*AJAW*: A LINGUISTIC INDEX OF CULTURE IN A MAYA HIEROGLYPH

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*AJAW*: A LINGUISTIC INDEX OF CULTURE IN A MAYA HIEROGLYPH

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**ABSTRACT**

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Much can be learned about how the Maya understood kingship by investigating how the Maya used the word for king, *ajaw*, in their inscriptions. This work endeavors to undertake this goal by reviewing the available literature on the topic of kingship and its representative *ajaw* glyph. In addition to this review, a study was conducted to look at the various representations of *ajaw* present at three different Maya sites. It looked at inscriptions from three Maya sites, Tikal, Copan, and Palenque, and examined them for *ajaw* signs. These signs were then coded and categorized based on site, monument, date and graphical characteristics.

From this preliminary investigation, four main categories, or allographs, were identified. The [calendrical], [Non-Calendrical], [Headband], and [Affix] *ajaw* allographs each have identifying characteristics that make its function within the Maya writing system unique. However, each of these allographs shares either graphical or

semantic characteristics as evidence of their relationship. The literature review suggests that the *ajaw* morpheme was borrowed from the neighboring Mixe-Zoquean speakers to the west of the Maya heartland during the Early or Middle Formative periods. It also suggested strong relationships between kingship and agriculture, cave rituals, and the lineage ties between the king and his mythical ancestor, the Maize God.

These findings from the literature were supported by a multi-approach analysis of *ajaw*. First, historical linguistic reconstructions of possible loaned words from proto-Mixean were evaluated. Then a detailed breakdown of each allograph was conducted based on its structure, its common position within inscriptions, and the literal meaning of the allograph in context. Finally, the signs were broken down iconographically and an analysis was conducted on the constituent elements of each sign.

Interesting patterns appeared that indicated that the [Affix] *ajaw* began as a specific elite title that seemed to merge with the more common semantic value of *ajaw* over time. On the other hand, the [Non-Calendrical] *ajaw* appears to have began as a title associated with elite toponyms or lineage markers. Over time it began to drift into several different grammatical categories within the writing system, but each of these categories still shares associations with kin relationships and responsibilities associated with lineages.

# A NOTE ON ORTHOGRAPHY

This work makes use of several orthographic conventions, including International Phonetic Alphabet (IPA) symbols, as well as standard notation such as the asterisk * to represent reconstructed proto-languages, and the apostrophe ' to represent glottal stops. Words written in italics within the text are Mayan words unless otherwise noted. There are also several notations that have been modified for this work. Words in square brackets [ ] represent an allographic sign. I have represented syllable signs and sounds as a CV cluster within a set of slash marks //. These symbols are used in an effort to enhance the clarity of the information.

# 1 INTRODUCTION

## 1.1 Background

The Maya are a Native American people that are indigenous to southeastern Mexico, Belize, Guatemala, and the far western portions of Honduras and El Salvador (Figure 1.1.1). At the beginning of the Spanish arrival in the 16th century, the Maya peoples of the northern Yucatan peninsula were only one of several complex, state level societies in a region that has come to be known as Mesoamerica. Figure 1.1.2 shows how Mesoamerica stretches from



Figure 1.1.1. Map of Maya cultural area. (Source: www.latinamericanstudies.org/maya, 2/15/11)

central Mexico in the north, to Honduras and El Salvador in the south. This area includes the Maya, Aztec, Mixtec, and Zapotec cultures. Starting at the end of the Archaic period around 2000 BC the cultures of Mesoamerica progressed to a high degree of cultural sophistication, and developed many complex social, political and technological practices, including writing.

Figure 1.1.2. Map of Mesoamerica with Formative period sites noted.  (Source: www.famsi.org, 12/10/10)

This work focuses on the development of writing in Mesoamerica.  Specifically, it addresses a single written symbol, the *ajaw* sign (Figure 1.1.3). *Ajaw*, the Maya word for lord, retains important political associations that are not believed to have originated among the Maya.  By examining the linguistic, calendric, and iconographic function and context of this sign during the Formative period (2000 BC-AD 250), it is possible to locate the origin and



Figure 1.1.3. [Calendrical *Ajaw*]. (Source: Schele, 2000)  © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

trace the development of both the sign for lord and the concept of lordship among the Maya and their linguistic neighbors.

This first chapter shows how the Classic period Maya used writing in their culture. It briefly discusses the decipherment of the Maya script and the more common topics of Maya writing. It then discusses the position that the *ajaw* sign holds within this system, specifically as it relates to the Maya calendar, its function as a title for kingship, and its function within the basic grammar of the Maya script. This is followed by a brief summary of the development and historical context of writing in Mesoamerica, including a brief discussion of possible sources for the development of the *ajaw* morpheme. The chapter concludes with a detailed description of Maya Hieroglyphic writing.

*1.2 The Maya Hieroglyphic Writing System*

Maya hieroglyphic writing is a mixed logographic and syllabic writing system despite the very formal nature of the graphemes (Coe, 1992). Formal refers to the fact that most Maya signs appear as forms found in nature, especially parts of the human body. Figure 1.2.1 shows several different examples of how Maya hieroglyphs, a pictorial system, use natural forms,



Figure 1.2.1. Maya signs that illustrate natural forms. (From top to bottom, left to right: a bat head, a Deer Skull, a Rodent head, and a human hand). (Source: Schele, 2000) © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

including bat and rodent heads, a dear skull, and a human hand.  Animals, objects, and even human body parts are common in many signs.  All of the sign forms express some degree of stylization, but that stylization is more similar to early Sumerian cuneiform or Shang period Chinese script rather than the high degree of stylization that can be seen in the Latin alphabet (DeFrancis, 1989; Coe, 1992).  Figure 1.2.2 illustrates the writing systems of the Sumerian, Chinese, and Maya cultures respectively.  Each of these cultures created formally expressive writing rather than arbitrary symbols.  In the following section the Maya script will be defined.  By describing how the Maya script works, it will become apparent how the *ajaw* sign functions within it.

Figure 1.2.2. A comparison of early forms of writing from Mesopotamia (1.2.2.a), China (1.2.2.b), and Mesoamerica (1.2.2.c).

The Maya make use of a hieroglyphic writing system; that is, one in which each grapheme, the smallest meaningful unit of writing, represents a morpheme from a spoken language.  A morpheme may be either grammatically dependent as an affix or independent as a root (Ottenheimer, 2009: 81-82).  In Maya hieroglyphic writing, a single

glyph block may contain one root morpheme, called a main sign, and several, smaller, affix morphemes, or it may contain multiple roots along with affixes (Coe, 1992; Coe and Van Stone, 2001: 17; Montgomery, 2002). Figure 1.2.3 exemplifies how main signs and affixes may work together to inform the reader. The example in the figure combines the *pacal* main sign logogram, with a *–la* syllabic subscripted affix. The affix acts as a phonetic compliment to the main sign. It is as if the writer is reminding the reader that the main sign ends with a *–la* sound, and thus should be read *pacal*.
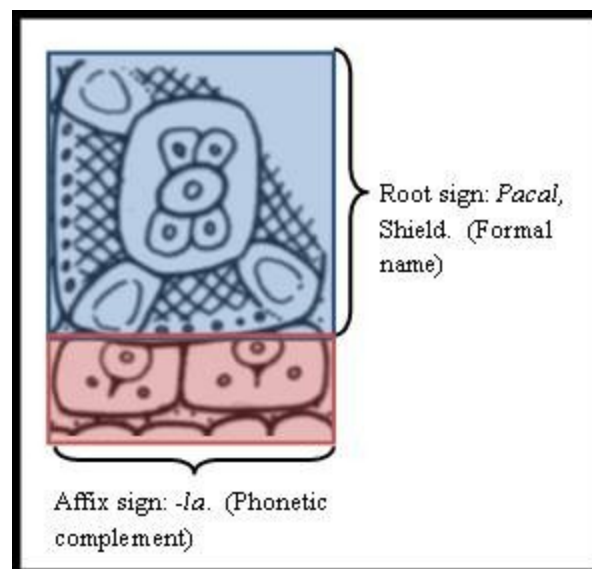
Figure 1.2.3. Glyph block with Root and Affix elements highlighted. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

The point where the direct pictorial quality of the word is lost and another semantically unrelated morpheme becomes associated with a grapheme is called the rebus principle (Coulmas, 2003: 47). This is not an actual writing system, but a way of manipulating homophony within a language in order to express more complex themes than can be express with a one to one relationship between subject and symbol. For example, a grapheme representing a simple concept like a picture of an eye could be used to relay the more complex concept of self in the morpheme "I" (Coulmas, 2003: 74). This is an important element of early writing because it allows for ideas that are difficult to represent with images to be formulated using simple pictorially oriented graphemes. Figure 1.2.4 represents a good example of rebus in Maya writing is the *Cha'an* snake

Number 7

Cha'an snake    [calendrical *ajaw*]
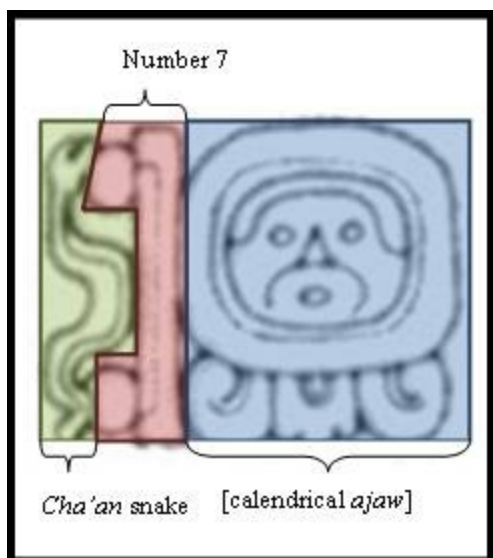
Figure 1.2.4. Example of rebus principle: *chan*, Snake; *cha'an*, From. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

associated with counting. In Cholan dialects of Mayan, *chan* means <snake>, while *cha'an* means <from>; the scribes used the similar phonetic value of the two words to create a sign with the morphemic value <from> by using the form of a snake (Campbell, 1999). By using the cha'an snake in this way the Maya are able to incorporate distance numbers, like the one used in figure 1.2.4 (the symbols noted in red represent the number 7, the symbol in blue is an example of *Ajaw*), in the main body of the text.

Thus, the initial date stated within the calendrical portion of the text can be given. Then a distance *from* the original date can be stated within the main body of the text in order to describe the passage of time and discuss more complex event chains. These "distance numbers" are calendrical information that were placed amid the body of the text.

Within any rebus system, the homophony present within a language can be used to focus on the phonetic value of the morpheme rather than only on the semantic value of the grapheme. This allows for the creation of more complex graphs composed of multiple elements. When combined, the primary element is used for its phonetic value, while the other, secondary, element indicates that the phonetic value, of the primary element should be used, rather than the semantic value. The Maya use of the rebus system suggests that both the form and the sound associated with a sign were important elements that influenced the development of the Maya script.

A syllabic writing system uses graphemes to represent the syllables of a language and clusters of graphemes to represent morphemes. The syllable, as a linguistic unit varies, however, it includes consonant (C)/vowel (V) cluster. The rebus principle was used by many early literary cultures, including Egyptian, Sumerian, Chinese, and Mesoamerican scribes in order to associate a syllable, commonly CV or CVC, with a morpheme. The syllable signs can be semantically associated with a word that begins with the syllable or may be represented by a completely arbitrary sign. In figure 1.2.3, the glyph makes use of the affix –*la* to phonetically support the *pacal* main sign. In a different context the formal characteristics of the –*la* affix may indicate the 20th Tzolk'in day or the *cham* "to receive" sign, or they may be used to as a semantic determiner for the [headband *ajaw*]. The formal nature of the Maya script allows the graphs to be more semantically associated, especially when the same sign may have multiple syllabic and logographic values depending on the context. This is definitely true for the *ajaw* allographs as will be discussed in greater depth in chapter 3.

Grammatical expressions can be accurately modeled using syllabic affixes in a manner that is much less cumbersome than logographic writing. Mayan is primarily an agglutinative language (Coe, 1992: 23), that is, it builds up words from root morphemes by attaching affixes to express grammatical relations (Coulmas, 2003: 39).

To understand the structure of the Maya script, its syntax and morphology must be explained. Maya writing is generally laid out in vertical columns, each divided into glyph pairs. Figure 1.2.5 show the hieroglyphs along the north side of Stela A at Copan. Beginning with the Initial Series Introducing Glyph (ISIG), the subsequent glyph pairs are read horizontally left to right, from the top to the bottom of the column (Coe and Van

Stone, 2001: 17; Montgomery, 2002). In figure 1.2.5, an artist's rendering of the north side of stela A from Copan, red arrows are used to indicate the reading order. The morphology of each glyph block can be broken down in several different ways. They are usually composed of two or more graphic elements, or signs, and are generally read in roughly the same way as the main body of the text, left to right and top to bottom (Montgomery, 2002: 39). In figure 1.2.6, one common example of the emblem glyph, reading begins with the prefix at position 1 (blue), followed by the superfix at position 2 (red), and ending with the main sign at position 3 (green). This is a simplistic example, and many glyph blocks are much more complex, and include overlapping, infixed, and conflated signs.

Within the glyph block, there are two basic types of graphemes: main sign roots and affixes. Figures 1.2.3 and 1.2.6 give good examples of the formal differences between
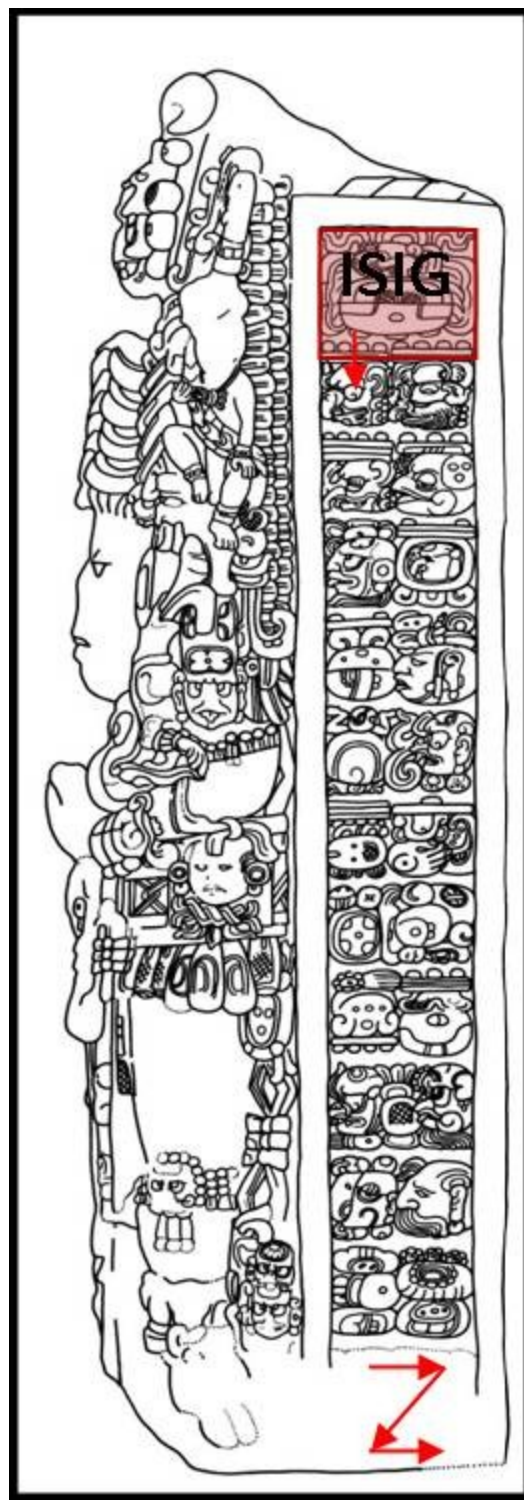


Figure 1.2.5. Common reading order for Mayan inscriptions. (Source: Schele, 2000) © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

main signs, such as the pacal "shield" of figure

1.2.3 or the bat head in position 3 of figure 1.2.6.

Main signs usually appear larger than affixes and

often represent the logographic element of a

glyph. As such, each main sign contains much of

the morphemic content of the glyph.  However,

main signs can also relay purely phonetic values

(Montgomery, 2002: 41-42).  Affixes are smaller

graphemic elements that may modify or
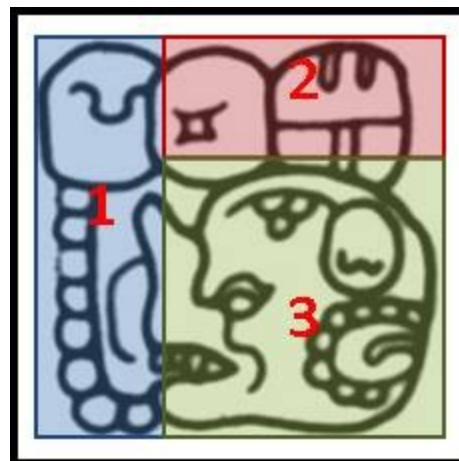


Figure 1.2.6. Common reading order for Mayan glyph blocks. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

emphasize the main sign as in figure 1.2.3.  Affixes can either complement the main

signs, or, on rare occasions, disambiguating polygraphs by offering phonetic clues to the

morphemic value of the main sign (Montgomery, 2002: 44).  More often, the affixes spell

out the phonetic value of part of the preceding or following words as phonetic

complements (Montgomery, 2002: 43).  Affixes may also be morphemically independent,

as in the prefix and superfix in figure 1.2.6.  The Maya script is highly variable in the

graphemes used to represent a specific morpheme (Macri and Looper, 2003: 18).

Different graphemes can be variations of the same morphemic value, but carry different

contextual information. Graphic variations in the Maya script, especially for the *ajaw*

sign, are akin to allophones, the phonetic variations of phonemes.

For example, [p] and [ph] are allophones of the phoneme /p/. Figure 1.2.7.

illustrates the different representations of *ajaw* utilized in the Maya script.  As a

comparable graphemic example, the [affix *ajaw*] (Figure 1.2.7.e) and the [calendrical

*ajaw*] (Figure 1.2.7.a) are allographs of the grapheme /*ajaw*/, most typified by the
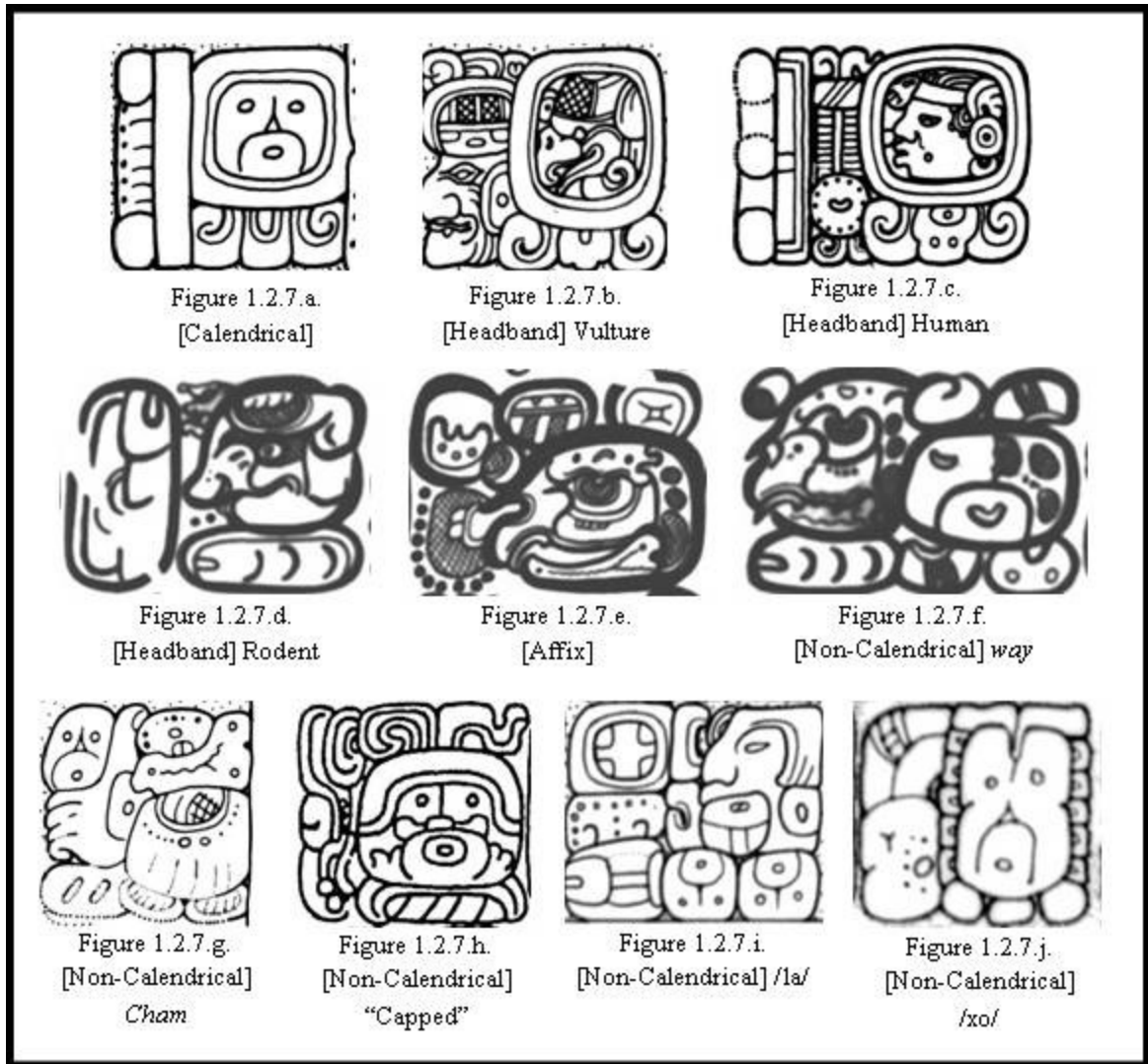
Figure 1.2.7. *Ajaw* Allographs. (Source: Schele, 2000) © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

[calendrical *ajaw*].    Throughout this discussion, the terms *Glyph* and *Block* will be used interchangeably to refer to the larger glyph block elements, or hieroglyphs, while the terms *Sign*, and *Affix*, will refer to the morphemic and grammatical elements within a glyph block respectively. To avoid confusion, the orthography for allographs, used above, will be used throughout the text.   Because some allographs represent categories with multiple forms, they may be represented in the plural form.

The /*ajaw*/ sign is represented with several different allographs.  It is a logograph in the calendrical context, and refers to the 20th day of the Tzolk'in calendar (Figure

1.2.7.a).  The [calendrical *ajaw*] appears within a rectilinear cartouche that serves as a

semantic determinative that removes the variability of the *ajaw* signs found in the body of

the text.  Semantic determinatives are graphical elements that do not provide phonetic or

grammatical information, and only specify the semantic value of a sign (Coe, 1992).  The

[calendrical *ajaw*] can be substituted with three different anthropomorphic or zoomorphic

headband allographs (Figure 1.2.7.b, c, and d). These [headband *ajaw*] can appear either

in the calendric context or as main signs within the context of the main body of the text.

[Headband *ajaw*] have the semantic value of 'lord'.  [Affix *ajaw*] allograph appears as a

series of two syllabic signs in an affix position, often superposed to the main sign in a

glyph block (Figure 1.2.7.e).  Affixes in Maya script can appear in several different

places within a glyph block based on their relationship to the main sign; the superposed

sign can be found above the main sign and precede the main sign in reading order.  The

[non-calendrical *ajaw*] is polymorphic, carrying the *nik*, 'flower', *cham* , 'to receive', or

'child of father' when appearing as a main sign as logographs (Figure 1.2.7.f, g, and h).

As an affix, the [non-calendrical *ajaw*] is most often syllabic.  An inverted *ajaw* holds the

/–*la*/ phonetic value as a grammatical affix (Figure 1.2.7.i), and the /xo/ value when it

appears with a petalloid boarder and cleft (Figure 1.2.7.j) (Justeson et al., 1985: 48; Macri

and Looper, 2003).  These signs are non-calendrical because they maintain the same

formal characteristics as the [calendrical] allograph, but not the morphemic value.  These

four /*ajaw*/ allograph categories represent the main corpus of *ajaw* signs and are the

major subject of this study.

　　　This research focuses on the interchange between language and culture.  A

relationship existed between the Maya and their linguistic neighbors during the

Formative period.  The interaction between these peoples allowed for the exchange of culture, both material and ideological.  During this period, the Maya started to record information with a hieroglyphic script.  The use of writing expresses a significant degree of sophistication that allows for a permanent record of history, genealogy, and ideology. *Ajaw* is conspicuously repetitive within the corpus of Maya writing.  It can be assumed that *ajaw* was important to the Maya because of the significant position it occupies in their writing.

Considering the importance of *ajaw* for the Maya, evidence for kingship appears elsewhere in Mesoamerica before it appears within the Maya cultural area.  If this is the case, then it can be assumed that kingship was acquired by the Maya from these people. It can also be assumed that the word for king, *ajaw*, is also a loan from the same donor culture.  Data about kingship is therefore contained within the linguistic, epigraphic, and iconographic structure of *ajaw*.  The goal of this work is to pull from these three elements of *ajaw* a greater understanding of the Mayan perception of kingship.

The preceding discussion described the Maya writing system. It was shown that the Maya employed a script reminiscent of early Sumerian and Chinese scripts.  The Maya made use of the rebus system to achieve greater expressiveness, and used both logographic and syllabic symbolization to graphically represent their language. *Ajaw*, as a lexeme, was introduced, defined, and exemplified as a collection of related allographs. What follows is Chapter 2.  It will demonstrate the methodology used to meet the overall goal of this thesis by showing how the presence and use of the *ajaw* lexeme in the Maya script can inform our understanding of the development of kingship among the Maya and within the greater Mesoamerican community.

## 2 BACKGROUND

This chapter provides background information from the literature in order to illustrate the critical connections that provide the foundation for the linguistic, epigraphic, and iconographic findings detailed in this work. First is a discussion about how the Maya used their writing system. This is followed by an explanation about the relationship between the Maya and their linguistic neighbors, Mixe-Zoque speakers. This focuses on the development of kingship in Mesoamerica and the influential cultures that would have influenced its development among the Maya. The goal of this chapter is to express the prominence of kingship within Maya art and writing, and to briefly explain its source.

The Maya used writing in many different facets of their society. The most dramatic was the telling of the great deeds of their gods, kings, and elite lords. These narratives were carved on the walls of their temples, the grand stairways of their plazas, and on massive, standing-stone stele and altar-thrones. Other, more subtle, mediums included wooden lintels, a great variety of ceramic vessels, and beautiful screen-fold bark-paper books. From the material culture that has persisted through the ages, the Ancient Maya can be seen as a complex society in which writing played a vital role. The Maya script of the Classic period was mainly a political tool used by elite scribes and priest/kings.

Much of the monumental writing throughout the Maya cultural sphere discussed the royal lineage and historical accomplishments of their kings. The Maya word for these royal individuals was *ajaw*, which is translated as 'lord' (Macri and Looper, 2003; Montgomery, 2002). Maya writing also recorded complex auguries and kept track of the movements of the Sun, Moon, Venus, and several important constellations, all of which were correlated to a sophisticated calendar cycle, called the Calendar Round, that combined a 260 day ritual calendar, and a 365 day solar calendar. The greatest material collection of Maya writing that persists, however, are thousands of inscriptions found on Maya ceramics (Coe, 1992). Many of these ceramic pieces depict scenes from Maya cosmology, and the complex inscriptions on them have only been partially deciphered. One part of the inscription served to label the object with primary statements like *u tup*, "his earspool", or *u bac*, "his bone."

Mesoamerican scholars have been able to learn much from the written material that remains, particularly about specific aspects of elite society. The Maya used a number of different words, signs, and images to refer to their elites. Many of these described the characteristics associated with elites and kings, such as *k'in*, meaning sun, shining, or radiant. Others focused on kingly symbols, such as *balam*, or jaguar, the animal spirit, or *way*, of the king (Freidel, Schele, and Parker, 1993). The most specific title, however, was *ajaw*. *Ajaw* or, in its plural form, *Ajawob* were represented using a series of different hieroglyphic elements, or signs. Some of these signs are incorporated into the title of specific kings and precede that king's name. They are also used within emblem glyphs, sign clusters that name a particular polity or lineage (Coe, 1992).

*Ajaw* is also the name of the 20<sup>th</sup> day in the 260 day ritual calendar, the Tzolk'in. While the signs used in the calendar system are somewhat different from those used in other parts of Maya script, there is much overlap. The presence of these *ajaw* signs in the calendar suggests great antiquity and additional significance of these signs among the Maya. The calendar tradition in Mesoamerica is very old and it may even predate writing (Rice, 2007). This is based on the structure of the calendar glyphs. Prudence Rice (2007) has suggested that the system may even be as old as the Archaic period (5000 – 2000 BC), and may have been necessary for the development of agriculture. John Justeson (1986) has suggested that the Mesoamerican calendar systems, along with vigesimal numeration and the complex symbolism of the artistic tradition, were instrumental in the development of writing. The relationship between calendar and writing systems helps to provide information about the origin of the monarchical tradition among the Maya, and within the region as a whole.

What is interesting about these *ajaw* signs is that they appear in so many different textual contexts. The history of the development of these signs can be traced back beyond the Classic period Maya, into the Formative period, especially the Late Formative period. Classic period Maya culture flourished from AD 250 until about AD 900 and the iconic florescence occurred in the Late Classic period beginning around AD 600. However, before AD 250 and as early as 2000 BC, there are several other cultures that have a major influence on all of Mesoamerica. Thus, the Formative period focuses on the development of these complex societies.

Historical linguistic reconstruction of proto-Mayan puts that language's origin point in the highlands of what is now Guatemala and Chiapas, Mexico around 2200 BC

(Kaufman, 1976: 104). From there the Maya people and their language spread north, east, and west, following the river valleys into the lowlands and eventually occupying all of the Yucatan peninsula, Guatemala, as well as parts of Honduras, El Salvador,



Figure 2.1. Map of Maya cultural area and Olmec Heartland to the west. (Source: www.latinamericanstudies.org, 2/15/11)

and Mexico. Kaufman notes that proto-Maya has a word for lord that existed in the earliest stages of linguistic development. This includes the Huastecan branch that split from late proto-Mayan around 2200 BC. However, Kaufman (1976: 105) does not mention the form of this word and only places it in a list of commercial and social organization concepts that appear in the linguistic reconstruction. As the Maya spread across southeastern Mesoamerica, around 1000 BC, they started to interact with other significant linguistic groups, most notably the Mixe-Zoquean (MZ) speakers to the west (Kaufman, 1976: 107).

There are two MZ speaking culture groups that develop during the Formative Period that are considered to have greatly influenced the larger Mesoamerican cultural sphere. The first and most prominent group is the Olmec culture that developed along the Gulf coast at the sites of San Lorenzo and La Venta, in the Mexican states of Veracruz and Tabasco respectively, within the Isthmus of Tehuantepec (Figure 2.1). The Olmec flourished primarily during the Middle Formative period between 1600 and 600 BC. The term Olmec refers both to the peoples of the Olmec heartland, who developed a complex

society during this period, as well as to the artistic style that these people used in both their portable and monumental art (Reilly, 1995). As the earliest complex society in Mesoamerica, the Olmec would come to play a role in the development of the social and cosmological narrative for the entire region.

The cultural and linguistic boundary of the Maya to the west probably represents the eastern linguistic boundary of the Olmec heartland. Campbell and Kaufman (1976) suggested that this was most likely proto-MZ, while Wichmann (1999) suggested a more conservative evaluation that the Olmec were probably a multi-ethnic population in which proto-Zoquean and proto-Mixean were both spoken but identifiably different languages during this time. He points out that during the later stages of the linguistic differentiation of proto-Mixean and proto-Zoquean, a significant number of loan words are exported to neighboring languages. There appears to be a massive export of loan words into the Mayan language region at the same time. With 17 examples of loans in total, 11 of which appear in Cholan (Wichmann, 1999: 316-17). Proto-Zoquean appears to remain localized within the northern coastal region of the Isthmus of Tehuantepec. However, Proto-Mixean was spoken as far as highland Guatemala sites like Kaminaljuyu, as early as 1400 BC (Kaufman, 1976).

Kaufman suggested that there may have been a proto-MZ influence on the Huastecan Maya as they migrated north through MZ linguistic territory between 1600 and 1000 BC (Kaufman, 1976: 106). There was undoubtedly a MZ influence on the groups remaining in the Maya Linguistic area to the east, which is attested by the appearance of MZ loan words in the Mayan Lexicon some time near the end of the Early Formative period (Campbell and Kaufman, 1976; Justeson et al., 1985; Wichmann,

1999).  Wichmann suggests that the considerable number of loan words that appear in the

Cholan language at this time is significant because Cholan is the language most directly

associated with the Maya heiroglyphic script.  He believes that the Maya script was

ultimately derived from an earlier system, probably the Epi-Olmec scripts of the Isthmus

or southern highlands (Wichman, 1999: 317).  He also believes that there are two basic

linguistic spheres of influence coming from proto-Mizean and proto-Zoquean speakers.

In the Isthmus there is a large corpus of early scripts exemplified by the La Mojarra Stela,

which Kaufman and Justeson (2001) believe represents a proto-Zoquean language.

Wichmann (1999: 317) offers that proto-Mixean speakers, on the other hand, had a

degree of influence over the ritual calendar reflected in the use of four different Mixe

words as day names.  The receipt of loanwords into Mayan from proto-Mixean or proto-

Zoquean speakers, especially political and religious terms, suggests that the Maya were

functioning at a similar level of socio-cultural complexity as the donor cultures, as early

as 100 BC.  This high degree of Maya cultural sophistication during the formative period

is further reinforced by the presence of complex architecture, iconography, and

hieroglyphic text, including an *ajaw* glyph, at sites like San Bartolo, El Peten, Guatemala

(Saturno et al., 2005).

  The Olmec are credited with creating the practice of kingship in the new world, as

well as establishing many of the symbols of that regal office (Fields, 1982; 1989; Schele

and Freidel, 1990; Taube, 1989; 1996b; Diehl, 2004).  While there is still debate over the

actual part that the Olmec played in the development of subsequent societies and social

practices, Olmec style art has a significant presence beyond the borders of the Olmec

heartland into the Late Formative period.

Figure 2.2.a. La Mojarra, Stela 1.

Figure 2.2.b. Tuxtla Statuette.

Figure 2.2.c. Chiapa de Corzo, Stela 2.
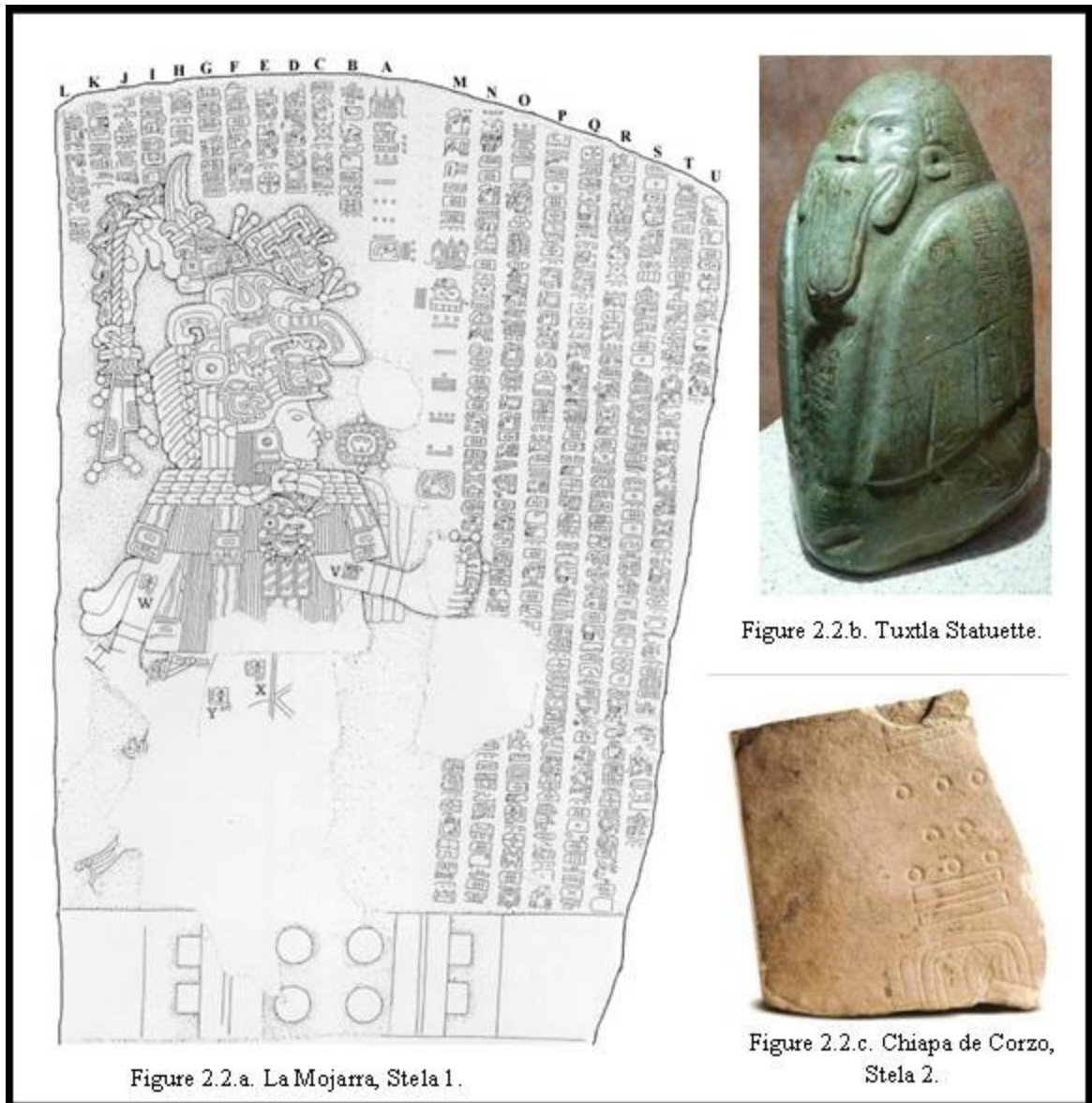
Figure 2.2. Examples of Epi-Olmec writing.  (Source 2.2.a: www.famsi.org, 12/10/10; 1.1.9.b: Fields and Reents-Budet, 2006; 1.1.9.c: Fields, 2010)

The second influential group, is really collection of cultures that rapidly rose to prominence during the Late Formative period (600 BC-AD 250), within the Epi-Olmec periphery, the regions that surrounded the Olmec heartland.  The growth and development of complex societies during the Formative period manifests in these regions, as far west as the site of Teotihuacan, in Hidalgo, Mexico and as far east as Izapa, in

Chiapas, Mexico and Kaminaljuyu, in Guatemala. These groups are considered to be outgrowths of the collapsing Olmec culture at the end of the Middle Formative period. Until recently, it was believed that both the earliest concrete examples of writing and the first calendar notations appear within the Epi-Olmec periphery. The earliest examples of hieroglyphic writing come from portable art objects and monuments. Figure 2.2.a is an artist rendition of La Mojarra, stela 1. The La Mojarra stela, the Tuxla Statuette (Figure 2.2.b), and Chiapa de Corzo, Stela 2 (Figure 2.2.c), are examples of an early script from the Isthmus of Tehuantepec that predates Maya hieroglyphic writing (Diehl, 2004).

These Isthmian writings samples were considered to be some of the earliest examples of true writing with corresponding calendrical notations that dated to 32 BC. That was until the discovery of the Late Formative Maya site of San Bartolo, in the Peten region of Guatemala (Saturno, Taube, and Stuart, 2005). At San Bartolo, a sample of



Figure 2.3. San Bartolo glyph-block and reconstruction. Note: The highlighted, i.e., #7 is an early [affix *ajaw*] form. (Source: Saturno et al., 2006)

hieroglyphic writing was found in association with seven different carbon-14 dates.  The C-14 samples provided dates as early as the Fourth Century BC, but at least as old as the Isthmian samples (Saturno, 2006).  Figure 2.3 is a picture of the San Bartolo glyph block in situ, and a corresponding rendition of the glyphs drawn on its surface.  The sign in red is considered to be the earliest representation of the [affix *ajaw*] (Saturno, 2006).

By the Classic period four allographs had come to be associated with the *ajaw* morpheme.  The significance of the San Bartolo glyph block is that this early *ajaw* yet discovered was not in the logographic [calendrical] form that both Rice and Justeson hypothesized as earlier than the phonetically based syllabic writing. It is possible that older [calendrical] forms exist and have not been found.   However, the sign would still be significant because of its early example of a phonetic spelling convention, which the [affix *ajaw*] represents.

Both within the Maya cultural area and in neighboring regions, the symbolism and the political roles of kings had already been established by the beginning of the Late Formative period based on evidence from La Venta, such as Stela 2 (Fields, 1982; 1989; Taube, 1989; 1996b; Diehl, 2004).  The presence of *ajaw* signs at San Bartolo attests to the possibility that the Maya acquired the royal institution as early as the fourth century BC.  The close temporal association of the San Bartolo glyphs (~400 BC) and the collapse of La Venta (600 BC), suggest that kingship may have been adopted from the Olmec via direct or indirect contact between Olmec and Maya peoples.

Thus, it is possible that the morpheme /*ajaw*/ is also borrowed from some element of Olmec royal society.  This form is very old within the Mayan languages based on the historical linguistic reconstruction of the proto-Mayan language from its modern Mayan

granddaughter languages (Kaufman, 1976). However, during the Middle and Late Formative period, there existed various similar, and possibly related, forms of /*ajaw*/ in proto-Mixean. Mixean, and its linguistic sister, Zoquean, compose a neighboring language family to Mayan that appears to be strongly associated with the Olmec and the area of

Figure 2.4. Olmec and Epi-Olmec art objects depicting Maize and Maize God imagery. (Source: Fields, 2010; Guernsey, 2006)

the Olmec heartland (Campbell and Kaufman, 1976; Wichmann, 1999). Mixean also has strong associations with the later Formative centers of the southern Guatemala and Chiapas highlands (Kaufman, 1976; Justeson, Norman, Campbell, and Kaufman, 1985; Fields, 1989; Stross, 1994; Wichmann, 1999).

Along with similar political practices and linguistic traits, there are key iconographic associations between *ajaw* graphemes and the symbols used by Olmec and Epi-Olmec kings (Figure 2.4). These iconographic associations include an emphasis on maize imagery and a royal Maize God cult, as well as other vegetal imagery (Fields, 1982; 1989; Freidel and Schele, 1990; Taube, 1996a; 1996b; 2004; 2005; Freidel and Reilly, 2010). What these relationships suggest about Maya kingship is that, based on iconography, the institution was probably borrowed, in part or entirely, from Mixean-

speaking peoples from the west or southwest, and it is increasingly likely that the Maya

probably acquired kingship from these Mixean-speaking peoples just after the collapse of

La Venta.

In summary, the Maya used writing primarily to aggrandize their ruling class.

Most of the Maya written record discusses the great deeds of their kings and how these

kings and their deeds figured into Maya cosmology. The critical focus was the

relationship between the king and the mythological lineage founder. This is a

fundamental aspect of Mesoamerican kingship that is as old as the Olmec. The

relationship of kingship to the Olmec is critical. The Olmec were practicing kingship

during the cultural development of the Maya, and the Maya were definitely interacting

with the Olmec at the same time. This is indicated by linguistic evidence, both in the

form of words loaned into Mayan from the MZ languages of the Isthmian region, as well

as the presence of Maya speakers on either side of the Olmec heartland along the gulf

cost of Veracruz and Tabasco. Evidence from the site of San Bartolo indicates a

significant degree of cultural development among the Maya as recently as 200 years after

the collapse of the last major Olmec site at La Venta. However, this collapse did not

mean an end to influential MZ speaking cultures. To the south of the Maya lowlands, in

the Highlands of Guatemala, Mixean speaker at the sites of Izapa, Kaminaljuyu, and

Takalik Abaj, continued influence both the role of kingship and the linguistic structure of

the *ajaw* lexeme. The next chapter will be a discussion of methodology. It will show

how historical linguistics, epigraphy, and iconography have been applied to *ajaw* in order

to better understand the Maya perception of kingship.

# 3 METHODOLOGICAL PROCEDURES

The underlying principle guiding the collection and analysis of data for this work is the ethnographic analogy. On the basis of this principle, three approaches are employed: (1) historical linguistic analysis, (2) linguistic analysis of writing systems, and (3) iconographic interpretation of art. What follows is an explanation of these approaches and there implementation.

## 3.1 Ethnographic Analogy

When examining ancient cultures, like the Maya, the depth of time, from the modern peoples that claim Maya ancestry to their Classic period Maya ancestors, is immense. This time depth creates problems when comparing the practices of modern Yucatec, Chol, or Quiché Mayan to the peoples depicted in the art of their ancient ancestors. However, the detailed accounts of the Maya provided in the literature from the early Spanish colonial period allows for the comparison of contemporary Maya practices to those of the early 16th century. For example, Bishop de Landa, in his *Relación de las Cosas de Yucatán* (1959), provides an example of the Maya calendar and writing system produced by Maya scribes. These historical Spanish accounts bridge the information gap between modern ethnographic Maya and the Maya of the Contact period. Ethnographic analogy is the deduction of the unknown from the known. Thus, by examining the behavior of more contemporary Maya, anthropologists can cautiously infer earlier behavior. This use of ethnographic analogy is all the more valuable for analyzing

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archaeological cultures because of the evidence of Classic period writing preserved in Contact period historical documents, from both the Spanish and Maya perspectives. Each new touchstone added to the corpus of historical data by these documented accounts, expands our picture of the Maya culture back into the distant past. By following these touchstones back through time, the history and explanation of modern practices can be found much like tracing the source of a river by following its flow upstream.

*3.2 Historical Linguistic Comparative Method*

Historical linguistics is the study of language change (Campbell, 1999). There are two primary way through which language changes: (1) internal, and (2) external. Internal language changes occur slowly and subtly. A language may undergo small phonetic shifts (k changes to ch, v changes to f, or j to h, etc). These kinds of sound changes can happen within any language and they happen in predictable ways. Most of these changes can only occur in one direction, and often result in cascading chains of changes in order to fill in phonological gaps created by the preceding changes.

In the case of the languages spoken in Mesoamerica, research into the four main language families of Mesoamerica has resulted in the tracking of major phonetic shifts in each language family. The investigation of these families has resulted in the reconstruction of many of the proto-languages and the mapping of the division of their various daughter languages. Once the relationships within language families are established and understood, new relationships between families can be evaluated. These relationships represent external language change and are generally manifested as words loaned between neighboring language families.

Loan words often have phonological and/or morphological characteristics that are quite unlike any other words in the borrowing language. Loans can occur within distant branches of the same language family or between unrelated languages. They are especially apparent when the donor language is a different language family than the borrower. Once a loan has occurred, regardless of the donor language, it is made to conform to the phonetics and morphology of the recipient language. By charting phonetic shifts by their approximate period of development, linguists can begin to narrow loan acquisition to the periods between these shifts. In fact, if the cultural source of a loan word is known then archaeological evidence of the earliest interaction between peoples may provide an absolute date for acquisition (Justeson et al., 1985: 5)

In order for loans to occur in the first place, there must be a level of interaction as well as comparable sophistication between the donor and recipient cultures. The degree of this interaction can dictate what kinds of words can be loaned (Justeson et al. 1985: 1). By looking at the loan words that made their way into Mayan from neighboring languages, Justeson and colleagues (1985), and later Wichmann (1999), were able to make some inferences as to the level of interaction between Mayan speakers and their neighbors at different points in Maya cultural history. In most cases of language loans, the direction of lexical diffusion reflects the direction of cultural diffusion and may provide clues regarding the dominance of the different language families within Mesoamerica at different points in time (Campbell and Kaufman, 1976; Justeson et al., 1985; Wichmann, 1999). This practice of interpreting the greater cultural impact implied by the presence of a loan word is aided by the presence of several different writing systems, chiefly Maya Hieroglyphic script.

Campbell (1999) has also discussed the idea of semantic shift in regards to spoken language change. He suggests that there are a number of different ways that a word can undergo these shifts and likens it to metaphor. Through metaphor a lexeme can undergo slow subtle change over time, while maintaining ties to the original meaning during the process (Campbell, 1999). This process probably happened with some of the *ajaw* allographs. The [affix *ajaw*] appears to have converged on one semantic value, while the [non-calendrical *ajaw*] diverged into several different values. Campbell (1999: 171-72) also points to the Invited Inferencing Theory of Semantic Change. In this case semantic changes are the products of the pragmatic use of language. On the other hand, subjectification of words allows speakers to create meanings for words "that encode and externalize their perspective and attitudes as constrained by the communicative world of the speech event, rather than by the so-called "real-world" characteristics of the event or situation referred to" (Traugott and Dasher, 2002: 30).

Two basic assumptions were made about the nature of *ajaw* for its linguistic analysis. First, *ajaw* is assumed to be a loan word into Mayan. Second, *ajaw* is assumed to come from proto-Mixean. The foundation for these assumptions was formed from a review of the literature regarding the growth spread of proto-Mayan during the Early and Middle Formative periods. It was also informed by the background information provided in chapter 2.

The loan characteristics of *ajaw* may only represent one aspect of its greater linguistic value. Several different interpretations of the linguistic origin of the *ajaw* loan were collected from a review of the literature, based on the assumption that it has a proto-Mixean origin. A basic evaluation of the different proto forms was conducted using

historical linguistic principles previously outlined. One interpretation was chosen based on its overlapping comprehension in both Mayan and Mixean. The following section detail how additional evidence was acquired through the linguistic analysis of the Maya writing system.

*3.3 Linguistic Analysis of Writing Systems*

In addition to information gleaned from extant scholarly work on the historical linguistic reconstruction of Mayan, a study of archaeological material was conducted based on three major Maya centers: Tikal, Copan, and Palenque. All of the material used in this study came from the end of the Early Classic and the Late Classic periods. At each site, major inscriptions were studied for examples of *ajaw* signs. The signs were isolated and organized into groups based on the site, monument, and physical appearance. The signs were then grouped based on physical appearance. Four major groups were formed and compared to the literature. The groups were then evaluated for the common syntactical and grammatical function of the signs. Each group was determined to have unique functions. It was on this basis that each group was determined to be a different allographic variant of the main *ajaw* grapheme, best represented by the [calendrical *ajaw*].

Four major groups of signs were determined: (1) a calendrical group, (2) a headband group, (3) an affix group, and (4) a non-calendrical group. These groups were cross referenced with Martha Macri and Matthew Looper's *The New Catalog of Maya Hieroglyphs* (2003) regarding their proper identification as *ajaw*, and the most currently understood value within the writing system. Macri and Looper (2003) verified and

supported the study's findings. Most signs were shown to have similar graphical elements (calendrical group, non-calendrical, and some examples from the headband group), some signs and sign groups were semantically similar, but did not have the basic *ajaw* graphical elements (some other examples from the headband group and the affix group). Other signs only possessed graphical elements but possessed distinct semantic values (non-calendrical).

The function for each group was determined based on the position each sign group occupied within an inscription. Positions were defined as calendrical text, main body text, and both calendrical and main body text. Signs from the calendrical group were only present within the calendrical portion of text. The headband group could appear in both the calendrical and non-calendrical context. The affix and non-calendrical groups appeared within the main body of the text. Once the position was determined, the identified value of each group was considered.

The calendrical group only had the semantic value as the $20^{th}$ day of the Tzolk'in ritual calendar. The headband group substitute for the calendrical group but also had "lord" as its semantic value. "Lord" was the only value assigned to the affix group. The non-calendrical group is polymorphic, with different sign values depending on what additional graphical elements were associated with the basic graphical *ajaw* elements.

Based on this assessment each group was determined to have graphical and semantic similarities and the occasional overlapping functions. This suggested a relationship between these signs akin to allophones. Thus, each group has been designated as an allograph of the root basic form. The antiquity of the calendar system, suggests that the main graphical element of the [calendar *ajaw*] group is most similar to

the root form. This will be discussed in the following section regarding the iconographic method

With one major exception, all of the allographs operate under the basic rules of the Maya script as either logographs or syllabic signs. The majority of the allographs have a semantic value, including the [affix] allograph. The [affix *ajaw*] represents a notable exception to many of the rules of the Maya writing system and it received special attention during analysis.

Within the body of the text another important relationship was identified. The *ajaw* signs, as the term for "lord", are often elements of an elite title. They are placed in the text as descriptive epithets such as "holy lord" or "shining lord." Because of this positioning, many examples of *ajaw* allographs have predictable placements in the text. However, there are some *ajaw* allographs that do not have an association with either calendrical notations or naming conventions. The polymorphic [non-calendrical] allograph, while graphically consistent with other *ajaw* sign forms, does not represent the word *ajaw*. These forms may be simple phonetic signs, such as the 'upside-down *ajaw*' which has been identified as the phonetic determiner –la (Montgomery, 2002; Macri and Looper, 2003). Others, including the signs identified as "to receive", "child of father", and "flower", each have similar graphical characteristics. Therefore, the sign forms of the *ajaw* allographs differ dramatically based on the position they hold in the text. Graphically similar signs may also differ in meaning.

With the non-calendrical allograph, it is possible to chart some of the gradual refinements of the writing system over time. This is mostly evident from examples among the non-calendrical allograph that possess a purely phonetic value such as -*la*.

When the Mayan language is compared to the script, a gradual progression towards

phonetic signs can be seen. However, these phonetic allographs also contribute purely

iconographic information that adds additional nuance to the semantic value of the sign.

Phonetic assignments appear to have an association with semantic values. This

relationship can be address through an understanding of the form of the signs as

described in the next section.

*3.4 Iconographic Interpretation of Art*

In order to understand the relationship between the form of *ajaw* signs and their semantic

and phonetic values, this work makes use of the Panofsky method of art interpretation.

Irwin Panofsky's (1955) method makes use of three different tiers of understanding in

order to relate the themes and motifs expressed in the art to the culture and the artist that

produced a given work. Panofsky applied this method mostly to Renaissance paintings.

However F. Kent Reilly (1989) has shown that this method is not bound by western

cultural norms. By applying the Panofsky method, it is possible to retrieve the semantic

value of key themes and motifs expressed in Mesoamerican art. In this section, the

Panofsky method will be described. Then the application of this method will be

discussed in regards to this work.

The Panofsky method involves a three step process. The first step is the

identification of "Pure forms", or the primary, natural, subject matter. This is achieved

by looking at elements (color, line, and shape) and combinations of elements and

identifying motifs (man, tree, dog, and house) based on the elements (Panofsky, 1955).

Panofsky's second step, termed "iconography", identifies themes and concepts among the motifs and combinations of motifs. These themes and concepts, either concrete images or abstract symbols, are cultural conventions of a secondary nature and require a certain level of cultural historical context to identify them correctly (Panofsky, 1955).

Panofsky's third step is the identification of intrinsic meaning, or "iconology." The goal of iconology is to show how a single artist or work embodies the basic worldview of a particular group of people. This goal represents the scope of the present work. It is, therefore not address specifically within this section.

Panofsky's first step was used to identify the main graphical element of *ajaw*, the "*ajaw* face." This is most commonly expressed as two "eyes", a circular "mouth", a curved line bisecting the eyes from the mouth, a triangular or linear "nose" bisecting the eyes, and a circle enclosing the whole element. Each allograph, with one exception, adds additional elements to this basic form or modifies it in some way.

For the second step, iconography, a literature review preceded the iconographic analysis of *ajaw* in relation to Maya art. This literature review was conducted in order to define the cultural context of Maya art. The results of these findings are discussed in the next chapter.

# 4 FINDINGS AND DISCUSSION

This chapter presents the findings based on the methods presented in the previous chapter. The implications of the findings that have resulted from this methodology suggest a possible source for the loaning of *ajaw* into Mayan culture. Other implications include new epigraphic understanding of the words use within the writing system and a more nuanced understanding of the place of *ajaw* within Maya iconography developed through the use of the Panofsky method.

## 4.1 Analysis of Ajaw

The orthography of *ajaw* can be used to shed light on the possible linguistic source of *ajaw*, as well as the cultural implication of this loan for the Maya. *Ajaw* has been represented phonetically in a number of different ways in the literature. There are two common orthographic representations seen in the literature. The */aj-aw/* with the */-w(a)/* ending is the spelling preferred by linguists, while the */ah-au/* with the */-u(a)/* is the Spanish spelling (Coe, 1992: 286 n. 8). The linguistic orthography has been used throughout because it most closely approximates the phonemes of the Mayan script (Coe, 1992; Stross, personal communication 2010). When Floyd Lounsbury (1973) first translated the affix version of *ajaw*, he isolated the affix components and identified them separately as */ah/* and */po/*, an elite title, distinct, but possibly related to the title *ah pop*, or 'he of the mat'. Lounsbury based his reading on analysis of the then 'Ben' and 'Ich' signs in different contexts with phonetic complements that showed them to consistently

read /'*aj*/ and /*po*/ or /*po:p(o)*/ (Lounsbury, 1973; Coe, 1992: 200). Today when the glyphs are seen together, however, we read them as *ajaw*. This is further reinforced by the orthography from Quiché (K'iche'). Quiché is an eastern Mayan language in which the Popol Vuh was recorded. Within the Popol Vuh, the spelling of *ajaw* is /*ahpu*/ (Tedlock, 1996). The complex epigraphic etymology of *ajaw* allows for an interpretation on a number of different linguistic levels. Lounsbury's interpretation of the [affix *ajaw*] sign as /*ah-po*/ rather than /*ajaw*/ allows for the separation of the two syllables into grammatically independent morphemes. The /'*aj*/ syllable is the agentive prefix ('he of'), while /*po:p*/ is Yucatec Maya for 'mat'. This represents a possible source of the *ajaw* lexeme. Yucatecan /*po:p*/ is derived from proto-Mayan /*\*pohp*/ and may have been a graphical representation of the 'throne mat' (Justeson et al., 1985: 63).

Another possible source of the *ajaw* sign is a word-sentence in Tzeltal Mayan as /*ah-aw*/ 'he of the seed', where /*aw*/ is the Tzeltal 'seed' (Macri and Looper, 2003; Stross, 1994: 22, n. 10). In proto-Mixe, 'seed' is /*\*po:h*/ and still exists in Popoluca-Sayula, a modern Mixean language, as /*puj*/ (Justeson et al., 1985: 64, 97). Quiché Mayan is spoken in the southern highlands of Guatemala, while Popoluca-Sayula is spoken in the Mexican state of Veracruz. During the Late Formative period, however, the Greater Izapan script existed into the southern highlands and was written by Mixean-speakers (Justeson et al., 1985). Justeson, and colleagues (1985), suggest that the Maya were aware of the language of the Izapan elites and chose to use the Mayan and Mixean phonetic values for the 'seed' morpheme interchangeably.

A third source considers the possibility of /*ajaw*/ as a single morpheme. Both Fields (1989) and Stross (1994: 20) have suggested the possibility of /*ajw*/ or /*awa*/,

proto-Mixean 'mouth/speaker' as a possible donor of *ajaw*. Each has offered compelling iconographic evidence supporting this option but the problem lies in the multitude of possibilities and the imperfect resolution of the historical linguistic reconstruction.

In summation, the three suggested candidates for the source of *ajaw* as a Maya loan are /*'ah-pop*/, "he of the mat;" /*'ah-po*/ or /*'ah-wa*/, "he of the seed;" and /*ajw*/ or /*awa*/, "mouth" or "speaker." Each of these choices reflects the interplay between language and culture and about the nature of Maya kingship. Based on this assumption, mat, seed, and mouth imagery was explored for iconographic associations with kingship. These relationships are explored in the iconography section.

*4.2 Epigraphy*

There are four different sign categories that carry the morphemic value of 'lord' (Macri and Looper, 2003). There are the [calendrical], [headband], [affix], and polymorphic [non-calendrical] allographs. Each category possesses considerable semantic and phonetic variability (Friedel et al., 1993: 441, n. 17; Marcri and Looper, 2003: 65). These signs appear in different parts of the text, and in dramatically different contexts.

[Calendrical *ajaw*] allographs only appear in the Tzolk'in portion of calendar notations. This glyph has 3 identifiable characteristics: a cartouche surround, a numeration affix in the prefix or superfix position, and a subfix that is often applied as a footer element of the cartouche (Figure 4.2.1) (Montgomery, 2002; Marcri and Looper, 2003; Rice, 2007).
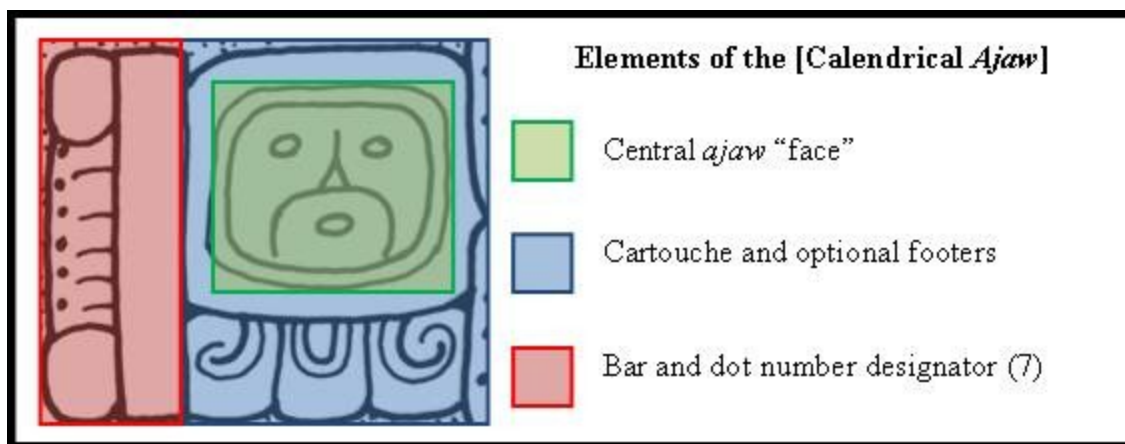
Figure 4.2.1. Iconographic breakdown of the [calendrical *ajaw*]. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

Each one of the 60 different calendar systems share functional characteristics, as well as many of the same patrons for days and months, despite linguistic and cultural differences. The position of *ajaw* as the patron of a day in the Tzolk'in is consistent across the calendars of Mayan speaking groups but changes to 'Flower' for the Zapotec culture and other Nahuatl speakers (Rice, 2007: 34, Table 3.2). There appears to be some overlap of the 'flower' morpheme in Mayan script that exists outside of the calendric context. Flower can substitute for *ajaw* as a Tzolk'in day, and *ajaw* signs with petaloid elements first occurred during the Late Classic and Epi-Classic periods (Macri and Looper, 2003). *Ajaw* signs with petaloid elements have been considered as [non-calendrical] allographs, representing the syllable *xo-*. In this case, *xo-* appears to be short for xochitl, Nahuatl for "flower." This seems to reflect the rising influence of Nahuatl speakers among the Maya during this period.

[Headband] allographs could appear in both calendrical and main body context as a full logogram or a main sign. They depict either the head of a man, a rodent, or a vulture, but the consistent feature is the presence of a headband with a characteristic forehead ornament as shown in figure 4.2.2. This forehead ornament has two common

Figure 4.2.2. Iconographic breakdown of the [headband *ajaw*]. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

forms, and two uncommon forms. Of the common forms, they are either a profile or, less frequently, a portrait view of the basic *ajaw* element. Of the uncommon forms, either a representation of the jester god, identified by its trefoil head ornament, or a full trefoil (Schele and Freidel, 1990: 115).

The [affix *ajaw*] allograph only appeared in the main body of the text. [Affix] allographs commonly accompany main signs that are generally assumed to be toponyms, or place sign. This adds the morphemic value of 'lord' to the overall meaning of a glyph block read as *k'ul ajaw* [*Copan*] or "holy lord of Copan" (Figure 4.2.3) (Martin and Grube, 2008). This specific glyph series, including the [affix *ajaw*], is included in larger glyphic series that serve as the naming convention of a particular king or lord. These place signs are something like a descriptor or "epithet" that precedes the personal name of an individual.

The [affix] allograph is also one of the oldest, unmodified examples of *ajaw*, and is the form that appears at San Bartolo (Saturno et al., 2005). Because of the structural difference between the [affix] allograph, as a multi-component sign, and the other allographs, as single component logo-syllabic signs, there is additional complexity inherent in the affix form. This additional complexity suggests that the morphemic value of the [affix *ajaw*] is also morphologically more complex than the other forms. The
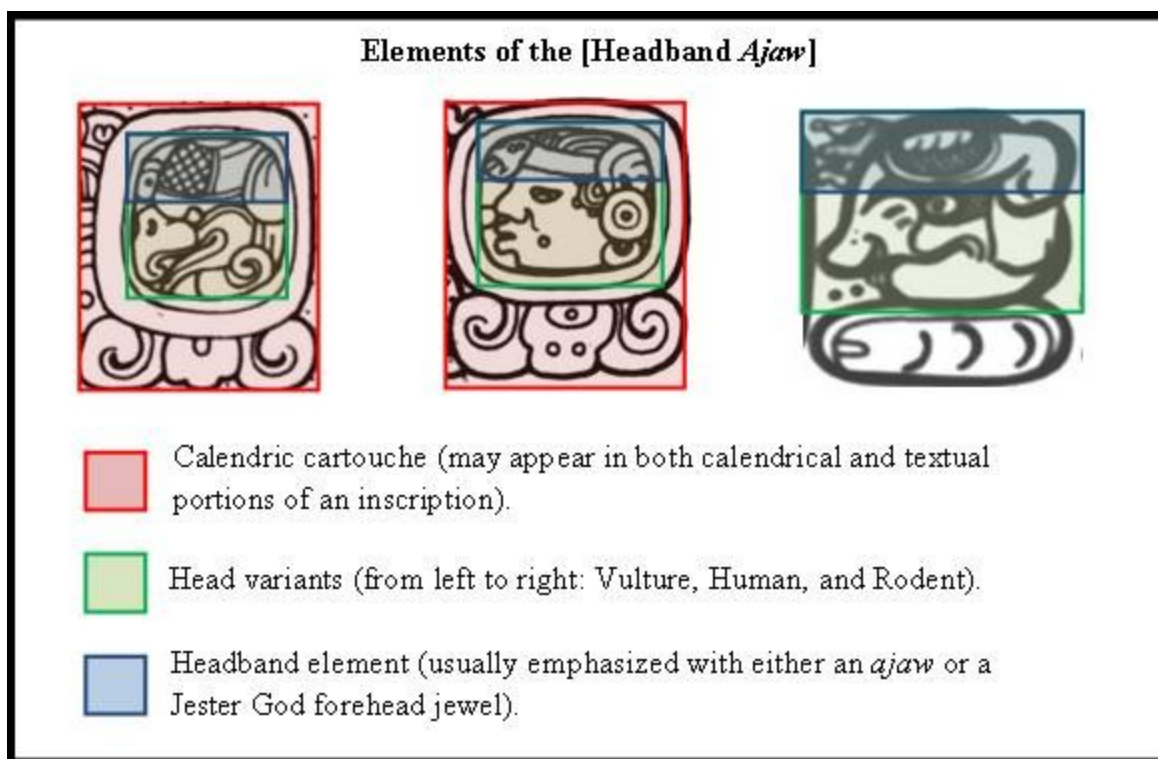


Figure 4.2.3. Iconographic breakdown of the [affix *ajaw*]. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

implication is that source of the [affix *ajaw*] maybe very different from that of the other allograph forms.

The polymorphic [non-calendrical *ajaw*] allograph most often appears as a main sign within the main body of the text, often in reference to a polity sign (Martin and Grube, 2008: 17). Its form is much the same as the calendrical notation without the semantic cartouche (Figure 4.2.4). However there are often elements that modify the basic form in subtle ways. Adding a 'cap and smoke curls' to the *ajaw* creates the value 'child of father', while placing the *ajaw* in an 'open palm' sign creates the value *cham*,

## Elements of the [Non-Calendrical *Ajaw*]

*Cham*: Combines an *ajaw* element with an 'open palm' element to mean "receive".

"Capped": Unknown phonetic value. Combines an *ajaw* element with a 'helmet' and two 'smoke curl' elements to mean "child of

*Way*: Combines an *ajaw* element with a *balam* element in a conflation meaning "spirit companion", "transformation", and "dream".

/-la/: Upside-down *ajaw* element with a phonetic value but no known semantic value.
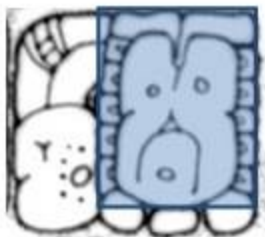
/xo-/: Petaloid *ajaw* element with forehead cleft with the semantic value of *xochitl*, Nahuatl for "flower".
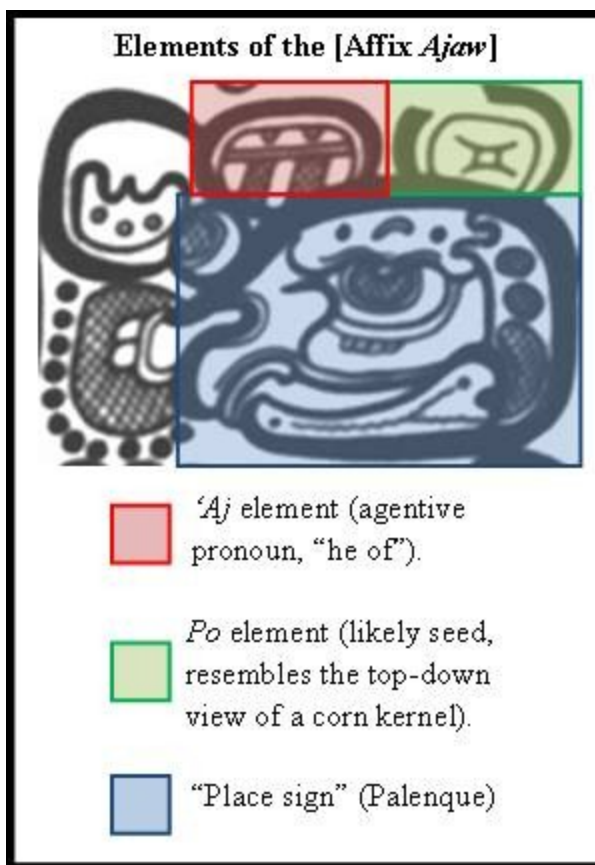
Figure 4.2.4. Iconographic breakdown of the [non-calendrical *ajaw*]. © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

'to receive' (Macri and Looper, 2003). The meaning of each sign is variable, depending on semantic determiners and additional phonetic compliments for correct interpretation (Freidel et al., 1993; Rice, 2007).

*4.3 Maya Iconography*

4.3.1 The Jester God headband and the Trefoil

*Ajaw,* as the word for 'lord' or king implies that it carries with it all of the associations of Maya kingship. Figure 4.3.1.1 illustrates several different representations of the Jester God and the trefoil in Maya art. The Maya freely substituted the trefoil and the Jester God in images of the royal headband. This substitution series appears to also include the basic *ajaw* element.
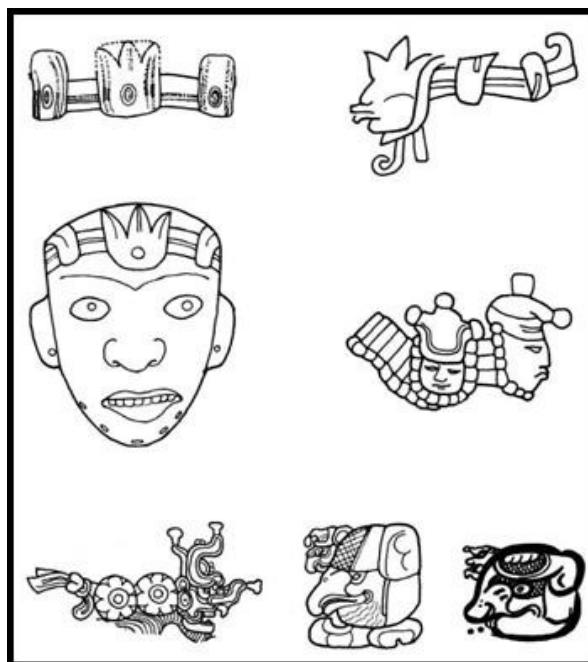
Figure 4.3.1.1. Images show how the Royal headband, the Trefoil and the Jester God as iconographic elements form a substitution series. (Source: Schele and Freidel, 1990)

According to Schele and Freidel (1990: 115), the ancestral twins are prototypes of kingship; and in Classic imagery the Jester God headband is a diagnostic motif of the elder twin, Hunahpu. Hunahpu carries associations with Venus, as the morning and evening star, the Sun and the Celestial Monster. Yaxbalam, the younger twin, carries associations with Jaguars, the Sun, and the Moon. In a discussion of the divine aspects of the Hero Twins, Schele and Freidel (1990: 436) state,

"These aspects constitute statements of momentary affinity or resonance. Ultimately the charismatic supernature of the king is dependent on a logic which mandates his inclusion in such cosmic categories."

Since the Jester God headband occurs in the writing system as a sign element for *ajaw*, it is a reasonable assumption that it carries the same meaning when seen as an element of regalia (Schele and Freidel, 1990: 115). Schele and Freidel (1990: 436 n. 30) state, "To wear the headband in the Classic Period was to be an [*Ajaw*]."

Archaeologists have found the remains of these headbands in association with places of royal ritual performance at the sites of Cerros, Belize, and Tikal, Guatemala. A dedicatory cache at the summit of structure 6B at Cerros contained artifacts with a similar appearance to the graphical representations that appear on both Classic Period images of kings and lords, as well as on the various *ajaw* allographs (Figure 4.3.1.2.a). Schele and Freidel (1990: 435 n. 14) believe that the material found at the summit of structure 6B may represent the headband of the first king of Cerros. While Cerros is neither the first, nor the most important, Late Formative period site to express early forms of Maya kingship, it does represent a very early royal expression that dates to about 50 BCE. Cerros and Tikal (Figure 4.3.1.2.b) are each sites where the limited number of these royal headbands have been found as well as the large-scale public architecture that verifies the presence of a Maya king (Schele and Freidel 1990:434 n. 4).
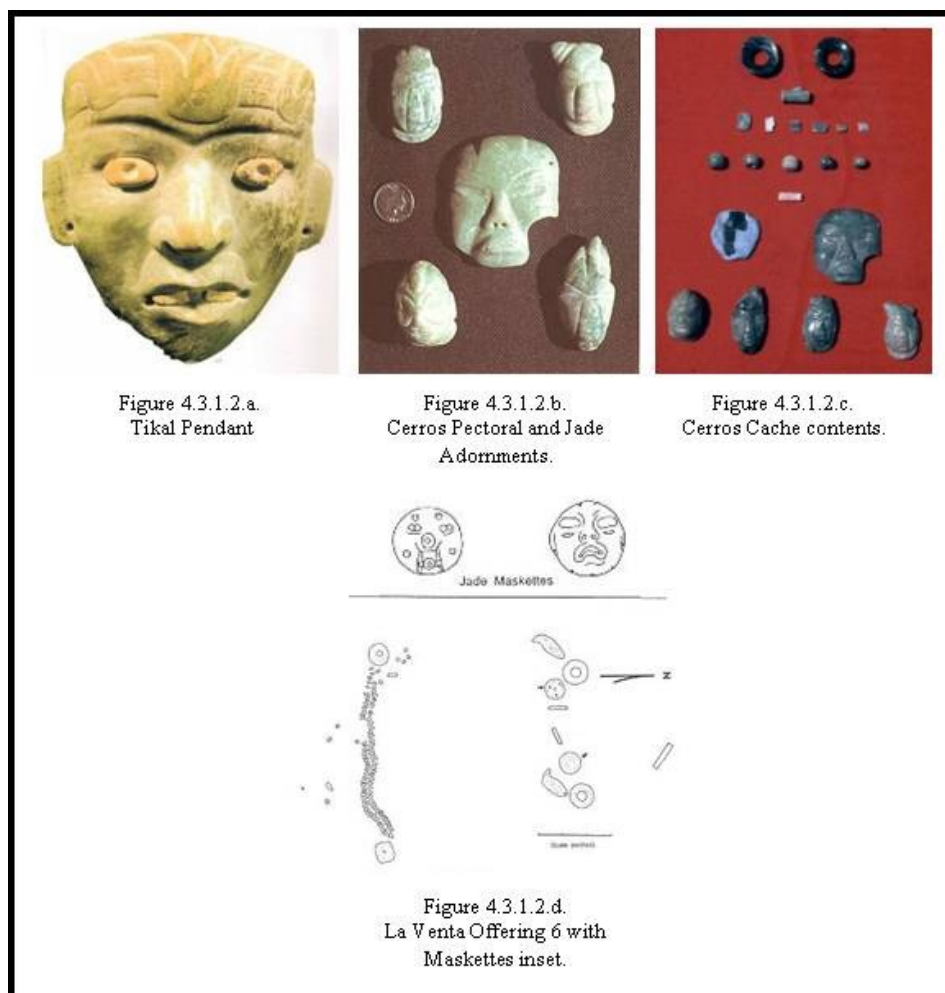
Figure 4.3.1.2. Headband Jades and associated material from caches at Tikal, Cerros, and La Venta. (Source 4.3.1.2.a and 4.3.1.2.b: Schele and Freidel, 1990; 4.3.1.2.c: David Freidel, personal communication 2011; 4.3.1.2.d, Reilly, 1999)

The graphical representation of these artifacts from the Early Classic period and Late Formative period Maya art shows the larger central ornament, as well as four smaller pieces of sculpted jadeite, as the adornments on early headbands of rulership. The larger central ornament functioned as the central jewel of a diadem, and was shown on, or just above, the wearer's forehead. The pieces from Cerros and Tikal have very anthropomorphic features and appear to reinforce the very image they represent.

In fact, the Trefoil image at the top of the Cerros and Tikal jadeite diadems are images that have been associated with royal elites since the Olmec period. Virginia Fields (1982; 1990) identified the trefoil motif, and the related jester god motif, as symbolic of maize foliation, while Karl Taube (1996a) showed relationship to the Olmec Maize God. F. Kent Reilly III (1999) identified the earliest use of a headband diadem (Figure 4.3.1.2.d) among the Olmec at La Venta, Tabasco, thus tying together the relationships between the two different stylistic representations of royal regalia.

The association between vegetal themes and political authority is an important relationship in Mesoamerican societies and is present in artistic representations across the greater cultural area. This vegetal association continues in *ajaw* representations as well. However, most of these vegetal *ajaw* signs are from the [non-calendrical *ajaw*] allograph category. Despite the fact that most of these signs do not carry the phonetic value of *ajaw*, their formal appearance, including the vegetal elements, reinforce their ties with kingship. These vegetal motifs will be explored in detail in the next section.

## 4.3.2 Seeds, Maize, and the Maize God: Religion and Politics

The Hero Twins and the Popol Vuh combined; represent a thread of religious belief that can be traced back to the Formative period at the sites of Kaminaljuyu, Guatemala, and La Venta. The painting on the Boston plate in figure 4.3.2.1 is a depiction of the resurrection of the Maize God by his sons, the hero twins. The modern Quiché names for the Hero Twins from the Popol Vuh are Junajpu (on the left) and Xbalanque (on the right). Junajpu can be translated into to Yucatecan *Hun Ahau*, or 'One Lord' (Tedlock, 1996: 238-239). Among the Quiché, Junajpu is a day of the 260 day divinatory calendar,

and holds the same position as *Ajaw* in the 260 day calendar of the Classic Period Maya (Tedlock, 1996: 239). A common naming convention for several different Mesoamerican cultures was to take the day of birth as one of the names of the child. This practice can be seen with the name of the Hero Twins fathers: One Hunahpu and Seven Hunahpu. According to Dennis Tedlock (1996: 351) the numbers one and seven represent all of the thirteen possible hunahpu days, occurring first and last among the number prefixes. The supernatural character of the Hero Twins suggests a further association than this basic naming convention. These characters represent aspects of Mesoamerican cosmology
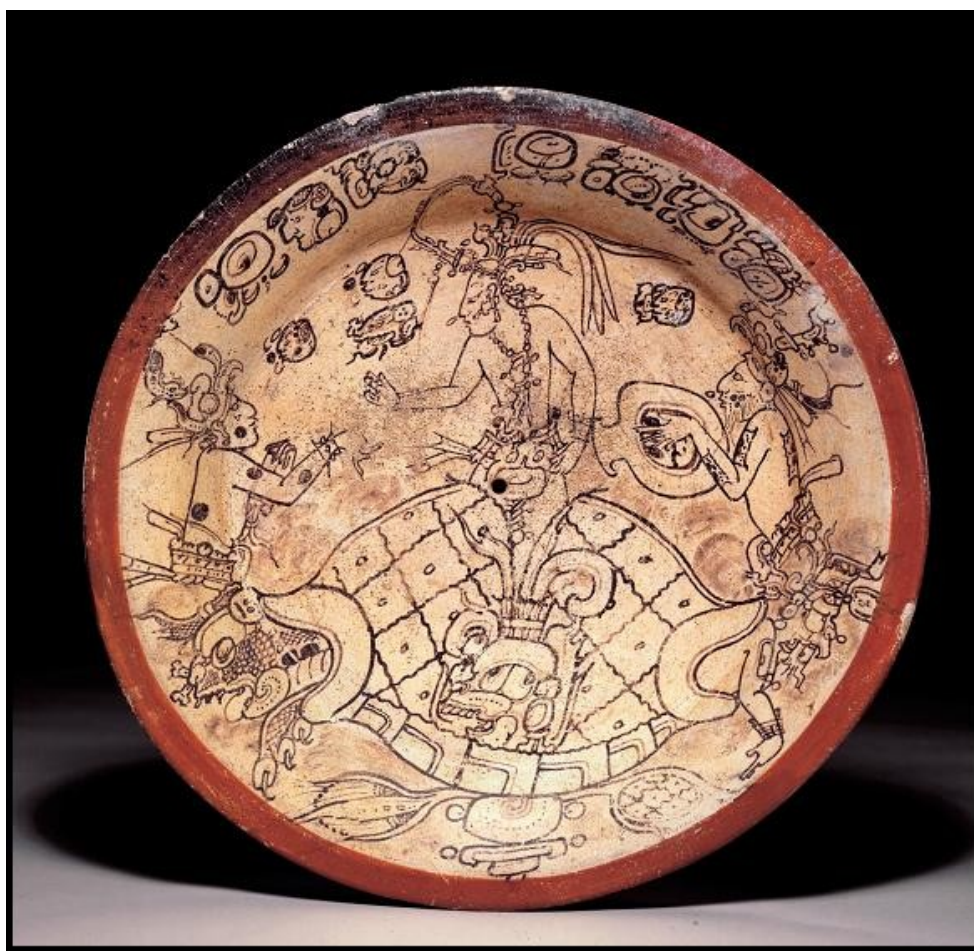


Figure 4.3.2.1. Boston Museum Plate. Hunajpu appears at the left with his personal name just above and to the right of his head. The Maize God emerging from a turtle earth monster is the central focus of the piece. His personal name appears just to the left of his head. Both Hunajpu and the Maize God's personal name signs make use of the [headband] allograph.

that are critical to what would become Classic Period Maya kingship, and as twins, they represent the dualism inherent in the role of the king.

One and Seven Hunahpu together represent all of the Hunahpu days of the Quiché ritual calendar, and they are both credited with siring the Hero Twins. Hunahpu and Xbalanque together represent the Sun, the Moon, Venus, and the Celestial Monster, each a facet of the domain of kingship, each richly interwoven into the tapestry of the calendar system.

Figure 4.3.2.2. Río Pasquero celt.  Olmec celt that associates the Maize God with both the center and axis mundi by using quincunx symbolism.
(Source: Schele, 2000)  © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

In the Popul Vuh creation myth, the Hero Twins resurrect their father, One and Seven Hunahpu, as the Maize God, setting the stage for the present creation. They also sire the first lords of the Quiché kingdom, establishing a royal lineage that can be traced back to the Gods of Creation (Tedlock, 1996: 146).  While the Popol Vuh specifically discusses the Quiché lords in this section, iconographic representations of the same creation stories can be seen on archaeological material from all over the Maya cultural area and in the Epi-Olmec periphery as well.

Many of the earliest iconographic representations of creation stories deal with the theme of the Maize God.   The role of the Maize God in both religion and politics is

fundamental to the establishment of leadership and kingly authority. The Maize God is the mythological founder of the royal lineage, and one of the primary purposes of monumental architecture was to track the line of descent back to the founder of a particular royal lineage. This development of validation can be seen in a few specific examples, such as Monument Q at the site of Copan, Guatemala. New lineages would acquire the authority to rule at one site by the accent of an established dynasty at another site. These power conferring sites were called *Puh*, or 'Place of Reeds' by the Maya, a term most commonly reserved for Teotihuacan but possibly associated with other sites (Stuart, 2000: 502-506; Rice, 2007: 194).

Among the Maya, the Maize God is the central deity responsible for the present creation (Tedlock, 1996; Freidel et al. 1993). He laid out the world like a milpa, or maize field, establishing the four corners and the center, and raising the World Tree (axis mundi) (Freidel et al., 1993: 130; Fields and Reents-Budet, 2005: 24). Because of the role he played, Maize God and Maize God Head motifs can substitute for the axis mundi and is often seen rendered as the center of a quincunx. Figure 4.3.2.2 is an illustration of one such example. This depiction, from the Rio Pasquero Celt, shows the head of a king, denoted by the trefoil element on the headdress. The head is positioned at the center of four stylized maize seeds. Below this scene a bar is held in the disembodied hands of the ruler. The quincunx was used by the Olmec and Epi-Olmec as a cosmological model for the four cardinal directions and the center (Stross, 1992: 6; 1994: 25-30). Therefore, the central place of the Maize God was codified through the art of Southeastern Mesoamerica and represents an important analogy for kingship (Fields, 1990; Freidel et al., 1993; Taube, 1996b; Schele and Freidel, 1990; Stross, 1990; 1992). Maize God iconography

Figure 4.3.2.3.a. "el Bebe", Monument 2 La Merced (1000-800 BC).

Figure 4.3.2.3.b. La Venta Monument 77 (900-400 BC).

Figure 4.3.2.3.c. San Bartolo North Wall Mural (100 BC).

Figure 4.3.2.3.d. Maya Polychrome Vessel (AD 300-600).

Figure 4.3.2.3. Progression of Maize God imagery from San Lorenzo phase (1200-900 BC) to Classic period (AD 300-600). (Source 4.3.2.3.a and 4.3.2.3.b: Berrin and Fields, 2010; 4.3.2.3.c: Saturno, 2009; 4.3.2.3.d: www.famsi.org, 2/15/11)

makes use of different symbols and motifs in different cultures, but these symbols and motifs begin to overlap, especially as their representations become closer in space and time. For example, the Olmec style depicts the Maize God as an infant with bucal mask and cleft head during the San Lorenzo phase (1600 – 900 BC).

Monument 2 "el Bebe" from La Merced, Veracruz, Mexico, best represents the infant bucal mask and cleft head motifs (Figure 4.3.2.3.a). This cleft head and bucal mask motif persists through the La Venta phase (900 - 600 BC) but has become associated with adult figures, such as La Venta Monument 77 (Figure 4.3.2.3.b) (Reilly, 2006). During the Late Preclassic phase of the Maya (400 BC-AD 250), at San Bartolo, the Maize God is shown as a young man with maize silk cascading from his head, but wearing a bucal mask created in the Olmec Style (Figure 4.3.2.3.c) (Saturno et al., 2005). These Maize God symbols and motifs are important in the investigation of the origin of the *Ajaw* glyphs because they set precedents for the use of vegetal symbolism in kingly iconography in the Middle and Late Formative period, as well as across different

Figure 4.3.2.4.a.
Oxtotitlan Painting A-1
~900 BC

Figure 4.3.2.4.b.
El Mirador Ceramic
Fragment 300-250 BC

Figure
4.3.2.4.e.
Kendal Axe

Figure 4.3.2.4.c.
San Bartolo North Wall
Mural 100BC

Figure 4.3.2.4.f.
Tikal Stela 5
AD 744

Figure 4.3.2.4.d.
Olmec Pectoral Maya
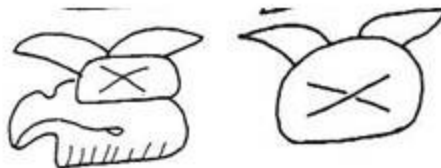Inscription AD 100-300

Figure 4.3.2.4. Examples of possible *Ajaw* signs from the Middle Formative to the Late Classic period. (Source 4.3.2.4.a: Stone, 1995; 4.3.2.4.b: Berrin and Fields, 2010; 4.3.2.4.c: Saturno, 2009; 4.3.2.4.d and 4.3.2.4.e: Fields and Reents-Budet, 2005; 4.3.2.4.f: Montgomery, 2000) © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

Southeastern Mesoamerican cultures (Fields, 1991; Taube, 1996a). Fields (1989) shows how the form of the calendrical *Ajaw* glyph changed from the Late Formative representations, to the Early Classic glyphs to settle in its Middle Classic period standard anthropomorphic portrait. Figure 4.3.2.4 shows several different examples of *ajaw* signs at different stages of development and includes many examples from Fields 1989 work, but also includes examples from San Bartolo (4.3.2.4.c) that help to elaborate developmental sequence. Fields described how the earlier forms may have had maize leaf or other vegetation associated with the sign. Some *ajaw* signs even have trefoils directly associated with them. The association of the *ajaw* motif with the trefoil motif reinforces it as a kingly symbol and ties kingship together with maize symbolism. The trefoil is a common sight in any maize field, especially in hot, dry summers, when the plant's leaves curve away from the fruit of the plant.

4.3.3 Caves and the Underworld

Along with the obvious vegetal and more subtle maize and Maize God symbolism associated with kings and the *Ajaw* sign, Fields (1989) suggested that there may be additional symbolism that can be tied to caves and the underworld. In Mesoamerica, caves are portals to the underworld and places of ritual and supernatural communication (Stone, 1995). They are also the source of clouds, life-giving waters, and the first maize (Stone, 1995: 40-41). Because of the access to the supernatural that caves provided, many of the caves in the region were used for ritual purposes, some of which have been continuously used for millennia (Freidel et al., 1993: 185-87). Images found in these caves and images of cave rituals often depict ancestral heroes and kings within caves.
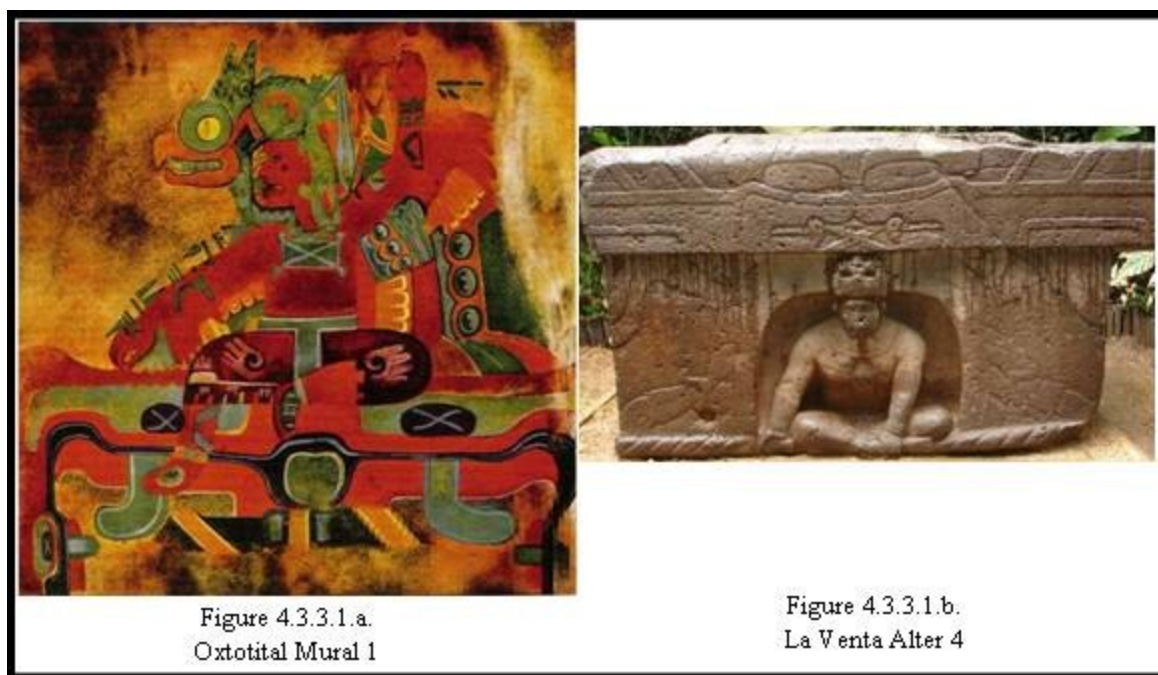
Figure 4.3.3.1. A comparison of cave and alter images from Oxtotitlan and La Venta. (Source 4.3.3.1.a: Stone, 1995; 4.3.3.1.b: www.famsi.org, 2/15/11)

The earliest examples of these images appear on San Lorenzo Alter-thrones such as Monument 20 (Stone, 1995: 20). Figure 4.3.3.1 shows Mural 1 from Oxtotitlan and La Venta Alter 4. This comparison shows a ruler in association with a zoomorphic mountain and cave entrance (Grove, 1970; Stone, 1995: 48-49). These, and other, mountain monster motifs commonly depict the entrances to caves as an enormous set of jaws augmented with other zoomorphic facial features (Figure 30). In this way the cave is the personified mouth of the mountain, or *witz*, gods (Fields, 1989; Freidel et al., 1993; Stone, 1995).

Early examples of *witz* monsters represented in figure 4.3.3.2 from Relief 1, "el Rey", and Monument 9 at the site of Chalcatzingo, in the highland Mexican state of Morelos, are similar in form and symbolism, if not necessarily in style, to the depictions
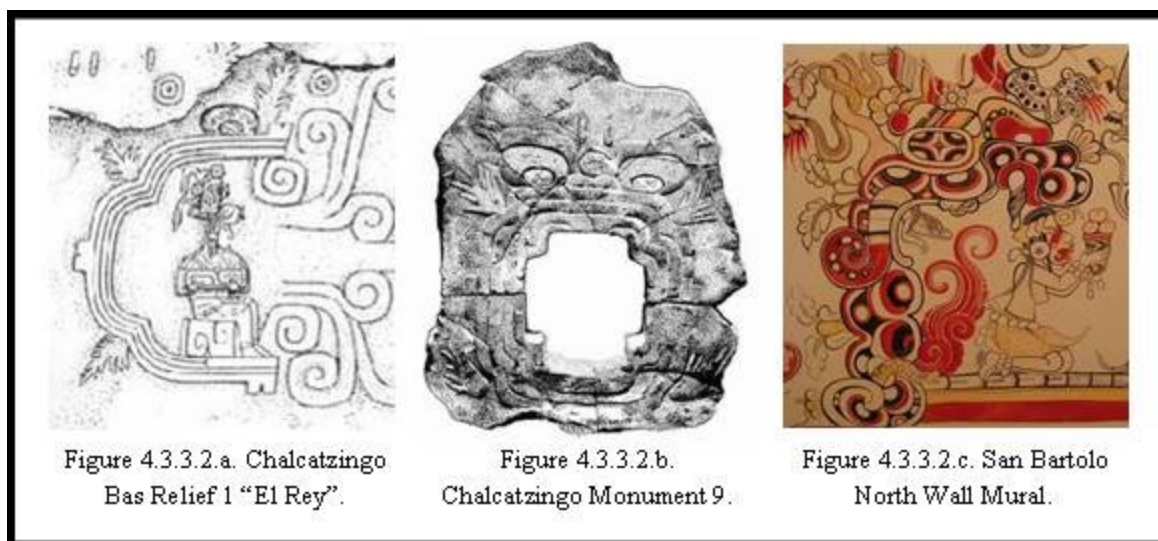
Figure 4.3.3.2. Cave Monster Maw iconography from Chalcatzingo and San Bartolo. (Source 4.3.3.2.a: Fields and Reents-Budet, 2006; 4.3.3.2.b: Diehl, 2004; 4.3.3.2.c: Saturno, 2009)

on the San Bartolo North Wall mural (Figure 4.3.3.2.c). In later periods, the Maya used

*witz* symbolism in the construction of their temple pyramids with the head of a *witz* god

on the corners of the structure and the mouths of *witz* gods positioned around the doors to

the sanctuaries (Freidel et al., 1993: 149-51). The Maya viewed the temple pyramids as

artificial mountains and the sanctuaries as artificial caves, further validating the cave as

the place for conducting ritual (Freidel et al., 1993; Stone, 1995). Fields has suggested

that the Late Formative and Early Classic period form of the *ajaw* sign is a stylized

representation of a cave entrance in the form of an "earth monster" mouth that may have

been viewed either as a portal or a throne (Fields, 1989: 74). Fields (1989: 74-75)

supports her idea by comparing the formal similarities between Chalcatzingo Monument

9, as quatrefoil earth monster mouth, and Relief 1, which depicts a figure seated inside a

half-quatrefoil earth monster mouth. While Fields relates this earth monster imagery

with jaguarian imagery and the oratory practices of early kings, the evidence seems to

show a greater relationship between the cave entrance as both a mouth and a portal to the

underworld that was used for the purposes of communication with ancestors.

### 4.3.4 Sak Nik: The "White Flower"

Ancestor communication was an important ritual responsibility of Maya kings. For the

Classic period Maya, the souls of the ancestors persist and can communicate with the

living. Ethnographic material from the Zinacanteco people describes the persistence of

the soul after death. This soul remains in the care of the Mother-Father Creator God in

the underworld (Vogt, 1976; Freidel et al., 1993: 182). The presence of the ancestors in

the underworld makes caves a logical place for conducting rituals of ancestor

communication (Stone, 1995: 44). The Classic period Maya Glyph for the persistent

soul includes a [non-Calendrical *ajaw*] and has been deciphered by both Grube and Stuart

as *sak-nik-nal* meaning, "white flower thing" (Freidel et al., 1993: 183). It is the *nik*

"flower" element that these scholars think is represented by the *ajaw* sign. This

interpretation is supported by the ritual calendars of the Aztec and the Zapotec. It can be

the last day with *xochitl* "flower." *Xochitl* falls in the same position as the day *Ajaw*

"lord" in the Tzolk'in (Rice, 2007: 34, Table 3.4). However, the phonetic complements

in the *sak-nik-nal* glyph block do not necessarily support the *nik* reading (Matt Looper,

personal communication, 2010).

Figure 4.3.4.1. Detail of lower right corner of the image from the Temple of the Foliated Cross. Shows Maize God as vegetal maize being drawn into the Underworld through the Matawil shell. (Source: Schele, 2000) © The Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org.

Regardless of the specific reading of the glyph block, the *ajaw* sign in this [non-Calendrical] context does appear to be associated with a specific aspect of soul (Freidel et al., 1993: 182, 440 n. 16). There is iconographic evidence that supports the notion that the *sak-nik*, for lack of a better term, resided in a person's head. The representations of these *ajaw* signs are capped with a vegetal trefoil, and some images, such as the Maize God head being pulled into a giant *nawal* conch shell. Figure 4.3.4.l, from the Temple of the Foliated Cross at Palenque, may be a more complex representation of this specific form of soul (Freidel et al., 1993:183). If, as Stuart and others have suggested, the *nawal* shell represents a portal to the underworld, these spirits appear to be able to temporarily pass between earthly and supernatural worlds in order to communicate with their descendents.

# 5 CONCLUSION

This chapter assesses each of the major *ajaw* allographs, beginning with the [headband *ajaw*], followed by the [affix *ajaw*], the [non-calendrical *ajaw*], and the [calendrical *ajaw*]. Each sign description shows the place they hold in the Maya script and art, and how this position informs their relationship to the *ajaw* morpheme. Finally, this chapter describes the significance of the different *ajaw* signs and the methods used to analyze them.

## 5.1 The Headband Ajaw

Based on the data collected, there appears to be thematic connections between the *ajaw* allographs and the different elements of royal regalia and ritual performance. The [headband] variants have as a common motif the royal headband. This motif can be recognized, in both the art and the Maya script, by the presence of a diadem headband with a central jewel ornament. This jewel can take three different forms: a non-calendrical *ajaw*, the Jester God, or a trefoil. These jewels have strong iconographic associations with both kingship and agriculture (Fields, 1989; Freidel and Reilly, 2010; Reilly, 1999; Schele and Freidel, 1990; Taube, 2005). The headband motif can be traced back to Olmec art produced during the Middle Formative period. Archaeological material from the site of La Venta has been shown to be comparable to representations of headbands from Maya art, and was probably used in much the same way (Reilly, 1999).

However, there is no definitive lexical association for this motif among the Olmec that I have found. In Mayan, the [headband] allographs cannot be broken down into smaller morphological units. Because of the logographic nature of these signs, we must assume that they have a single morphological value consistent with the iconographic theme formally expressed by the sign. These signs have never been assigned a syllabic reading (Macri and Looper, 2003; Montgomery, 2002).

The headbands are used in combination with a Human, Rodent, or Vulture head motif. These head motifs make up the second major component of the [headband *ajaw*]. I was not able to determine any contextual associations that could be directly linked to the various head forms. The scribes, through the uses of one head variant or another, may have implied additional semantic value. This may represent simple artistic license on the part of the scribe, or it may add nuance or occulted information for the initiated. Further research is required to answer this question.

The [headband *ajaw*] makes reference to the most characteristic element of royal regalia, the royal headband. As a result, they were used as an alternate logographic representation of the [calendrical *ajaw*] signs. However, they are the only allograph that can appear in both calendrical and non-calendrical, maintaining roughly the same morphemic value. Thus, the stability of the semantic value of the [headband] supports the cultural importance of the sign, both within the script and as an iconographic motif. This cultural importance extended as far back as the Olmec florescence and imbued the semantic value of the headband grapheme with significant cultural conservatism. This conservatism probably passed to its lexical value, but this conclusion cannot be supported linguistically.
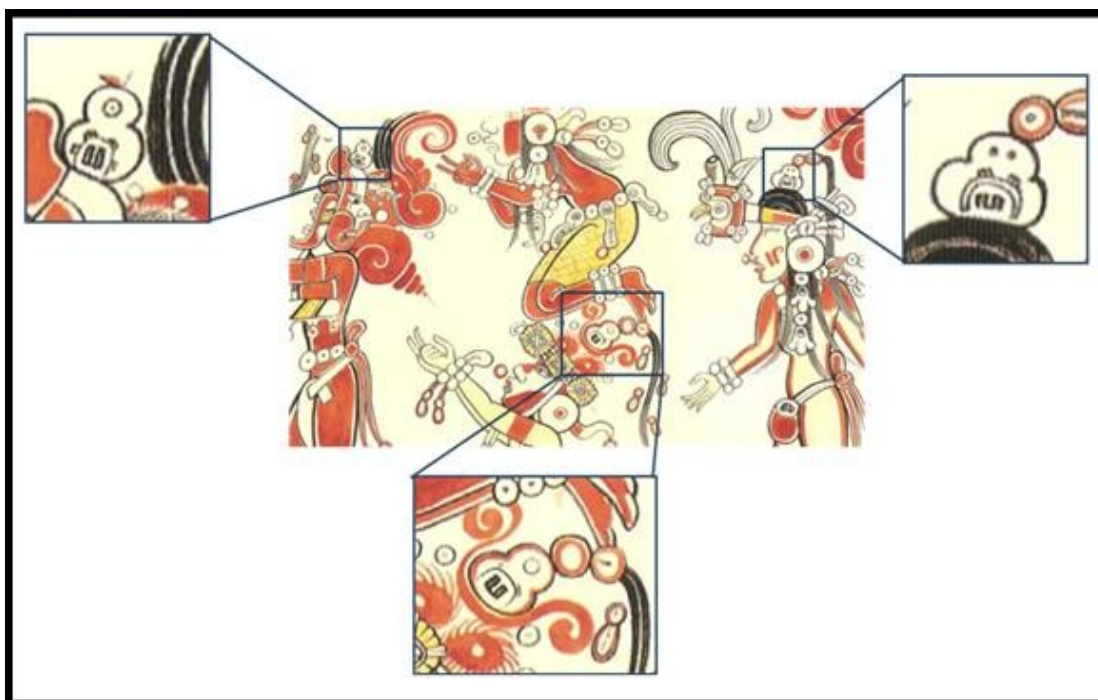
Figure 5.1.1. Detail of headband elements from San Bartolo North Wall Mural. (Source: Saturno, 2009)

Iconographically, if the [non-calendrical *ajaw*] is substituted as the headband diadem, in place of the Jester God or trefoil, then the central jewel position must act as a semantic determinative.  This semantic determinative identifies the linguistic and semantic value of the headband, and the individual who wears it, as *ajaw*.  The use of the [non-calendrical *ajaw*] in the jewel position can be seen to supersede the importance of the headband itself.  Therefore, the [non-calendrical *ajaw*] as the central jewel ornament is the most identifiable element of the [Headband *ajaw*].  These sign elements appear in both the inscriptions and among the iconographic representations of kings in both Maya and Epi-Olmec art.  The iconic North Wall mural from San Bartolo, has three different Late Formative period representations of [non-calendrical *ajaw*] signs (Figure 5.1.1) as head dress elements that designate the elite status of the individuals participating in a ceremony (Saturno, 2009).  Stross (1994) suggested that the sign floating in front of the figure on the La Mojarra stela (Figure 5.1.2) serves a similar function as a rank

Figure 5.1.2. Detail of *Ajaw* element from La Mojarra stela 1.

designator. These different methods of iconographic representation between the lowland Maya and Gulf Coast regions underscore the stylistic variability as well as the thematic conservatism, apparent throughout Mesoamerica.

Again, while these early *ajaw* motifs may indicate lordship iconographically, they do not seem to have a definitive linguistic value. Kaufman and Justeson suggested that the writing on the La Mojarra stela represents proto-Zoquean (Kaufman and Justeson, 2001), while Stross and Reilly suggested that it may be proto-Mixean (Stross, 1994: 11). Meanwhile, at San Bartolo, the inscribed elements within the murals have consistently resisted decipherment (Saturno, Stuart, and Beltrán, 2006). More research is necessary before any definitive statements can be made about the linguistic character of this early writing system.

Thus, the same, or similar, iconographic motifs of the [non-calendrical *ajaw*] appear in context with scripts associated with different language families. This is characteristic of an influential motif that temporally superseded at least one, if not both of the scripts that use it. Fields (1989) has shown how the [non-calendrical *ajaw*] sign underwent considerable formal change from the Late Formative through Early Classic periods before settling into its standard Late Classic form. Based on this information, it appears that the sign was experiencing significant iconographic variability during this time frame. This formal fluctuation may help to explain how the similar graphical

representations of the [non-calendrical *ajaw*] came to have such divergent phonetic and semantic associations in the later script (Montgomery, 2002; Macri and Looper, 2003). The earliest recorded representation of these signs, around 100 BC at San Bartolo, show three distinct forms within the same mural (Saturno et al., 2006; Saturno, 2009). The distinctions depicted in the North Wall mural may represent subtle semantic differences such as toponyms or lineage affiliations characteristic of the individuals who wear them.

*5.2 The Affix Ajaw*

A similar consideration is apparent with the [affix *ajaw*]. This allograph is most often found in the same block as an "emblem glyph", a main sign strongly associated with a specific place. Emblem glyphs have been found at most of the major Maya centers, and some sites even have multiple glyphs (Coe, 1992; Martin and Grube, 2008). There are numerous historical examples of a single place acquiring different names over the course of time, such as New Amsterdam and New York, or Constantinople and Istanbul. In each case the name change corresponded with a change in the sovereign rulership of the city, Dutch to English in the first case and Greek to Turkish in the second. However, because the emblem glyph block is most often found within a larger group of epithets, it is equally likely that the sign is either a lineage descriptor or a toponym. Much like personal names, these glyphs are used in one specific context for a time and then are never used again. A critical example of this can be found at Yaxchilan, a major Maya site on the border between the Peten region of Guatemala and Chiapas, Mexico. At Yaxchilan, the earlier glyph, called *pa' chan*, or "split-sky" is the only emblem glyph in use at the site until AD 681. With the inauguration of the reign of

Itzamnaaj Bahlam II, a new emblem glyph appears (Martin and Grube, 2008: 119).

Significantly, the earliest notations of this sign appear at Bonampak, in the highland foot

hills of Chiapas, and at Palenque, Tabasco, Mexico, around AD 599 (Martin and Grube,

2008: 121).  It is possible that Itzamnaaj Bahlam II was a member of an elite lineage from

one of these cities and was placed as the ruler of Yaxchilan.  Martin and Grube (2008:

119) point out that at a later date; the new emblem is tied to the founder of Yaxchilan,

probably to emphasize the legitimacy of the foreign lineage.  The problem with specific

decipherment of these emblem glyphs results from the logographic nature of the main

"emblem" sign, and makes accurate decipherment much more difficult.

In regards to the [affix *ajaw*] allograph, its association with these emblem groups

adds to its similar difficulty in decipherment.  This appears to be the earliest allograph

and can be broken down into smaller phonetic units.  However, unlike the purely syllabic

spelling of *ajaw*, where the graphemes are purely phonetic, the graphemes of the [affix]

allograph have morphemic values.  Lounsbury's (1973) proofs show that the sign

combines the agentive prefix *'aj*, "he of", with some subject phrase that is phonetically

either, *po* or *w(a)*, which has lead to the historical linguistic reconstructions discussed in

the previous chapter. Lounsbury showed that the initial sign could be an agentive prefix.

This assessment leaves little doubt that the [affix *ajaw*] is a personal title, however, the

nature of that title probably changed over time.  Definitely by the Postclassic period, as

attested by examples from the Madrid and Paris Codices, the affix form shares the

phonetic value of the other *ajaw* allographs (Lounsbury, 1973: 120-21). This is most

likely true for the Late Classic period as well.  Yet, the phonetic value of the earliest sign

forms from San Bartolo is more questionable than Stuart has suggested (Saturno et al.,

2006). It is likely that the [affix] allograph began a semantic shift as early as the Early Classic period that was finally complete by the end of the Late Classic. In the earlier forms there is a question regarding the subject of the agentive prefix. "He of the" what? How did the Maya arrive at *ajaw* from *'aj po*; and why did they maintain the old *po* phonetic sign despite the new reading? The implication is that the *ajaw* and *'aj po* readings are so close semantically that there is virtually no difference regardless of pronunciation. Thus, the subject of the agentive prefix must have had a strong semantic relationship with kings even at the earliest date.

As noted from linguistic findings, the four most likely candidates for the subject of the affix allograph are: (1) Mat [*pop* > p-Mayan **pohp*], (2) Seed [*aw* > p-Mixean **po:h*], (3) Mouth/Speaker [p-Mixean **awa*], (4) Place of Reeds [*pu, puh*]. Of these suggestions the most promising possibility seems to be (2) seed. This suggestion is supported in the southern highlands of Chiapas and Guatemala, where there appears to have been a strong influence of Mixean-speakers over the local Mayan speakers. At the sites of Izapa, Takalik Abaj, and Kaminaljuyu, situated west to east along the Pacific coastal foothills of Chiapas, Mexico and Guatemala, archaeological and art historical evidence suggests that they were originally controlled by Epi-Olmec groups from the west during their florescence in the Late Formative period (Guernsey and Love, 2005). The Mixean-speakers in the region today may be their linguistic descendants. These sites are particularly known for their Izapan art style, which projected a powerful influence over the art of the highlands, including the southern Maya regions (Guernsey, 2006). Towards the end of the Late Formative all three sites came under the control of Mayan-speakers and the art of the region changes to a more traditional Classic Maya style

(Guernsey, 2006).  The southern Mayan language groups differ from the northern lowland Mayan, and this difference is probably a reflection of the same cultural influence seen in the artistic style of the Late Formative.  If there was a Mixean influence on highland Mayan languages then Quichéan *ajpu* may be a reflection of that influence.  The *ajpu* example suggests that the *po* subject from the [affix] allograph may be a Mixean root.  This information excludes the (1) mat and (3) mouth/speaker readings from this allograph because they do not have the correct language source or phonetic value.  Place of reeds (4) could still be a possibility; however, there is currently not enough historical linguistic data on this reading to make a conclusion.

The iconographic data also supports the (2) seed reading.  The vegetal associations regarding kingship are numerous and seem to imply that, ultimately, the care or products of the milpa are a responsibility of the king.  However, these vegetal associations do not make sense in the context of the "emblem" glyph.  If the correct reading is "he of the seed", then the sign may have originally functioned as a claim of legitimacy.  The "seed" may be a metaphor, refering to the particular lord as the progeny of someone or something.  This reading, if correct, could also clarify the meaning of the emblem sign.  If the emblem sign is a toponym, then the glyph series would suggest that the individual is the "seed" of the place.  In other words, he is the "product" of Yaxchilan.  This reading is not supported by any of the sources, and the example of the sign of Itzamnaaj Bahlam II of Yaxchilan seems to defy it entirely.  On the other hand, if the emblem is a lineage or family, the "seed of a royal family", would have been an important declaration of legitimacy connecting the current ruler to the mythological lineage founder.  The [headband] and [affix] allographs represent relatively

straightforward relationships between the ruler and important elements of royal tradition. The [calendrical] and [non-calendrical] allographs do not have such clear cut relationships.

*5.3 The Non-Calendrical Ajaw*

The [non-calendrical] allograph has been touched on earlier regarding the [headband] allograph, in this context it was shown to freely substitute for other royal icons, such as the trefoil or the Jester God.  Outside of this context, these signs are dramatically variable, morphologically and semantically.  Part of the variability is the result of the Maya using different configurations of these signs to represent several different syllabic phonemes such as *–al(a)* or *xo* (Macri and Looper, 2003).  However, many more of these sign forms have distinct, unrelated logographic values.  Because of their logographic nature, the phonetic values of these signs are still questionable, yet many of their semantic values have been deduced:  (1) "Child of Father", (2) *way* "Spirit Companion, Dream, Transform", and (3) *nik* "Flower" (Macri and Looper, 2003).  These semantic values can be shown to have important royal associations that may have served as the point of origin of the more general concepts they acquired later.   The "Child of Father" association can be shown to have the same importance to legitimacy as the [affix] allograph.

Tatiana Proskouriakoff (1960) was the first to identify the various Maya stela as recording a history of kings.  On these monuments, both the mother and father of the king are mentioned; however, patrilineal descent was more important than matrilineal descent for Classic period Maya elites (Martin and Grube, 2008).   These signs are depicted as a

'capped' *ajaw* with a pair of leaves or smoke curls rising from the top (Macri and Looper, 2003). This value can be seen as similar to the *ch'am* sign, meaning "to receive", often depicted as an *ajaw* in the open palm of a hand. Other "open palm" graphemes with different objects in the hand have been interpreted as *al* or *yal* "child of mother", including one example using the *'aj* sign from the affix glyph (Macri and Looper, 2003: 130).

In addition to the aforementioned [non-calendrical] signs, the *way* signs carry important ritual association with kingship that focuses on the shamanic role of the king. *Way* has several different translations including, spirit companion, transformation, and dream. This grapheme is a conflation of a [non-calendrical *ajaw*] sign and a *balam*, or "jaguar", sign. This speaks directly to the shamanic role of the king by combining his natural and supernatural aspects. Shamanism is a core belief at the center of Mesoamerican religious practices. Central to this belief is shamanic transformation, and the *way* is both a spirit companion and transformative totem. The *way* of kings was the jaguar (Reilly, 1989; Freidel et al., 1993; Furst, 1995). Because neither the *ajaw*, nor the *balam* values lend their phonetic characteristics to the *way* sign, the phonetic value of the logograph was deciphered based on the values implied by affixed phonetic complements (Houston and Stuart, 2001: 452).

The same syntactic rules have been used in the decipherment of the *nik* sign; however this value is more questionable. Grube and Nahm, and Stuart independently came to the conclusion that these [non-calendrical] allographs held the *nik* value based on different phonetic determinatives (Freidel et al., 1993: 440-41). Grube and Nahm went so far as to suggest that all [non-calendrical] *ajaw* signs should be read as *nik* (Freidel,

1993: 440).      This is supported by the significant amount of flower imagery in both the text and iconography of the Classic Maya art.  The *xo* sign, represented by a petaloid *ajaw* with a cleft head, appears to support the flower reading, but only if the form is considered as a Nahuatl loan for *xochitl* "flower" (Macri and Looper, 2003: 67).  The relationship between *nik* and *ajaw* was definitely apparent and important to the Maya.  By the Late Classic period there appears to be a semantic shift occurring based on the *ajaw* - *nik* metaphor.  It is likely that this metaphor is the result of the growing influence of Nahuatl speakers within the Mayan language boundaries.  Unfortunately, the actual time depth of this relationship remains to be tested.

On the other hand, there is also strong evidence that the sign may also form the suffix, *–nal*, meaning "born of, one of the quality of, or one from", which supports the "child of father" semantic value (Macri and Looper, 2003).  This interpretation supports an overarching theme of royal legitimacy through blood ties.  This theme may be related to the concept of ancestral communication and cave rituals noted by Fields (1989).

*5.4 The Calendrical Ajaw*

As for the [calendrical *ajaw*], the significance of the Mesoamerican calendrical tradition plays an important role in its understanding.   Rice (2007) suggested that the calendar system, including the symbols used within it, must have been developed during the Archaic period.  This insistence is based on her view of the importance of the calendar system on the maintenance of the agricultural system, the existence of which is demarcated by the beginning of the Formative period.  In regards to Mesoamerican calendrics, Blanton and Kowalewski (1981:60) suggest that the rituals associated with

agriculture developed alongside the sedentary lifestyle allowed by plant domestication. They suggest that counting time is a prerequisite for regularly scheduled agricultural rituals, and that these rituals were the progenitor of calendrics (Blanton and Kowalewski, 1981).

Yet, Rice (2007) applies an Order, Legitimacy, and Wealth model of political authority to the use of calendrics. The use of the calendar by elite calendar priests to facilitate the political authority of the king seems appropriate once the calendrical system had been established (Rice, 2007). It is possible that a network strategy of political power, as described by Blanton and colleagues, existed during the Early and Middle Formative periods. This network would have been based around the market system as an economic model and expressed over a large geographical area through individual personal relationships. These relationships are maintained through "differential access to prestigious marriage alliances, exotic goods, and specialized knowledge" that may "translate by varying degrees into leadership within the local group" (Blanton, Kowalewski, and Peregrine, 1996: 4). The importance of a network political economy to calendrics is the political value of these agricultural rituals.

The rituals, ritual objects, and, by extension, the ritual performers acquired an elevated status within the network of communities who value the rituals. It is likely that the *ajaw* day name was established as a veneration of the performers of agricultural rituals. A day of veneration suggests that the day name was created during a period of calendrical adjustment and not a day in the original calendar, this is further supported by the fact that most of the day names have a naturalistic sense such as *ix'* "wind", *imix* "death", or *muluk'* "water" (Rice, 2007: 34, Table 3.2). The historical linguistic

reconstruction of *ajaw* as a Mayan lexeme still suggests an early date, probably during the Huastecan migration through Olman around 1000 BC (Kaufman, 1976). It is likely that both the eastern and western branches of Mayan acquired or modified an existing calendar system around this time based on contact with proto-MZ-speakers through the exchange of ritual knowledge.

*5.5 Conclusion*

Each of the *ajaw* allographs enumerated above tell the story of an important aspect of Maya cultural history. They also offer hints about the cultures that influenced the Maya at the end of the Formative period. The development of hereditary kingship in Mesoamerica represents a significant political threshold for the aboriginal peoples of the western hemisphere. Among the Mayan-speakers, the appearance of the *ajaw* lexeme is indicative of this political development.

The *ajaw* lexeme is derivative of the political expansion of kingship. The graphical representations of the *ajaw* morpheme captured its development iconographically at different periods during its evolution. This created a trend where the different allographic representations of *ajaw* appear to migrate, either closer to or further from, the root morphemic value of lord. This kind of semantic migration is common in all languages. For example, the original value of *meat* in English was foodstuffs. Over time this value has narrowed so that meat only refers to animal flesh, but different survivals of the old meaning persist, such as sweet*meat*, or candy (Campbell, 1999: 255).

Among the Maya, there appear to be different factors acting to preserve the morphemic value of one allograph, while diluting the value of another. The [calendrical

*ajaw*] appears to represent the most culturally conservative use of an allograph. The calendar and its day designations rarely changed. The Maya calendar was both religious and political, both cultural and scientific. Like the days and months of western calendars, the fundamental elements of the Maya calendrics were ancient and highly resistant to change.

Based on the glyph block recovered from San Bartolo, and the linguistic and epigraphic evidence gathered here, it appears that the [affix *ajaw*] is also very long lived. This can be said because of the remarkable persistence of the basic elements of sign form, which preserves its complex morphology. However, unlike the [calendrical *ajaw*] its semantic value has shifted over time. The [affix *ajaw*] must have designated a person of significant political and/or social importance, perhaps an agricultural ritual specialist, 'he of the seed'. A metaphorical relationship existed between the role of the ritual performer and the role of the king. This agricultural-royal relationship underlies most of the iconography identified for the other *ajaw* allographs.

The [headband *ajaw*] appears to play off this relationship using the headband jewel as rank designator. Because there are three different motifs that can freely substitute for each other in this jewel position, each of these motifs must have approximately the same semantic value. The Trefoil motifs appear on headbands from the Middle Formative period, while the [non-calendrical *ajaw*] and the Jester God motif appear in art from the Late Formative period. It would be interesting to look at the geographic distribution of the Late Formative art objects that use these motifs. It is possible that each is a geographically distinct expression of the same theme.

The [non-calendrical *ajaw*] seems to have had an important function as a rank designator based on its use at El Mirador and San Bartolo during the Late Formative period. Minute artistic details may even have distinguished lineages or toponyms. Throughout the Early Classic, however, these signs underwent considerable formal change. Fields (1989) has shown how the older forms show iconographic similarities to cave motifs. If there is a relationship between these [non-calendrical *ajaw*] signs and caves, it would reinforce the relationship to child birth rituals, shamanic transformation and ancestral communication, inherent in the morphemic values of the Late Classic signs.

[Non-calendrical *ajaw*] signs also acquired an important function in the basic grammar of the hieroglyphic script. These signs are the most common of the allographs in Late Classic inscription, and have the most variability of form and value. The variability of value only supports its use as a lineage or topological designator, for they would have been both abundant and variable during the formalization of the script system during the Early Classic period.

Finally, many of the Maya hieroglyphs would be receptive to this degree of iconographic and linguistic evaluation that this work has ascribed to the *ajaw* glyph and its various allographs. By evaluating the Maya script with all of the communicative material at our disposal, linguistic, epigraphic, and artistic, more of the nuances of form and development are understood. Moreover, by critically evaluating each grapheme in the Maya script the total corpus of Mesoamerican iconographic motifs is expanded. The places of iconographic and linguistic overlap must be identified and critically assessed. These areas should be carefully mapped in order to better understand the places of

cultural interaction.  It is in this way that the new mysteries of Mesoamerican writing
systems must be explored.

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