, from 300 BC until the first part of the 7th century AD, though inscriptions that date prior to approximately AD 200 are too poorly understood to contribute much in the way of linguistic data. The principle goal of this thesis is to describe the corpus of Early Classic inscriptions linguistically, with an emphasis on the morphological system attested in these texts. Such a description has never been undertaken before now, though the majority of the morphemes described below have been treated individually in a variety of sources, which are provided in the relevant sections below.

In broader terms, this thesis aims to provide researchers with a reference tool for undertaking more detailed analyses of the linguistic features superficially described here. Research on Early Classic inscriptions will also be aided by the detailed list of Early Classic texts provided in the appendix along with sources for drawings and photographs, where available. Mathews (1985) provides a list of Early Classic monuments in his discussion of monumental sculpture during the Early Classic. However, because the focus of that study was monumental sculpture, and not hieroglyphic texts, that list included many monuments with no glyphic inscriptions, and excluded many non-monumental texts. In addition, the source is now more than two decades out of date. Several monuments have been discovered in subsequent years, including some remarkably lengthy texts, such as Calakmul Stela 114 and Tikal Stela 40. These new

monuments, included in this study, allow for a more comprehensive picture of the language of the Early Classic hieroglyphic inscriptions.

1.2 THE MAYAN LANGUAGE FAMILY

The Mayan Language family consists of approximately 31 living languages spoken in parts of Mexico, Guatemala, Belize and Honduras. Estimates for the precise number of Mayan languages spoken today vary slightly due to the ever-present disagreement about languages versus dialects. Several attempts have been made to organize these languages into genetically related sub-groupings. The most widely cited models at present are Terrence Kaufman's (1976) model and John Robertson's (Robertson 1992, Houston et al. 2000) model. I assume Robertson's model in this work, which is represented graphically in Figure 1 below.

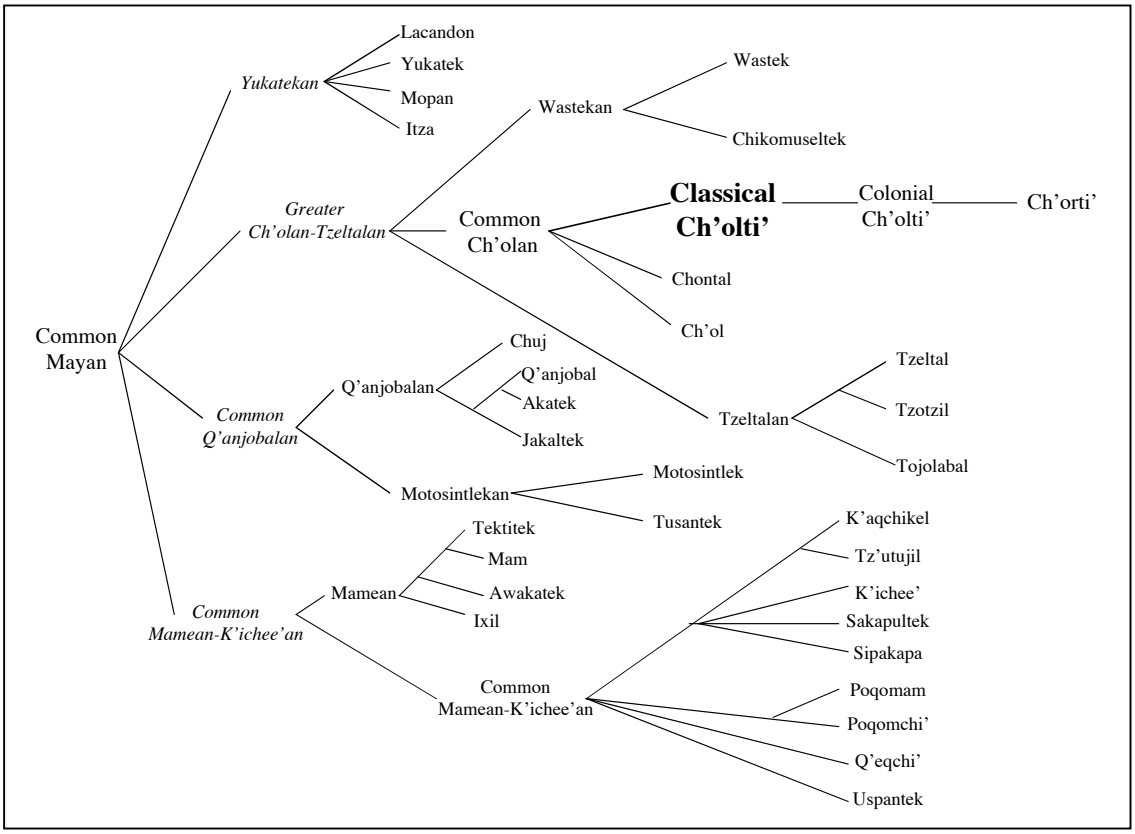


Figure 1. The Mayan Family Tree (After Houston et al. 2000)

The language described in this thesis is labeled Classical Ch'olti' in Figure 1 above (Law et al, n.d.). John Robertson (Robertson 1992, Houston et al. 2000) has given substantial comparative evidence that Colonial Ch'olti', and its modern-day descendant Ch'orti', are direct descendants of the language of the hieroglyphic script. All three, then, form one branch of the Ch'olan subgroup of the Mayan language family, which also includes modern Ch'ol and Chontal.

The Mayan languages are frequently referred to in terms of two general geographic *sprachbund*: the Lowland language area and Highland language area.

Lowland languages generally include the Yukatekan family and the Greater Ch'olan-Tzeltalan family, including, to some degree, Wastek. Highland languages include the Common Q'anjobalan and the Common Mamean-K'ichee'an families. These groupings are important for describing language change among these groups because of the frequent diffusion of features, particularly among the Lowland Mayan languages.

Classical Ch'olti' has alternatively been called Hieroglyphic Ch'olan (Wichmann, in press), Epigraphic Mayan (Kaufman 2003), Pre-Proto-Ch'olan (Mora-Marin 2004), and Classic Ch'olti'an (Houston et al. 2000, 2001). Despite the common refrain 'a rose by any other name would smell as sweet', each of these names reflects particular assumptions about the linguistic affiliation of the hieroglyphic script. The number of suggested labels for this language is evidence of the amount of debate this issue has generated among scholars.

Perhaps the most neutral term in this regard is Kaufman's 'Epigraphic Mayan'. In fact, if anything, this term seems too neutral. It fails to capture the fact that the language of the hieroglyphic script is much more similar to Colonial Ch'olti', than to, say, Mam, K'ichee', or any other Mayan language for that matter. The terms 'Hieroglyphic Ch'olan' and 'Pre-Proto-Ch'olan' have a very different problem: They specify the wrong language. Both refer to the ancestor to the modern Ch'olan languages, labeled 'Common Ch'olan' in Figure 1. The difference between the terms 'Classic Ch'olti'an' and 'Classical Ch'olti'', on the other hand, is more a matter of convenience than precision. The term Classical Ch'olti' reflects the fact that the language of the inscriptions is a clear ancestor of Colonial Ch'olti' (as well its descendant, modern Ch'orti'—see Houston et al. 2000, 2001; Robertson et al. n.d.; and Law et al. n.d.). It also frees up the term Ch'olti'an to

refer to all three linguistic entities collectively: Classical Ch'olti', Colonial Ch'olti', and modern Ch'orti'.

1.3 Linguistic Research on Mayan

The Mayan language family has been the subject of a great deal of linguistic investigation, beginning with the many missionary-linguists who arrived in the Maya area shortly after the Spanish Conquest in the 16th century. The *Muy Reverendo Padre Fray* Fransisco Moran, author of the only surviving attestation of Colonial Ch'olti' (Moran 1695), is among these pioneering linguists. Since that time, the Yukatekan languages have received the greatest amount of attention from Mayanists, perhaps because it was widely assumed that the language of the inscriptions was Yukatek Maya (Houston et al. 2000).

Until recently, Ch'olti' and Ch'orti' had been the subject of very limited, and almost entirely unpublished research. William Gates published a handwritten transcription of the Moran (Ch'olti') manuscript in 1935 (Moran 1935). John Fought published a brief grammatical sketch of Ch'olti' in 1984, in which he mentions a thorough critical text of the several versions of the Moran manuscript which was "now nearly finished" in 1984, but which apparently never saw the light of publication. Fought also published the most detailed linguistic study of Ch'orti' to date in his 1967 dissertation at Yale. Earlier work on Ch'orti', carried out by Charles Wisdom, and, to a lesser degree, by Ernest Noyes in the 1930's and 1940's, was unfortunately never published. Noyes also worked with Oliver LaFarge on the Moran manuscript. Their unpublished correspondence is available in the Peabody Archives at Harvard University.

Wisdom and Noyes' Ch'orti' data are currently available on microfilm at Brigham Young University, and at the University of Chicago.

Work on Classical Ch'olti' (regardless of what it was called at the time) was a motivating factor in much (though by no means all) of the linguistic work done during the past two centuries. William Gates, Benjamin Lee Whorf, Brasseur de Bourbourg, and others, attempted, in some cases failing miserably, to contribute to the decipherment of the enigmatic script. Coe (1992) gives a detailed and generally accurate account of the decipherment of the hieroglyphic script. Unlike the decipherment of Egyptian Hieroglyphs by Champollion, the decipherment of the Maya script was very much a collaborative, and cumulative, effort.

The first portions of the hieroglyphic inscriptions to reveal their meaning involved the numerous calendric references. Some time later, isolated lexical items began to yield to the decipherment of the hieroglyphs. The state of the decipherment did not allow serious linguistic analysis of Classical Ch'olti' data until the1980's. During that decade, several morphological suffixes were proposed, some of which have stood up to twenty years of scrutiny. Early contributors to our understanding of the linguistics of Classical Ch'olti' include Bricker (1986), Macleod (1982), Stuart (1987), and Schele (1982).

The 1990's, leading up until the present day have seen an explosion of progress in the decipherment, and subsequently in the level of linguistic analysis that is possible for this unique source. That progress has been recorded in dozens of individual, small-scale studies of specific grammatical morphemes, many of which will be referenced throughout the body of this thesis. More comprehensive treatments of the language of the

hieroglyphic inscriptions have been limited to extremely general overviews, including Coe and Van Stone (2001:17-36) and Stuart (2005).

1.4 NATURE OF THE SCRIPT

Coe (1992) attributes the initial failure to decipher the Maya hieroglyphs to a series of bad assumptions about the nature of the writing system. On one extreme, scholars such as Benjamin Lee Whorf assumed that the system was alphabetic, an understandable assumption based on Bishop Diego de Landa's 'alphabet'. Whorf's failed attempts to dice the hieroglyphs into smaller and smaller component 'letters' persuaded many in the field that phoneticism was not a part of the hieroglyphic script. These scholars, among them the venerable Sir J. Eric Thompson, assumed, instead, that the glyphic orthography was entirely logographic, or, more accurately, ideographic, much like the pictographic Mixtec codices.

In 1952, Yuri Knorosov demonstrated convincingly that the script in fact involved two components: a phonetic component, which was syllabic in nature, and not alphabetic; and a logographic component, a set of symbols that represent particular words. Once this more accurate view was accepted, the decipherment of the hieroglyphs progressed at a steady rate.

These logographic and syllabic signs were arranged into rounded squares' called glyph blocks. Scribes had considerable freedom as to what visual variant of each sign was used, and how they were arranged within a block. Basic reading order for the hieroglyphs was from top to bottom and left to right in columns of two. However, scribes commonly took artistic liberties to play with both the physical form of the individual

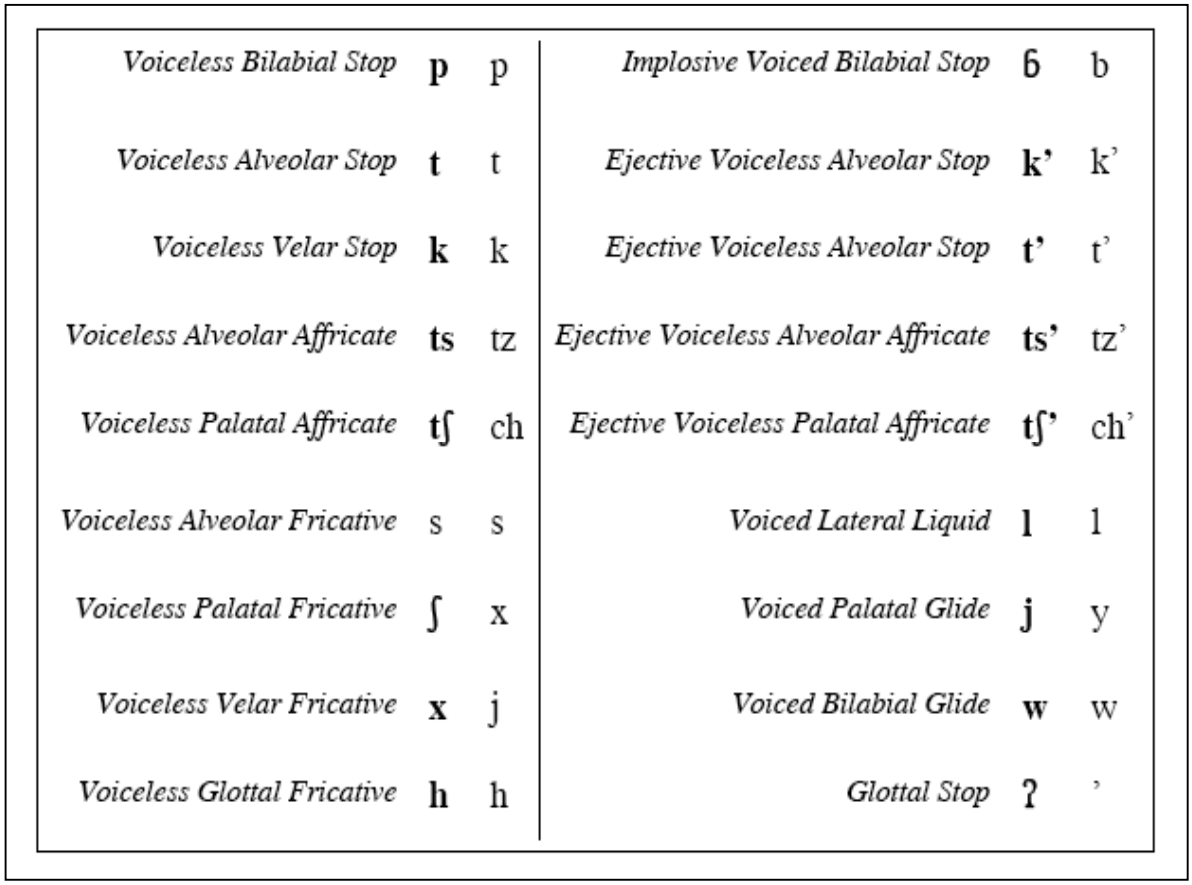
glyphs and the reading order of a text. Single columns, single rows, right-to-left reading order, and other even more unique reading orders (the 'woven mat' text on Copan Stela J is a particularly fascinating example) were frequently used at the artists' discretion to fit the artistic and functional purposes of the text in question.

Following the established conventions suggested by G. Stuart (1988), logograms are here transcribed in all-capitals, and syllabograms are transcribed with lower case letters. Each grapheme is separated by a dash and direct transcriptions are enclosed in square brackets. When confidently known, a phonemic transcription in the standard Mayan orthography (correlated to the IPA below) will immediately follow in italics. English translations are enclosed in single quotes. These conventions are illustrated with a brief example below:

[CHUM-la-ja-ti-a-AJAW-IL] *chumlaj ta ajawil* 'he sits in the lordship'

This example also illustrates the fact that the pronunciation of logograms is often reinforced with accompanying syllabic signs indicating the first CV or the final C of the word in question. These syllabic signs are known as phonetic complements.

The standard orthography adopted by Mayanists for transcribing the hieroglyphs into a roman script is similar in many ways to the conventional symbols of the IPA. The vowels (a,e,i,o,u) have values identical to the values of those same symbols in the IPA. However, there are several differences between the IPA and the traditional Mayan orthography with respect to the consonants. Table 1, below, provides the complete inventory of consonants for Classical Ch'olti'. Each phoneme is described articulatorily, transcribed with the IPA, and then written in the traditional orthography.



Voiceless Bilabial Stop	**p**	p	*Implosive Voiced Bilabial Stop*	**ɓ**	b
Voiceless Alveolar Stop	**t**	t	*Ejective Voiceless Alveolar Stop*	**k'**	k'
Voiceless Velar Stop	**k**	k	*Ejective Voiceless Alveolar Stop*	**t'**	t'
Voiceless Alveolar Affricate	**ts**	tz	*Ejective Voiceless Alveolar Affricate*	**ts'**	tz'
Voiceless Palatal Affricate	**tʃ**	ch	*Ejective Voiceless Palatal Affricate*	**tʃ'**	ch'
Voiceless Alveolar Fricative	s	s	*Voiced Lateral Liquid*	**l**	l
Voiceless Palatal Fricative	**ʃ**	x	*Voiced Palatal Glide*	**j**	y
Voiceless Velar Fricative	**x**	j	*Voiced Bilabial Glide*	**w**	w
Voiceless Glottal Fricative	**h**	h	*Glottal Stop*	**ʔ**	'

Figure 2. The Consonants of Classical Ch'olti'—Traditional Orthography and IPA

The only truly problematic differences between the traditional orthography and the IPA involves the symbols <x>, <y> and <j>. These symbols are used in both systems, but with very different values in each. Note that vowel length is also a phonemic feature of Classical Ch'olti'. In the traditional orthography, long vowels are signaled by simply doubling the vowel, as in *baah* 'self'.

1.5 A BRIEF OVERVIEW OF THE LANGUAGE

Classical Ch'olti' is a synthetic language in that the majority of grammatical functions, at least pertaining to the verbal system, are performed by an array of affixes, rather than analytically. Word order in this language is generally quite flexible for a language without morphological case, but the basic transitive word order is Verb-Object-Subject. Subjects and objects can both be placed before the verb in focus type constructions (see Aissen 1992, for a discussion of this in Tzotzil). Though lacking morphological case, morphological inflection on verbs, and derivational processes are extremely productive, as the following study will show.

1.5.1 PRONOUNS

Verbal inflection agrees in number with both subject and object following an ergative-absolutive pattern, in which one paradigm (ergative) is used both to mark subject agreement for transitive verbs and a possessive relationship on nouns, and another paradigm (absolutive) marks subject of intransitive verbs and the object of transitives. This can be exemplified with the following examples from Colonial Ch'olti', a language that follows this same pattern:[1]

(a) *lopa et t-in-wut*
TO.COME • ABS2SG • PREP-ERG1SG-FACE
'You came before my face.

(b) *u-kohko et,*
ERG3-TO.KEEP • ABS2SG
'He keeps you.'

[1] All examples from Colonial Ch'olti' are taken from Moran (1685-1695). Spelling of these examples has been regularized by the author.

In example (a), the absolutive pronoun *-et* you' is used to reference the subject of the intransitive verb *lopa* 'to come'. In (b), that same absolutive pronoun *-et* is used to reference the object of the transitive verb *kohko*'to keep'. The subject of the sentence, 'he' is referenced with the ergative pronoun *u-*. In addition to this ergative-absolutive pattern on verbs, the ergative pronouns can be used as a possessive pronoun when affixed to nouns, as in *u-k'aba'*his name'.

In a generative framework, these 'pronouns' are clearly affixes, as opposed to clitics or independent morphemes, because of their obligatoriness—they are present even when the associated argument is overt (see Sportische 1992, 1996; Aissen 1992; Philippaki-Warburton et al. 2003; and Larson 1987 for discussion of this issue). However, as they are traditionally referred to as 'pronouns' in the literature, I adopt this terminology here. The referent of the term is specific and well-established in the field, and its use does not cause any undo confusion when describing the morphology of the language.

1.5.2 Lexical Categories

Classical Ch'olti' counts with an impressive system of derivational and inflectional affixes that can be used to nominalize, transitivize, and intransitivize virtually any lexical root. These roots fall into five general categories, based on the pattern of morphological inflection and derivation used. The boundaries of these categories are remarkably porous (several roots can use the morphology of three or more of groups). These five categories are Transitive, Intransitive, Positional, Nominal, and Prepositional.

Adjectives generally behave like nominals, the main distinction being semantic, not morphological. Houston et al. (2001) noted this fact in their treatment of glyphic nouns and adjectives. They illustrate this with two lexical items from Bachejón Tzeltal, *winik* 'man' (a noun) and *sak* 'white' (an adjective). Both words can be suffixed with the abstractive *-il*, resulting in *sakil* 'whiteness' and *winikil* 'manhood, peopleness'. In addition, both can be suffixed with an absolutive pronoun to form a stative predicate: *winik-Ø* 'He is a man', and *sak-Ø* 'It is white.' The only difference is that uninflected verbs like *sak* 'white' cannot be used as arguments of a predicate (Houston et al. 2001:2).

1.5.3 PREPOSITIONS AND NOUNS

Prepositions and nouns are also closely related. The prepositional category is minimal. Only two all-purpose prepositions, *ti* and *ta* (possible free-variant allomorphs of a single lexical item) can be said to be distinct to this class in Classical Ch'olti'. Several others lexical items, often called relational nouns, can function as prepositions in certain contexts, meaning that, for the most part, the linking properties of prepositions are determined by syntax, and not a lexical category. This is a feature found throughout the Mayan language family. England (1983:185) gives the following example from the Highland language Mam, which uses three relational nouns (in bold):

at-Ø *juun xjaal n-Ø-taan* ***t-uj*** *juun*
LOC PRED-ABS3SG ONE PERSON PROG-ABS3SG-SLEEP **ERG3SG-RN/IN** ONE

t-tx'aaqan jaa ***t-jaq'*** *chik'uul* ***t-e*** *Chna'jal*
ERG3SG-OLD HOUSE **ERG3SG-RN/UNDER** MOUNTAIN **ERG3S-RN/POS** HUEHUETENANGO

'There was a person who slept **in** his old house **under** the mountain **of** Huehuetenango.'

The translation for each of these in English is a preposition (in, under, of). However, in Mam, each of the lexemes in question is possessed with the ergative prefix *t-*, a feature typically associated with nouns. The function performed by 'under' in English, and *t-jaq'* in Mam is the same: they link noun or determiner phrases with another, larger unit. In Mayan languages, however, these linking words show the same morphological behavior as nouns and, in many cases, also function as nouns within the language.

1.5.4 VERBS

By sheer size, the morphological system relating to the verbal categories, Transitive, Intransitive, and Positional (though, in many ways, Positional could also be considered an adjectival or nominal category) is the most important component of Classical Ch'olti' grammar. These roots can be derived for use in transitive, intransitive, and ditransitive sentences, and as nominal arguments within the sentence. Each class takes its own set of suffixes when used in each type of sentence. Because of this, membership in a particular class is defined by whether or not a root can take the set of suffixes used by that class. A description of the morphology involved with each of these classes during the Early Classic will comprise the body of this thesis.

1.6 DEFINING EARLY CLASSIC

The Early Classic Period in the Maya Lowlands can be defined from several different perspectives. In the Maya Long Count, a logical starting point for a new era would be the beginning of a Baktun. Perhaps the best candidate for the start of the Early Classic Period from the point of view of the Classic Maya would be the beginning of the

Eighth Baktun, 8.0.0.0.0. or AD 41. This date is somewhat earlier than the earliest firmly dated inscribed monument (Tikal Stela 29, which dates to AD 292), but not as early as the earliest attested Maya hieroglyphic writing at San Bartolo, which dates to around 300 BC. An endpoint for this period that corresponds to the end or beginning of a Baktun cycle is less fitting. The Ninth Baktun, which began on 11 December AD 435, is in the middle of what is traditionally known as the Early Classic. The Tenth Baktun began on 15 March AD 830. By that time, the Classic Maya Civilization, which flourished during the Late Classic, had already begun its downward slide into oblivion. This date would be much too late to signal the end of the Early Classic; it would be more appropriate as an endpoint for the Classic Period as a whole. The next possible candidate is the half-baktun date 9.10.0.0.0., which corresponds to 27 January AD 633. This date is appropriate as a late limit for the corpus of Early Classic inscriptions because it corresponds roughly to the end of the Hiatus', after which the Lowland Maya Civilization experienced its greatest fluorescence, a period typically known as the Late Classic.

1.6.1 Stylistic Features of the Early Classic

Another possible way to define the Early Classic is based on the style of the artwork found on most inscribed monuments. Proskouriakoff (1950) gives a detailed analysis of sculptural details including body positions, clothing, physical adornments such as earplugs, nose beads', belts and collars, etc., and several other common sculptural icons. She outlines specific stylistic features with which to date a monument. For example, she characterizes Late Cycle 8 artwork (8.14.0.0.0-9.0.0.0.0) with the following descriptors: " Objects turned into plane of carving. Fluid, general body outlines. Marked

relation to non-Classic styles. Pendent rear ornament. Large Earplug" (Proskouriakoff 1950: 102). For the Early Cycle 9 (9.0.0.0.0-9.5.0.0.0) monuments, she notes these artistic innovations: "The development of typically Maya ornament. Side position of the figure, with overlapping feet. The serpent bar. Development of detail" (Proskouriakoff 1950: 106). While these diagnostic features can be valuable for determining the approximate age of an undated monumental sculpture, they can often be interpreted in more than one way on any particular monument, leading to divergent (sometimes polar) scholarly opinions regarding the age of a particular monument.

The miniature'Hauberg' Stela is a case in point. Schele et al. (1990) date this unprovenanced monument to AD 192 based on calendric correlations and stylistic considerations (the large earspool, non-overlapping stance, and the slightly malformed waist. This date, which has been widely accepted (see Miller 1999:90; Sharer 1994:127), would make the Hauberg Stela among the very earliest legible stone monuments. However, according to Stephen Houston (personal communication) such an early date would be anachronistic. Houston dates this monument to near the beginning of the 'Hiatus', about AD 534. This means that the monument would still be Early Classic, but one of the later monuments, not one of the earliest, a difference in estimates of more than 300 years. It can reasonably be assumed that closer investigation of some of the stylistic dates which have been the basis for the chronological lists used below would yield similarly significant disagreement among scholars. This can quickly cause problems with any of the claims made in the body of this thesis regarding the chronology of certain linguistic features in the Early Classic corpus.

1.6.2 Early Classic Architecture and Ceramics

Architecturally, the advent of the Classic Period has been correlated with the first appearance of the corbelled vault, though later discoveries have pushed the first appearance of this archaeological feature back into what is traditionally known as the Preclassic (Grube 1995).

In the ceramic record, the only widespread Lowland innovation moving into the Early Classic is the introduction of true polychrome ceramic vessels, also now seen as a innovation of the Protoclassic. Other features that characterize Early Classic ceramic vessels are, for the most part, unique to particular sites or regions. Several ceramic phases at individual sites have been said to begin around AD 250, and to end around AD 600, and are generally considered to be Early Classic ceramic styles. These include the Manik phase at Tikal, the Tzakol Phase at Uaxactun (divided into Tzakol 1, 2,and 3, which correspond roughly to the three divisions used here for convenience), the Junco phase at Seibal, and the Hermitage phase at Barton Ramie (Gifford 1975).

1.6.3 Cultural Characteristics of the Early Classic

Finally, the Early Classic might be defined in terms of the cultural or social changes new in, or unique to, this period. Fahsen (1995) proposed that one change characteristic of the Early Classic was the institution of divine kingship. However, the newly discovered murals at San Bartolo show in clear and elegant style, a monarch ascending a scaffolding to take his place on the throne, suggesting an earlier origin for this political structure. Another suggested innovation is the rise of distinct burial patterns

according to social status, an innovation which has also been pushed back into the later Preclassic in light of later discoveries (Grube 1995:1).

Linked to the evident rise of an elite class prior to the beginning of the Early Classic, Grube also notes that, at least in retrospective references, most of the founders of the various Late Classic dynasties came to power during the Early Classic. The Tikal founder Yax Ehb Xook is estimated to have ruled near the end of the first century AD. Caracol's Te' K'ab Chaak is said to have reigned around about AD 331, and Yaxchilan's founder is also placed around the middle of the fourth century. The famous founder of Copan, Yax K'uk' Mo', as well as Palenque's founder K'uk' Balam I can be placed in the fifth century. This suggests that, at least according to the Late Classic Maya (since many of these rulers are mentioned retrospectively), the Early Classic was a period of great founding rulers.

Mathews' (1985) study of Early Classic monuments also correlates the Early Classic the beginning of widespread production of inscribed stone monuments, though earlier examples make this a change of degree, and not kind.

Because the focus of this study is on the *language* of the Early Classic, linguistic factors for delimiting the Early Classic could be considered primary. This study takes into account only those early inscriptions that provide legible linguistic material. The earliest inscriptions with intelligible linguistic data are from around the third century AD, which will be the *de facto* starting point for this linguistic description. A logical cutoff date for the end of the Early Classic Period is more difficult to determine. The point chosen, 9.10.0.0.0 in the Maya Long Count, is convenient as a period ending according to the Maya calendar and because it encompasses the scribal lacuna of the 'hiatus'.

Linguistically, however, this cutoff date does not correlate with any significant change. The closest innovation linguistically is the introduction of the Chontal loanword *-wan*, a positional intransitive marker (this category will be discussed below), which is first attested in the glyphic corpus at the western site of Tortuguero on 9.10.18.0.0.0, approximately 18 years after this cutoff date (Hruby and Child 2004).

1.7 Political Geography of the Early Classic

Provenanced Early Classic hieroglyphic texts come from a total of 53 archaeological sites located in parts of modern day Guatemala, Mexico, Belize, and Honduras. Twenty-three of these sites have inscriptions as early as the Eighth Baktun (or earlier, in the case of San Bartolo). Sixteen of these sites do not have any dateable inscriptions until the first part of the Ninth Baktun (9.0.0.0.0 to 9.5.0.0.0). Only 12 sites have their earliest inscriptions from the final portion of the Early Classic, generally known as the 'Hiatus'. Figure 2, below, based on the map by Sharer (1994:Fig. 1.1), with sites marked and labeled by the author, summarizes the geographic distribution of these sites with respect to the earliest known inscription from each site. See Proskouriakoff (1950:6) and Mathews (1985:27-30) for similar maps with slightly different foci.

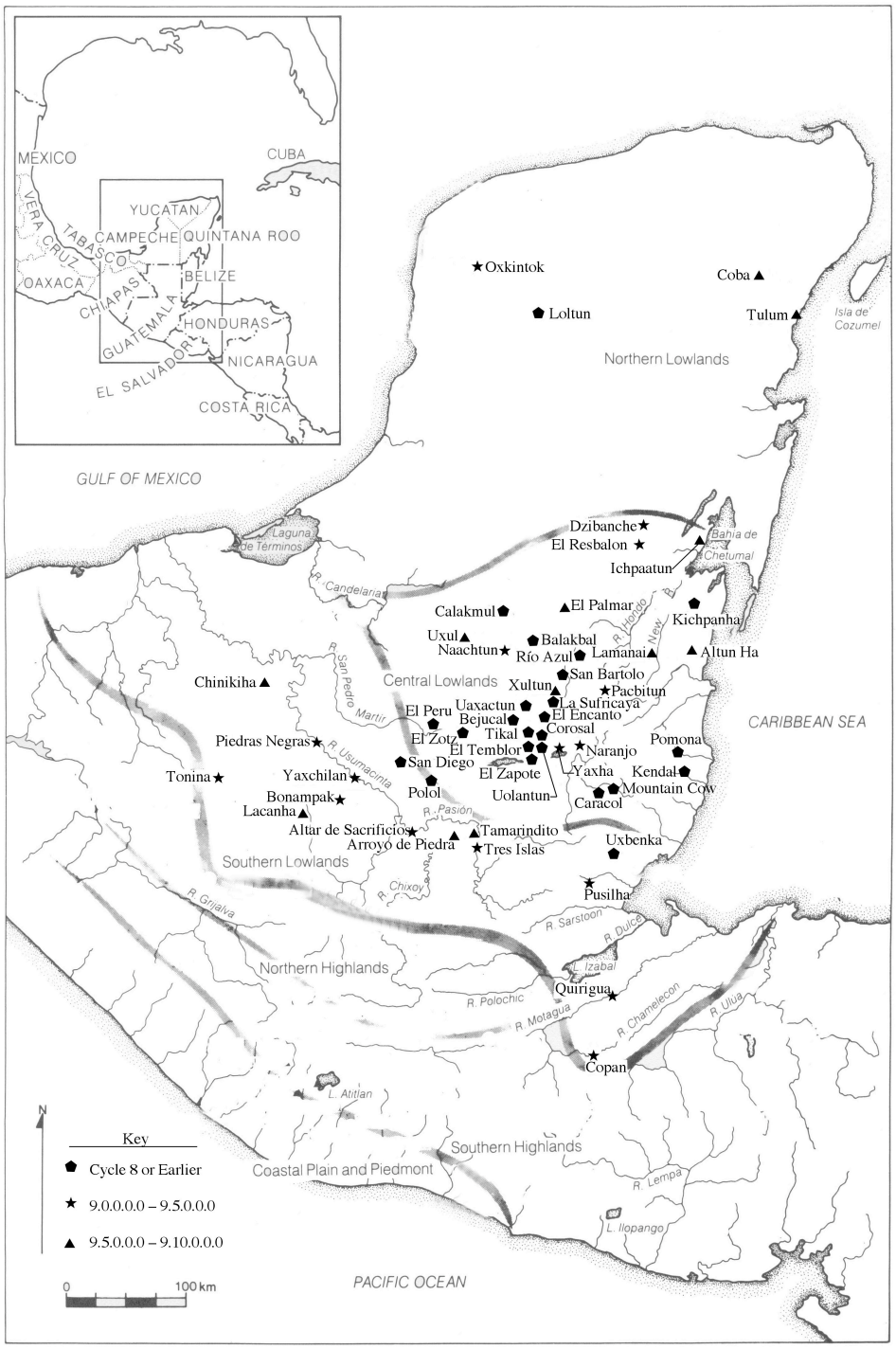


Figure 2. Geographic Distribution of Early Classic Sites with Hieroglyphic Texts After Sharer (1994:Fig. 1.1), sites by author.

Each site in Figure 2 is marked according to the time period of its earliest text. This map clearly shows the centrality of Tikal through the Early Classic, particular during

Cycle Eight. Most of the inscriptions that date to the Eighth Baktun (with some notable exceptions) cluster around its immediate environs. Several distant early sites, such as Loltun, in the Yucatan Peninsula, make the picture slightly more complex.

The prominence of Tikal in the Early Classic glyphic record can also be seen in the simple number of provenanced inscriptions recovered from each site. Figure 3, below summarizes this information.

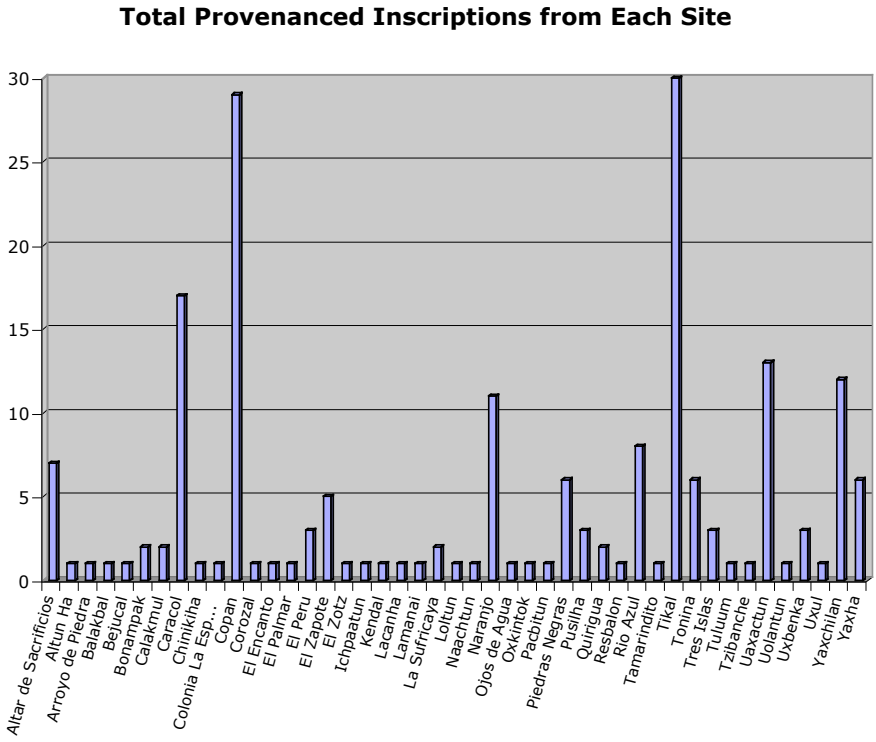


Figure 3. Total Number of Early Classic Inscriptions Produced Per Site.

Tikal, with 30 known and provenanced Early Classic inscriptions still holds the record. Surprisingly, however, Copan, with 29 inscriptions, is virtually as productive as Tikal, in spite of the fact that the earliest inscription from Copan, the Motmot Floor Marker, associated with the cities founder, Yax K'uk' Mo', and probably commissioned by his son (Martin and Grube 2000), dates to AD 435. Even with a two hundred year head start, Tikal is almost eclipsed by the comparatively late-rising power, Copan.

Other interesting patterns can be noted with respect to when each site produced its monuments. Figure 4 summarizes the numbers of inscribed monuments known for each Early Classic site during each K'atun, starting with 8.12.0.0.0 and ending with 9.10.0.0.0.

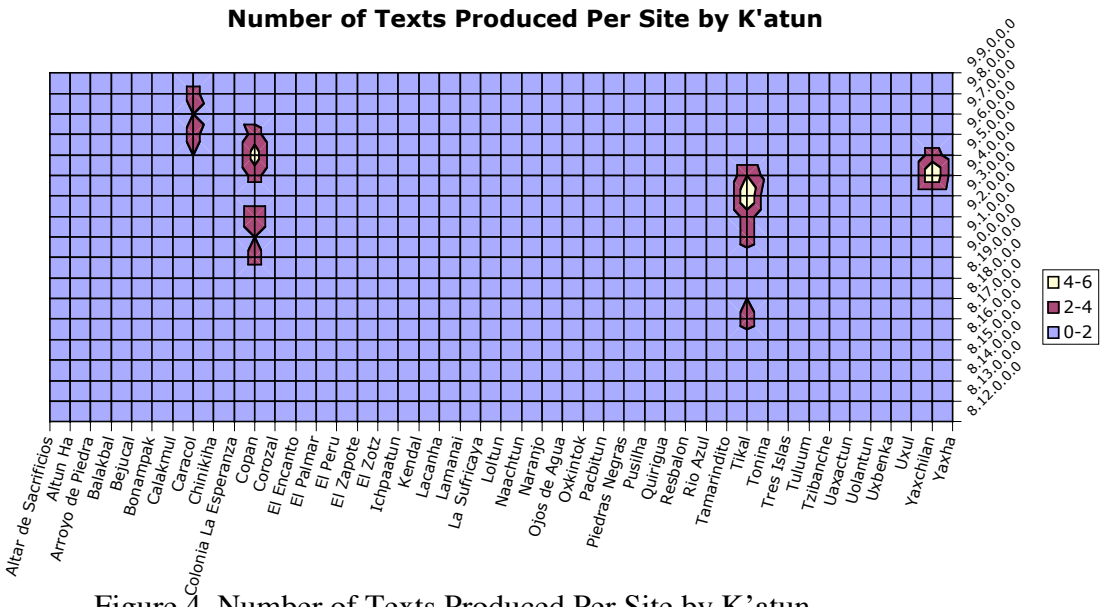


Figure 4. Number of Texts Produced Per Site by K'atun

Figure 4 reveals several sudden and temporary climbs in production over the course of the Early Classic at four sites. Two different surges in production can be seen at Tikal—a mild jump during K'atun 17 of Cycle 8, and more drastic one during the third and fourth K'atun's of Cycle 9. The rulers responsible for the first spike in text production were Chak Tok Ich'aak I and his successor (but not son) Yax Nuun Ayiin I (Martin and Grube 2000:32). The second period of productivity, from 9.1.0.0.0 through 9.4.0.0.0, included the reigns of Siyaj Chan K'awiil II, his son K'an Chitam, and his grandson Chak Tok Ich'aak II, as well as some texts apparently commissioned by the 'Lady of Tikal' (Martin and Grube 2000, Martin 1999).

During the first portion of the Ninth Baktun, Copan's text production seems to mirror that seen in Tikal. During the first two K'atuns of Cycle 9, Copan undergoes its first surge of text production under the auspices of the son of Copan's founder, known as Popol Hol. At the highpoint of Tikal's productivity, Copan goes through a temporary lag in production, which then picks up in the fifth K'atun, just as Tikal heads into the famous 'Hiatus'.

The other two sites that show temporary bursts of productivity are Yaxchilan and Caracol. Yaxchilan's productivity, limited to the fourth and fifth K'atuns of Cycle 9, is roughly contemporary to the final Early Classic fluorescence of Tikal. In fact, twenty-one of the provenanced Early Classic inscriptions date to the fourth K'atun of Cycle 9, making it the most productive K'atun period of the Early Classic. Caracol differs slightly from the other three sites mentioned here. The peak text production at Early Classic

Caracol occurs during the sixth and eighth K'atuns of Cycle 9, about two decades after the other sites had finished their temporary surges in productivity.

1.8 Sketching Early Classic Grammar

The following grammatical description is divided into three sections based on chronology. The first section is a description of the linguistic features found in texts which date prior to the end of the Eighth Baktun, which occured on 11 December AD 435. The second section describes those features which appear for the first time during the 99 years between 9.0.0.0.0 (AD 435) and 9.5.0.0.0 (AD 534). The last section covers those features which are not attested until the very end of the Early Classic, between 9.5.0.0.0 and 9.10.0.0.0 (AD 534 to AD 633). The dividing lines between each section are, like the division between Early and Late Classic, falsely precise (down to the day). But, with the understanding that the finely drawn line should be a broad grey band, they are useful divisions, as each time period can be generally characterized by the types of features introduced into the corpus during that span. The divisions are also useful because they divide the corpus into three approximately equal portions.

The first group of texts includes the earliest known example of Maya writing, a recently discovered painted text from San Bartolo, dated to approximately 300 BC (National Geographic, Feb. 2006), as well as several others that probably date between about 100 BC and AD 100. However, in practice, very little can be said of the linguistics of these early texts, which are almost entirely unreadable. The period of time from 435 to 534 is shorter, but it encompasses a gradual increase in monument production, which peaked near the 9.4.0.0.0 k'atun ending, so that the number of texts included in this

section is greater than the previous. The last section includes some of that Early Classic productivity, but also includes a period of sharp decline in the production of monumental inscriptions, known as the ‘Hiatus’.

Chapter 2 - Cycle 8 Grammatical Sketch

2.1 INTRODUCTION

When dealing with the earliest Maya texts as sources of linguistic data, the researcher encounters two major obstacles: the overwhelming scarcity of texts and the often-stubborn opacity of those texts that survive. The unrelenting passage of time dictates that fewer early texts are likely to survive. In addition, it seems clear that the cultural and religious practice of inscribing stone monuments, by far the medium most resistant to the onslaught of age and the elements, and the focus of this study, was only beginning to surface during the second and third centuries AD. In other words, another reason for the scarcity of early monuments is the simple fact that fewer were made. That these texts are generally more resistant to decipherment is likely a consequence of their rarity (see Houston and Coe 2003). In spite of this, around 50 texts have been identified that are dateable before the end of Baktun 8 on 11 December, AD 435. Thirty of these are large stone monuments, generally stelae, that can be dated with a fair degree of confidence because of extant calendric material on the monument itself. Several other monuments and portable objects can be confidently placed during the 8th Baktun based on glyphic and sculptural style. However, as noted in the introduction, stylistic dating is often much less accurate than other methods. For discussion of many of the portable objects of this time period, see Mora-Marin (2001).

Tables 2-4 below list the inscriptions that are included in the corpus of 8th Baktun texts. In this corpus are several Preclassic texts that are, for the most part, undeciphered, and quite possibly undecipherable (see Houston and Coe, 2003). The earliest of these is the text recently found in the excavations of San Bartolo which dates to approximately

300 BC, many of the Preclassic portable texts, the San Bartolo Mural texts (Saturno et al. 2005), and the Antwerp Stela (Boot 2006) date to around 100 BC. All of these texts are technically from Baktun Seven. As they are, for the most part, illegible, they have little bearing on the linguistic analysis below. In some cases, however, legible glyphs are cited from these texts as earliest occurrences of a particular lexical or grammatical item.

In Table 2, inscriptions are ordered chronologically to the extent to which I, or others, have been able to date them. Long Count dates in parentheses are reconstructed either by external stylistic factors, or internal mention of dates of significant rulers, or both. Table 3 includes those texts that can stylistically be attributed to the 8th Baktun, but for which a more precise date is impossible. Table 4 lists all of the Preclassic texts, including those that can be dated with some confidence. Because many of the pieces included in the second and third tables are rather hard to attach a unique descriptive name to, I have included the number under which they are found in the master list of Early Classic inscriptions in appendix I, which also provides information about published photographs or drawings for these texts.

DATEABLE 8 BAKTUN TEXTS

Site	*Name*	*Long Count*	*Gregorian Date*
Unknown	Hauberg Stela	(8.7.17.14.4)	AD 197?
Tikal	Stela 29	8.12.14.8.15	8 July 292
El Encanto	Stela 1	(8.13.?.?.?)	Between 305 and 308 AD
no Loltun	Cliff Carving	(8.14.0.0.0)	AD 317
Tikal?	Leiden Plaque	8.14.3.1.12	17 Sept. 320
Uaxactun	Stela 9	8.14.10.13.15	11 April 328
Uaxactun	Stela 19	8.16.0.0.0	3 Feb. 357
Uaxactun	Stela 18	8.(16).0.0.0	3 Feb. 357
Corozal	Stela 1	(8.16?.?.?.?)	Around AD 359
Tikal	Stela 26	(8.16.?.?.?)	AD 360-378
Tikal	Stela 39	(8.17.0.0.0)?	AD 376
Uaxactun	Stela 5	8.17.1.4.12	16 Jan. 378
El Zapote	Stela 4	(8).17.2.5.3	AD 379
Tikal	Altar 1	(8.17.2.16.17)	AD 379
Tikal	Stela 4	(8.17.2.16.17)	AD 379
La Sufricaya	Stela 6	8.17.(10).9.9	7 Mar 387
Rio Azul	Stela 1	8.17.16.12.(2)	AD 393
Bejucal	Stela 2	8.17.17.0.0	24 July 393
Tikal	Stela 18	(8.18.0.0.0)	AD 396
Uaxactun	Stela 4	(8.18.0.0.0)	AD 396
Unknown	Bone Tubes-NY	8.(18.4.13).19	23 Mar 401
Caracol	Stela 20	8.18.4.4.14	19 Sep 400
El Zapote	Stela 6	(8.18.9.15.5)	AD 406
Balakbal	Stela 5	8.18.10.0.0	17 May 406
El Zapote	Stela 1	8.(18).10.(4).9	14 Aug 406
Tikal	Hombre de Tikal	(8.18.10.8.12)	AD 406
Uolantun	Stela 1	8.18.13.5.(11)	20 Aug 409
Tikal	Stela 28	(8.19.0.0.0)	AD 416
El Peru	Stela 15	(8.19.0.0.0)	AD 416
Unknown	Belmopan Stela	8.19.(0.0).0	25 Mar 416
Tikal	Marcador	(8.19.0.0.0)	AD 416
no Uaxactun	Stela 17	8.19.0.0.0	25 Mar. 416
Rio Azul	Tomb 7 Mural	8.19.?.?.?	21 Oct 418
La Sufricaya	Stela 5	8.19.6.8.5	6 Aug 422

Table 2. Dateable Texts from the 8th Baktun

UNDATEABLE 8 BAKTUN TEXTS

Site	*Name*
Tikal	Mundo Perdido Vase
Caracol	Stela 23
Kendal	Earflare
Rio Azul	Jade Mask (AKA Pheonix Mask)
Uxbenka	Stela 11
Uxbenka	Stela 18
Uxbenka	Stela 21
Unknown	Pearlman Conch
Unknown	Conch Trumpet
Unknown	Jade Celt (Schele 6908)
Unknown	Jade Turtle
Unknown	K1285 Pot
Unknown	Shell Gorget
Unknown	Early Celt 1
Unknown	Bagaces Mirrorback
Unknown	Early Celt 2

Table 3. Undateable 8th Baktun Texts

PRECLASSIC TEXTS

Site	*Name*
Kendal	Axe Head
Kendal	Effigy Shell
Kichpanha	Bone Bloodletter
Mountain Cow	Incised Celt
San Diego	Cliff Carving
Pomona	Jade Flare
San Bartolo	Earliest Text
San Bartolo	Mural Texts
Unknown	BMA Mask
Unknown	DO Jade Pectoral
Unknown	Cleveland Plaque
Unknown	UNP clamshell
Unknown	JM Spoon
Unknown	Antwerp Stela

Table 4. Preclassic Texts

Below I will discuss the morphological system attested in inscriptions that date prior to the end of the Eighth Baktun. Though it would have certainly been impossible to decipher without later inscriptions, the heart of the grammatical system of Classical Ch'olti' is already clearly present, even with the extremely limited corpus, by the end of the Eighth Baktun. The attested morphological system will be described in detail below.

2.2 PRONOUNS

I will begin this discussion of the various specific elements in the grammar of Classical Ch'olti' with the most central morphological paradigm, the pronominal system.[2] As mentioned in the introduction, pronominal inflection in Classical Ch'olti' follows a so-called 'straight ergative' pattern on verbs: subjects of intransitive verbs and objects of transitive take absolutive pronominal suffixes, while subjects of transitive verbs take ergative pronominal prefixes. In other words, Classical Ch'olti' has two sets of pronouns: a set of absolutive pronouns, and a set of ergative pronouns. The ergative pronouns are also used to signal possession when affixed to nouns. The pronominal system is much like its descendant, Colonial Ch'olti', which has the following pronominal paradigm:

	ERGATIVE PRONOUNS		**ABSOLUTIVE PRONOUNS**	
	Singular	Plural	Singular	Plural
1st Person	*in- / inw-~w-*	*ka- / kaw-*	*-en*	*-on*
2nd Person	*a- / aw-*	*i- / iw-*	*-et*	*-ox*
3rd Person	*u- / uy-*	*u- / uy-...(ob)*	*-Ø*	*- Ø(ob)*

Table 5. The Colonial Ch'olti' Pronominal Paradigm

[2] For more discussion of the pronominal systems of Mayan languages, see Robertson (1980), Bricker (1981), Quizar and Knowles (1988), and Quizar, (1994).

The similarities between Colonial and Classical Ch'olti' can readily be seen in their respective pronominal systems. Stuart (2005) gives the following pronominal system for Classical Ch'olti'. I have included forms, marked with an asterisk (*), that are not attested in the glyphic corpus (here including Late Classic and Postclassic sources). In these cases, the form given is that found in Colonial Ch'olti'. I have also put parentheses around both uses of the suffix *-oob*, as it is clearly an optional plural marker.

	ERGATIVE PRONOUNS		**ABSOLUTIVE PRONOUNS**	
	Singular	Plural	Singular	Plural
1rst Person	*in- / *w-*[3]	*ka- /* kaw-*	*-een*	**-on*[4]
2nd Person	*a- / aw-*	**i- / *iw-*	*-at*	**ox*
3rd Person	*u- / y-*	*u- / y-...(-oob)*	*-Ø*	*(-oob)*

Table 6. The Classical Ch'olti' Pronominal Paradigm

During the Eighth Baktun, however, only the third person pronouns come into play. Note that these pronouns distinguish person and number, but not gender. Thus the phrase *u-kakaw* could be translated as 'his cacao', 'her cacao', or 'its cacao', depending

[3] The more common 1st Person Ergative Prevocalic morpheme in Colonial Ch'olti' is *inw-*. However, the *w-* allomorph is also attested in the Colonial Ch'olti' record in this example:

> t*uyanil a k'ahn-a t-u-pat w-anima, t-u-pat ixte in-baktal,*
> ALL • LEVATIVE • TO.WANT/TO.NEED-PASS • PREP-ERG3-BACK • ERG1SG.PV.IRREG-SOUL • PREP-ERG3-BACK • THEN • ERG1SG-FLESH
> 'all that is needed for my soul, for my body.'

For the language of the Classic inscriptions, a prevocalic *w-* is more likely as the archaic form. Neither has been identified in the Classic corpus.

[4] John Robertson (personal communication) notes that the plural absolutive pronouns might well have had glottalized vowels: *-o'n, -o'x,* and *-o'b.*

on the context. The ergative pronouns also have predictable allomorphy: before vowel-initial words, these pronouns have a glide *w* for first and second person, and *y* for third person. The only difference between the third person pronouns noted above for Colonial Ch'olti' and those attested in Classical Ch'olti' is that in Classical times, the third person prevocalic variant was a simple glide *y-*, where as the Colonial version had both a vowel and a glide, *uy-*.

The importance of the pronouns morphologically is confirmed by the fact that one of the earliest legible grammatical morphemes in the Maya hieroglyphic inscriptions is the third person ergative prefix *u-*. Distributionally, this prefix plays an important role in determining the linguistic function of elements of an inscription. As mentioned previously, the ergative pronoun is only used to reference the agent of a transitive verb or the possessor of a nominal phrase. The earliest contexts for this morpheme involve the latter possessive function. The *u-* prefix is attested on several early or pre-Classic portable objects, such as the Brooklyn Museum of Arts Jade Mask. It shows up on virtually every dated monumental inscription that includes more than just a Long Count date. Thus, while it does not show up of Tikal Stela 29, it is attested on El Encanto Stela 1, which Martin (2000) dates to between AD 305 and 308. The first dated attestations of the prevocalic allomorph of the third person ergative prefix, *y-*, are also very early. It is found on the later Caracol Stela 23, dated to between AD 361 and AD 420 (Martin and Grube 2000), and Bejucal Stela 2, from AD 393. It also appears to be attested on several Preclassic portable objects, including the Dumbarton Oaks Jade Pectoral, and the Hatzcap Ceel Celt. In these early texts it is always in the phrase [ya-AK'AB?] *y-ak'ab* 'his/her/its darkness'.

As mentioned previously, according to the ergative-absolutive paradigm followed in Classical Ch'olti' for pronominal inflection, the other function filled by ergative pronouns is to reference the agent of a transitive sentence. This function for the ergative pronoun is not attested until much later than the possessive. The first attested transitive sentence (on which more below) is found on Tikal Stela 39, which dates to approximately AD 376.

Unsurprisingly, considering the formal genre of most Classic Maya texts, first and second person pronouns, whether ergative or absolutive are almost entirely absent from the Early Classic corpus. The sole possible exceptions, both on early monuments from Copan, will be discussed in the next chapters.

2.3 VERBS

The verbal system attested in the hieroglyphic script has received more attention in the literature than any other aspect of the grammar, with good reason. The function of verbs within a proposition is to dictate the relationships between the main nominal elements of the sentence and to describe the nature of that relationship. In some languages, information about the structural relationships in a sentence is encoded on nouns, adjectives, and even prepositions. In Classical Ch'olti', almost all of the morphologically encoded information about structural relationships within a proposition is on the verb. A clear understanding of the verbal complex provides a wealth of information about the associated nominal arguments.

In Classical Ch'olti', as with all Mayan languages, verbal roots are traditionally divided into three major classes: transitive roots, intransitive roots, and positional roots

(Houston et al. 2000; see Coon 2004 for another analysis). These classes are defined by their affixation; while almost every verbal root can be used in both transitive and intransitive contexts, the affixes used in each case differ from class to class. Furthermore, transitive and intransitive verbs can be derived from nouns and adjectives (which are, for the most part, not distinguished morphologically in Mayan languages-see Houston et al. 2001) with the addition of yet another set of affixes. While we can assume similar complexity in the verbal system of 8th Baktun Classical Ch'olti', the attested system is much simpler.

2.3.1 TRANSITIVE ROOTS

Several transitive roots are attested on monuments prior to the start of the 9th Baktun. These are summarized below.

8TH BAKTUN TRANSITIVE ROOTS

k'al	'to bind'	Uaxactun Stela 18
tz'ap	'to plant'	Bejucal Stela 2
ch'ak	'to cut'	Bejucal Stela 2
muk	'to bury'	Balakbal Stela 5
k'a'	'to end'	Balakbal Stela 5
ch'am	'to take'	Hombre de Tikal
tzutz	'to finish'	Uaxactun Stela 4

Table 7. 8th Baktun Transitive Roots

However, of these roots, only *tzutz* is found in transitive sentences until after the end of the 8th Baktun. Tikal Stela 39 provides the first clear transitive sentence from a transitive root. Spelled [u-TZUTZ-wa] *u-tzutzuw* 'He finishes it', it displays the appropriate ergative prefix, referencing a third person agent. The syllable [wa], in this case, signals the transitive suffix of transitive roots, *-V_1w*, in which the vowel matches the

vowel of the root. Bricker (1986) first identified this important suffix on active transitive phrases in the script, a pattern Wald (1994) elaborated on. The same vowel harmonic suffix can be seen in Colonial Ch'olti', though by Colonial times, the final glide appears to have been lost.

*u-**kol-o** on*
ERG3-TO.FREE-WA • ABS1PL
'He frees us.'

*noh-noh ya'-il a-**muk-u** u-menel ka-tahnal*
BIG-BIG • PAIN-VL • ERG2SG-TO.BURY-WA • ERG3-BY • 1.PL.ERG-SIN
'You endured great pain because of our sins.'

*ma naik a-**k'as-a** u-tak-ya Dios taka ixte*
NEG • OPT • ERG2SG-TO.BREAK-WA • ERG3-SEND-NOM.AP • GOD • WITH • THEN
'Do you ever break the commandments of God?'

In each of these cases, the CVC transitive root is affixed with a vowel harmonic suffix for use in a transitive sentence.

The forms of the several other transitive roots found in the 8th Baktun demonstrate some of the productivity of the inflectional system. The other transitive roots are found with either the bipartite passive *-h-...-aj*, or the vowel harmonic suffix *-V_1y*, which, as shown by Hruby and Robertson (2001), was in the process of transitioning from a passive to a mediopassive function during the Early Classic.

2.3.1.1 THE CVC PASSIVE *-H-...-AJ*

The *-h-...-aj* passive, first noted in the script by Victoria Bricker and Linda Schele (Schele 1982, Lacadena 2004), provides an interesting example of both infixation and a bipartite morpheme. The *-h-* is infixed between the vowel nucleus and the final consonant of the root in the template CVhC. Because of its proximity to the vowel nucleus, this infix has also been analyzed for Ch'olan languages as an aspirated quality on the vowel,

rather than a separate phoneme (see Coon, 2004 for this analysis with Ch'ol). This suprasegmental analysis of the infixed *-h-* is somewhat consistent with its status in the hieroglyphic script, which is generally very precise in recording all of the phonemes of words. The script does not appear to record vocalic qualities such as lengthening, glottalization, and aspiration in the same way. All of these are perhaps best seen as suprasegmental, thus explaining their unique treatment in the Classic Maya orthography (for a discussion of conventions used to capture these features see Houston et al. 1998, Wichmann 2004, and Robertson et al. 2004).

The bipartite nature of the passive of transitive roots is clear from the fact that the *-aj* suffix is elsewhere a generic intransitivizer (discussed below—see Lacadena 2003), whereas when it is affixed to transitive roots, it is clearly passive. The presence of an infixed *-h-* (not specified orthographically) can be reconstructed since the only languages which use an *-a(j)* suffix on transitive roots are Colonial Ch'olti' and Modern Ch'orti' (both descendents of Classical Ch'olti'), and in both these languages, the passive with *-a(j)* is *always* accompanied by an infixed *-h-* (see Robertson et al. Unpublished). For example, Hull (2005) provides the following passive examples from modern Ch'orti' (note that there is no distinction between *h* and *j* in Ch'orti'):

> ***K'ujxa*** *e ak'ach umen e sajb'in.*
> 'Se le comió el pollo por la cadreja.'
> 'The chick was eaten by the weasel.'
>
> *E sitz'* ***chojka*** *aktana ub'ajner umen e ijch'ok.*
> 'El muchacho fue abandonado solo por la muchacha.'
> 'The boy was abandoned alone by the girl.'
>
> ***K'ojpa*** *ub'aker e chamen winik ta k'opot umen ajk'ampa'rob'.*
> 'El cadaver del hombre fue recogido en el monte por las autoridades.'
> 'The corpse of the man was picked up in the forest by the authorities.'

In each of these cases, the transitive roots *k'ux* 'to eat', *chok* 'to abandon', and *k'op* 'to pick up', were passivized with the infixation of an aspirate *j*, and suffixation of *-a*, certainly cognate with the *-h-...-aj* passive found in the script.

The earliest firmly dateable attestation of the *-h-...-aj* passive on a transitive root is on Bejucal Stela 2 with the root *tz'ap* 'to plant'. The text includes the Long Count date 8.17.17.0.0 or July 24, AD 393. The famous 'Marcador' at Tikal also provides an example of the passive, along with a Long Count date of 8.17.6.5.12 (AD 383). However, Martin and Grube (2000) list the dedication date for this text as AD 416, making it much later than the Bejucal Stela 2 example.

2.3.1.2 THE -V_1Y MEDIOPASSIVE

The earliest attestation of the -V_1y suffix, noted by Houston et al. (2000), is found on Balakbal Stela 5. This monument dates to May 17, AD 406 (8.18.10.0.0 in the Maya Long Count). Like the root transitive suffix, the mediopassive suffix copies the vowel of the root, adding the glide /y/. During the Early Classic, it attaches mainly to transitive roots. A possible exception to this, the common intransitive root *t'ab*, will be discussed below.

Where the function of the passive is to remove the agent from the core syntax of the sentence and put in its place the patient, the function of the mediopassive is to remove all trace of an agent, focusing on the action and the patient exclusively. In English, this distinction can be seen in pairs such as 'The door was closed (by Tom).' versus 'The door closed (*by Tom)'. In the first, passive, example, the focus is clearly on the recipient of

the action, the door. The agent (Tom) is demoted to a peripheral and optional prepositional phrase. In the second, mediopassive, example, the door is still the focus of the sentence, but the agent (Tom) is entirely removed, as evidenced by the ungrammaticality of '*The door closed by Tom. (with the meaning 'Tom was the one who closed the door.')'. On a continuum, the mediopassive is semantically closer to an intransitive sentence than a passive is. It is unsurprising, then, that this would come to mark certain types of intransitive roots, such as the root *och* 'to enter', in the phrase *ochoy* 'It entered', by Colonial Ch'olti'.

2.3.2 INTRANSITIVE ROOTS

Intransitive roots, in addition to their morphological behavior, can be semantically defined. An intransitive verbal root only involves one entity in the action it expresses. For example, in several Ch'olan-Tzeltalan languages, including Tzeltal, Tzotzil, Ch'ol, and Chontal, the word *way* is an intransitive root meaning 'to sleep'. Because the act of sleeping logically only involves one person, a sentence using this verb will only need one argument, or core associated noun phrase. The intransitive root category has far fewer members than the other verbal categories in many modern Mayan languages (see Haviland 1994:700 regarding Tzotzil and Coon 2004:83 regarding Ch'ol). The same is true in the glyphic corpus. Prior to the start of the 9th Cycle, the only firmly dated intransitive roots are *hul* 'to arrive' and *t'ab* ' to ascend'.[5] Unlike the transitive roots

[5] Another possible intransitive root, *uht* 'to occur', differs from a standard intransitive root in having a non-CVC form. Although it is only used in intransitive contexts in the glyphic corpus, John Robertson (personal communication) notes that it is possibly a

discussed earlier, these roots tend to keep their root valency when used in hieroglyphic inscriptions, meaning that they are less likely to be derived from intransitive verbs into transitive ones. Although suffixes exist in related languages that derive transitive verbs from intransitive roots (as with the *-es* causative mentioned earlier for Colonial Ch'olti'), no such suffix has yet been identified in the glyphic corpus.[6] This underscores the value placed on intransitive structures in the genre of Classic monumental inscriptions.

2.3.2.1 THE INTRANSITIVE ROOT *T'AB*

The earliest attestation of a root intransitive could be the verb currently read *t'ab* on the Preclassic Antwerp Stela, described by Boot (2006).[7] The morphology on this example is opaque, but Boot identifies it as a representation of a hand, and proposes that it is a variant of the syllable [ye], which could spell the suffix *-eey*, an early form of the

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fossilized form involving the Common Ch'olan-Tzeltalan passive -h-. Under this analysis, the root *ut* would have been a Common Ch'olan-Tzeltalan transitive root.

[6] Zender (1999: footnote 48) tentatively advances the idea that the spelling [yu-k'e-sa] *y-uk'ees* 'trumpet', attested on the Early Classic Pearlman Conch, might involve this transitivizing suffix. However, the causative suffix in question is not generally used to nominalize, making the *-es* causative an unlikely explanation for this particular case.

[7] The question is mainly regarding the syllable onset /t'/. A syllabic form of the CV syllable [t'a] is not yet been firmly identified. One possibility, pointed out to me by Stephen Houston, is on Ikil Lintel 1:A2. The following VC of this word is clearly *ab*, due to the occasional complementation with the syllable [ba]. This makes the root *t'ab* a very likely reading.

intransitive past tense marker *-iiy*, discussed below. Identifying the glyph in question as a hand is tenuous. Identifying this hand as the syllable [ye] is even more so. But if true, it would show the root *t'ab* as an intransitive, consistent with the morphological class that to which *t'ab* belongs in related languages. As noted earlier, most later examples show *t'ab* with the *-V_1y* mediopassive suffix which otherwise affixes only to transitive roots during the Early Classic.[8]

Colonial Ch'olti' displays the same form *t'abay*, as shown in example (a), below. However, it is used elsewhere in the Colonial data as a clearly intransitive root. For example, it is found with the intransitive nominalizer *-el*, in (b) below, and in example (c) with a causitive suffix *-es*, which derives transitives from intransitives, in the nominal antipassive phrase *aht'abesya* 'he who cause to ascend'. It is important to remember, as mentioned earlier, that by Colonial times, the *-V_1y* suffix had been modified in function, allowing it to affix to certain intransitive roots. The comparative data suggest that *t'ab* has always been an exclusively intransitive root. If this is true, these early occurrences of *-V_1y* affixed to an intransitive root would represent a Ch'olti'an innovation in the function of *-V_1y* which became much more generalized by Colonial times.

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[8] Other cases of *t'ab* without the *-V_1y* suffix are found on the Copan Motmot floor marker, likely the earliest inscription from the southern site of Copan, the Dumbarton Oaks Jade Pectoral, and the BMA Mask. In the Copan inscription, the *t'ab* logograph is suffixed by what appears to be the syllable [ka] and another, unknown element. On the DO Pectoral, the suffix is a 'hand' element, though its value is hard to assert confidently. The BMA Mask involves an apparent [ko]. prefixed syllable, what looks like the *t'ab* logograph followed by some sort of deity-head depiction.

(a) *t-u-cha'-te' winal a-kux-pah-el xa a-wut t'ab-ay et ti chan,*
PREP-ERG3-TWO-CL • FORTNIGHT • ERG2SG-TO.LIVE-MP-SAP.NOM • OR/AGAIN/IF • ERG2SG-FACE • TO.RISE-MP • ABS2SG • PREP • HEAVEN
'Forty days after you were resurrected, you ascended to heaven.'

(b) *u-t'ab-el ka-na' Santa Maria ti chan.*
ERG3-TO.RISE-SAP.NOM • 1.PL.ERG-MOTHER • HOLY • MARY • PREP • HEAVEN
'The ascenscion of our mother, Holy Mary, into heaven.'

(c) *machi ah-t'ab-es-ya t-a-ba ti chan?*
WHO • AGENT-TO.RISE-CAUSATIVE-NOM.AP • PREP-ERG2SG-SELF • PREP • HEAVEN
'Who is he who raises you to heaven?'

In modern Ch'orti', *t'ab* is also an intransitive root. The following examples from Hull (2005) show the root *t'ab* used intransitively with no derivational suffixes and that same root in a transitive context derived with the causative transitivizer *-se*.

(a) *E winikob' **t'ab'o'b'** ixo'b' tichan tu't e witzir.*
Los hombres subieron y se fueron arriba en el cerro.
The men went climbing up high on the mountain.

(b) *E ixik **ut'ab'se** upik twa' anumuy ta ja'.*
La mujer levanta su falda para cruzar el agua.
The woman raises her skirt to cross over the water.

2.3.2.2 THE INTRANSITIVE ROOT *HUL*

The other intransitive root attested in the Eighth Baktun inscriptions is *hul* to arrive'. This root is firmly deciphered and clearly and consistently an intransitive root. It is most commonly found as' Glyph D' in the so-called' Lunar Series'. The earliest example of this is most likely on one of a pair of bone tubes in a collection in New York (Stuart et al. 1999: figure 80), which bears the Long Count date 8.18.4.13.19, or 23 March AD 401. The morphology of *hul* will be discussed in more detail below in the section on tense in the hieroglyphic script, as this same verb phrase likely provides the earliest example of the intransitive past tense marker.

2.3.3 THE INTRANSITIVE SUFFIX *-I*

Houston et al. (2000) suggest another suffix relating to intransitives which deserves mention. They note that many of the suffixes used in intransitive contexts are signaled with syllabic signs of the form Ci, with the exception of the *-aj* passive (spelled with the syllable [ja]) and the *-laj* positional intransitive (spelled [la-ja]. For example, the common phrase, as found on Uaxactun Stela 4, [i-TUTZ-yi] could be read *i tzutzuyi*, rather than the assumed *i tzutzuy*, in which the /i/ in the syllable is not pronounced. This is consistent with other Ch'olan languages, including Chontal, and Colonial Ch'olti', which use an *-i* suffix as a simple marker of intransitive verbs, though the distribution of the morpheme in each language is slightly different.

One intriguing fact of the *-i* suffix in Classical Ch'olti' is that it appears to be dropped if another morpheme is immediately adjacent. The spelling [u-to-ma] *uhtoom* 'shall happen' attested on Naranjo Altar 1 consists of the intransitive verb *uht* 'to happen' and a future suffix (discussed later). In this case, the full syllabic spelling leaves little doubt that no such suffix was present. David Stuart (2005) mentions a similar spelling from a Late Classic text [hu-le-na], presumably signaling the root *hul* and the first person singular absolutive suffix *-een*. In Chontal Maya, the same distribution is found for the 'completive' intransitive suffix *-i*:

> "The perfective aspect of transitive roots is marked by
> either an *-i* or *-Ø* status suffix attached to the root. The
> choice of status marker depends on the person of the object.
> *The -i status suffix is used with third person objects, and*
> *the -Ø status suffix is used with first and second person*

objects." (Knowles 1984:72, italics added).

As mentioned earlier, the difference between third person objects and first and second person objects is that third person objects are marked with a phonetically null absolutive suffix, while non-third person markers are all pronounced. Knowles description for Chontal seems to fit the data from the Early Classic hieroglyphic inscription fairly well. In Ch'olti', this is not the case; an intransitive marker *-i* is present even when followed by a vowel initial morpheme. For example:

kakx-i et u-menel ti bihil,
TO.FALL • ABS2SG • ERG3-BY • PREP • ROAD
'You fell because of it (while) on the path.'

Unfortunately, a detailed discussion of this issue is beyond the scope of this thesis. A detailed study of this suffix in the modern languages might shed valuable insights on its possible use in the hieroglyphic script.[9]

2.3.4 TENSE

Another linguistic feature associated with intransitives in Classical Ch'olti' is tense. Much of the information about *when* events took place in the inscriptions is managed by the ever-present calendric information. This provides a substantial

[9] John Robertson (personal communication) notes that "the dropping of the *-ik goes back to Common Mayan, as e.g. K'ichee' x-war-ik 'he slept'; x-war Juan (or Xwan) 'John slept.' In very slow pronunciation, the -ik reappears." In light of this data, it could well be that the *-i* does not disappear in later Ch'olti'an because it has become unproductive, and is reanalyzed as being a part of the root.

framework in most texts with which to organize events temporally. Perhaps because of this, the inscriptions adopt a narrative style that Houston (1997) characterizes as the 'shifting now'. In this style, past events are told in the present tense. Past tense marking is reserved for embedded events that have taken place prior to the main narrated event. See Houston (1997), Stuart et. al. (1999), and Robertson et al. (2004) for more detailed discussion.

With respect to the tense/aspect of Classic Ch'olti', it is important to note that in Colonial Ch'olti', and its descendent Modern Ch'orti', inflectional tense/aspect markers are only found in intransitive sentences. For transitive verbs, context or adverbial phrases such as 'yesterday', ' three days from now', etc., provide any necessary clues for orienting events in time. From glyphic texts, it is clear that Classical Ch'olti' has this same imbalance. The only systematic tense distinctions are found in intransitive verb phrases.

The inflectional morpheme used to mark past tense on intransitives in the hieroglyphic script was *-iiy*, generally signaled with the syllable [ya]. In Eighth Baktun texts, a [ye] syllable is found in place of the [ya] spelling typical during most of the Classic Period. David Stuart (Stuart et al. 1999:102-104), who first noticed this early variation, suggests that the early spellings indicate the reconstructed sound change of long /ee/ to /ii/ in Ch'olan languages. Examples of this spelling given by Stuart mostly involve the root *hul* ' to arrive'. They are found on an incised bone tube in a private collection in New York, dated AD 401, on the 'Marcador' from Tikal, likely from AD 416, and on El Zapote Stela 5, which dates to 9.0.0.0.0, or AD 435. The earliest instance

of *-iiy* (spelled with a [ya] syllable) in the lunar series appears to be Copan Stela 63, which also dates to the Baktun ending 9.0.0.0.0.

Interestingly, this same suffix, often spelled with a velar spirant [ji-ya] is also found on distance numbers, which are clearly nominal, as early as Tikal Stela 4, from AD 396. If we are to see these suffixes as related, it appears that the verbal suffix was resistant to a phonological innovation that had already affected the same suffix in other contexts. Wichmann (in press) rightly highlights a need for further research on the linguistics of dates in Classical Ch'olti'. The fact that *-iiy* is found on certain nouns phrases hints at an earlier deictic clitic function. That this has since become inflectional is evidenced by the fact that, throughout the Classic period, *-iiy* cannot be used in transitive sentences, but only as a suffix to intransitive verbs.

2.3.5 PRESENT TENSE *I*

The present tense counterpart to *-iiy*, which is also restricted to intransitive verbs, is the particle *i*. This particle was prefixed to the verbal root to emphasize the immediacy or 'now-ness' of the act. While not all present tense intransitive sentences make use of this particle, no Early Classic examples have been identified in which both *i* and *-iiy* are used. The earliest attestation of this suffix is found on the 'Hombre de Tikal', which dates to 8.18.10.8.12, in the phrase [i-CHUM-ja] *i chuhmaj* 'Then he sits'.

2.3.6 POSITIONAL ROOTS

Positional roots, in their underived states, are best thought of as qualitative. They are not semantically transitive or intransitive, but can be used both transitively, in which the agent A causes a patient P to experience quality or state X, and intransitively, in

which a subject S simply experiences or adopts quality X. The famous Leiden Plaque gives us the first dated attestation of a positional root, *chum* 'sitting', used frequently to refer to the 'seating' of a new king as ruler. This act is intransitive, involving only the ruler in question, and the suffix *-laj* is attached to the root to indicate this. The positional intransitive suffix *-laj* was first recognized by Barbara Macleod (1987).

This example of the *-laj* positional intransitive suffix is the earliest attested occurrence of any Positional morphology. Another early attestation of *chum*, in an intransitive usage shows unique suffixation. Lacadena (2002) noted a Positional intransitive suffixed with the syllable [ja], rather than the expected [la-ja] on the 'Hombre de Tikal' text, a lengthy Early Classic text tattooed on the back of a husky, and now headless figurine. Caracol Stela 6 appears to attest the same suffix followed by a past tense morpheme *-iiy* (discussed below). CHUM-ji-ya *chuhm(a)jiiy*. Similar spellings have been noted in Late Classic texts from Tonina, though because Tonina is located in what is believed to have been a Tzeltalan speaking area, these examples may well be substratum features from the local spoken vernacular (Tzeltalan had an intransitive positional *-h-...-aj.*)

While too infrequent to substantiate any claims, it is possible, as Lacadena asserts, that the examples from Tikal and Caracol attest to an earlier stage in the linguistic history of Ch'olti'an, as described by Houston et al. (2000) in which the marker for intransitive positionals was **-h-...-aj.*

It is unclear if there are other positional roots attested during the 8th Baktun. The only deciphered candidate is the root *tz'ak* 'to join/complete'. However, unlike *chum*, this is never found in an intransitive context in the Early Classic. On the possibly early

Hauberg Stela (at H1), and on the Cleveland Plaque, we find the phrase [u-TZ'AK-bu-IL], a collocation common throughout the Classic period. As we will discuss later, the *-Vl* suffix here appears to act as a nominalizer. The syllable [bu] in this context is generally believed to represent the positional transitive marker *-bu* (see Houston et al. 1999). Because cognates with the root *tz'ak* are frequently positional roots in Mayan languages, this is unsurprising. The *u-* ergative prefix is also consistent with this interpretation, though with a nominalizing suffix, the *u-* ergative pronoun would be fulfilling its possessive function, and not referencing the agent of a transitive verb.

2.4 NOUNS

2.4.1 NOMINALIZATION WITH *-VL*

As mentioned just mentioned, the productive and problematic *-Vl* is attested on the Hauberg Stela in the difficult phrase [u-TZ'AK-bu-IL]. This phrase, with the ergative prefix *u-* could be a noun, or a transitive verb. The remainder of the inscription is somewhat unclear, making it difficult to absolutely discard a transitive analysis. On the Cleveland Plaque, it seems to be part of a 'successor of' statement of the form *RULER u-tz'akbuil PREVIOUS RULER*. This phrase is generally translated as 'Ruler X (is) the successor of Ruler Y'. In such contexts, it is best analyzed as a noun. This *-il* would be similar to the nominalizing *-el* in Colonial Ch'olti', except for the important fact that it attaches to transitive verbs, whereas the Colonial *-el* only attaches to intransitive ones. A particularly interesting example of this appears on an Early Classic celt, where we find the phrase [u-TZUTZ-IL], a phrase also found in the 9th Baktun on Uaxactun Stela 22:B4.

If read *utzutzil*, these texts would demonstrate the suffix -IL attached directly to a CVC transitive root.

Another explanation of this structure, however, is that the *-Vl* suffix is not functioning as a nominalizer in these cases, but that it is in fact affixed to an already nominalized form. This is suggested by alternations such as [tu-MUK] and [tu-MUK-IL] in expressions regarding tombs, from the CVC root *muk* 'to bury'. This would involve a process of bare-root nominalization, perhaps also involving vowel lengthening or vowel aspiration to signal the nominal form, to which the abstractive *-Vl* suffix would be affixed. This *-Vl* suffix, when affixed to nouns affects the semantics of the noun, making it more abstract, or emphasizing a partitive relationship to the whole (see Robertson et al. 2001). Since the nominalized form of any verb can also be seen as more 'abstract', there is a likely functional link between *-Vl* nominalizers and *-Vl* abstractives. If the *-bu* suffix is indeed a positional transitive marker, a bare-root nominalization account loses its appeal, as positional transitives, and derived transitives generally, cannot be used in this way.

In the eighth baktun, there is also some evidence for an *-al* nominalizing suffix. The 'Hombre de Tikal' text has an expression that can be read [CH'AM-la-TAJ] *ch'amal taj* 'the grasped torch'.[10] The much later Caracol Stela 22 has the clear syllabic spelling [tza-ya-li?], involving the root *tzay* 'to burn'. It is possible that this [li] syllable was read [IL] in this case, as a morphosyllable, and given the generally deteriorated state of

[10] Another possible analysis of this phrase would involve the *-Vl* positional predicate suffix. However, the absences of cognates in other Mayan languages that function as positional roots argues against this analysis.

Caracol Stela 22, this could even be the syllable [yi], giving the mediopassive *-V_ly*. However, one must also consider the possibility that the suffix in question here, and elsewhere is *-al*.

The suffix *-el* is also possibly attested in the Early Classic corpus as part of a frequently repeated phrase [yi-pi-ya-je-la] (Yaxchilan Lintel 47:B8-C1), which appears to alternate with [yi-pi-ya-ja]. Unfortunately its meaning and precise morphological composition are unclear. However, its similarity to the ubiquitous *-ahel* ending in Colonial Ch'olti', (i.e. *kuxpahel* 'becoming alive' from *kux* 'to enliven') is enticing.

In short, data exist which suggest that several *-Vl* nominalizing suffixes, perhaps even with different functions, may exist. Unfortunately, a serious investigation of this matter is beyond the scope of this thesis.

2.4.2 COMPOUND NOMINALIZATION

Another common process of nominalization found in the 8th Baktun is compounding. In this process, a verb is compounded with a noun, usually its object, to form a nominal. In this case, the sequence is always *verb+noun=noun*. The same process is widespread in Colonial Ch'olti' and Ch'orti', as seen in the following examples.

Ch'olti'	Ch'orti'
pas-kab	*pak-nar*
OPEN-EARTH	FOLD.OVER-CORN(STALKS)
'dawn'	'corn(stalk)-bending' (a nominal gerund)

Common examples in the hieroglyphic script, including *k'al-tuun* 'stone-wrapping', where noted by Lacadena (2003). Early Classic texts also provide compounded nominal phrases involving intransitive roots, such as *ochbiij* 'road-

entering', and positional roots, as found in common expressions referring to the 'seating' of a particular month (the twentieth day of the preceding month) *chum k'anasiiy*, 'The seating of K'ayab'. Another example of this positional compound nominalization can be found on Yaxchilan Lintel 11 in the frequently repeated expression CHUM-AJAW , presumably 'lord-seating'.

2.4.3 NOMINAL PREDICATES

As with most Mayan languages, Classical Ch'olti' lacked an overt copula (to be) verb. A complete sentence, as opposed to a simple noun phrase, carries an absolutive pronoun. As mentioned earlier, the third person absolutive pronoun is *-Ø*, an unpronounced null. In practice, this means that no distinction is made structurally between a nominal phrase and a stative or 'nominal' sentence. Thus *sak huunal*, in isolation, could mean 'white headband/diadem', or 'The headband is white.' Generally, the context makes it apparent which reading is more appropriate. When the phrase *sak huunal* immediately follows a verb, usually the passive form *k'ahlaj* 'it is wrapped', the only logical reading would be 'white headband.'

A more complicated example illustrates the fact that, in some cases, the distinction is simply not made, leaving the translator free to decide which translation sounds best in the target language. The frequent phrase *u baah ti X* can be translated either as 'It is his image doing X' or 'His image doing X', in which X is a verbal noun, such as *ch'ab* 'fasting, penance' or *ak'ot* 'dancing'. The general approach taken is to translate such passages as stative sentences unless they are clearly arguments of another verb. Needless to say, in English, we often label monuments and other works of art with noun phrases, and not full sentences. Since the more common European languages

generally have a copula, and therefore make a distinction not found in Mayan languages, translators might be well advised to consider the context of a particular passage when deciding if a stative sentence translation or a nominal 'label' is more appropriate.

2.4.4 ABSOLUTIVE NOUNS

Absolutive suffixes were first noted in the hieroglyphic script by Robertson, Houston, and Stuart (Houston and Stuart 1998, Stuart et al. 1999:14; Houston et al. 2001; Zender 2004:199-200). In many Mayan languages, certain nouns, particularly body parts, must either be possessed with an ergative prefix, or affixed with a morpheme emphasizing its 'unattached' status. The earliest example of this type of suffix appears on El Encanto St 1 at B11 (AD 305-308) which reads [BAAH-AJ]. It is significant that this spelling includes the suffix *-aj*, and lacks the usual ergative prefix. The same suffix is found on Tikal Stela 39 in the name Ehb Xook Baahaj. In both cases it is immediately followed by the phrase [u-HUN-TAHN?-na] 'the cherished one of...' emphasizing that the function of the lexical item in each case is as part of a proper name. This is a likely context to find reference to unassociated body parts that would, under normal circumstances, have a clear owner.

2.4.5 THE *AJ-* AGENTIVE

Another important morpheme associated with nouns is the agentive prefix *aj-*, together with the feminine agentive *ix-*. These can prefix to nouns, whether they be nominal roots, or nominalized through any of the methods mentioned above. The *ix-* prefix can be found on Calakmul Stela 114, the *aj-* prefix can be found on the Copan

Papagayo Stela, as well as many others. Robertson et al. (2001) have noted a form, which will also be discussed later, which involves nouns suffixed with the same sign (T12) used to signal the agentive prefix *aj-*. This can be seen on the Rio Azul Mask, and on Naranjo Stela 38. Robertson et al. suggest that this might also be functioning as an agentive.

These agentive prefixes are also attested in Colonial Ch'olti'. The *ix-* prefix can be seen in the term *ixch'ok* 'young women', from *ch'ok* generically means children. It is generally assumed that *aj-* is the masculine counterpart of *ix-*. However, as these data show for Colonial Ch'olti', *aj-* was, in fact, the generic agentive, which could refer to both male and female 'agents'.

natz' et ah-k'al-ya ti-ka-ba,
IND.PRO • ABS2SG • AGENT-TO.MAKE-NOM.AP • PREP-1.PL.ERG-SELF
'You are the maker of us.'

u-k'ot-el ka-na' Santa Maria taka Santa Isabel ah-il-ya t-u-ba
ERG3-TO.ARRIVE-SAP.NOM • 1.PL.ERG-MOTHER • HOLY • MARY • WITH/ONLY • HOLY • ISABEL • AGENT-TO.SEE-NOM.AP • PREP-ERG3-SELF
'The arrival of Holy Mary with Saint Isabel as witness (lit. seer) of her.'

In the first example, the referent of 'you' is God, in Catholic Doctrine, a male. In the second example, the referent is Saint Isabel, a female. The agentive *aj-* is used in both cases.

2.5 PREPOSITIONS

The glyphic language made use of only a handful of prepositions. In the 8th Baktun texts we find two true prepositional forms, *ta*, and *ti*, which seem to be more like free variant allomorphs of a single morpheme, rather than distinct lexical items, since they are found in identical contexts with no apparent shift in meaning. Other words that

are found performing the linking function of a preposition, such as *yit* and *tahn*, belong to a class of phrases known as relational nouns.

yit could possibly be composed of two morphemes, the prevocalic ergative pronoun *y-* and an unidentified nominal root *it*, perhaps related to the Common Mayan word for 'bottom'. *tahn* refers to the center or middle of something, and can often be glossed in English with the preposition 'in'. However, as a lexical item, it also mean simply 'chest'. Other nouns, such as *ti'* 'mouth', and *ohl* 'heart' are likely candidates for use as relational nouns. In short, relational nouns, whether possessed or not, can function as prepositions by linking an external argument into a larger phrase. This demonstrates another way in which, unlike English, Classical Ch'olti'an category boundaries were very flexible.

The generic preposition in Classical Ch'olti' during the Early Classic was *ta*, translatable, depending on context, as 'on', 'at', 'to', 'from', 'by', 'for', etc. The vowel /a/ is often deleted when this morpheme precedes the ergative pronoun *u-*, yielding *t-u-*. This is attested on the Hauberg Stela in the phrase [tu-K'UH-IL]. Interestingly, this is not a phonological process, but a morphological one, since there is no identifiable phonetic context which conditions the vowel deletion.

The preposition *ta*, in its full form, is found in front of a variety of vowel initial phrases. In addition, Tikal Stela 4, which dates to about two centuries later than the Hauberg Stela, seems to spell out the unreduced form [ta-u-BAAH] *ta ubaah*. The explanation of this might be in the function of each collocation. *tubaah* is, in fact, a type of compound preposition meaning simply 'to (a person)'. One could hypothesize then, that the unreduced for *ta ubaah* is unreduced because it refers to the literal meaning

'to/at/on his head', and not the 'grammaticized' preposition. Because of its exceptional nature, however, it might be best to consider the *ta-u-baah* example on Tikal Stela 4 an example of hyperanalysis on the part of the Classic scribe.

The variant form *ti* is also present in the early inscriptions, with its first attestation on the famous teotihuacan-style 'Marcador' (at F7). Both of the descendants of Classical Ch'olti' also show this variation between *ti* and *ta*. In Colonial Ch'olti', the preposition is almost exclusively *ti*, but a *ta* variant can be seen in rare examples, such as:

> *a-ch'am-a ka-baktal t-u-nak' Santa Maria,* ***ta*** *pehkahel u-menel Angel*
> ERG2SG-TO.TAKE-WA • 1.PL.ERG-FLESH • PREP-ERG3-BELLY • HOLY • MARY • IN • WORD • ERG3-BY • ANGEL
> 'You took our form in the womb of Saint Mary, according to the words from the Angel.'

> *ma ka u-k'ale-ob Confesar tuyanil winik chum-ul* ***ta*** *aw-otot xa aw-al-al xa machi xa.*
> NEG • YES.NO • ERG3-TO.MAKE-PL • CONFESSION • ALL • MAN • TO.BE-POS.VL • IN • ERG2SG.PV-HOUSE • OR/AGAIN/IF • ERG2SG.PV-CHILD-VL • OR/AGAIN/IF • WHO • OR/AGAIN/IF
> 'Does every man in your house make confession, whether it be your children or anyone else?'

> *ma ka ha'i-n ach kaw-ahaw-il Jesucristo chum-ul* ***ta*** *Santa ostia, chum-ul tama Santo calis?*
> NEG • YES.NO • DEICTIC-DEF.ART • EMPH • 1.PL.ERG.PV-LORD-VL • JESUS CHRIST • TO.BE-POS.VL • IN • HOLY • HOST/WAFER • TO.BE-POS.VL • IN • HOLY • CHALICE
> 'Is it not Jesus Christ himself that is in the holy host, that is in the holy chalice?'

In modern Ch'orti', a very different distribution is found. By far the most common form is *ta*. The form *ti* only appears as a fossil in compounds with consonant-initial ergative pronouns, such as the first person plural *ka: ti-ka-b'a* PREP-1ERGPL-SELF 'ours' (author's field notes).

Whether these forms truly were allomorphic variants in free variation during Early Classic times, or if they communicate a different fine-grained semantic nuance is unclear. It is even possible that the form *ta* represents a phonologically reduced form of

tahn, and, therefore, connotes containtership. However, the presence of both forms of the preposition, even at this early date confirms the archaic nature of the variation between *ta* and *ti* that is still hinted at in modern Ch'orti'.

Chapter 3 - Early Cycle 9 Grammatical Sketch

3.1 Introduction

The second group of texts to be considered in this study were inscribed between 9.0.0.0.0 and 9.5.0.0.0.0 in the Maya Long Count. This period started on December 11, AD 435. By that time the Maya had inscribed stone monuments, destined to survive millennia, with sufficient linguistic data to allow our modern scholars to discern the basics of the Classical Ch'olti' grammatical system. The basic lexical categories were all attested; the inflectional system demonstrated already a budding complexity. The defining features of Classical Ch'olti'an had been recorded.

During the subsequent ninety-nine years, comprising the completion of five K'atun cycles—9.0.0.0.0 to 9.5.0.0.0, the corpus of hieroglyphic texts would more than double, as would the inventory of derivational morphemes in an already complex system. This new complexity, however, was almost certainly not new to the language. As tempting as it is to draw conclusions about the spoken language from the scanty corpus of inscriptions (see, for example, Mora-Marin, Josserand, and Hopkins 2005; Mora-Marin 2004; and Wichmann, in press), in many cases, it simply cannot be done. Two assumptions about the relationship between written and spoken language that are essential for this type of theorizing are simply not valid.

The first is that innovations in the vernacular are always introduced into the written system within a certain span of time (say within two generations). The second is that any features found within a single written texts, would have also been contemporary

in the spoken vernacular. Dialectal variation in a written corpus is very different from dialectal variation in spoken vernaculars.

In terms of inscriptions, the century span from 9.0.0.0.0 to 9.5.0.0.0 was the apogee of the Early Classic tradition. More texts come from this span of time than from the previous or the prior section. Table 7 below lists the dateable inscriptions in approximate chronological order insofar as that order could be determined. Table 8 is a short list of those texts that cannot be placed more precisely than between AD 435 and AD 534. All of these texts were used to produce the following description of features that surface in the hieroglyphic corpus for the first time in surviving inscriptions from this time period.

DATEABLE EARLY 9TH BAKTUN TEXTS

Site	*Name*	*Long Count*	*Gregorian*
Calakmul	Stela 114	9.0.0.0.0	11 Dec. 435
Copan	Motmot Marker	(9.0.0.0.0)	11 Dec. 435
Copan	Stela 28	(9.0.0.0.0)	11 Dec. 435
El Zapote	Stela 5	9.0.0.(0.0)	11 Dec. 435
Copan	Stela 63	9.0.0.0.0	11 Dec. 435
Tikal	Stela 31	9.0.10.0.0	19 Oct. 445
Uaxactun	Stela 26	9.0.10.0.0	19 Oct. 445
Rio Azul	Tomb 12 Mural	(9.0.14.8.11)	18 Mar. 450
Tres Islas	Stela 3	(9.1.0.0.0)	28 Aug. 455
Copan	Papgayo Stela	(9.1.10.0.0)	6 July 465
Tikal	Stela 1	(9.1.10.0.0)	6 July 465
Tikal	Stela 40	9.1.13.0.0	20 Jun 468
AdS	Stela 11	(9.2.0.0.0)	15 May 475
Tikal	Stela 9	(9.2.0.0.0)	15 May 475
Tres Islas	Stela 1	(9.2.0.0.0)	15 May 475
Tres Islas	Stela 2	9.(2).0.0.0	15 May 475
Oxkintok	Str. 3C6, Lintel 1	9.2.0.0.0	15 May 475
Uaxactun	Stela 23	(9.2.0.0.0)	15 May 475
Tikal	Stela 13	N.D.(9.2.10+/-2KT)	AD 485 +/-40
Pacbitun	Stela 6	9.2.5.?.?	AD 475
Copan	Stela 24	(9.2.10.0.0)	AD 485
Copan	Altar K'	ND (9.2.10)	AD 485
Tikal	Stela 3	9.2.13.0.0	7 Mar. 488
Quirigua	Mon. 21(Stela U)	9.2.15.0.0	25 Feb. 490
Quirigua	Monument 26	9.2.18.0.(0)	9 Feb. 493
Caracol	Altar 4	(9.3.0.0.0)	AD 495
Tikal	Stela 15	(9.3.0.0.0)	AD 495
Tikal	Stela 7	(9.3.0.0.0)	AD 495
Uaxactun	Stela 20	(9.3.0.0.0)	AD 495
AdS	Stela 13	9.3.0.0.(0)	30 Jan. 495
AdS	Altar 3	(9.3.0.0.0)	AD 495
Tikal	Stela 27	9.3.0.0.0	30 Jan. 495
Tikal	Stela 8	(9.3.2.0.0)	19 Jan. 497
Unknown	Unknown Panel 1	9.3.3.16.4	4 Dec 498
Tikal	Stela 23	9.3.9.8.3	13 July 514
Uaxactun	Stela 22	9.3.10.0.0	9 Dec. 504
Caracol	Altar 19	(9.3.10.0.0)	9 Dec. 504
Tikal	Stela 2	N.D. (9.3.10+/-2KT)	AD 504 +/- 40
Uaxactun	Stela 3	9.3.13.0.0	24 Nov. 507
Unknown	Kansas City Lintel	9.3.19.3.8	30 Dec 513

DATEABLE EARLY 9TH BAKTUN TEXTS

Site	*Name*	*Long Count*	*Gregorian*
Tikal	Stela 6	(9).4.0.(0.0)	18 Oct. 514
Tonina	Monument 43	(9.4.0.0.0)	18 Oct. 514
Yaxchilan	Stela 27	9.4.0.0.(0)	18 Oct. 514
Calakmul	Stela 43	9.4.0.0.0	18 Oct. 514
Caracol	Stela 13	9.4.0.0.0	18 Oct. 514
AdS	Stela 12	9.4.10.0.0	26 Aug. 524
Copan	Altar Q'	9.4.10.0.0	26 Aug. 524
Naachtun	Stela 23	9.4.10.0.0	26 Aug. 524
Caracol	Altar 7	(9.4.10.0.0)	26 Aug. 524
Unknown	Private Coll. Panel	9.4.2.10.1	26 April 517
Tikal	Stela 25	9.4.3.0.0	7 Dec. 573
Piedras Negras	Lintel/Panel 12	9.4.3.0.17	19 Oct. 517
Bonampak	Pop Panel	9.4.8.14.9	2 July 521
Copan	Stela 15	(9.4.10.0.0)	26 Aug. 524
Yaxchilan	Lintel 22	(9.4.11.8.16)	13 Feb. 526
Yaxchilan	Lintel 34	(9.4.11.8.16)	13 Feb. 526
Yaxchilan	Lintel 47	(9.4.11.8.16)	13 Feb. 526
Yaxchilan	Lintel 48	9.4.11.8.16	13 Feb. 526
Yaxchilan	Lintel 49	(9.4.11.8.16)	13 Feb. 526
Tikal	Stela 10	9.4.13.0.0	11 Aug. 527
Tikal	Stela 12	(9.4.14).0.0	5 Aug. 528
Resbalon	H.S. 1	9.4.14.10.4	25 Feb. 529

Table 8. Dateable Early 9 Baktun Texts

UNDATED TEXTS LIKELY FROM EARLY 9TH BAKTUN

Site	*Name*
El Zapote	Stela 3
El Zapote	Stela 7
Naranjo	K5458 Pot
Pusilha	Stela Z
Rio Azul	Chocolate Pot
Rio Azul	Jade Mask
Rio Azul	Tomb 1 Mural
Rio Azul	Earflares
Tikal	Pot Schele 2012
Tonina	Monument 74
Uaxactun	Str. B-XIII Mural
Unknown	K8042 Pot
Yaxchilan	Lintel 19
Yaxchilan	Lintel 18
Yaxchilan	Lintel 20
Yaxha	Stela 7

Table 9. Undated Texts Likely From Early 9th Baktun

3.2 NON THIRD PERSON PRONOUNS

As mentioned at the beginning of the last section, one gap in the data from the eighth baktun is the lack of first and second person pronouns. That gap is filled, at least slightly in this time period with two unique attestations of non-third person pronouns. David Stuart (2005), has suggested that the Copan 'Papagayo' Stela, which dates to the first part of the Ninth Baktun, provides a rare example of the second person absolutive pronoun *-at*. Another rare example of a non-third person pronoun, also from the peripheral site of Copan, is the first person ergative prefix on Copan Stela 49, for which I have no firm date beyond Early Classic.

The phrase on Copan Stela 49 is [ni-TZ'AK-bu-li] 'my completion/joining' perhaps voiced from the perspective of the ruling monarch, or more figuratively, from the perspective of a personified Baktun cycle, or even the monument itself. The example on

the Papagayo Stela involves both an ergative and an absolutive pronoun in an apparent stative predicate [u-MAM-ta] *u maam at* 'You are his ancestor/descendant'.

One question surrounding these morphemes, particularly the first person morpheme spelled with the syllable [ni], is, 'how was it pronounced?' Houston et al (1998, 2001) have identified a class of glyphic signs, dubbed 'morphosyllables', which are pronounced with a VC form when signaling grammatical morphemes. This allows for the possibility that this prefix would be pronounced *in-*. Kaufman and Norman (1984) reconstruct **in-* for the first person singular ergative pronoun in Common Ch'olan, the direct ancestor of Classical Ch'olti', but they also reconstruct **-et* for the second person singular absolutive. This is clearly not the form attested in Classical Ch'olti'. Rather, the script attests to an earlier form, **-at*, which would go back to Common Mayan.

An examination of the Common Mayan first person ergative prefix is also instructive. Robertson (1980) reconstructs this as **nu*. The clear descendant in Common Ch'olan-Tzeltalan is **ni-*. In addition, the Common Ch'olan-Tzeltalan absolutive pronoun for first person singular was **-iin*, whereas by the Late Classic (Stuart 2005), it was *-een*.

In Ch'orti' the same archaic *ni-* form for first person singular pronoun is preserved when affixed to a noun (in the possessive function), but when affixed to a verb, the morphological form is *in-*. In Colonial Ch'olti', a more innovative system is in place in which *in-* is used in both the possessive function and on verbs to reference the agent of a transitive sentence.

From these data, Robertson (personal communication) reconstructs the following scenario to explain 1) the change from *ni-* to *in-*, 2)the change in the first person singular

absolutive from *-iin* to *-een*, and 3) the change in the second person singular absolutive from *-at* to *-et*.

Stage I: The 1st person ergative pronoun *ni>in* in verbal contexts by analogy with the 1st person singular absolutive, which also occurs (by definition) only in verbal contexts.

Stage II: In a push chain, the 1st person absolutive becomes *-een* in order to dissimilate from the *in-* 1st person ergative.[11]

Stage III: Because it belongs to the same paradigm (absolutive pronouns), the 2nd person singular absolutive *-at>-et* by analogy with *-een*, the 1st person singular absolutive.

Stage IV (anytime after stage 2): No longer analogous to the 1st person absolutive, the *in-* form of the ergative prefix spreads to use on nouns in all but the peripheral dialect spoken in south eastern lowlands.

In this scenario, the stage that seems to fit the data from the glyphic corpus best is stage II, in which we have two allomorphs of the 1st person singular ergative pronoun, *ni-* (before nouns) and *in-* (before verbs); a 1st person singular absolutive pronoun *-een* and a 2nd person singular absolutive pronoun *-at*.

Thus, the *in-* / *ni-* allomorphs in modern Ch'orti' are conservative, while the *in-* /*in-* generalization in Colonial Ch'olti' reflects an innovation, apparently unique to that particular dialect of Ch'olti'. Under this account, the most logical hypothesis for the

[11] That this pronoun is attested as *-een* in Colonial Ch'olti', suggests that this change took place some time before long *ee* raised to *ii*.

pronunciation of the first person ergative prefix would be the conservative *ni-*, since the relevant lexical item is a noun, and not a verb.

3.3 OTHER MORPHOLOGY

As we have seen, aside from the pronominal system, the core grammatical morphemes of Classical Ch'olti' are generally well attested in the corpus of inscriptions by the end of the 8th Baktun. However, several other interesting and important morphological features, in addition to the two pronouns mentioned, are not attested until the first ninety-nine years of Baktun 9, from AD 435 until 9.5.0.0.0 in the Maya Long Count, or AD 534. Among these features are a series of poorly understood derivational suffixes, which derive a variety of root classes into other classes. These include an intransitivizing suffix, *-aj*, spelled with the syllable [ja], a nominalizer or transitivizing suffix of unclear pronunciation, spelled with the syllable [ji], a transitivizer spelled with the syllable [a], a proposed antipassive suffix *-Vw*, spelled with both [wi] and [wa], the instrumental *-ib*, spelled [bi], and possible an inchoative intransitivizer *-Vn*, spelled with the syllable [ni]. I will discuss each of these individually below.

3.3.1 THE INTRANSITIVIZER *-AJ*

Perhaps the clearest of these derivational suffixes is the intransitivizer *-aj*. This productive suffix was first identified by Lacadena (1998, 2003). It can derive intransitive verbs from compound and simple nominals. It differs distributionally from the passive *-h-...-aj*, also spelled with the syllable [ja] in that it does not attach to verbal roots. The earliest examples of this suffix can be found on the lengthy inscription on the back of

Tikal Stela 31. Examples include the death euphemisms found in this text, [OCH-HA'-ja] and [OCH-BIIJ-ja], yielding 'he water-enters' and 'he path-enters'.

These two phrases are very clearly not passive structures (which would then involve an infixed *-h-*), as they include the intransitive root *och* 'to enter'. In Colonial Ch'olti', the transitive version of this verb is *otes*, with a transitivizing *-es* suffix added to the root *ot* 'to enter'. Object incorporation is well documented in the hieroglyphic script, and these are clear examples. The terms in question are also often found without affixed [ja] syllable. The only other explanation for the presence of the [ja] syllable on these forms is as a phonetic complement to some part of the compound. It could, for example, be interpreted as the complement of *biij*, or, not distinguishing glottal and velar spirants, as a signal of the first CV of *ha'* 'water', in the expressions [OCH-BIIJ-ja] and [OCH-HA'-ja]. The associated argument (the subject of the sentence—in both cases, a person's name) argues against this interpretation. The single associated argument, or noun phrase 'opening' allotted the intransitive verb *och* is already taken by the incorporated nouns *biij* and *ha'*. The individual entering needs to be associated with the verb as well. This could be done by putting an ergative prefix on the compound noun, or by adding an intransitivizing suffix, like *-aj*, to make room in the syntactic structure for another noun phrase. On Tikal Stela 31, and many other inscriptions throughout the Classic Period, the latter strategy was apparently used.

Another possible example of this suffix is the common phrase referring to half period endings [TAHN-LAM-ja] *tahnlamaj* 'it (inwardly) diminishes'. The nominal nature of the phrase *tahnlam* is demonstrated by the possessed form [u-TAHN-LAM] found on Uaxactun Stela 26, which shows the *u-* possessive prefix in complementary

distribution with the intransitivizing *-aj* suffix. However, the verbal root in question, *lam*, is both a positional and a transitive root in cognate languages. Wichmann (2004b), in a discussion of the grammar of this particular phrase throughout the Classic Period, labels this as an archaic positional suffix. While his analysis of the several other morphological contexts of *tahnlam* provides important insights, the topic merits revisiting.

While it is clear that this particular form, with *-aj* is intransitive, it is not clear what relationship the verb has with its subject; namely, is the associated argument a semantic patient, or a semantic agent? The lack of clarity might be, in part, because of the lack of precision in the currently understood semantics of the phrase. Wichmann argues that this form cannot be passive on, for example, Tikal Stela 31 because the associated subject is [HUN-pik] 'one baktun'. As he points out, the date in question, 9.10.0.0.0 is not the half-finishing of a baktun, but rather of a k'atun. Here it is important to note that *tahn* does not necessarily mean 'half', a notion that is attached to the word because it generally shows up at half-period junctures. While 'half' is certainly a reasonable interpretation of a word like *tahn* as an incorporated adverbial, another possible reading for this phrase would be 'it (as span of time X) is internally diminished' or 'lessened from within', in the sense of one of its component cycles being more than halfway done. In this interpretation, the phrase in question could conceivably be *tahnlahmaj*, a CVC passive form. It is also possible that the compound *tahnlam* is nominal, making this *-aj* suffix a simple intransitivizer. A detailed investigation of adverb incorporation (mentioned in Knowles, 1984, as dependant adverbs) might shed some light on this somewhat perplexing expression, as will further study of the nature of compounds in related languages. At present, the most solid conclusion is that the evidence is inconclusive.

3.3.2 THE ANTIPASSIVE *-Vw*

It is worth noting that this intransitivizing suffix *-aj* is represented with the same syllable, or morphosyllable, as the bipartite passive *-h-...-aj*. These two suffixes would not have been confused because of their complementary distribution: the former affixing to noun phrases, the latter to root transitives. This same homography can be seen with the CVC transitive suffix *-Vw*, discussed above, which is marked with the syllable [wa], and an antipassive suffix *-Vw*, recently proposed by Lacadena (2000) which is also spelled with the [wa] syllable, or, occasionally, the syllable [wi]. This antipassive suffix is also first attested on Tikal Stela 31 in the phrase [K'AL-wi TUUN] *k'al?w tuun* 'stone wrapping'. Another clear example from Quirigua (Mon. 26), which reads *pasaw ukab-che'n* 'His earth-cave opens', in which the antipassive form *pasaw* is clearly verbal, illustrates the absolutive antipassive function.

Interestingly, this same [wi] suffix is also found in phrases with ergative pronouns as, for example, on Caracol Stela 13: A16, which has the phrase [u-K'AL-wi TUUN-ni]. Two possible explanations can be given: First, both [wi] and [wa] could be used to mark both transitive verbs and antipassives, certainly with a heavy preference for [wa] when marking transitives. Another possibility is that the /i/ of [wi] was, in fact pronounced in these apparently transitive examples, in effect 're-transitivizing' an antipassive structure. A similar case can be seen in Colonial Ch'olti', possibly even involving a reflex of this *-Vw* antipassive, the inchoative suffix *-law*.

(a) ***ya'-law-l et*** *ya'-les-na et, u-menel ka-tahnal*
PAIN-INCHO-SAP.NOM • ABS2SG • PAIN-*TRANS.*-PASS • ABS2SG • ERG3-BY • ERG1PL-SIN
'You suffered, you were afflicted, because of our sins.'

(b) *ma ka* ***u-ya'-law-i*** *u-baktal kaw-ahaw-il Jesucristo t-u-xel-pah-el.*
NEG • YES.NO • ERG3-PAIN-INCHO-VBLZR • ERG3-FLESH • 1.PL.ERG.PV-LORD-VL • JESUS CHRIST • PREP-ERG3-TO.BREAK-MP-SAP.NOM
'Does it not hurt the body of our Lord Jesus Christ when [the bread] is broken (lit. in its getting broken)?

In example (a) above, the noun *ya'* 'pain', has been suffixed with the morpheme *-law(l?)* to create an intransitive verb 'to suffer'. In (b), the derived intransitive form *ya'law* was then suffixed with *-i*, producing a transitive verb 'it hurts him'. If we can understand the transitive examples suffixed with [wi] in the glyphic data as derived antipassive forms which have subsequently been transitivized with the addition of a vocalic suffix *-i*, these otherwise problematic examples become straightforward.

While this explanation has the advantage of a clear parallel in its Colonial descendant, it does seem unduly complicated, when simply adding the *-Vw* root transitive suffix would seemingly yield the same results. However, the semantic nuances involved are not sufficiently understood to rule out this more complex analysis.

3.3.3 DERIVED TRANSITIVES

The reconstructable ancestor of Classical Ch'olti', Common Ch'olan, made use of a productive transitivizing suffix with the phonological form *-Vn*. This suffix productively derived transitive verbs from both nominal roots and intransitive roots. As discussed in Law et al. (in press), this suffix was reanalyzed prior to the breakup of Common Ch'olan as a transitivizing suffix *-V* plus an incompletive *-n*. Nick Hopkins (n.d.) first proposed that the common phrase on ceramic texts [u-TZ'IB-a] was a derived

transitive form consisting of the noun *tz'ib* 'writing, drawing', and a transitivizing suffix *-a*. This suffix would fit into the same class as the *-i* suffix suggested above, a suffix with the form *-V*, which derives transitive verbs from nominal bases, or even intransitive ones, as suggested by the Colonial Ch'olti' data. If this analysis is accurate, both *-V* suffixes would be clear reflexes of the Common Mayan *-Vn* suffix.

3.3.3.1 THE DNIG

The same *-V* suffix may also be attested in the script in the common phrase *utz'aka* 'he completes it'. *tz'ak* is a fascinating root which is attested in several languages as a noun, a CVC transitive root, and a positional root. This same polyvalency of root class can be seen in the hieroglyphic inscriptions in the contrast between [u-TZ'AK-a], [u-TZ'AK-bu] (both present in the Early Classic), and [u-TZ'AK-wa] (attested rarely and only in Late Classic texts). The three way contrast in transitive inflectional patterns suggests that in the spelling [u-TZ'AK-a], *tz'ak* is behaving functionally as a nominal root, whereas in the other two it is behaving as a positional and a transitive root respectively. The analysis u-NOUN-a, is also supported by the certain nominal root *kab* 'earth' in the phrase [u-KAB-a] 'erg3-earth-tv' found on later texts, such as the late inscription of Naranjo Altar 2.

In Tzotzil, *tz'ak* as a noun means 'boundary'. In Ch'orti', a noun *tz'ak*, which is possibly related, means medicine. Both carry connotation of completeness. A boundary is the point at which two things join together to make one whole. Medicine is used to make the body whole. Thus, this transitive expression, derived from a noun might be translated as 'X makes Y whole' or 'X completes Y'.

The first examples of this difficult phrase are on Tikal Stela 31. It is repeated four times on the back of this monument. The first occurrence is transcribed below.

> [u-TZ'AK-a 12 AJAW K'AL-wa-TUUN 7 K'AN-?-NAL K'AK' WITZ]
> *utz'aka chalahuun ajaw k'alawtuun wuk k'an?nal k'ak' witz*
> 'The stone wrapping completed [the calendric cycle] 12 *Ajaw* at 7 Yellow ? Place, Fire Hill.' (Tikal Stela 31: F15-F17)

While it can work semantically as a transitive verb, it might conceivably also work as a relational noun. One obstacle to choosing between these analyses is that it is not clear exactly how the phrase was pronounced, thus making it difficult to find likely cognates in related languages. The glyph that is affixed to TZ'AK in each of these examples, T12, can be read both as AJ, an agentive prefix, and [a], the syllabic sign. It is possible (and perhaps even probable) that the phrase spelled [u-TZ'AK-T12] was pronounced *utz'akaj*, making any relationship with the *-V* transitivizer dubious.

One attested spelling which confuses things with respect to this transitivizing suffix is the occasional addition of an [a] syllabic sign in contexts clearly not involving a transitive verb, and which do not likely end in V'. Several of these can be found on the Rio Azul mask, and on Tikal Stela 31, the phrase WAY-na-?-a could involve the same ending. Naranjo Stela 38, dating near the end of the Early Classic, includes the phrase [3-K'AL-TUUN-a] within a complex triplet poetic structure, which seems to show the same morpheme, suffixed to a noun in an already nominal context. On the face of it, this appears to be a different phenomenon altogether, as unrelated to the transitivizing suffix under discussion as the antipassive [wa] is to the transitive [wa]. As mentioned earlier, Houston et al. (2001) suggest that this interesting suffix might be an agentive *aj* in postposition. However, it is possible that further investigation might find a connection

between the two types of attestations mentioned above. This would certainly require a reevaluation of the transitive analysis here advanced.

3.3.4 THE *-IJ* SUFFIX

Another problematic suffix is found in the common phrases [u-TZ'AK-bu-ji] and [u-KAB-ji], among others (see Macleod 2004 for a more comprehensive listing). In this context, *tz'ak* is found with a [bu] syllable, representing either the positional transitive *-bu*, or another derivational suffix *-Vb*, which has then been affixed with [ji]. This [ji] suffix is first found with the undeciphered 'bent kawak' sign in the phrase [u-'bent kawak'-ji] on Tikal Stela 26:A7. Barbara Macleod (2004) has done an in-depth study of this problematic suffix spelled with the syllable [ji], and proposes that [ji], pronounced *-ij*, is a kind of present perfect marker. Robertson et al. (2004) have proposed other possible interpretations, including *-ij* as a transitivizing derivational suffix, or as a nominal antipassive, akin to *-yaj* in modern Ch'orti'. Because of the complexity of the arguments involved, I will not include a discussion of these competing analyses here.

3.3.5 RELATIONAL NOUNS

Another possible explanation for the *ucabji* expression, mentioned above, is as a type of nominal 'preposition' called a relational noun. This class has been observed in the glyphic corpus in the common phrase *y-ichnal* 'his presence', first attested on Copan Stela 7. The *y-* (prevocalic) ergative prefix indicates that this collocation is either a transitive verb phrase, or (at some level) a noun phrase. It is always followed by a single noun phrase referring to the person who witnesses. If it is a transitive sentence, its oft-

noted ‘second position’ following a main verb would make it unlikely that the object would be repeated after the [yi-chi-NAL-la] expression. As a noun, it would be impossible for it to have a second argument. In this case the suffix *-Vl* ending suggests that we are dealing with a noun, making *y-ichnal* a clear relational noun.

For the *ukabji* expression, the data are inconclusive. The phrase clearly involves three morphemes: the third person ergative prefix, the noun *kab* ‘earth’, and an unidentified derivational suffix. A firm identification of the function and etymology of that derivational morpheme will help determine which of the above-mentioned options is more likely.

3.3.6 THE INCHOATIVE *-VN*

Another intransitive derivational suffix, the inchoative suffix *-Vn*, possibly attested in modern Ch’orti’ as *-r-an*, might be captured in the spelling [la-ni] on Copan Stela 15, in an unfortunately obliterated context, and on the slightly later Naranjo Altar 1 with the spelling [a-AJAW-ni-ya] *ajawaniiy* ‘He became a lord’. Stephen Houston (personal communication) has noted the same suffix on Late Classic monuments, including Naranjo Stela 23:E12. The expression is verbal, and intransitive. It occupies the position generally filled by expression such as *chumlaj ti ajawel* ‘he sat in the lordship’, making the inchoative ‘he became a lord’ a very plausible interpretation.

3.3.7 THE *-IS* ABSOLUTIVE AND THE *-IB* INSTRUMENTAL

The two remaining derivational morphemes that show up for the first time between AD 435 and AD 534 are the instrumental *-ib* and the poorly understood *-is* suffix. The *-ib* suffix has long been recognized as an important part of the term *uk’ib*

'drinking vessel', frequently found in the 'Primary Standard Sequence' or dedicatory formula on many decorated ceramics. The first firmly dateable example of this morpheme, however, is not until AD 517. It is found on Piedras Negras Panel 12 in the phrase [u-LOK'-bi-li] 'its instrument for leaving/its exit'.

The opaque *-is* suffix is not so common, nor so easy to identify with cognates in other languages. Marc Zender (2004) makes a compelling argument that *-is* functions as a nominal absolutive, much like the *-aj* mentioned earlier in phrases such as *baahaj* 'the head'. Cognates are found in various, though distantly related, Mayan languages, including Poqomam, and Zender suggests that these could have been borrowed from Classical Ch'olti', in light of its widespread prestige status during the Classic Period. Stephen Houston (personal communication) has suggested that this suffix is functioning as a type of agentive. The suffix is first attested on Yaxchilan Lintel 47, which dates to AD 526. In Early Classic texts, it is rare and seems to prefer attaching to undeciphered or otherwise opaque glyphs, which makes determining its probable function much more difficult.

3.4 Inflectional Morphology

Within the sphere of inflectional morphology, texts from the period between 9.0.0.0.0 and 9.5.0.0.0 do not introduce many new features. New information about inflectional morphology from this time period is generally spotty and inconclusive, often with only a single attestation of a particular feature. In this light, much of what will be described below might be viewed as deviant from the normal patterns of inflection.

A good example of this is the passage found on Tikal Stela 10, which reads [a?-TZ'AK-bu-NAAH]. Given the logographic status of T4 NAAH, particularly during the

Early Classic, it is possible that this phrase is simply ‘your completion house/he of the completion house’. However, in the context, it could easily be verbal. The base *tz’akbu* is clearly the root *tz’ak*, likely with the transitive positional marker *-bu*. Derived transitives in Colonial Ch’olti’, unlike root transitives, are passivized with the suffix *-nah*, as in this example:

san-bu-na et t-u-wut crus, cham-ay et tya'
PLACE-POS.TRANS-PASS • ABS2SG • PREP-ERG3-FACE • CROSS • DIE-MP • ABS2SG • THERE
‘You were placed on the face of the cross, where you died.’

The unusual prefix *a*, which occurs in such intransitive verbal contexts elswhere, such as on an unnumbered altar from Tonina, can also be explained through Colonial Ch’olti’.

a tumu-n-pa ixte tuyanil k'al-na, t-u-pat hun-hun-tul.
LEVATIVE • TO.CONSIDER-*AGENT.BLOCKER*-MP • THEN • ALL • TO.MAKE-PASS • PREP-ERG3-BACK • ONE-ONE-CL.HUMAN
‘It is considered all that is done on behalf of each person.’

As seen here, the *a,* when preceding an intransitive verb phrase in Colonial Ch’olti’ reinforces the ‘nowness’ of the action. When used with this form, it generally carries the connotation of a habitual present, implying that a particular action is what is generally done. During script times this prefix would most likely have had a present perfect sense, ‘It has been completed’ (see Law et al, in press, for more discussion). The very uniqueness of this novel interpretation, however, detracts from its overall attractiveness as a theory. Not only is such a passive structure not found elsewhere, but the *tz’akbu* phrase is found almost entirely in nominal contexts. The lack of supporting data make a nominal analysis the more prudent explanation.

3.5 POLYVALENCY AND *K'A'*

tz'ak is not the only root to demonstrate a curious polyvalency of root class. There is some evidence that the root *k'a'* 'to end/finish' is also transitory with respect to root class. In several inscriptions, as illustrated on El Zapote Stela 5 and Lamanai Stela 9, the 'wing' sign representing either the logogram K'A', or the syllable [k'i], is suffixed with the [ya] syllable indicating the intransitive past tense marker *-iiy*. In most cases, *k'a'* is found with the [yi] syllable indicating a vowel harmonic mediopassive suffix. If in this past tense, this phrase will additionally include the syllable [ya] spelling out *k'a'ayiiy* 'It got finished'. There are two ways to account for this distribution. First, it could be, given the two possible values of the glyph in question, that two distinct lexical items are portrayed: a transitive root *k'a'*, and an intransitive root beginning with the syllable [k'i]. The other possible explanation is that *k'a'*, like *tz'ak*, was polyvalent, meaning it could behave as both a transitive root (to which a mediopassive suffix could attach) and an intransitive root (to which the past tense *-iiy* could attach with no other inflection).

3.6 NUMBERS

Several linguistic features that occur for the first time during the first part of the 9th Baktun have to do with numerals. The Copan Papagayo Stela and Tres Islas Stela 1 both attest the generic numeral classifier *te'*, a feature not attested during the Eighth Baktun.[12] The morpheme *te'* is also the generic numeral classifier in Colonial Ch'olti'.

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[12] A widely held assumption about these languages is that they have a system of obligatory numeral classifiers. Under this assumption, the dozens of numbers found prior to these first attested dates, and the hundreds afterwards that do not record a numeral

Another numeric feature of the hieroglyphs that merits note is the use of the ergative pronoun *u-* prefixed to the numeral to make an ordinal number. This pattern, first attested on Tikal Stela 1, which dates to around AD 435, is interesting in that the *u-* ergative does not need to have a referent, or associated argument. Like 'it' in phrases such as 'it rained' in English, the function of *u-* in these cases is not to reference an actual entity, but to fulfill a particular grammatical function. This pattern is used repeatedly through the sequence of texts comprised of Lintels 11, 49, 37, and 35 of Yaxchilan. These texts lists a series of ten rulers. Each uses the structure u-#-tal CHUM-AJAW Ruler. Ordinarily, this sequence would be interpreted as a simple possessive structure: ' Ruler X's sixth seated lord.' However, because the ruler named is different each time, it is clear that the same individual is not enduring the same ritual several over and over. Rather, the ergative pronoun *u-*, in these cases, has no referent. It is there simply to indicate that the numbers are ordinal, and not cardinal. The clearly intended meaning is ' The sixth seated lord is (was) Ruler X', also a clear example of the nominal sentence mentioned in chapter 2.

3.7 For Further Research

This description of the new linguistic features introduced between AD 435 and AD 534 raises a number of interesting issues. In general, the use of numbers in glyphic texts warrants a great deal of attention linguistically. A full discussion of the linguistics

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classifier after this date, would have necessarily been supplied by the reader. This seems uncharacteristic, given the otherwise exceptionally precise nature of the hieroglyphic system. Evidence from Colonial Ch'olti' suggests that these classifiers might not have been strictly obligatory.

of the various calendric uses of numbers, even just in the Early Classic, is beyond the scope of the present study, but a great many issues in this respect beg to be investigated. For example, the syntax of Glyphs E and D of the Lunar Series, which consist of a number between 1 and 29 and the phrase *huliiy* 'it/they arrived' is intriguing. What function does the number have syntactically? Is it the subject of the verb, which has been fronted for focus reasons? Is it an adjunct determiner phrase? Glyph C and Glyph A in the Lunar Series are similarly problematic. Glyph C includes a numeral (between 1 and 6) a transitive verbal root *k'al*, an undeciphered object and, occasionally, an ergative prefix. Glyph A is simply a numeral, either 29 or 30, which corresponds to the number of days in the current lunation. A preposition *ta* before this number in the lunar series of Rio Azul Tomb 1 mural, as well as on the Houston Panel, reinforces its probable modifying syntactic position, but exactly how and where it fits in remains unclear. These collocations raise several questions about structure that might prove answerable with more stringent linguistic analysis.

Another problematic passage relating to numbers can be found on Piedras Negras Lintel (or panel) 12, which records the phrase *ox alay?* 'three that?'. If the decipherment by Barbara Macleod and Yuriy Polyukhovich for the 'initial sign' of the primary standard sequence (or dedicatory formula) as a deictic particle 'that; there' is correct, many difficult issues arise in trying to explain this and other syntactic positions for this interesting term.

In summary, the early 9th baktun, from 9.0.0.0.0 to 9.5.0.0.0 (which could well be termed 'Middle Early Classic', a term almost as cumbersome as the more precise 'from 9.0.0.0.0 to 9.5.0.0.0') saw the introduction of several interesting derivational suffixes. In

addition, texts from this time period have supplied several vexing and opaque grammatical structures. A great deal of additional work is needed to answer the questions posed by these difficult texts.

Chapter 4 - The 'Terminal Early Classic'

4.1 Introduction

As discussed in chapter 1, the end of the Early Classic period has been ascribed to various times, all centering around the Hiatus. I have included in my study all of the inscriptions up to (but not including) the 9.10.0.0.0 K'atun ending in order to capture the entire Hiatus period, as well as the beginnings of the transition into the Late Classic. This is not to say that the end of the Early Classic should definitively be placed at this later date. This cutoff is a consequence of the very blurry line between the Early and Late Classic and my desire to include as much data as possible in order to capture the language of the Early Classic in its entirety.

It is interesting to note that the number of features first introduced between 9.5.0.0.0 and 9.10.0.0.0 is much lower than the number introduced during the previous five baktuns. This could be due to a tighter standardization of the genre of monumental inscriptions, after a period of innovative language use in the inscriptions. The tables below list the texts that comprise the corpus of 'Terminal Early Classic' inscriptions.

DATEABLE 'TERMINAL EARLY CLASSIC' TEXTS

Site	*Name*	*Long Count*	*Gregorian*
Caracol	Stela 16	9.5.0.0.0	5 July 534
Caracol	Altar 3	(9.5.0.0.0)	5 July 534
P. Negras	Stela 30	(9.5.0.0.0)	5 July 534
Yaxha	Stela 2	N.D. (9.5.0+/-2KT)	AD 534+/-40
Tikal	Stela 14	N.D. (9.5.0+/-3KT)	AD 534+/-40
Copan	Altar A'	ND (9.5.0)	AD 534+/-40
Copan	Altar L'	ND (9.5.0)	AD 534+/-40
Copan	Altar M'	ND (9.5.0)	AD 534+/-40
Xultun	Stela 13	(9).5.0.9.?	AD 534
Yaxchilan	Lintel 11	9.5.2.10.6	16 Jan 537
Yaxchilan	Lintel 35	(9.5.2.10.6)	16 Jan 537
Yaxchilan	Lintel 37	(9.5.2.10.6)	16 Jan 537
P. Negras	Stela 29	9.5.5.0.0	16 Jan 537
Copan	Ante Step	9.5.7.(12.2)	26 Jan 542
Copan	Stela E	9.5.10.0.(0)	13 May 544
Caracol	Altar 5	(9.6.0.0.0)	22 Mar. 554
El Peru	Stela 22	(9.6.0.0.0)	22 Mar. 554
El Palmar	Altar 1	(9.6.0.0.0)	AD 554
Tamarindito	Stela 4	(9.6.0.0.0)	AD 554
Dzibanche	Lintel 3	(9.6.0.0.0)	AD 554
Uaxactun	Stela 6	9.6.(0.0.0)	22 Mar. 554
Caracol	Stela 14	9.6.0.0.0	22 Mar. 554
Copan	Stela 17	9.6.0.0.0	22 Mar. 554
Copan	Stela 9	9.6.10.0.0	29 Jan. 564
Copan	Stela 21	ND (9.6.10)	AD 564
Caracol	Stela 3	9.6.12.4.16	24 April 566
Tonina	Monument 177	9,6.(?.?.?)	AD 568?
Tulum	Stela 1	(9.7.0.0.0)	AD 573
Pusilha	Stela O	9.7.0.0.0	7 Dec. 573
Caracol	Altar 6	(9.7.0.0.0)	7 Dec. 573
Copan	Stela 18	(9.7.0.0.0)	7 Dec. 573
Chinikiha	Throne	(9.7.0.0.0)	AD 573
Tonina	Monument 26	9.7.0.5.9	26 Mar 574
Altun Ha	Jade Plaque	(9.7.11.2.17)	6 Dec. 584
Caracol	Stela 4	(Late EC)	AD 553-593
Caracol	Altar 1	(9.8.0.0.0)	24 Aug. 593
Naranjo	Altar 1	(9.8.0.0.0)	24 Aug. 593
Naranjo	Stela 38	(9.8.0.0.0)	24 Aug. 593
Pusilha	Stela Q	(9.8.0.0.0)	24 Aug. 593
Ichpaatun	Stela 1	9.8.0.(0.0)	24 Aug. 593
Unknown	Brussels Stela	9.8.0.0.0	24 Aug. 593

DATEABLE 'TERMINAL EARLY CLASSIC' TEXTS

Site	*Name*	*Long Count*	*Gregorian*
Caracol	Stela 1	9.8.0.0.0	24 Aug. 593
Tonina	Monument 106	9.8.0.0.0	24 Aug. 593
Tikal	Stela 17	9.8.3.9.15	19 Feb. 597
Bonampak	Lintel 4	(9.8.9.15.1)	6 May 603
Caracol	Stela 6	9.8.19.?.2	AD 603
Tonina	Monument 183	9.9.(0.0.0)	12 May 613
Arr. de P	Stela 1	9.9.0.0.0	12 May 613
Copan	Stela 7	9.9.0.0.0	12 May 613
Lamanai	Stela 9	(9.9.12.0.0)	7 Mar. 625
Naranjo	Stela 25	(9.9.2.0.4)??	6 May 615
Altar de S.	Stela 18	9.9.5.0.0	18 Oct. 514
Uxul	Altar 2	9.9.9.9.10	2 Oct 622
Copan	Stela P	9.9.10.0.0	21 Mar 623
P. Negras	Stela 25	9.9.10.6.16	4 Aug 623
Altar de S.	Stela 8	9.9.15.0.0	23 Feb 628
P. Negras	Stela 26	(9.9).15.(0.0)	23 Feb 628

Table 10. Dateable 'Terminal Early Classic' Texts

4.2 THE (DETERMINATIVE) FUTURE

Perhaps the most important grammatical feature first attested near the end of the Early Classic is the future suffix *-oom*. This suffix is found twice on Naranjo Altar 1, which, as Mayer (1980) points out, was most likely a panel, not an altar. After describing prior and contemporary celebrations of significant calendar cycle endings, overseen by the Naranjo king Aj Wosaaj, the text goes on to predict future celebrations with the phrases [TZUTZ-yi-mo u-10-PIK? 7-AJAW 18 SIP u-to-ma u-CHOK-wi AJ-wo-sa(ji)] *tzutzuyoom u lahuun pik wuk ajaw waxaklahuun sip; utoom uchoki?w Ajwosaaj* 'The 10th Baktuun shall get finished (on the date) 7 Ajaw 18 Sip. Ajwosaaj's scattering shall happen. All other occurrences of this future suffix are Late Classic. Interestingly, some of the Late Classic examples appear to also use this suffix as an agentive nominalizer. That

the same distribution is found in Poqomchi, a language known to be heavily influenced by Classical Ch'olti', though not closely related genetically.

It is something of a mystery that this future form should be the only one attested when it does not exist in any of the Mayan languages most closely related to it. The expected (but unattested) future for intransitives in Ch'olti'an is a prefix **x-* (possibly **ch-*) and the suffix **-Vk*, both reflexes of the Common Ch'olan incompletive paradigm (see Robertson 1992).

A clue to explaining the marked absence of the anticipated future marker, as suggested by John Robertson (personal communication), might lie in the semantic context in which every *-oom* future is found in the inscriptions. As typified by the Naranjo Altar 1 text, these future expressions are generally couched in calendric contexts which give a sense of inevitability to the future event. The future form in Colonial Ch'olti' that would likely be used in that context is the determinative future, what the Colonial author Moran calls the 'futuro en rus'. The Colonial Ch'olti' determinative future also involves a nominalizing suffix, *-el*, and a prefixed particle *a*, mentioned previously, that can also be used on verbal forms to indicate the habituative present. The semantic gist of the determinative future is illustrated with the following example from the Colonial data:

> *ma ka* ***a kux-pah-el xa*** *tuyanil chamen t-u-lopah-el kaw-ahaw-il Jesucristo?*
> NEG • YES.NO • *RAISER* • TO.LIVE-MED.PASS-SAP.NOM • OR/AGAIN/IF • ALL • DEAD • PREP-3.ERG-TO.COME-SAP.NOM • 1.PL.ERG.PV-LORD-VL • JESUS CHRIST
> 'Are all the dead to be resurrected at the coming of our Lord Jesus Christ?'

In this example, the determinative verb phrase *a kux-pah-el xa* 'must live again' emphasizes the doctrinal message about the prophetic inevitability of the event in question, in this case, the resurrection of the dead at Christ's Second Coming. Rather than

the simple sense of 'will happen', the determinative gives the more prognostic sense of 'must happen'. Thus, the inevitable cycle ending must happen and, just as certainly, given his quasi-divine nature, Aj Wosaaj's scattering ritual must happen. It is not surprising in this light, that the only type of future expressions that would be memorialized in stone are the determinative type.

4.3 THE PLURAL MARKER *-TAAK*

In European languages, the morphological plural (*-s* in English) is very much a core part of grammar. In languages such as English, Spanish, German, and Welsh, a plural morpheme marks plural nouns. If the entity in question does not have a plural morpheme, than it must be singular. In Classical Ch'olti', however, overt plural morphology was optional. This is evidenced by the fact that, although the earliest texts involve plural entities, the only plural marker attested in the Early Classic, a specialized plural *-taak* for animate entities, is not attested until AD 542 on the Copan 'Ante Step'. This text includes the phrase [4-te' CH'OK-TAAK] *chante' ch'oktaak* 'the four youths'.

4.4 COLOR MORPHOLOGY

Colors also display interesting morphology. The Copan Ante Step apparently had the name [K'AN-la e-bu] *k'anal ehb'* 'the yellow/glorious step' using a form of the 'abstractive' *-Vl* suffix mentioned above, perhaps to emphasize that the yellowness is an inherent quality of the step. Another curious expression could possibly involve two morphemes, the intransitivizing suffix *-aj* and a nominalizing *-al*, both discussed earlier. Yaxchilan Lintel 11 is the earliest text with this suffix in the phrase [SAK-ja-la SUUTZ'] *sakjal suutz'* 'whitening bat'. Houston et al. (2001:42) proposed that this suffix gives the

inchoative sense of ‘to become color X’, thus the translation ‘whitening bat’. They suggest that it is composed of two separate morphemes, the *-aj* intransitive and the *-Vl* nominalizer. If this analysis is accurate, it would be a very clear case of the suffix *-al* used as a nominalizer, though it would here be deriving an apparent intransitive base.

4.5 Conclusion

Copan Stela 7 boasts the first occurrence of two interesting linguistic structures. It appears to be the earliest monument with a deictic *haa’* particle (spelled [ha-‘i]), and it includes what looks like [u-K’AL-ja-TUUN-ni]. This is unusual because none of the understood suffixes involving the [ja] syllable (passive, intransitive, and nominal absolutive) can occur with the ergative prefix *u-*. Two possibilities exist: either [ja] here represents an unknown nominalizing suffix, or it is a scribal mistake. Until the former has been fully investigated, it would be bad method to assume the latter.

In general, the final century of the Early Classic could be described as linguistically uneventful. Aside from the obviously important first attestation of the rare determinative future, only a handful of relatively rare suffixes are first attested during this time period, many at Copan. This gradual decline in novel inscribed forms corresponds to simultaneous decline in artistic, particularly monumental, production in many of those sites that dominated the Early Classic political scene.

Chapter 5 - Conclusion

5.1 GAPS

As mentioned earlier, the predicted intransitive future **x-...-ik* is not attested. Nor is its transitive counterpart **x-...(-n)*. One explanation for this gap is the genre. The type of future that a royal monumental inscription would be expected to use, the determinative 'must; shall' is evidently expressed by the attested suffix *-oom*.

Another clear gap in the linguistic system attested in the Early Classic inscriptions is the progressive 'ongoing' aspect. Some likely candidates for progressive markers have been proposed for the Late Classic, but in the Early Classic, the closest structure to a progressive is the *ubaah ti X* construction mentioned earlier. I argue that in many cases, this structure is best translated into English as a nominal title "Person X' image performing action Y'. Whether translated as a label, as here, or as a stative predicate, this structure at least communicates the notion of being in the middle of a particular action. The lack of an equivalent to Colonial Ch'olti' *yualen ti caste'* 'I am wood-cutting' also seems attributable to the formal genre of monumental inscriptions, though some interesting constructions with *iyuwal* can be found on the Late Classic Copan Stela J (see Law et al, in press, for further discussion of *iyuwal* in the glyphic corpus).

Also apparently absent from the Early Classic corpus is negation. Later inscriptions do attest the expected *ma* generic negation. As with the above-mentioned features, the lack of negation markers in the Early Classic corpus is perhaps due to the types of expressions one would expect to record on a monumental inscription.

The most obvious and unsurprising gap in Early Classic data is the lack of several non-third person pronouns. David Stuart has suggested a possible occurrence of the second person absolutive suffix *-at* on the Copan Papagayo Stela, to which I would add a likely first person ergative pronoun *ni-* on Copan Stela 49. This gap too is obviously attributable to the genre. In fact, no sense can be made of either of these monumental examples of non-third person. It is interesting that both of these surprising grammatical features, as well as several examples of the future, and likely candidates for progressive structures all occur on inscriptions at Copan, a site known for its innovative sculpture and peripheral location. It is possible that the innovative attitude toward artistic embellishment transferred to the literary content of their inscriptions, leading to a penchant for more unusual modes of expression.

5.2 SUMMARY

The corpus of Early Classic inscriptions, while incomplete, supplies a great deal of important grammatical information. As the above description shows, the majority of the grammatical system was already attested by the 9.5.0.0.0 K'atun ending. In fact, the core inflectional categories were, for the most part, already present by the beginning of the 9th Baktun, though with notable exceptions, such as non-third person pronouns and future tense expressions. During the first century of the 9th Baktun, many important derivational and analytic linguistic features were first introduced into the glyphic corpus. The end of the Early Classic, which here includes inscriptions from 9.5.0.0.0 until 9.10.0.0.0, for the most part made use of linguistic features attested earlier. As mentioned earlier, however, the determinative future *-oom*, and the first person ergative prefix *ni-*,

both central features of the linguistic system, were among the latest grammatical morphemes to be introduced during the Early Classic.

Perhaps the most remarkable feature of the Early Classic linguistic corpus is its consistency through time. The Early Classic inscriptions seem to hold very little in the way of firm evidence for grammatical innovation, in spite of the fact that these inscriptions cover a period of more than four hundred years. All of the grammatical affixes first attested between AD 435 and AD 534 seem to be fulfilling functions that had not been needed prior to that time. The only way to determine that a particular feature is an innovation in the language, rather than simply a first in the attested corpus, is if a particular function *f* is expressed by the form *A* at one point in time, and the form *B* at another point in time. Examples of this type of innovation include David Stuart's identification of a possible phonemic change of *ee* to *ii* in the spelling of the past tense suffix *-iiy* (Stuart et al. 1999), Hruby and Robertson's (2001) description of the function shift of *-V_1y*, and the Late Classic introduction of *-wan*, a Chontal loan, as noted by Hruby and Child (2004). Other types of innovations, particularly the use of a novel form for a novel function cannot confidently be identified as such based on such an obviously incomplete corpus.

That said, the present study leaves a great deal of ground unturned, and it is very possible, even likely, that a more detailed analysis of the Early Classic corpus will uncover more examples of just the type of clear innovations mentioned above. A detailed study of any single possible case of language change is beyond the scope of this simple description, but such detailed studies have great potential to expand on the information presented here.

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APPENDIX:
A PRELIMINARY LIST OF EARLY CLASSIC INSCRIPTIONS BY SITE WITH SOURCE INFORMATION FOR PUBLISHED TEXTS

This appendix is meant as a resource to enable further research into the Early Classic inscriptions. Many Early Classic texts have never been published. Those that have been published are, for the most part, scattered throughout the literature on Classic Lowland Maya archaeology, epigraphy, linguistics, and iconography. The Appendix is organized according to site. Each entry for a particular site includes 1) a designation for the particular monument (i.e. Stela 10), 2) a date, in the Maya Long Count where possible, or a more general time period, and 3) those published sources in which I have found photographs or drawings of the text. Unpublished monuments are noted at the end of each site list. Occasionally these include a published source in which a particular text is mentioned as being Early Classic.

Most of the citations are straightforward and full bibliographic information is available for them in the preceding Bibliography of Works Cited. Exceptions to this include drawings from the (Linda) Schele Archive and photographs from the (Justin) Kerr archive. Each entry from these sources has a unique number within the archive, which is included in the reference for that entry. These archives are freely accessible online at <www.famsi.org>, the homepage for the Foundation for the Advancement of Mesoamerican Studies, Inc. Several drawings of monuments are available in the

Glifoteca corpus of hieroglyphic inscriptions, coordinated by Maricela Ayala Falcón and sponsored by the Centro de Estudios Mayas (CEM) at the Universidad Autónoma de México. Finally, all publications by the Corpus of Maya Hieroglyphic Inscriptions project, at the Peabody Museum, Harvard, are referenced with the abbreviation CMHI followed by the volume and page number(s). These sources are referenced in the bibliography under the various authors and years of each volume.

Altar de Sacrificios

Stela 10	(9.1.0.0.0) *sources:* Graham 1972: Fig. 29 (rubbing); Morley 1938
Stela 11	(9.2.0.0.0) *sources:* Graham 1972: Fig. 32 (part-photo); Morley 1938
Stela 13	9.3.0.0.(0) *sources:* Graham 1972: Fig. 36 (photo, rubbing)
Stela 12	9.4.10.0.0 *sources:* Graham 1972: Figs. 33, 34, 35, (photo); Morley 1938
Altar 1	9.7.15.2.9 *sources:* Graham 1972: Fig 51 (photo)
Stela 8	9.9.15.0.0 *sources:* Graham 1972: Fig. 19 (photo)
Stela 18	9.9.5.0.0 *sources:* Graham 1972: Fig. 46 (photo)

Unpublished Early Classic Inscriptions from Altar de Sacrificios

Altar 3	9.3.0.0.0	(Graham 1972:81, Mathews 1985)
Altar 4	(Early Classic)	(Graham 1972:82, Mathews 1985)

Altun Ha

Jade Plaque	(9.7.11.2.17) *sources:* Mathews and Pendergast 1979
Obsidian Earspool	(Early Classic) *sources:* Mathews 1979

Arroyo de Piedra

Unpublished Early Classic Inscriptions from Arroyo de Piedra

Stela 1	9.9.0.0.0

Balakbal

Stela 1	(Early Classic) *sources:* Morley 1938 (rubbing)

Balakbal (cont.)

Stela 4	(8.8.9.17.18) *sources:* Morley 1937 (photo)

Unpublished Early Classic Inscriptions from Balakbal

Stela 5 8.18.10.0.0 (Mathews 1985)

Bejucal

Unpublished Early Classic Inscriptions from Bejucal

Stela 2 8.17.17.0.0
Altar of Stela 2
Stela 1
Stela 3

Bonampak

Lintel 4	(9.8.9.15.1) *sources:* Nájera 1991:56 (photo)
Houston Panel	9.3.3.16.4 *sources:* Mayer 1980: Plate 26 (photo), Plate 27 (drawing)
Pop Panel	9.4.8.14.9 *sources:* Miller 1980: plate 20

Calakmul

Stela 114	9.0.0.0.0 *sources:* Pincemin et al. 1998
Stela 43	9.4.0.0.0 *sources:* Mathews 1985: fig. 20h

Caracol

Altar 4	(9.3.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 20d
Altar 19	(9.3.10.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 26b
Altar 7	(9.4.10.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 21c
Altar 3	(9.5.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 20c

Caracol (cont.)

Altar 5	(9.6.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 21a
Altar 6	(9.7.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 21b
Altar 1	(9.8.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 20a
Stela 4	(Terminal Early Classic) *sources:* Beetz & Satterthwaite 1981: fig. 5
Stela 20	8.18.4.4.14 *sources:* Beetz & Satterthwaite 1981: fig. 18b
Stela 15	9.(7.0.0.0) *sources:* Beetz & Satterthwaite 1981: fig. 14b
Stela 13	9.4.0.0.0 *sources:* Beetz & Satterthwaite 1981: fig. 13
Stela 16	9.5.0.0.0 *sources:* Beetz & Satterthwaite 1981: fig. 15
Stela 14	9.6.0.0.0 *sources:* Beetz & Satterthwaite 1981: fig. 14a
Stela 3	9.6.12.4.16 *sources:* Beetz & Satterthwaite 1981: fig. 3, fig. 4
Stela 1	9.8.0.0.0 *sources:* Beetz & Satterthwaite 1981: fig. 1
Stela 6	9.5.19.1.2 *sources:* Beetz & Satterthwaite 1981: fig. 7

Unpublished Early Classic Inscriptions from Caracol

Stela 22	9.?.?.?.?
Stela 23	8.15.(0.0.0?)

Chinikiha

Unpublished Early Classic Inscriptions from Chinikiha

Throne	573 AD? (Martin & Grube 2000)

Coba

Panel C	(Late Early Classic) *sources:* Hellmuth 1996: 47-48 (Photos and Drawing)

Unpublished Early Classic Inscriptions from Coba

Panel D (Mathews 1985)

La Esperanza (Chinkultic)

Ballcourt Marker	9.7.17.12.14 *sources:* Hellmuth 1996: 4-5 (photo)

Copan

Motmot Floor Marker	(9.0.0.0.0) *sources:* Bell et al. 2004: Fig. 4.4 (drawing)
Papgayo Stela	(9.1.10.0.0) *sources:* Schele No. 1045 (FAMSI); Bell et al. 2004: 11.10 (Altar of Stela 63-Drawing)
Stela 24	(9.2.10.0.0) *sources:* Morley 1920 : fig. 13
Stela 15	(9.4.10.0.0) *sources:* Bell et al. 2004: Fig.11.5; Morley 1920
Stela 18	(9.7.0.0.0) *sources:* Morley 1920 (photo)
Xukpi Stone	(Terminal Early Classic) *sources:* Bell et al. 2004: Fig. 11.18; Schele et al. 1994
Peccary Skull	(Terminal Early Classic) *sources:* Bell et al. 2004: Fig. 11.4; Morley 1920
Altar X	(Terminal Early Classic) *sources:* Baudez 1994: fig. 58, fig. 59; Morley 1920 (photo)
Altar Y	(Terminal Early Classic) *sources:* Baudez 1994: fig. 56, fig. 57; Morley 1920 (photo)

Copan (cont.)

Stela 63	9.0.0.0.0 *sources:* Bell et al. 2004: Fig. 11.9, Fash 2001: fig. 37
Stela E	9.5.10.0.(0) *sources:* Baudez 1994: fig. 16 (front); Robicsek 1972: fig. 80.
Ante Step	9.5.7.(12.2) *sources:* Bell et al. 2004: Fig. 12.9, Morales et al. 1990
Stela 17	9.6.0.0.0 *sources:* Fash 2001: fig. 41c; Morley 1920
Stela 9	9.6.10.0.0 *sources:* Schele No. 1032 (FAMSI)
Stela 7	9.9.0.0.0 *sources:* Baudez 1994: fig. 65 (front)
Stela P	9.9.10.0.0 *sources:* Baudez 1994: fig. 39 (front) ; Robicsek 1972: fig. 170
Stela 20	(9.1.10) *sources:* Morley 1920:72
Stela 21	(9.6.10) *sources:* Morley 1920:95
Altar Q'	9.4.10.0.0 *sources:* Morley 1920 (photo)
Altar K'	(9.2.10) *sources:* Morley 1920 (photo)
Altar A'	(9.5.0) *sources:* Morley 1920 (photo)
Altar L'	(9.5.0) *sources:* Morley 1920 (photo)
Altar M'	(9.5.0) *sources:* Morley 1920 (photo)

Copan (cont.)

Stela 28 (9.0.0.0.0)
sources: Bell et al. 2004: Fig. 11.16 (drawing)

Hunal Tomb Shell Disk (Terminal Early Classic)
sources: Bell et al. 2004:Plate 4

Stela 25 9.2.10.0.0
sources: Morley 1920

Stela 22 (9.4.0)
sources: Morley 1920

Stela 16 (Early Classic)
sources: Morley 1920

Unpublished Early Classic Inscriptions from Copan
Altar P' (9.2.10) (Mathews 1985)
Stela 49 (Terminal Early Classic)

Corosal

Stela 1 (8.13?.?.?.?)
sources: Jones and Orrego 1987, Martin 1998

Dzibanche

Captive Stairway (a.k.a monuments 3, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 17, 18, 20, 21, 22)
(Early 9 Baktun - Before 520 AD)
sources: Nalda 2004: 87-96, 30-55

Unpublished Early Classic Inscriptions from Dzibanche
Lintel 3 9.6.0.0.0 (Mathews 1985)

El Encanto

Stela 1 (8.13.?.?.?—between 305 and 308)
sources: Martin 2000; Morley 1937

El Palmar

Unpublished Early Classic Inscriptions from El Palmar
Altar 1 9.6.0.0.0 (Mathews 1985)
Outlier Stela (Mathews 1985)

El Peru

Stela 15	(8.19.0.0.0) *sources:* Glifoteca CEM
Stela 22	(9.6.0.0.0) *sources:* Glifoteca CEM
Stela 16	(Early Classic) *sources:* Glifoteca CEM

Unpublished Early Classic Inscriptions from El Peru

Altar of Stela 39	(Mathews 1985)
Stela 9	(Mathews 1985)
Stela 23	9.4.0.0.0 (Mathews 1985)

El Temblor

Unpublished Early Classic Inscriptions from El Temblor

Stela 1	8 Baktun? (Mathews 1985)

El Zapote

Stela 1	8.(18).10.(4).9 43 *sources:* Stuart et al. 1999: fig. 134 (part)

Unpublished Early Classic Inscriptions from El Zapote

Stela 4	(8).17.2.5.3
Stela 6	(8.18.9.15.5)
Stela 3	(Early 9 Baktun)
Stela 7	(Early 9 Baktun)
Stela 5	9.0.0.(0.0)

El Zotz

Wooden Lintel	(Terminal Early Classic) *sources:* Glifoteca CEM; Kerr No. 5183 (FAMSI)
Stela 1	(Early Classic) *sources:* Glifoteca CEM

Ichpaatun

Unpublished Early Classic Inscriptions from Ichpaatun

Stela 1	9.8.0.(0.0)

Kendal

Earflare	(8 Baktun) *sources:* Schele No. 6909 (FAMSI)

Kendal (cont.)

Axe Head	Preclassic *sources:* Schele No. 6907 (FAMSI)

Unpublished Early Classic Inscriptions from Kendal

Effigy Shell	PreClassic?	(Mathews 1985)

Kichpanha

Bone Bloodletter	Preclassic *sources:* Sharer 1994:126 (fig. 3.32)

La Sufricaya

Unpublished Early Classic Inscriptions from La Sufricaya

Stela 6	8.17.(10).9.9
Stela 5	8.19.6.8.5

Lacanha

Stela 1	(9.8.0.0.0) *sources:* Proskouriakoff fig. 44b

Unpublished Early Classic Inscriptions from Lacanha

Stela 7	9.8.0.0.0 (Mathews 1985)

Lamanai

Stela 9	(9.9.12.0.0) *sources:* Closs 1988

Loltun

Cave Carving	(8.14.0+/-?) *sources:* Proskouriakoff 1950: fig. 38b; Morley 1920

Mountain Cow

Unpublished Preclassic Incriptions from Mountain Cow

Incised Celt	Preclassic (Mathews 1985)

Naachtun

Stela 23	9.4.10.0.0 *sources:* Morley 1938 (rubbing)

Naranjo

Altar 1	(9.8.0.0.0) *sources:* CMHI 2:103

Naranjo (cont.)

Stela 38	(9.8.0.0.0) *sources:* CMHI 2:97
Stela 25	(9.9.2.0.4)? *sources:* CMHI 2:69
K5458 Pot	(Early 9 Baktun) *sources:* Kerr No. 5485 (FAMSI)
Stela 41	(Terminal Early Classic) *sources:* CMHI 2:185
Stela 17	(Terminal Early Classic) *sources:* Morley 1937 (photo)
Stela 27	(Terminal Early Classic) *sources:* CMHI 2:73
Panel 1 (Caracol)	(Terminal Early Classic) *sources:* CMHI 2:105

Unpublished Early Classic Inscriptions from Naranjo

Stela 15	(Terminal Early Classic) (Mathews 1985)
Stela 16	(Terminal Early Classic) (Mathews 1985)
Altar 2	(Terminal Early Classic)

Ojos de Agua

Unpublished Inscription from Ojos de Agua

Stela 1	9.7.15.0.0 (Mathews 1985)

Oxkintok

Lintel 1	9.2.(0.0.0) *sources:* García and Lacadena 1990: fig. 1
Lintel 2	9.2.(0.0.0) *sources:* García and Lacadena 1990: fig. 2
Lintel 11	(9.2.11.16.17) *sources:* García and Lacadena 1990: fig. 3
Lintel 13	(9.2.11.16.17) *sources:* García and Lacadena 1990: fig. 4

Pacbitun

Stela 6	9.2.5.(0.0) *sources:* Healy 1990

Piedras Negras

Stela 30	(9.5.0.0.0) *sources:* Morley 1937 (photo)
Lintel (AKA Panel) 12	9.4.3.0.17 *sources:* Morley 1937; Morley 1938
Stela 29	9.5.5.0.0 *sources:* Morley 1937 (photo)
Stela 25	9.9.10.6.16 *sources:* Sharer 1994: fig. 5.23a (photo)
Lintel 11	(Early Classic) *sources:* Morley 1937 (photo)
MSS 19	(Early Classic) *sources:* Morley 1938
Inscribed Cliff	9.8.0.0.0 *sources:* Morley 1938
Stela 26	(9.9).15.(0.0) *sources:* Schele No. 6107 (FAMSI)

Polol

Altar 1	(8 Baktun) *sources:*Proskouricakoff 1950: fig. 36d; Morley 1938

Pomona (Belize)

Jade Earflare	Preclassic *sources:* Sharer 1994: 126 (fig. 3.32)

Pusilha

Stela Q	(9.8.0.0.0) *sources:* Wanyerka 2003:140-142; Morley 1937
Stela Z	(Early 9 Baktun) *sources:* Wanyerka 2003:150-151

Pusilha (cont.)

Stela O	9.7.0.0.0 *sources:* Wanyerka 2003:130-132; Morley 1937

Quirigua

Monument 26	9.2.18.0.(0) *sources:* Sharer 1990: fig. 46, 47; Jones 1983
Monument 21 (aka Stela U)	9.2.15.0.0 *sources:* Sharer 1990: fig. 45 (photo); Morley 1937

Resbalon

H.S. 1	9.4.14.10.4 *sources:* Schele and Mathews 1990

Unpublished Inscriptions from El Resbalon

H.S. 2 (Mathews 1985)
H.S. 3 (Mathews 1985)

Rio Azul

Tomb 7 Mural	(8.19.?.?.?) *sources:* Adams 1999: fig. 3-14
Chocolate Pot	(Early 9 Baktun) From Tomb 12-AD 450 *sources:* Adams 1999: fig. 3-41, plate 5
Jade Mask (Pheonix Mask)	(Early 9 Baktun) *sources:* Coe and Kerr 1998: fig. 20, fig. 21; Mayer 1987; National Geographic April 1986: cover
Tomb 1 Mural	(Early 9 Baktun) *sources:* Adams 1999: plate 2, plate 3
Stela 1	8.17.16.12.(2) *sources:* Adams 1999: fig 3-32
Tomb 6 Mural	(Early 9 Baktun—Between 450 and 525) *sources:* Adams 1999: fig. 3-17
Tomb 12 Mural	(9.0.14.8.11) *sources:* Stuart 1987:161-167; Adams 1999: fig. 3-15, fig. 3-16

Unpublished Early Classic Inscriptions from Rio Azul

Ear Flares	(Early 9 Baktun)

San Diego

Unpublished Inscriptions from San Diego

Cliff Carving	Preclassic (Mathews 1985)

Tamarindito

Stela 5	(Early Classic) *sources:* Houston 1993:77

Unpublished Inscriptions from Tamarindito

Stela 4	9.6.0.0.0

Tikal

Mundo Perdido Vase	(8 Baktun) *sources:* Kerr No. 5618 (FAMSI)
Stela 36	(8 Baktun) *sources:* Jones & Satterthwaite 1982: fig. 56a
Stela 39	(8.17.0.0.0) *sources:* Schele No. 2030 (back), Schele No. 2031 (front) (FAMSI)
Altar 1	(8.17.2.16.17) *sources:* Jones & Satterthwaite 1982: fig. 6
Stela 4	(8.18.0.0.0) *sources:* Jones & Satterthwaite 1982: fig. 5; Schele No. 2018 (FAMSI)
Stela 18	(8.18.0.0.0) *sources:* Jones & Satterthwaite 1982: fig. 26; Morley 1937; Schele No. 2011 (back), Schele No. 2026 (front) (FAMSI)
Hombre de Tikal	(8.18.10.8.12) *sources:* Villela 1993; Fahsen 1988
Stela 6	(9).4.0.(0.0) *sources:* Jones & Satterthwaite 1982: figs. 9, 10; Morley 1937
Stela 1	(9.1.10.0.0) *sources:* Jones & Satterthwaite 1982: fig. 1

Tikal (cont.)

Stela 9	(9.2.0.0.0) *sources:* Jones & Satterthwaite 1982: fig. 13; Morley 1937
Stela 15	(9.3.0.0.0) *sources:* Jones & Satterthwaite 1982: fig. 21; Morley 1937
Stela 7	(9.3.0.0.0) *sources:* Jones & Satterthwaite 1982: fig. 11; Morley 1937
Stela 8	(9.3.2.0.0) *sources:* Jones & Satterthwaite 1982: fig. 12
Stela 12	(9.4.14).0.0 *sources:* Jones & Satterthwaite 1982: fig. 17, 18; Morley 1937
Cache 198 Lidded Vessel	(Early 9 Baktun) *sources:* Schele No. 2012 (FAMSI)
MS. 6a	(Early Classic) *sources:* Jones & Satterthwaite 1982: fig. 63
MS. 94	(Early Classic) *sources:* Jones & Satterthwaite 1982: fig. 66
Stela 37	(Early Classic) *sources:* Jones & Satterthwaite 1982: fig. 56b
Stela 38	(Early Classic) *sources:* Jones & Satterthwaite 1982: fig. 56c
Str. 5D-141 Text	(Early Classic) *sources:* Schele No. 2043 (FAMSI)
Str5D-57	(Early Classic) *sources:* Schele No. 2073 (FAMSI)
Stela 26	(8 Baktun) *sources:* Jones & Satterthwaite 1982: fig. 44, 45
Marcador	8.(17).6.(5).12?—Dedicated 416 *sources:* Schele No. 2057, 2058, 2059 (FAMSI)

Tikal (cont.)

Stela 29	8.12.14.8.15 *sources:* Jones & Satterthwaite 1982: fig. 49; Schele No. 2064 (FAMSI)
Leiden Plaque	8.14.3.1.12 *sources:* Schele No. 2007 (front); Schele No. 2027 (back) (FAMSI); Morley 1920; Morley 1938
Stela 31	9.0.10.0.0 *sources:* Jones & Satterthwaite 1982: fig. 51, 52, 53, 54
Burial 48 Mural	9.1.1.10.10 *sources:* Martin & Grube 2000:36
Stela 40	9.1.13.0.0 *sources:* Valdez et al. 1997:86
Stela 3	9.2.13.0.0 *sources:* Jones & Satterthwaite 1982: fig. 4
Stela 27	9.3.0.0.0 *sources:* Jones & Satterthwaite 1982: fig. 46, 47
Stela 23	9.3.9.8.3 *sources:* Jones & Satterthwaite 1982: fig. 35, 36
Stela 10	9.4.13.0.0 *sources:* Jones & Satterthwaite 1982: fig. 14, 15; Morley 1937
Stela 25	9.4.3.0.0 *sources:* Jones & Satterthwaite 1982: fig. 42, 43
Stela 17	9.8.3.9.15 *sources:* Jones & Satterthwaite 1982: fig. 24, 25; Morley 1937; Schele No. 2013 (front), 2046 (back) (FAMSI)
Stela 28	(8.19.0+/-3KT) *sources:* Jones & Satterthwaite 1982: fig. 48
Stela 13	(9.2.10+/-2KT) *sources:* Jones & Satterthwaite 1982: fig. 19; Morley 1937; Schele No. 2017 (FAMSI)

Tikal (cont.)

Stela 2	(9.3.10+/-2KT) *sources:* Jones & Satterthwaite 1982: fig. 2; Morley 1937; Schele No. 2042 (FAMSI)
Stela 14	(9.5.0+/-3KT) *sources:* Jones & Satterthwaite 1982: fig. 20; Morley 1937

Unpublished Monuments from Tikal

Burial 195 Panels (Mathews 1985)

Tonina

Monument 43	(9.4.0.0.0) *sources:* CMHI 6:91
Monument 74	(Early 9 Baktun) *sources:* CMHI 6:107
Monument 26	9.7.0.5.9 *sources:* CMHI 6:61, 6:62, 6:63
Monument 106	9.8.0.0.0 *sources:* Mathews 1985: fig. 20m
Monument 98	(Early Classic) *sources:* CMHI 6:121 (photo)

Unpublished Early Classic Inscriptions from Tonina

Zapata Panel	(Terminal Early Classic)
Monument 183	9.9.(0.0.0)
"New Altar" (Simon & Grube 2000:178)	
Monument 177 (aka Zotz Choj)	(Early 9 Baktun)
Fragment 13	
Fragment 5/50/67	
Fragment 84	

Tres Islas

Unpublished Early Classic Inscriptions from Tres Islas

Stela 1	(9.2.0.0.0)	(Mathews 1985)
Stela 2	9.(2).0.0.0	(Mathews 1985)
Stela 3	(9.1.0.0.0)	(Mathews 1985)

Tulum

Stela 1	9.7.0.0.0 *sources:* Proskouriakoff 1950: fig. 41c; Morley 1920

Uaxactun

Incised Bowl	(8 Baktun) *sources:* Morley 1937 (photo)
Stela 4 Yes	(8.18.0.0.0) *sources:* CMHI 5:141, 5:142; Morley 1937; Schele No. 6605 (FAMSI)
Stela 20	(9.3.0.0.0) *sources:* CMHI 5:181, 5:182, 5:183, 5:184, 5:185; Morley 1937
Stela 15	(Early Classic) *sources:* CMHI 5:167 (photo-no legible glyphs; Morley 1937
Stela 16	(Early Classic) *sources:* CMHI 5:169, 5:170; Morley 1937
Stela 18	8.(16).0.0.0 *sources:* CMHI 5:173, 5:174, 5:175; Morley 1937
Stela 9	8.14.10.13.15 *sources:* CMHI 5: 155, 5:156, 5:157, 5:158; Morley 1937, Morley 1920
Stela 19	8.16.0.0.0 *sources:* CMHI 5:177, 5:178, 5:179, 5:180; Morley 1937
Stela 5	8.17.1.4.12 *sources:* CMHI 5:143, 5:144, 5:145, 5:146; Morley 1937; Schele No. 6604
Stela 17	8.19.0.0.0 *sources:* CMHI 5:171, 5:172; Morley 1937
Stela 22	9.3.10.0.0 *sources:* CMHI 5:189, 5:190, 5:191; Morley 1937

Uaxactun (cont.)

Stela 3	9.3.13.0.0 *sources:* CMHI 5:137, 5:138, 5:139; Morley 1937
Stela 6	9.6.(0.0.0) *sources:* CMHI 5:147, 5:148, 5:149; Morley 1937
Stela 10	(8.15.0+/-?) *sources:* CMHI 5:159, 5:160; Morley 1937
Str. B-XIII Mural	(Early 9 Baktun) *sources:* Sharer 1994: fig. 4.29; Schele No. 6601
Stela 23	9.2.0.0.0 *sources:* Morley 1937 (photo)
Stela 25	9.5.0.0.0 *sources:* Morley 1937; Morley 1938
Burial A-31 Incised Bowl	(Early Classic) *sources:* Boot 2005
Stela 1	8.18.13.5.(11) *sources:* CMHI 5:133

Unpublished Early Classic Inscriptions from Uaxactun

Stela 24	(Early Classic) (Mathews 1985)
Stela 26	9.0.10.0.0 (Mathews 1985)

Uolantun

Stela 1	(9.0.0.0.0) *sources:* Mathews 1985: fig. 20c; Martin 2000

Uxbenka

Stela 18	(8 Baktun) *sources:* Wanyerka 2003:220-222
Stela 21	(8 Baktun) *sources:* Wanyerka 2003:226-228
Stela 11	(8 Baktun) *sources:* Wanyerka 2003:211-214

Unpublished Inscription from Uxbenka

Stela 1	(Morley 1937; Morley 1938)

Uxul

Unpublished Early Classic Inscriptions from Uxul

Altar 2	9.9.9.9.10
Stela 19	(Early Classic)

Xultun

Stela 13	(9).5.0.9.? *sources:* CMHI 5:41, 5:42, 5:43
Stela 18	(Terminal Early Classic) *sources:* CMHI 5:59, 5:60; Morley 1937; Proskouriakoff 1950: fig. 43a
Stela 6	9.3.5.0.0 *sources:* CMHI 5:27, 5:28; Morley 1937

Yaxchilan

Lintel 36	(Early 9 Baktun) No glyphs *sources:* CMHI 3:81; Morley 1937
Lintel 22	(9.4.11.8.16) *sources:* Mathews 1997: 82; CMHI 3:51
Lintel 34	(9.4.11.8.16) *sources:* CMHI 3:77; Morley 1937
Lintel 47	(9.4.11.8.16) *sources:* CMHI 3:103; Stuart et al. 1999
Lintel 35	(9.5.2.10.6) *sources:* CMHI 3:79; Morley 1937
Lintel 37	(9.5.2.10.6) *sources:* CMHI 3:83; Morley 1937
Lintel 19	(Early 9 Baktun) *sources:* Mathews 1997:84; Morley 1937
Lintel 18	(Early 9 Baktun) *sources:* Mathews 1997:83; Morley 1937
Lintel 20	(Early 9 Baktun) *sources:* Mathews 1997:81; Morley 1937

Yaxchilan (cont.)

Lintel 49	(9.4.11.8.16) *sources:* CMHI 3:107; Mathews 1997:75; Morley 1937
Stela 27	9.4.0.0.(0) *sources:* Martin 1998:57; Mathews 1997:101
Lintel 48	9.4.11.8.16 *sources:* CMHI 3:105; Mathews 1997:78 Morley 1937
Lintel 11	9.5.2.10.6 *sources:* Mathews 1997:74

Yaxha

Fragment	(Early Classic) *sources:* Schele No. 6706 (FAMSI)
Stela 4	(Terminal Early Classic) *sources:* Schele No. 6700 (FAMSI)
Stela 2	ND (9.5.0+/-2KT) *sources:* Schele No. 6701 (FAMSI)
Stela 7	(Early 9 Baktun) *sources:* Morley 1937

Unpublished Early Classic Inscriptions from Yaxha

Stela 25	(Early Classic)
Altar 13	(Early Classic)
Stela 1	(Early Classic)
Stela 27	9.4.0.0.0
Stela 6	ND (9.0.10+/-2KT)

Unprovenanced Texts

1. K6964 Pot	(Terminal Early Classic) *sources:* Kerr No. 6964 (not a rollout) (FAMSI)
2. K3801 Pot	(?.?.?).12.18 *sources:* Kerr No. 6964 (FAMSI)
3. Jade Celt	(8 Baktun) *sources:* Schele No. 6908 (FAMSI)

4. Pearlman Conch	(8 Baktun) *sources:* Schele No. 6913; Coe and Kerr 1998: fig. 41 (photo); Zender 1999
5. Conch Shell Trump	(8 Baktun) *sources:* Schele No. 6912 (FAMSI)
6. Jade Turtle	(8 Baktun) *sources:* Schele No. 4010 (FAMSI)
7. Shell Gorget	(8 Baktun) *sources:* Stuart et al. 1999: fig. 187; Coe and Kerr 1998: fig. 39 (photo)
8. Early Celt 1	(8 Baktun) *sources:* Unpublished
9. Early Celt 2	(8 Baktun) *sources:* Coe and Kerr 1998: fig. 24 (back), 25 (front detail)
10. K1285 Pot	(8 Baktun?) *sources:* Kerr No. 1285 (FAMSI)
11. Hauberg Stela	(8.7.17.14.4)? *sources:* Schele et al. 1990; Fields et al. 2005: cat. 56; Easby and Scott 1970: cat. 169; Lacadena 1995: 250-262
12. K8042 Pot	(Early 9 Baktun) *sources:* Kerr No. 8042 (FAMSI)
13. K1216 Pot	(Early Classic) *sources:* Kerr No. 1216 (FAMSI)
14. Duke Stela	(Early Classic) *sources:* Mayer 1980: cat. 19 (plate 81-photo)
15. Bagaces Mirrorback	(Early 9 Baktun) *sources:* Mora-Marin 2001: fig. 20 (INS 6528)
16. K6167 Pot	(Terminal Early Classic) *sources:* Kerr No. 6167 (FAMSI)

17. Deletaille Tripod	(Terminal Early Classic) *sources:* Fields et al. 2005: cat. 137; Martin 2000
18. Bedran Pots	(Early Classic) *sources:* Unpublished
19. N.Y. Inscribed Bones	8.(18.4.13).19 *sources:* Stuart et al. 1999: fig. 80; Boot 2005
20. Belmopan Stela	8.19.(0.0).0 *sources:* Mayer 1984: cat. 2 (plate 46-photo)
21. Kansas City Lintel	9.3.19.3.8 *sources:* Mayer 1980: cat. 17 (plate 39-photo)
22. Private Collection Panel	9.4.2.10.1 *sources:* Unpublished
23. Brussels Stela	9.8.0.0.0 *sources:* Mayer 1978: cat. 1 (plate 16-photo)
24. BMA Jade Mask	Preclassic *sources:* Schele No. 6911; Mora-Marin 2001: fig. 4; Covarrubias 1957: fig. 97
25. Dumbarton Oaks Pectoral	Preclassic *sources:* Mora-Marin 2001: fig. 9, fig. 10; Fields et al. 2005: cat. 90
26. Cleveland Plaque	Preclassic *sources:*Stone 1994
27. UNP clamshell	Preclassic *sources:* Kerr No. 763 (FAMSI)
28. JM Jade Spoon	Preclassic *sources:* Mora-Marin 2001: fig. 12; Fields et al. 2005: cat. 87 (INS 6726)
29. Antwerp Stela	Preclassic *sources:* Boot 2006
30. Hatzcap Ceel Celt	Preclassic *sources:* Mora-Marin 2001: fig. 31