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REEEVALUATING THE LATE CLASSIC LU-BAT GLYPHIC

PHRASE:

THE ARTIST AND THE UNDERWORLD

by:

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B.A. University of Central Florida 2010

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Anthropology in the College of Sciences at the University of Central Florida Orlando, Florida

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ABSTRACT

The study of hieroglyphic texts is vital to the interpretation of the ancient Maya and how their worldview contributed to their daily lives. Hieroglyphic decipherment has been an arduous undertaking and a wide variety of the Late Classic Maya writing styles has also been documented. When specific hieroglyphic phrases are not fully understood it has been necessary to utilize other sources of information to help increase the understanding of these texts. The “lu-bat” glyphic phrase has been utilized in multiple mediums throughout the Late Classic period and is described as an artist’s signature. This artist signature is directly related to specific iconographic elements and themes that represent a cosmological view of the ancient Maya. This thesis demonstrates the connection between the lu-bat glyphic phrase and iconographic themes indicative of liminal powers exercised by the social elites in terms of the underworld. This connection is strengthened through the evaluation of the associated texts and iconographic analysis. While interpretations of the lu-bat glyphic phrase have suggested that it represented an artist’s signature, a concise articulation of the hieroglyphic values for the lu-bat glyphic phrase has not yet be achieved. The iconographic imagery involved with this glyph demonstrates an interactive level between the conduit being and liminal actions. This interaction depicts the individual involved as a direct medium for the ritual activities of the elites in terms of the underworld.
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# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................ iv
LIST OF TABLES ........................................................................................................... vii

CHAPTER 1: INTRODUCTION .................................................................................... 1

CHAPTER 2: BACKGROUND AND PROBLEM STATEMENT ..................................... 5
  2.1 Role of Bat in Maya Universe ......................................................................... 5
  2.1.1 Deity and Religious Worldview ................................................................. 6
  2.1.2 Connection to the Underworld ................................................................. 7
  2.2 Previous Scholarship .................................................................................... 8
    2.2.1 Iconographic Interpretations ................................................................. 8
    2.2.2 Epigraphic Decipherments ................................................................. 13
  2.3 Problem Statement ..................................................................................... 16

CHAPTER 3: DATA PRESENTATION AND ANALYSIS ........................................... 19
  3.1. Presentation of Database ............................................................................. 19
    3.1.1. Venue ................................................................................................. 22
    3.1.2 Medium ............................................................................................... 24
    3.1.3 Type ..................................................................................................... 25
    3.1.4. Text Position ....................................................................................... 27
    3.1.5 Multiple lu-bat Glyphic Phrases ............................................................. 29
  3.2 Spatial and Temporal Distribution .................................................................. 30
    3.2.1 Spatial Distribution .............................................................................. 31
    3.2.2 Temporal Distribution ......................................................................... 34
  3.3 Summary ...................................................................................................... 35

CHAPTER 4: EPIGRAPHIC INTERPRETATIONS ..................................................... 37
  4.1 Introduction ................................................................................................... 37
  4.2 Reading of Components .............................................................................. 37
    4.2.1 Affixes ................................................................................................. 38
    4.2.2 Main glyph .......................................................................................... 40
    4.2.3 Conflation vs. Pairing .......................................................................... 41
  4.3 Accompanying texts .................................................................................... 42
    4.3.1 Primary texts ....................................................................................... 43
    4.3.2 Secondary texts ................................................................................... 45
  4.4 Summary ...................................................................................................... 47

CHAPTER 5: ICONOGRAPHIC DISCUSSION ......................................................... 48
  5.1. Introduction ................................................................................................. 48
5.2. Specific Imagery .................................................................................................................. 49
  5.2.1. Warfare Elements ......................................................................................................... 49
  5.2.2 Royal Activities ............................................................................................................ 51
  5.2.3 Supernatural Imagery .................................................................................................. 56
5.3. Iconographic Themes ....................................................................................................... 59
5.4. Summary .......................................................................................................................... 61

CHAPTER 6: DISCUSSION AND CONCLUSION ......................................................................... 62
  6.1 Introduction ....................................................................................................................... 62
  6.2 Evaluation of the Glyphic Phrase ..................................................................................... 62
  6.3 The Artist and the Bat ....................................................................................................... 63
  6.4 Significance of Distribution ............................................................................................ 65
  6.5 Conclusion ......................................................................................................................... 66

APPENDIX A: MONUMENTS CONTAINING LU-BAT GLYPHS .................................................. 68
APPENDIX B: IMAGES PERMISSIONS ..................................................................................... 114
APPENDIX C: CERAMIC VESSEL FROM CARACOL, BELIZE ................................................. 121
REFERENCES .......................................................................................................................... 123
LIST OF FIGURES

Figure 1 Lu-bat Glyph ........................................................................................................ 4
Figure 2 Bat deity in Codex Vaticanus 3773 ...................................................................... 9
Figure 3 Hammond Palma with elements of sacrifice and Bats ........................................ 11
Figure 4 Pie chart showing distribution of monument type ............................................ 27
Figure 5 Maya sites containing the Lu-bat glyphic phrase ................................................ 33
Figure 6 T-61 Glyph ......................................................................................................... 38
Figure 7 T-568 Glyph ......................................................................................................... 38
Figure 8 Superfix T-756 from Chichen Itza ..................................................................... 39
Figure 9 Top of Hun Nal Ye stone coffer ....................................................................... 69
Figure 10 Cauac Altar Support Piedras Negras 4.1~781 C.E. ........................................... 70
Figure 11 Cauac Altar Support Piedras Negras 4.2~781 C.E. ............................................. 71
Figure 12 Cauac Altar Support Piedras Negras 4.3~781 C.E. ............................................. 72
Figure 13 Cauac Altar Support Piedras Negras 4.4~781 C.E. ............................................. 73
Figure 14 Monument 146, Tonina, with texts from base ................................................ 74
Figure 15 Lintel 25, Yaxchilan, underside and front edge ................................................ 75
Figure 16 Naranjo stela 12 .............................................................................................. 76
Figure 17 Stela 14, Front and back, Naranjo .................................................................. 77
Figure 18 Stela 12, Piedras Negras .................................................................................. 78
Figure 19 Stela 34, El Peru .............................................................................................. 80
Figure 20 Lintel 26, Yaxchilan ....................................................................................... 81
Figure 21 Lintel 2, Bonampak ......................................................................................... 82
Figure 45 Stela 14 with signatures, Piedras Negras.......................................................... 106
Figure 46 Throne 1 Backrest with signatures, Piedras Negras.............................. 107
Figure 47 Panel 3, Cancuen ......................................................................................... 108
Figure 48 Kerr Rollout 8740 ......................................................................................... 109
Figure 49 Kerr Rollout 6551 ........................................................................................ 110
Figure 50 Kerr Rollout 8257 ........................................................................................ 111
Figure 51 Kerr Rollout 2774 ........................................................................................ 112
Figure 52 Altar 2, Bonampak....................................................................................... 113
LIST OF TABLES

Table 1 The Database ........................................................................................................................................... 21
Table 2 Texts position based of Venue distribution .......................................................................................... 22
Table 3 Percentages of Venue and Medium ....................................................................................................... 24
Table 4 Text Position vs. Primary and Secondary Texts .................................................................................... 29
Table 5 Monuments with multiple Lu-bat Glyphic Phrases .............................................................................. 30
CHAPTER 1: INTRODUCTION

During the Late Classic Period Maya, the value placed on artists and their work changed as the lu-bat glyphic phrase became a standard on Southern Lowland monuments in the Usumacinta River Valley. The lu-bat glyph, as described by David Stuart and others (Boot 2009; Chinchilla Mazariegos, et al. 2001; Coe 1999:250-251; Coe and Kerr 1998; Coe and Van Stone 2001:95,102; Grube 1986:224-226; Stuart 1986, 1987, 1990; Thompson 1966:181-183), represents the artist’s signature on elite monuments related to warfare, to a change in rulership, or to ritual activities. Artists utilized the lu-bat glyphic phrase during the Late Classic Period from approximately 573 C.E to 881 C.E., therefore it played a short lived role in the overall Maya hieroglyphic corpus. Current interpretations do not address the iconographic themes associated with the usage of the text and therefore limit the interpretative abilities as to why the artists utilized this phrase. Reevaluating the glyphic phrase in connection with iconographic interpretations will address the issue as to what the glyphic phrase represents and whether the spread through space and time is related to changes in ideology. This thesis draws upon interpretations of specific elements within the overall iconographic scenes to show a connection between the hieroglyphic texts and the value bestowed on the individual related to the glyphic phrase. This individual herein will be termed “conduit” as per their role in the liminal activities. This conduit in some cases can be the artist or carver of the monument. The individual is connected to the supernatural and liminal abilities of the elite as a metaphorical medium that relays the elites’ messages to the common people.

The “lu-bat” glyphic phrase is characterized as a secondary text that represents the so called “scribal signature” and is depicted as a specific bat head glyph with an associated bowtie
prefix and an infixed gouged eye glyph (Figure 1). The evolution of the corpus and understanding of the glyphic phrase has continued to change and a clear decipherment is lacking. In order to present possible interpretational values for the bat head glyph, it is necessary to address the usage of the glyph and how it is connected to the associated iconographic scene through the role of the conduit. As previously stated, epigraphers have interpreted the lu-bat glyphic phrase as a scribal signature as a way to denote a name tag (Boot 2009:7; Closs 1992; Coe 1999:250-251; Coe and Kerr 1998; Grube 1986:228; Houston and Taube 1987; Houston, et al. 1989:722; Kidder 2009; MacLeod 1998:187; Schele 1982; Schele and Freidel 1990; Schele, et al. 1986; Stuart 1986; Tate 1989:9-10), and the goal herein is present a different interpretation and to consider the conduit’s role as a metaphorical supernatural medium and messenger depicted in these scenes. It is suggested that this metaphorical medium works within the guidance of the divine ruler and through their liminal and supernatural actions to present a message to the people relating to the major events of warfare, sacrifice or dynastic change within the site.

The evaluation of the iconographic scenes and associated texts stems from the construction of a dataset utilizing available sources in which the lu-bat glyphic phrase is represented. This datasets contains 81 instances in which this glyphic phrase is represented. While not all occurrences are utilized for the argument due to lack of iconographic imagery, it is necessary to included them in the dataset to represent the complete distribution of the glyphic phrase within the Maya hieroglyphic corpus. With a complete dataset it is possible to evaluate the entirety of the glyphic phrase. Through this consideration of associated iconographic elements and themes I argue that the lu-bat glyphic phrase establishes a connection between the conduit and the underworld as a supernatural medium represented as the messenger bat. This thesis explores this connection between the conduit and the underworld by addressing the
following research questions pertaining to the usage of lu-bat glyphic phrase during the Late Classic Period. Does the conduit have a connection with the underworld as a metaphorical messenger for the elites? Is this connection represented in the iconographic scenes and are they related to the underworld and site specific events or milestones? Finally does the spatial and temporal distribution of the lu-bat glyphic phrase signify a specific change in world view of the Late Classic Southern Lowland Maya or is the usage limited to expressing regional ideology within the Usumacinta Valley?

The reevaluation of the glyphic phrase in connection with the iconography allows for a different way of interpreting the value of hieroglyphs that do not necessarily have a clear decipherment. While it does not assist with decipherment or the understanding of the written text, it helps to understand the connection between the iconography and the decided usage of specific hieroglyphs or hieroglyphic compounds. This connection proves to be vital to an overall understanding of the Late Classic Period Maya worldview and ideological interactions. While hieroglyphic decipherments have been used to help interpret iconographic scenes, there has been little use of iconography to assist in the interpretations of specific hieroglyphs and their usage. Although it can not necessarily be used for all aspect of hieroglyphic writing, it can assist with the interpretative value of phrases related to ideology and worldview. The ability to use different level of interpretations can provide insight into the reasoning behind certain actions and therefore allow for a broader view of a minute detail.

This thesis addresses these research questions through the next five chapters. Chapter Two starts with an explanation of the lu-bat glyphic phrase and outlines the importance of the bat in Maya iconography and worldview. While the focus is the Maya, greater pan-Mesoamerican corpus of knowledge is also utilized to strengthen the role of the bat as a deity related to the
underworld and sacrifice. Included in Chapter Two is a thorough discussion of the problems and questions this thesis addresses in the process of reevaluating the lu-bat glyphic phrase. Chapter Three presents the database in a manner of spatial distribution and temporal periods along with a breakdown of association to iconography. Chapter Three also presents previous scholarship in order to give a foundation for building upon the argument. Chapter Four explores the epigraphic decipherments and the interpretations in order to present a basis for correlating the epigraphy with the iconography. Exploring the values and the usage of the bat head in the Maya Lowland glyphic corpus builds on this foundation and assists with the iconographic interpretation and epigraphic decipherments. Chapter Five evaluates the iconographic scenes and the elements related to the role of sacrifice, warfare, and change in rulership. Chapter Five further explores how the specific elements are related to the broader events depicted within the iconographic scenes and how these elements can be related to particular hieroglyphic phrases. Chapter Six is the concluding chapter and connects the discussion of Chapters Four and Five. Chapter Six explains how the iconography can provide interpretation for the specific components of the glyphic phrase. These interpretations support the role of the conduit within the iconography and the epigraphy and therefore provide a specific role to the conduit as a metaphorical being.

Figure 1 Lu-bat Glyph

Drawing by author, Detail after Peter Mathews
CHAPTER 2: BACKGROUND AND PROBLEM STATEMENT

Within this chapter an explanation of the background information is presented. This produces a foundation for exploring the epigraphic and iconographic interpretations of the lu-bat glyph by the Late Classic Period Maya. The main focus of discussion is on the role of the bat in the Maya universe and cosmology. This chapter continues with a presentation of previous scholarship on bat epigraphy and iconography in the greater Maya region; however, it also addresses iconographic examples from the greater Pan-Mesoamerican region in an effort to show the diversity of the bat’s temporal and spatial usage. Finally, this chapter addresses the interpretative problems of the bat in order to provide support for a possible iconographic value of the lu-bat glyphic phrase.

2.1 Role of Bat in Maya Universe

The bat has played a multitude of roles within the Maya universe and cosmology. These roles are associated with otherworld and liminal activities. In iconographic interpretations the bat is viewed as a messenger from the otherworld and has strong associations with sacrifice, mainly in acts of blood (Kampen 1978:116-118; Miller and Taube 1997:44-45; Miller 1991; Seler 1904; Thompson 1966:181-183). There is a great range in the depictions of the bat in iconography that allows for multiple interpretative values to be assigned to the actual meaning of the bats. Also, variation is presented in the decipherment of the bat-head glyph, which is utilized in a range of contexts and presents differences when representing a specific epigraphic value. The bat has strong ties to the underworld and longstanding connections to creation stories (Tedlock 1996).
2.1.1 Deity and Religious Worldview

Bats are associated with caves and the openings in earth’s surface from which they emerge. The ancient Maya viewed openings in the earth’s surface as portals to the otherworld and underworld that housed the deities and gods (Miller and Taube 1997:56-57). The openings within the earth surface have been interpreted differently within iconographic contexts, making it difficult to always present a connection between them and bats; however, bats have a strong connection with the underworld in the iconography of Mesoamerica. This connection becomes clear when examining codices, vessels, hacha, and carved monuments in which the bat is involved in acts of sacrifice or going after blood (Kampen 1978:117-119).

The bat played an important role in the ancient Maya religion and worldview. The bat was used to name a group of people after the deity and likewise was the foundation for constructing temples that would represent the “House of Bats” and taking the bat as an emblem glyph (Fash and Fash 1994; Mathews 1991). The usage of the bat head as an emblem glyph is not strictly limited to Copan; Calakmul utilizes the bat head as an emblem glyph as well. This usage however is related to the controlling dynasties and does not represent a stagnant usage of the bat head glyph (Chase, et al. 2008:18-19; Martin 2005). It is important to note that while this thesis focuses directly on the Late Classic Maya, the view of the bat as a deity was not restricted to the Maya alone. The Zapotec of Oaxaca also utilized a deified bat figure on funeral urns (Thompson 1966:176). The Zotzil Maya, a tribe that still thrives on the Chiapas plateau, took their name from the deity to represent themselves as “bat men” and named their town Zinacantlan, “Place of Bats” (Seler 1904:233; Thompson 1966:176). The Zotzil was not the only group that utilized bat iconography and epigraphy for themselves; Copan’s emblem glyph consists of a bat head as the main sign. Copan’s Temple 20 is a unique structure that was
adorned with bat statues and possibly served as their jail or “bat house”, which alludes to the position of the deity in the underworld and in the Popol Vuh (Fash, et al. 1992:422-423; Fash and Fash 1994; Tedlock 1996).

2.1.2 Connection to the Underworld

The Maya viewed the world as part of a multi-layered universe that consisted of three realms of inhabitance. The first was the celestial realm; it reached down to the second physical realm where humans resided. Finally it ended in the third watery realm of the underworld (Chase 2009:219-221). As one of the inhabitants of these realms, the bat represented a deity with direct connections to blood and sacrifice throughout Mesoamerican cultures, mainly within the Maya (Kampen 1978:117-118; Seler 1904:234-237; Tedlock 1996). Kampen (1978) and others (Seler 1904:235,241; Tedlock 1996) suggest that the association with blood stems from the presence of bats at ceremonial centers where the stench of blood from ritual activities would attract the vampire bat that feeds on the blood of animals at night.

The role of the bat deity in the underworld varies amongst different Maya regions; however, the most notable role of the bat is that of Cama Zotz or “death bat”. Cama Zotz was represented in the Guatemalan Highland Maya’s Popol Vuh as a death dealer (Tedlock 1996; Thompson 1966:176). Cama Zotz resided in the House of Bats, which was utilized as a jail by the Gods of the Underworld. Within the story, Cama Zotz beheaded Hunahpu, one of the Hero twins, who had stuck his head out of the tube in which he was hiding through the night (Tedlock 1996). Within in this “bat house” any person that enters would be giving a sacrifice of his own body in order to continue down into the deepest part of the underworld (Tedlock 1996). The bat
deity connection to the underworld is represented by the connection with bats to caves, as well as to blood. This connection strengthens the notion that the bat is a conduit to the underworld.

2.2 Previous Scholarship

Scholars have long discussed the many different roles of the bat ranging from iconographic interpretations to the decipherment of hieroglyphic texts that involve the use of bat heads. While there are numerous conflicting discussions on the hieroglyphic decipherments, the iconographic interpretations have been less divergent as there are clearer visible cues that can be analyzed to facilitate the interpretation of the bat. Hieroglyphic texts do not have the clear imagery that is present in iconographic representations of the bat. Another issue that arises with hieroglyphic decipherments is the variations that present themselves within the hieroglyphic corpus. Both iconographic and hieroglyphic interpretations are utilized within this thesis in order to provide a multi-viewed approach toward a better understanding of a specific hieroglyphic compound.

2.2.1 Iconographic Interpretations

There have been numerous discussions on the role of the bat in the iconographic presentations throughout the Ancient Maya region as a bat deity. The earliest scholar to comment on the role of the bat was Edward Seler, who in 1904 explored the iconographic interpretations within the codices and how the bat was portrayed; Seler discussed how the bat is shown within the codices as drinking the blood and ripping out the hearts of the sacrificed Mayas. This correlation with blood and sacrifice led to a perception of the bat as the death dealer of the underworld (Seler 1904:234-236). While Seler utilized the Zapotec-Mixtec codices of the Borgia, Vatican and Fejérváry, the Maya portrayal of the bat is similar and shows close
connection between the people of Mesoamerica. Seler describes the bats that are presented in the Codices by their characteristic “membranous nose leaf”, their wings, as well as their claws (Seler 1904:235-237). Of particular interest is one of the bat deities from Codex Vaticanus 3773, represented with a blade in place of the leaf-like protuberance (figure 2).

Figure 2 Bat deity in Codex Vaticanus 3773

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The connection between the bat and sacrifice becomes apparent when viewing the depictions within the Codices where the bat is portrayed holding decapitated heads, as well as the hearts of victims. In the instance from the Borgia Codex, the bat is devouring the heart of the victim, showing a direct connection between blood and sacrifice (Seler 1904:235).

After Seler, little work was done on the iconographic interpretations of the bat in the Maya area; however, in 1978, Michael Kampen (1978) discussed Classic Period Veracruz iconographic interpretations of the vampire bat, again noting the association to sacrifice. Kampen discussed the role of three major Gods that are represented in Veracruz iconographic depictions showing the close interaction that they all have with sacrifice. The Classic Period Veracruz iconography represented different themes that are commonplace throughout the Mesoamerican region- scenes of ball court rituals and priests involved in ritual context. The most common and powerful scenes are those that involve human sacrifice and also include active roles for the gods; this can clearly be seen in the Hammond Palma from New Orleans (Kampen 1978:118-119), where the bats are actively try to get blood from a sacrificial victim (Figure 3).
While Kampen did not discuss iconographic interpretations of the bat in the Maya area, he was able to provide insight for the interpretative ability of decorative motifs associated with the bat within Mesoamerica. After Kampen, Mary Miller and Karl Taube (1997) presented a short discussion covering the bat and how it is portrayed through its nocturnal actions. To Miller and Taube, the bat is directly related to acts of sacrifice and death following the role of the bat in the Quiche Popol Vuh. While majority of discussions of bat iconography are related to the
Popol Vuh and the codices, the overall themes in the iconographic representations of the bat are consistent.

Erik Boot (1996) also discussed the iconography of the bat within a broader discussion focused on the interpretation of the bat hieroglyph. Boot presented a case for how the iconography on polychrome vessels from the Chama region can be related to the hieroglyphic interpretations of the bat. The Chama vessels depict the bat god, Cama Zotz’, as an anthropomorphic being or as a bat impersonator. While the extent of his discussion focused on the hieroglyphic interpretations of the bat head glyph, he utilized the iconographic characteristics of the bat to support his notion of a relationship between the hieroglyph and iconography.

The literature focused on bat iconography is limited due to the nature of usage of the bat in iconographic representations. Bat iconography often represents the deity Cama Zotz’ but is usually limited to vessels from funerary contexts in the Highland region during the Classic Period. The representations of Cama Zotz’ on the vessels are fairly standard, therefore creating a consensus in the field that key characteristics vital to the interpretation of bats are present over a broad region. The Cama Zotz’ deity on the funerary vessels is not directly involved in acts of sacrifice; however, the representations of sacrifice are present through iconographic elements. Sacrifice is shown by disembodied eyes on the outstretched wings or around the neck of the bat, through the fangs and leaf-life protuberances on the bat’s snout and, in most cases through the use bifurcate scrolls that are emitted from the mouth of the bat. These scrolls have numerous interpretative meanings, but the most common interpretations argue that the scrolls are representative of blood (Danien 1998; Miller and Taube 1997:46-47; Spinden 1970:209-210). The iconographic interpretations are fairly concise and permit a linkage between iconography and epigraphic readings wherein both can complement the ideology associated with the bat.
2.2.2 Epigraphic Decipherments

Hieroglyphic research has played an essential role in the decipherment of the ancient Maya culture through its written texts. Interest within epigraphic research has been a growing field and was initially spurred forward by J. Eric Thompson (1962), who in 1962 constructed a fairly complete database of Maya hieroglyphs that is still utilized by many scholars today. This database was organized by use of a “T-number” index that could be easily used to ascertain the position of a specific glyph within the database. Within this database, Thompson first describes the bat glyph (T-756); however he did not discuss the possible interpretations of the glyph. This occurred later, in 1966, when Thompson discussed the bat hieroglyph in relationship to the act of sacrifice (Thompson 1966:180-183).

Within his 1966 article, Thompson (1966) discussed two possible interpretations of the bat glyph as metaphorograms through the usage of the bat glyph and associated affixes. The first interpretation was as a possible meaning for the end of a katun period, represented by an inverted bat head that lacked the T-568 infix (Thompson 1966:178-180). The second glyph he discussed is one that represents the closest association with sacrifice. The bat head within this glyph was not inverted and included the T-568 glyph which previously discussed by Henrich Beyer (1937) as being related to a gouged eye and a symbol for death. Further discussion by Lizardi Ramos (1948) noted the association of the gouged eye to human sacrifice as seen in the codices (Thompson 1966). The argument that this glyph relates to sacrifice is supported by Thompson; however, viewed the glyph as a human heart pictogram rather than a gouged eye (Thompson 1966:182). He supports this view by noting the odd shape in which this glyph is drawn and in the inclusion of the death symbol of eyelash. Following Thompson, numerous epigraphers have
discussed the possible decipherment of the glyph pairing in carved or incised texts on ceramics and monuments alike.

The initial discussions focused on the “lu-bat” glyph started with David Stuart (1986) who presented a paper at the Primer Simposio Mundial sobre Epigrafia Maya in 1986. His paper focused on the “Lu-bat” and the Primary Sequence Standard, arguing that the presence of the knot (T-61) and bat head (T-756) glyphs are indicative of artists’ signatures. Within this presentation Stuart offered a reading for the bat head glyph within the “lu-bat” pairing as ts’i (Stuart 1986, 1987). Following this presentation, Nikolai Grube in 1986, instead presented the glyphic pairing as “yu-bat” noting that there was a lack of a decipherment for the bat head glyph (Grube 1986:224,228). Therefore, any readings presented for the “lu-bat” glyph is based solely on the affixes which can be problematic and driven by individual interpretations. Within this discussion Grube argues that the glyph pairing replaces the title of artist “U Tz’ib” on carved vessels (Grube 1986:228). Following Grube, David Stuart (1987) again discussed the bat glyph placing it as a complement to “U Tz’ib” glyph (signature for scribe on painted vessels), thus lending support to the notion that the bat glyph was utilized in carved texts and represents the carver.

Carolyn Tate (1989) discussed the role of sculptors at Yaxchilan and showed how there are notable differences in the skill levels and artistic variation presented on the lintels. Within her discussion she presented a problem with the usage of the “Lu-bat” glyph and the variation of the phrases on the lintels. Tate (1989) noted that it seemed odd that only the stone carver would sign the monument and not the drawer as well. In association with the dedication phrase of Yaxchilan lintel 25 that names Lady Xoc after the glyph pairing, she argued that it could be possible that the “lu-bat” glyph presents a patron of a household rather than the sculptors (Tate
Stuart (1989) continued to investigate the “lu-bat” glyph and re-affirmed his previous work with the pairing. He argued that, while there still lacked a precise phonetic reading, the associated texts presented the notion that this glyph was indeed directly related to the action of “carving” (Stuart 1989:154). While he felt this was supported by the context, he does mention again, that since no decipherment existed at the time that other interpretations remained possible (Stuart 1989:154).

Ruth Krochock (1991) briefly discussed the bat head glyph and presented a reading of it as ts’il based on Stuart’s previous hypothesis. Her work focused on dedication ceremonies at Chichen Itza and related the action of the bat glyph to the lintels that were associated with the ceremonies (Krochock 1991:43-45). Following her research, there was a trend away from this reading due to the evidence for a different root word and an ever increasing understanding of the epigraphic writing of the ancient Maya (MacLeod 1998:190-197). Barbara Macleod (1998) undertook the most extensive research on the “lu-bat” glyph pairing. Within her dissertation she dedicated a complete chapter to the discussion of the glyph and the possible phonetic decipherments of different bat head glyphs (MacLeod 1998:200-211). Macleod presented the history of decipherment of the glyph pairing, and showed the progression of interpretive values that deal with the bat head glyph. Two important sub-groups were examined within her research. She presented a possible reading as yu for the lu-bat phrase in turn giving a decipherment relating to “engrave” (MacLeod 1998:195). Following her discussion for a “yu” reading she briefly touched on the “xu” reading for the bat glyph. The reading as “xu” currently stands as the reading accepted for the bat glyph by numerous epigraphers (Grube and Martin 2008; MacLeod 1998:211; Zender, et al. 2002). This eventually lead to the “yuxul” reading of the glyphic phrase, which is the standard phonetic reading. While this value is accepted, Macleod stated that the
difference between the two readings was not exclusive as they are presented in the same contexts (MacLeod 1998:211-212). The differences, according to Macleod (1998) can be seen in the mouth infix of the “xu”-Bat glyph.

In 1990 David Stuart presented an example in support his argument that the “lu-bat” glyph is directly related to the act of carving. He used the iconography on the Emilliano Zapata Panel from Palenque to support his hypothesis that the “lu-bat” glyph described the action of carving by stating that it is “visual reinforcement of that hypothesis” (Stuart 1990:11) (See Stuart 1990 page 10 figure 1). He presented the most widely accepted values for the “lu-bat” glyph as reading “yu-xu-lu” or as one “yuxul” (Stuart 1986). While this is presently accepted, there is still the possibility of alternate readings of the lu-bat glyph as shown by the different interpretations within the past 30 years.

2.3 Problem Statement

Within this section, I present the major issues currently present in the process of the decipherment of the “lu-bat” glyph. First, there is no complete database constructed from the epigraphic record and the glyphic databases presently do not adequately address the variations in its presentation. In this thesis I present a comprehensive database using the available published field-reports and scholarly articles. When creating a concise database, an issue arises that is noteworthy. In order to create a complete database, access to field-related material is necessary and not all data from the Maya region has been published or made accessible to the scholarly community by the primary investigators. This database also includes the available data from provenienced as well as unprovenienced contexts in order to provide as comprehensive database as possible.
Second, the bat head glyph (T-756) has been inconsistently identified as \textbf{Yv} (MacLeod 1998:205), \textbf{Xu} (Grube 1989), \textbf{U-Sotz} (Kelley 1982), or \textbf{Ts'i} (Krocock 1991:43; Stuart 1986; 1987:1-3). The readings presented by epigraphers have changed with the advances in Maya epigraphy, and consequently, interpretations have changed through time (Chase, et al. 2008:17). For example, Grube (1986) first read the infixed T-568 glyph as “\textbf{Yu}” and then later changed his position to support its reading as “\textbf{Lu}” (Grube 1986:230). Ultimately, David Stuart presented a reading for the T-568 glyph as “\textbf{Lu}” which has held strong since this reading (Stuart 1986; 1989:154). The variation in attributed values to the two glyphs in the conflation does not change the notion that it is related to the act of carving something that is broadly supported by the epigraphic community. However, with no consistent phonetic reading, the attribution of the role of carving to the T-61.756.568 glyph group is purely observational.

Third, the lack of discussion of iconographic scenes associated with the glyph phrase presents problems when trying to decipher possible interpretative values of the lu-bat glyph. Within this thesis I discuss the associations with iconographic scenes and the usage of the “lu-bat glyph” in order to provide insight into the possible usage and interpretation. While not every presentation of the glyph is associated with iconographic scenes, there are common themes within the available scenes. Iconography has been supported by epigraphic decipherments; however, the ability to associate glyph usage with iconography has not been explored. This thesis will utilize a conjunctive approach in which iconographic and epigraphic data will be used to gain a better interpretive value of the bat head through a system of “checks and balance” (Chase, et al. 2008:19-20). This system of checks and balance has been utilized with archaeology and epigraphy and therefore begs the question as to why it cannot be used with epigraphy and iconography. While the database presented within this thesis includes presentations of the glyph
pairing associated with iconographic scenes, it also includes occurrences that do not have associated iconographic scenes. These will be discussed in further detail within Chapter 5 which focuses on the iconographic scenes alone. For the purpose of this thesis the discussion only focuses on the pairing of hieroglyphic texts with iconographic scenes in order to present a possible link between the texts and the specific iconography. While the dataset includes 81 different occurrences of this glyph (with some consisting of upwards of 12 so-called signatures), only the 48 occurrences associated with iconographic scenes will be examined. This in turn organizes the different scenes in terms of their overlying themes, thereby seeking to demonstrate a connection between the iconography and the texts within which the lu-bat glyph was placed.
CHAPTER 3: DATA PRESENTATION AND ANALYSIS

Data analysis within this chapter provides interpretative characteristics of the hieroglyphic pairing in order to lay a foundation for future decipherments. First, this chapter presents the database through the organization of the “lu-bat” glyph by venue, type, medium and text variations. Second, distribution is addressed in order to encompass the diversity in temporal and spatial locales. The analysis of the temporal and spatial distribution necessitates a closer examination of variation due to the possible dispersal of ideology over space and time. Lastly, the associations between epigraphic and iconographic interpretations are presented in order to allow epigraphic data to be reinforced with the iconographic representations.

The database contains information associated with the hieroglyphic texts that include the “lu-bat” glyph. The data provided (if applicable) contains the site name, venue, monument type, associated ruler, dates, and time period. The total number of hieroglyphic texts including the specific pairing and conflation is 114, occurring on 81 monuments at 28 sites (Table 1). This chapter discusses in depth the different aspects of the dataset and provides an analysis of the distribution and interpretations associated with each of the occurrences.

3.1. Presentation of Database

The hieroglyphic variation of the “lu-bat” glyph within the corpus of Late Classic monuments and ceramics needs a closer examination. Therefore, within the database precise characteristics are organized based on: venue, text positioning, monument type, and the mediums utilized. These key characteristics play a vital role in the interpretative analysis of the hieroglyphic pairing. The role of each aspect is designed to function as a whole unit in interpretation of the monument both iconographically and hieroglyphically. Hence, the opaque
lens of hieroglyphic decipherment can be met with the interpretative view of iconography in order to mutually ascertain an understanding of the conduit’s role in the Late Classic Period Maya. First, the discussion of the different characteristics presents a comparative analysis of the glyphic phrase. Second, spatial and temporal distribution is addressed in order to present the variation in time and space. This dataset contains 81 monuments and vessels from 28 different sites from the Late Classic Maya Lowlands (figure 4); 10 cases lack provenience. Table 1 represents the dataset with the site, name as well as monument type and number. While this dataset includes 81 different occasions, this thesis focuses on the 51 occurrences containing iconographic scenes associated with the texts.
Table 1 The Database

<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Location</th>
<th>Type</th>
<th>Location</th>
<th>Type</th>
<th>Location</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aguateca</td>
<td>stela</td>
<td>Piedras Negras</td>
<td>stela</td>
<td>Arroyo de Piedra</td>
<td>stela</td>
<td>Piedras Negras</td>
<td>stela</td>
</tr>
<tr>
<td>Beuno Vista</td>
<td>misc.</td>
<td>n/a</td>
<td>stela</td>
<td>Bonampak</td>
<td>lintel</td>
<td>stela</td>
<td>lintel</td>
</tr>
<tr>
<td>Bonampak</td>
<td>altar</td>
<td>stela</td>
<td>stela</td>
<td>Calakmul</td>
<td>stela</td>
<td>stela</td>
<td>stela</td>
</tr>
<tr>
<td>Calakmul</td>
<td>stela</td>
<td>51</td>
<td>altar</td>
<td>Cancuen</td>
<td>panel</td>
<td>altar</td>
<td>altar</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Mon. lintel</td>
<td>2</td>
<td>altar</td>
<td>Chichen Itza</td>
<td>Mon. lintel</td>
<td>2</td>
<td>throne</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Mon. lintel</td>
<td>3</td>
<td>stela</td>
<td>Chichen Itza</td>
<td>Mon. lintel</td>
<td>4</td>
<td>Rio Amarillo</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Mon. lintel</td>
<td>4</td>
<td>stela</td>
<td>Chichen Itza</td>
<td>Tof4 lintel</td>
<td>1</td>
<td>Seibal</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Tof4 lintel</td>
<td>2</td>
<td>altan</td>
<td>Chichen Itza</td>
<td>Tof4 lintel</td>
<td>3</td>
<td>Site R</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Tof4 lintel</td>
<td>4</td>
<td>Tof4 lintel</td>
<td>Chichen Itza</td>
<td>Tof4 lintel</td>
<td>4</td>
<td>Tonina</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>Tof3 lintel</td>
<td>3</td>
<td>Tof3 lintel</td>
<td>Chichen Itza</td>
<td>TofIS lintel</td>
<td>n/a</td>
<td>monument</td>
</tr>
<tr>
<td>Chichen Itza</td>
<td>TofIS lintel</td>
<td>n/a</td>
<td>TofIS lintel</td>
<td>Chichen Itza</td>
<td>Xcalumkin</td>
<td>ceramic</td>
<td>K8017</td>
</tr>
<tr>
<td>El Cayo</td>
<td>lintel</td>
<td>3</td>
<td>Column</td>
<td>Ek' Balam</td>
<td>Heiroglyphic Stair</td>
<td>1</td>
<td>jamb</td>
</tr>
<tr>
<td>El Peru</td>
<td>stela</td>
<td>34</td>
<td>Yaxchilan</td>
<td>El Peru</td>
<td>Ceramic</td>
<td>5</td>
<td>Column</td>
</tr>
<tr>
<td>El Peru</td>
<td>panel</td>
<td>n/a</td>
<td>Heiroglyphic Stair</td>
<td>Hun Nal Ye</td>
<td>Coffer</td>
<td>n/a</td>
<td>lintel</td>
</tr>
<tr>
<td>Hun Nal Ye</td>
<td>panel</td>
<td>n/a</td>
<td>Yomop</td>
<td>Hun Nal Ye</td>
<td>Ceramic</td>
<td>2</td>
<td>lintel</td>
</tr>
<tr>
<td>La Corona</td>
<td>stela</td>
<td>4</td>
<td>Heiroglyphic Stair</td>
<td>La Corona</td>
<td>panel</td>
<td>n/a</td>
<td>Heiroglyphic Stair</td>
</tr>
<tr>
<td>La Corona</td>
<td>panel</td>
<td>n/a</td>
<td>Unprovienced</td>
<td>La Corona</td>
<td>stela</td>
<td>1</td>
<td>Acanceh</td>
</tr>
<tr>
<td>La Corona</td>
<td>stela</td>
<td>2</td>
<td>Yomop</td>
<td>La Corona</td>
<td>Ceramic</td>
<td>2</td>
<td>Unprovienced</td>
</tr>
<tr>
<td>Laxtunich</td>
<td>panel</td>
<td>n/a</td>
<td>Motul de San Jose</td>
<td>Laxtunich</td>
<td>Ceramic</td>
<td>2</td>
<td>Mexico stela</td>
</tr>
<tr>
<td>Lubantun</td>
<td>Ceramic</td>
<td>2</td>
<td>Naranjo</td>
<td>Lubantun</td>
<td>Ceramic</td>
<td>2</td>
<td>Mexico stela</td>
</tr>
<tr>
<td>Motul de San Jose</td>
<td>stela</td>
<td>2</td>
<td>Motul de San Jose</td>
<td>Motul de San Jose</td>
<td>stela</td>
<td>12</td>
<td>ceramic</td>
</tr>
<tr>
<td>Motul de San Jose</td>
<td>stela</td>
<td>14</td>
<td>Motul de San Jose</td>
<td>Motul de San Jose</td>
<td>stela</td>
<td>24</td>
<td>ceramic</td>
</tr>
<tr>
<td>Motul de San Jose</td>
<td>stela</td>
<td>2</td>
<td>Motul de San Jose</td>
<td>Motul de San Jose</td>
<td>stela</td>
<td>2</td>
<td>ceramic</td>
</tr>
<tr>
<td>Nim Lu Punit</td>
<td>stela</td>
<td>2</td>
<td>Nim Lu Punit</td>
<td>Palenque</td>
<td>Death Head</td>
<td>n/a</td>
<td>ceramic</td>
</tr>
<tr>
<td>Palenque</td>
<td>Death Head</td>
<td>n/a</td>
<td>Palenque</td>
<td>Palenque</td>
<td>panel</td>
<td>n/a</td>
<td>ceramic</td>
</tr>
<tr>
<td>Palenque</td>
<td>panel</td>
<td>n/a</td>
<td>Palenque</td>
<td>Palenque</td>
<td>tablet</td>
<td>n/a</td>
<td>ceramic</td>
</tr>
<tr>
<td>Palenque</td>
<td>tablet</td>
<td>n/a</td>
<td>Palenque</td>
<td>Palenque</td>
<td>Heiroglyphic Stair</td>
<td>2</td>
<td>Heiroglyphic Stair</td>
</tr>
</tbody>
</table>

HS-Heiroglyphic Stair
3.1.1. Venue

Venue is described as the inter-site positioning of monuments. For the purpose of this thesis, the dataset is divided into public areas and private areas. Public areas represent any area where people converge for daily activity without being constricted in their movements. Public areas can include: ball courts, public structures, and plaza areas. Private areas are restricted to places where the general public has constraints on their movement and actions. These areas would consist of elite residences, ritual structures (buildings used for ritual activities), and tombs. The classification of private vs public reflects the accessibility of these texts and whether or not they were meant to be viewed by the general public. Within this dataset there are very few instances that occur in private areas (mainly occurring in tombs and burials or within ritual areas). While ritual areas can possibly be argued to represent public areas, it is difficult to directly make a correlation with the placement within the ritual areas and access by the public. For the purpose of this dataset, occurrences within ritual areas will be classified a private placement.

### Table 2 Texts position based of Venue distribution

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Underside/Bottom</th>
<th>Round (ceramic)</th>
<th>Back</th>
<th>Top</th>
<th>Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Public</td>
<td>43</td>
<td>9</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>N/A</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Underside/Bottom</th>
<th>Round (ceramic)</th>
<th>Back</th>
<th>Top</th>
<th>Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>33.33%</td>
<td>0.00%</td>
<td>50.00%</td>
<td>0.00%</td>
<td>16.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Public</td>
<td>74.14%</td>
<td>15.52%</td>
<td>0.00%</td>
<td>5.17%</td>
<td>0.00%</td>
<td>5.17%</td>
</tr>
<tr>
<td>N/A</td>
<td>31.25%</td>
<td>0.00%</td>
<td>50.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>18.75%</td>
</tr>
</tbody>
</table>

This dataset consists of texts found predominantly on public areas (72.50%), while the remaining 27.50% is allocated texts located in private areas (7.50%) and unknown venue (20.00%)(Table 3). The items with unknown provenience as well those lacking iconographic
scenes are included within this table in order to analyze the patterns of distribution. This separation is important because the placement of the texts and monuments affect the restriction of access to knowledge and the people that would have access to this knowledge. Restricting access to certain contexts separates the elite from the non-elite; it is generally thought that the non-elite population could not read hieroglyphic texts (Coe 1999; Coe and Van Stone 2001; Culbert 1991; Grube 1989; Schele and Freidel 1990). However, it has also been noted that the general public may have had minimal literate skills that allowed for a general understanding of certain texts (Culbert 1991; Mathews 1993). This would have been beneficial for the majority of the population as it would have permitted the dissemination of information without having to rely on long explanatory written texts. This proposition is supported by the text position within the venue type. Table 2 shows the percentage of each type of medium utilized as well as the distribution between public and private areas. “Round” text positioning accounts for 50% of private venue occurrences on ceramics while 74.14% of the public texts are placed on front of stone monuments. This would indicate that public position was intended to been seen with ease. With this division of venue, it becomes apparent that the lu-bat glyphic phrase was reserved mainly for public scenes and that it was intended to describe the role of the conduit involved in the liminal activities and the ability to traverse the different worlds.
3.1.2 Medium

The dataset consists of three different mediums, which is the type of material utilized to display the hieroglyphic texts in which the “lu-bat” glyph is represented. The first and the most utilized medium is stone, represented 83.75% of the dataset (Table 3). The diversity in stone types used will not be addressed, (being saved for future research); however, the variability is simply categorized here under the all-encompassing term “stone”. Ceramic was the second medium of choice, representing 15.00% of the total database. The final medium represented is bone. Bone only occurs once (.83%) -from the site Buena Vista- and does not contain associated iconography; however, the usage of bone as a medium presents an interesting relationship to sacrifice and death. While this number is not as significant, it is important to the interpretation of the glyphic pairings as it suggest that the term is not restricted to purely stone monuments and can be utilized in other mediums to depict a specific action relating to the iconographic scene. However, it is important to note that, while there are other types of mediums, the most prominent are (stone) representing a clear sign that the glyphic phrase is related to the types of scenes depicted. The other mediums lack iconographic scenes. It has been previously stated that stone monuments represent a clear subject matter that is less commonly depicted on other mediums (Chase, et al. 2008).

Table 3 Percentages of Venue and Medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>Ceramic</td>
<td>12</td>
<td>15.00%</td>
</tr>
<tr>
<td>Stone</td>
<td>67</td>
<td>83.75%</td>
</tr>
<tr>
<td>Total:</td>
<td>80</td>
<td>99.58%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Venue</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>6</td>
<td>7.50%</td>
</tr>
<tr>
<td>Public</td>
<td>58</td>
<td>72.50%</td>
</tr>
<tr>
<td>N/A</td>
<td>16</td>
<td>20.00%</td>
</tr>
<tr>
<td>Total:</td>
<td>80</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Stone was the most utilized medium due to the placement of monuments in public space. The ability to have a medium that can withstand the pressures of the environment and is in a permanent placement represents the importance of these scenes. Within this dataset, all public occurrence were stone, which suggests that the items that were not in stone (and in private venues) were intended to be movable and not marked for the general public. While the division between stone and ceramic within private areas is not as clearly defined as within public spaces, it can be argued that the ceramics, which would normally be interned within tombs or internments, were considered to be strictly private.

3.1.3 Type

Type analysis provides a background on the function of different monuments in the context of the surrounding environment that conveyed messages to the people who viewed them. The dataset contains 15 different types that are divided based on the classification provided by the primary source. However, in certain instances multiple classifications can be placed into one category based on terms given by the author, for instance a tablet and panel (Loten and Pendergast 1984). The first, and most prevalent type, is categorized as “lintel”, which is defined within this database as “a horizontal member that spans an opening in a wall, usually a doorway or window” (Loten and Pendergast 1984:10). Lintels comprise 25% of the entire dataset (refer to Figure 4). On lintels, the position of the texts can be either on the front edge or on the underside; however, this does not affect the interpretative value (Schele and Wanyerka 1991).

Following lintels, the most prominent type represented within the dataset is the “Stela”. This category represents 24% of the dataset and contains variation in text positioning. The positioning of the text will be addressed in the following section. Following “stela”, vessels
comprise the third largest group at 15% of the sample. Vessels present a unique obstacle as the occurrences within this dataset largely are from unknown proveniences published by Justin Kerr (Kerr 1994). This can cause problems, as the validity of the vessels as ancient artifacts can be questioned; however, they do contain iconographic scenes that can further help with the interpretations for this thesis. “Panels” make up 11% of the dataset. Within panels, “tablets” were included as they can be used inter-changeably. Panels are set into the wall of a structure; tablets can be utilized in similar ways. Lastly altars and altar supports make up 9% of the full database. The previously noted types all had more than three appearances. The remaining 16% of the database is divided among types that occurred only once or twice within the available corpus. These types consist of columns, monuments, hieroglyphic stairs, thrones, death head sculpture, coffer, “miscellaneous” and door jambs. While these remaining types only occur once or twice within the dataset, this may be due to the imperfect archaeological record represented by looted, decayed, or still hidden hieroglyphic texts on these types.
3.1.4. Text Position

The hieroglyphic texts within this dataset represent a wide variety of kinds of presentations in the monuments. The placements of the texts have been classified as primary or secondary to indicate the importance of the text to the overall scene. The distinction between primary texts and secondary texts was made based on the levels of interaction of the text with the iconographic scene. Within this dataset primary texts are utilized in contexts that do not have any associated iconography, accounting for 31 of the 82 items within this dataset. There are however 11 items with primary texts that have associated iconography. These items are vessels containing Primary Sequence Standard texts which will be discussed later; however, they share
characteristics with secondary texts. Secondary texts do not contain specific relative information, but instead seem to provide support for smaller aspects of the overall scene. Primary texts account for 45.12% of the entire dataset; the remaining 54.88% of texts are classified as secondary texts (Table 3). Secondary texts account for the entirety of lu-bat glyphic phrase with iconographic scenes and, therefore, it is necessary to examine these texts in their fullest.

After considering the text positioning, it is necessary to address the context of the hieroglyphic texts. There are different placements on the monuments and vessels that are categorized here as front, side, underside, round (used in the contexts of vessels), back and top. The term underside is directly related to lintels. Lintels are positioned in a way that the front is the lip, which is seen when approaching the lintel, while the bottom is the largest carved area seen when looking directly up within the entry way (Schele and Freidel 1990; Schele, et al. 1986). Within the dataset 55.88% of primary texts containing the ‘lu-bat” conflation or pairing are located on the front of monuments with no iconographic scenes, whereas 67.39% of secondary texts positioned on the front have associated scenes (Table 4). Secondary texts are related to minute supportive aspects of iconographic imagery and, therefore, the placement of the texts are predominantly on the front of monuments. This positioning presents the text to the viewer first, in order to convey a specific message that relates to the overall imagery on the face of the monument (Chinchilla Mazariegos, et al. 2001; Coe and Van Stone 2001:17-21).

Following texts on the front in frequency, 14.71% of primary texts and 8.70% of secondary texts are found on the bottoms of the monuments. The bottom/underside placement is the larger carved area of lintels and therefore usually contains iconography as well. This term usually is utilized for lintels and other objects that have multiple carved sides. The next category, “round”, is characterized as texts that run around the edge of a vessel. This “round” classification
represents 29.41% of primary texts, (Figure 31). All but four cases of “round” placement have associated iconography.

### Table 4 Text Position vs. Primary and Secondary Texts

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Underside/Bottom</th>
<th>Round (ceramic)</th>
<th>Back</th>
<th>Top</th>
<th>Side</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>19</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>Secondary</td>
<td>31</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Underside/Bottom</th>
<th>Round (ceramic)</th>
<th>Back</th>
<th>Top</th>
<th>Side</th>
<th>Percent of Dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>55.88%</td>
<td>14.71%</td>
<td>29.41%</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>42.50%</td>
</tr>
<tr>
<td>Secondary</td>
<td>67.39%</td>
<td>8.70%</td>
<td>2.17%</td>
<td>6.52%</td>
<td>2.17%</td>
<td>13.04%</td>
<td>57.50%</td>
</tr>
</tbody>
</table>

The primary and secondary positioning along with the location on the monument itself signify the importance placed on the texts and their interpretation. Primary texts are descriptive of the entire iconographic scene while secondary texts are indicative only of an aspect of the monument. Understanding the position of texts on the monuments gives insight into the power of the message and is vital to understanding and interpretation of the iconographic scenes and the lu-bat glyphic phrase.

#### 3.1.5 Multiple lu-bat Glyphic Phrases

Within the dataset there are multiple cases in which the glyphic phrase was utilized more than once. This group of monuments contains instances in which two or more glyphic phrase was utilized therefore presenting a tie between the conduit and the role this individual played as part of the liminal activities. In some of these cases, the conduit could be bound captives who would be sacrificed and therefore becoming a liminal being traversing the different levels of the world. This suggests that the lu-bat glyphic phrase is not a scribal signature but rather an indicator of a being that is involved in liminal activities. While not all cases of the lu-bat glyph is connected directly to sacrificial beings, it does represent a liminal activity of other beings. This can be seen in Piedras Negras Throne 1 (figure 46) in which there are two lu-bat glyphic phrases next to two
individuals within the eyes of the Cuauc monster. This represents the idea that these individuals are indeed a conduit for liminal activities. Table 5 shows the monument and the number of captives in connection with the number of lu-bat glyphic phrases. This shows a strong correlation between the captives or liminal being and the glyphic phrase further suggesting that indeed this phrase is not a signature but rather an indicator for a liminal action of the conduit. Tate states that is seems unlikely that there would be multiple artists that would be involved in the carving of these monuments (Tate 1989:9-10) especially as is the case with Piedras Negras stela 16 which has nine of these glyphic phrases.

**Table 5 Monuments with multiple Lu-bat Glyphic Phrases**

<table>
<thead>
<tr>
<th>Site</th>
<th>Monument</th>
<th># of Individuals</th>
<th># of Glyphic Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piedras Negras</td>
<td>Throne 1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Piedras Negras</td>
<td>Stela 12</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Piedras Negras</td>
<td>Stela 13</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Piedras Negras</td>
<td>Stela 14</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Piedras Negras</td>
<td>Stela 16</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Laxtunich</td>
<td>Panel</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Aguateca</td>
<td>Stela 7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Bonampak</td>
<td>Stela 1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>El Peru</td>
<td>Stela 34</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Montul de San Jose</td>
<td>Stela 2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Yomop</td>
<td>Stela</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>Stela</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**3.2 Spatial and Temporal Distribution**

Distribution of the lu-bat is not limited spatially or temporally. When examining the time span and regional spread of the hieroglyph it is necessary to address the distribution jointly, not separately. The spatial distribution is directly influenced by temporality and, therefore, cannot be
examined as a single entity. In order to spread regionally, time is needed; this temporal depth probably led to glyphic variation in artistic representation. This dataset contains a temporal spread of approximately 280 years from 28 different sites. This number is represented by major centers as well as smaller sites under control of the larger ones. While this is a significantly short time frame, it does show the proliferation of this glyphic phrase. Its spread was not limited to a small region of sites, but rather can be attributed to intra-site relationships between major and minor centers. Within this section, a presentation of the spatial and temporal distribution of the glyphic pairings will be discussed in order to present an interpretive analysis on the change that occurred in the representation of the glyph.

3.2.1 Spatial Distribution

The spatial distribution of the “lu-bat” glyph presents an interesting view into the transmission of ideas and knowledge about written text throughout the Maya region. As seen in Figure 4, the sites distribution is not limited to the Southern Lowlands; however, the connection to outlying sites is related to inter-site relationship ties as examined by Linda Schele. This dataset has three areas in which the glyph pairing is located outside of the Usumacinta Valley. These are represented by possible ties in the Northern Lowlands and among Chichen Itza, Ek Balam and Xcalmukin; it appears at Rio Amarillo far to the south; finally, it is evident in the Highland cave site of Hun Nal Ye (Woodfill, et al. 2012). The Hun Nal Ye cave is problematic as to the nature of its use. Woodfill (Personal Communication Aug. 8 and 15, 2012) suggests that although the context dates to the Late-Early Classic and is in the Highland region that in actuality it could be early Late Classic in date and have been carved in a lowland tradition. Whatever the case, all six of these sites have relationships to the Usumacinta Valley through elite interactions (Schele, et
al. 1986; Schele and Mathews 1991). The connection could be related to the number of supposed primary capitals and the centers related to the Lowlands as shown in Figure 2 in Chase et al. 2009 (Chase, et al. 2009:178). These ties are supported by hieroglyphic texts as well as from iconographic interpretations of monuments. While there was interaction between these elites, there is a clear difference in the interpretative value of the glyph. Within the sites of Chichen Itza, Ek Balam, Xculturin and Rio Amarillo the usage of the glyphic phrase is not connected with iconographic scenes and is only utilized on monuments that contain purely textual material. The lack of associated iconography represents a possible change in interpretation of the glyphic phrase as the spatial distribution expanded from the central core of its usage into areas with different Maya dialects and regional traditions (Chase, et al. 2008:15-16; Houston, et al. 1998). The Southern Lowlands is itself a diverse area; however, sites are situated in close proximity to each other, lending to potential inter-site interactions through warfare or relationship ties.
It is not necessary to discuss the interaction level between the sites within the Peten region, due to the proximity of these sites to each other. The relationships and the trade systems appear to have been related to the Usumacinta Valley through the interpretation of hieroglyphic texts on monuments describing the inter-site interactions of elite individuals. These interactions are represented by a range from elite marriages to warfare (Schele and Mathews 1991). Through interactions like these, it is nearly impossible not to see influences from one site’s regional traits on another site, as is the case with the “lu-bat” glyph. The earliest site to contain the glyphic...
phrase lies directly within the Usumacinta River Valley and the “spread” of this term can be followed through the use of this glyphic phrase on the monuments. While it is difficult to point to an origin for this glyph pairing, it can be better understood by examining the temporal distribution during the Late Classic Period.

3.2.2 Temporal Distribution

The temporal distribution is a vital part of any interpretation related to the use of the glyphic phrase. This dataset contains dates that fall within the early Late Classic to late Late Classic Periods. While the dataset is predominantly from the Late Classic Period; there is one outlying instance that presents an interesting conundrum. This instance is from the late Early Classic Period at the cave Hun Nal Ye in the Northern Highlands of Guatemala (Woodfill, et al. 2012). The hieroglyphic text resides on the lid of a stone coffer and contains two readings for the “lu-bat” pairing. This text was carved into a stone coffer that was set 1.5 m high on the back wall of the caves (Woodfill, et al. 2012:98)(Figure 9). This stone coffer is dated to the late Early Classic Period, which is problematic for two reasons. First, the coffer was found within a cave; caves with their ritual connections to the underworld permitted for multiple re-entries and dating can be difficult (Woodfill, et al. 2012). Second, the dating of the coffer is based on the style of the iconography and hieroglyphs- and this is consistent with late-Early Classic Period. While this is the only occurrence outside of a Late Classic dating, this stone coffer could represent the very early phase of the Late Classic. Further discussion of the iconographic and epigraphic interpretive values follows in Chapters 4 and 5.

With this dataset’s temporal spread being represented solely by the Late Classic Period, the influence of this hieroglyphic pairing throughout the early phases of the Classic Period is
minimal and represents a temporally specific hieroglyphic manifestation. The Northern Lowlands currently contain three occurrences of the glyph and these connections are seen as representing interaction ties with the Southern Lowland (allowing the dissemination of this ideology). Although this seems to be a regional glyph, it still is plausible that the glyph could have been developed outside of the Southern Lowlands. This, however, is not supported based on the spatial distribution and it’s in the Usumacinta River Valley.

3.3 Summary

This chapter presents the database and the statistical variation in choice of venue, medium, type, and the placement of the hieroglyphic texts on the monuments. These different components create a variation in presentation which allows for multiple approaches to interpreting the hieroglyphic pairing known as the “lu-bat”. In conjunction with physical differences between the hieroglyphic texts, the analysis of its distribution in space and time is imperative to an understanding of this glyph pairing. The dataset includes all the known occurrences of the specific hieroglyphic pairing that where published and available at the time of the construction of the database.

In order to provide an encompassing database, all available information in connection with the hieroglyphic texts also were analyzed in order to provide a foundation for better interpreting the temporal and spatial distribution. The data shows a lack in temporal change related to the short timespan in which the lu-bat glyph was used, and the level of interaction from site to site represents a fairly regulated usage of the “lu-bat” hieroglyphic pairing. The spatial analysis showed the distribution of this term predominated in the Usumacinta River. It appearance in other parts the Maya area was severely constrained. Through the analysis of its
distribution through space and time one can further infer that it represents a dispersal of importance related to the role of the bat in the Southern Lowlands. This ideology is directed to the worldview and the interpretation of the bat deity. There are numerous ideas concerning the schools in which the carver or artist learned and honed their skills as well as how their knowledge was distributed (Tate 1989:3-9). The dissemination of this knowledge is related directly to the interactions between sites.
CHAPTER 4: EPIGRAPHIC INTERPRETATIONS

4.1 Introduction

This chapter examines the different components that make up the hieroglyphic pairing and how the variation in these components presents specific issues when deciphering the texts. There is a variation in the affixes used within this dataset which yield different readings of the hieroglyphic pairing and conflation. Within this chapter, the texts are broken down to examine the components and how they affect the differences in interpretations. The “lu-bat” glyph is not limited to secondary texts, as previously thought, but is also found in primary texts in strong association with the iconographic scenes. Thus it is necessary to discuss the full texts in order to address the complexity of interpreting the “lu-bat” texts.

4.2 Reading of Components

The components of the “Lu-bat” glyph play a vital role in the decipherment and interpretations of the hieroglyphic pairing. This section focuses on the interpretative values of three main components of the glyphic pairing. First, there is variation in the presentation of affixes, such as the common is depicted “bow” affix (Thompson 1950, 1962; 1966:180). Not only are there variations in affixes, but there are also differences in the presentation of the main glyph, the bat head. This can be attributed to regional diversity in artistic ability and in knowledge of the glyph. Finally, a differentiation can be made between the written expressions of the T-756 and the T-568 glyph. The “lu-bat” glyph can be presented as a conflation of two glyphs, but it can also be written in long text form where the glyphs are separated from each other as free standing units.
4.2.1 Affixes

The affix is described as a smaller element that is attached to the larger main sign within a compound (Coe and Van Stone 2001:17). Within the dataset there are differences in the presentation of the affix. The placement of the affixes can lead to differences in readings of the values. There are suffixes, infixes, prefixes, and postfixes. Within the context of this database there are instances in which all of these affix styles occur. The most common, however are the prefixed “lu” T-61 (Figure 7) and the infixed, T-568 known as the gouged-eyed and believed to have a relationship with sacrifice (Figure 8).

Figure 6 T-61 Glyph

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Figure 7 T-568 Glyph

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As mentioned in the previous section, this depiction is not the only one represented. The T-568 glyph is not always infixed; it can be used as a superfix or suffix, as can be seen on Chichen Itza Lintel 4 from the Monjas building (Figure 8). These placements do not change the reading order of the glyph, as suggested by Coe and Thompson who explained that the reading of the glyph conflations and pairings follows a specific pattern being usually read from left to right and top to bottom, as is the case when reading the larger texts (Coe 1999; Coe and Van Stone 2001:17).

![Figure 8 Superfix T-756 from Chichen Itza](drawing)

Drawing by author, detail after Herman Beyer

When breaking apart the components of the lu-bat glyph, there are two main affixes to the bat glyph compound generally thought to represent the role of carving and scribal signature (Chinchilla Mazariegos, et al. 2001; Grube 1986; Stuart 1986, 1987). Firstly, the affixed bowtie glyph (T-61) has a given value as \textbf{YU}, which according to Stuart (1987,1988) could be used similarly to the \textbf{YU} in the Wing-Quincunx glyph as a “prevocalic pronoun” showing possession (Chinchilla Mazariegos, et al. 2001). The possession would be attributed to the conduit’s role within the monument and scene. This bowtie affix can also be related to the triple knot that is representative of bloodletting in iconographic scenes. This affix has clear variations as seen in Figure 7; however, it always consists of the tripartite style bow. The next affix that is
always part of the lu-bat glyph, is the T-568 glyph. This glyph is linked to the action of spearing or stabbing associated with the gouged-eye; in carving, spearing is necessary to create definition on the carving. While these two affixes are the most common, there are others that can extend the reading of the compound or pairing. These affixes usually consist of alternate components of the reading that do not change the root meaning of the glyph and do not affect the interpretation of the glyph compound. While there are other affixes, none are consistent across multiple sites or multiple sculptures and most do not appear to alter the reading of the glyph. This lack of consistency can be attributed to the artistic variation from site to site as well as the understanding of the glyphic corpus by the scribe. Although variation is present in the placement of the glyphs as well as in the usage of affixes, the main sign does not present any variation; it is consistently a bat head glyph.

4.2.2 Main glyph

The main glyph, the bat head, is utilized in multiple contexts with visible variations, in the association of specific affixes. The most common representation of the bat head glyph is in the month glyph of *Zotz*’ (Boot 2009: 1; Thompson 1966:177). Others include the relationship glyph for naming the “mother of” an individual, the ending of a Katun Period, and certain emblem glyphs, as at Copan (Fash and Fash 1994). With these different usage and values assigned to the bat head glyphs it is necessary to interpret the stylistic variations in order to facilitate the differentiation of the glyph usage. A variety of depictions of the bat head glyph exist within the corpus; however, all contain key characteristics associated with the bat. These characteristics represent the close attention paid to details of the bat by the artist. Even though
there is variety, the bat head glyph, which includes the leaf nose, eyes, mouth, and fangs is always present.

Site variation and artistic license can alter the way the bat head glyph is drawn. In some cases the snout can be elongated or snub, as can the size of teeth and the location of the leaf-like protuberance. (Boot 2009:3-4). This stylistic variation in the bat head glyph can be attributed to artistic license, however it is more plausible to attribute this variation to regional species of the bat than to artistic differences. In Central America there are 143 different species of the leaf-nose bat with at least 47 in Belize alone (Boot 2009:3). Again this variation does not change the meaning of the bat head glyph and is related to the usage of the bat within the hieroglyphic corpus. As for the case of the lu-bat glyph, the bat head has little variation and stays fairly consistent across the dataset. The head within this glyph always includes the leaf nose, which stylistically is the same for all usages; it also contains the teeth that are visual representations of the role bats have in blood and sacrifice, providing an allusion to the Popol Vuh. The main sign for the hieroglyphic lu-bat phrase does not evince much variability.

4.2.3 Conflation vs. Pairing

The difference in presentation between conflation and pairing must be addressed as it sheds light on the variations in scribal artistic license. There are, within the database, two different representations of the glyph. The first and most common is the conflation of the T-568 and T-756 glyph with an affixed T-61 glyph. In these texts, the “lu” glyph is usually affixed on the right side of the bat head. This written form, the so called scribal signature; it often is found in secondary texts and is associated with three or four glyphs naming an individual. The conflated glyph is not the only representation of the lu-bat glyph. A second variation involves the
pairing of the glyphic elements in an extended phrase consisting of two separate main glyphs. While the conflated form is seen in the secondary texts that are indicative of the scribal signature, the paring of the glyphs is seen in primary texts or within texts that are not clearly forming a scribal signature. However this pairing still represents a role played by the traversing being. This written form is apparent on the Hun Nal Ye stone coffer wherein the T-61 and T-568 precede the T-756 glyph (refer to Figure 9).

With these two distinct styles of writing and placement of the texts, it is possible that the artists’ knowledge of writing and the message that was to be conveyed allowed for the glyphs to compliment the space being utilized. This may show that, although the monument or artifact was commissioned by an individual other than the artist or carver, it did present some latitude to construct the texts in an aesthetically pleasing manner. The placements of secondary texts seem almost random and are positioned so as not to take away from the overall scene; therefore, it seems logical for the carver to constrict the number of glyphs used, lending to the conflated style. However, in primary texts the artist has to convey a specific message and this allows for expansive texts to properly express the details.

4.3 Accompanying texts

Hieroglyphic texts are utilized to describe a specific action that relates to the monument and what is being represented. When trying to decipher texts, it is necessary to understand how the writers of the texts sought to describe a specific action. The texts that accompany the lu-bat glyphic phrase tell of milestones within site histories that are related to supernatural and liminal activities of the elite lords. The discussion of this relationship is further analyzed in Chapter 5. This allows for a comprehensive approach in which texts that are not fully understood can be
approached through the use of iconography in order to better understand the texts. This section focuses on the relationships between the texts share and the iconography. This section considers the superficial relationships of these texts and not at the actual iconography. Within this dataset the texts are divided into two different sub-categories, with the first being represented by primary texts that are the main components for interpreting the iconographic scenes. Secondary texts relay a different aspect of information related to the monument. Therefore interpretation of the lu-bat glyph within these textual positions clarifies the level of importance the glyphic phrase contributes to the overall scene.

4.3.1 Primary texts

With the examination of the database, it became clear that the primary texts within which the lu-bat glyph is utilized exhibits a fundamental difference to the so-called carver’s signature in secondary texts. The lu-bat in primary texts is represented on monuments that do not have any associated iconography, with a few exceptions. These exceptions are limited to four different cases in which the lu-bat glyph is used in primary texts and does not conform to the normal standard defined within this thesis. The first instance is the furthest outlier in the dataset and is the stone cof{fer from the Hun Nal Ye cave. This primary text is written on a stone lid and describes the action of actually carving, and not naming the artist (Woodfill, et al. 2012:98). The glyphs are paired and read as “yu-lu xu-li” (Woodfill, et al. 2012:98)(Figure 9). In the next case, the Emiliano Zapata panel from Palenque, the lu-bat is read as “uxul[i]” and describes the action of carving, and not naming, an individual (Stuart 1990:11)(see Stuart 1990 page 10 figure 1). This example is accompanied by an iconographic scene in which a person is carving a large “cauac monster” head (Stuart 1990:10-11). This cauac monster head is seen in other instances
within the dataset, specifically in the altar supports of Piedras Negras all of which contain the lu-bat signature (Figures 10, 11, 12,13). This association is addressed in Chapter 5 in discussion of the iconographic themes. The last examples are from Tonina monument 146 (Figure 144) and Yaxchilan lintel 25 (Figure 15) where the lu-bat glyph is within the only texts present on the monument. Yaxchilan differs slightly in that the underside is also carved; however, the lu-bat glyph (P1) is on the front side and not associated with the iconography of the carved underside iconographic scene.

Following these outliers in the dataset, there is another group that contain the lu-bat glyphic phrase in the primary text. This group is restricted to carved or incised ceramic vessels. On these vessels however, the primary texts do not reflect the associated iconography, instead containing the Primary Sequence Standard (PSS), the most common of hieroglyphic texts (Coe 1999:224-225; Coe and Van Stone 2001:95,99-107). The PSS refer to the method of decoration, the type of vessel, what is contained within the vessel and who is the patron of the vessel (Houston, et al. 1989:720; Stuart 1989:150) There are also cases in which the glyphs represent part of the iconographic scene; however, these glyphs are only partially representative of the lu-bat glyph and do not contain the actual bat head glyph (see appendix C for an example from Caracol, Belize). This vessel in particular, again, represents different aspects of underworld and liminal activity. The PSS describe three different aspects of the vessel itself - and usually not the associated iconographic scenes. The three parts describe the dedication of the ceramic, the shape of the vessel, and finally the contents of the vessel (Coe 1999:224-225; Coe and Van Stone 2001:99-107; Stross 1989:187). While the texts from vessels are stylistically different due to the nature of the usage, the primary positioning of texts regardless of medium that shows the lu-bat
does not reflect a direct connection to the iconography and rather relates to the dedication of the carving (and not to the naming of the individual responsible for the work) (Stuart 1989:154).

With these examples, in which the lu-bat glyph is presented in primary texts, it is apparent that this glyph does not function as a signature. Rather, the use of the glyph represents either the action of carving or is related to the dedicatory texts. This is evident because there lacks a direct connection the iconographic imagery presented on the vessels. If there were a direct connection, there would imagery that supports the different aspects of warfare, blood, or sacrifice. Again, the reversal of roles of primary and secondary texts on vessels is evident, where the secondary texts are directly related to the iconographic scenes, further supporting the notion that primary text are not signatures, but rather dedicatory-related. The primary positioning of the texts, while not having iconographic scenes related to them, (with the noted exceptions) do show a connection between the use of the lu-bat glyph and the intended interpretation of the glyph pairing. This is also applicable to vessels where the roles of the texts are reversed in comparison to the carved monuments (Coe 1999:224-226; Coe and Van Stone 2001:98).

4.3.2 Secondary texts

Secondary texts are distinguishably different between vessels and monuments. Ceramic vessels contain texts in reversed importance, making secondary texts related to the iconographic scenes, while the primary texts represent smaller descriptive values of the vessel itself (Coe and Van Stone 2001:98-99; Stross 1989:187-188; Stuart 1989:153-155). The reversal of roles on vessels, however, does not change the interpretational value of the texts, as the primary texts on vessels contain similar contextual meaning to secondary texts on monuments and have similar characteristics to secondary texts (Coe 1999:244-251; Coe and Van Stone 2001:98). When
examining the secondary texts on monuments, they are stylistically the opposite of primary texts. Secondary texts are rarely carved into raised blocks; instead they are usually at the same level as the background and are carved into the scene (Coe and Van Stone 2001:98). In this way the secondary texts do not “pop” out at the reader and are, thus, noticed as a secondary aspect. While the carving style appears to be an after-thought, it does show that these so-called scribal signatures are an important part to the overall monument especially as they are placed directly in association with the iconographic scene.

Secondary texts on monuments are not directly descriptive of the iconographic scenes as they describe an outside action indirectly related to the actual imagery. The texts, however, do play a role in the interpretation of the overall monument or carving, again showing that while the lu-bat glyph, in the conflated style, is only found in secondary texts, it does not describe the scene itself. It is, however, an interpretive aspect of the monument as whole entity. When examining the dataset, it becomes clear that this conflated lu-bat glyph is only present in secondary texts when there are iconographic scenes, meaning that, while secondary texts are not vital for the interpretation of the iconography, they complement the scenes through naming specific individuals. It can be debated, however, whether the artist or the patron of the monument is named. This can be seen specifically on Yaxchilan Lintel 25, which names Lady Xoc after the lu-bat glyph (Schele 1982; Tate 1989:9)(Figure 15). This however, is the only notable case in which this conflation occurs and, again, may be the direct influence of the artist and their understanding of the glyphic corpus and use of the lu-bat phrase. While secondary texts reside mainly to the side of an iconographic scene, there are occurrences of the lu-bat glyph used in phrases found on the sides or backs of monuments, especially when the iconographic scene utilizes the entire open area on the monument’s front. The two instances from Naranjo (Stela 12
and 14) are similarly carved and contain a lu-bat glyphic phrase at the base on the back of the monument (see Figure 166 and 17). This placement on the side of monuments does not change the role of primary or secondary texts; as the carving style is still representative of the level of importance. However, when carved on the sides or back, the phrase does not exhibit a border around the text (Figure 166 and Figure 17). Secondary texts are signs of a change in the role of the conduit and how they interact with liminal activities.

4.4 Summary

Within this chapter the discussion of the stylistic characteristics of the lu-bat glyph in concordance with the associated texts showed the importance of: the components of the lu-bat phrase; the style in which the text was written; and, finally, the role of primary texts versus secondary texts. Taking the different components and breaking them apart to understand how each piece plays into the decipherment and interpretation of the glyphic phrase gave insight into the role of the conflated phrase in secondary texts as well as the pairing within primary texts. Also, upon further investigation, it became clear that while variation exists within the affixes that are used, there are always two primary affixes present that form the base for the lu-bat phrase. Finally, the examination of the main glyph revealed little variation, especially as the bat head glyph is the primary icon and the most necessary component of the phrase. This lack of variability represents the significance of the glyph to the overall phrasing and its ability to remain consistent across both the temporal and spatial order. With the discussion of the writing style and components of these texts, an interpretive value can be assigned to the lu-bat glyphs that demonstrate a connection between the glyph and its associated iconographic themes.
CHAPTER 5: ICONOGRAPHIC DISCUSSION

5.1. Introduction

This section focuses on the interpretation of specific themes through the examination of iconographic elements that express certain aspects of the ancient Maya and their cosmological worldview. This chapter first discusses iconographic imagery in order to establish a connection between the lu-bat glyphic phrase and the overall themes. Certain components play a vital role in the interpretive ability of the iconographic scenes and can give insight into the usage of the lu-bat glyph phrase. When interpreting the lu-bat glyph and the iconographic themes, it is essential to isolate specific components of the imagery in order to address patterns. While the iconographic imagery does occur on other examples, the Late Classic Period carving reveals a change in the behavior of the artist that can be shown in the association between certain themes and the lu-bat glyph. The discussion will show a connection between the lu-bat phrase and the milestone markers of the sites in this dataset. These milestones are represented on monuments as depictions of warfare, change in rulership or deaths of ruling elites. The iconographic themes are inter-related to each other and each theme contains elements of other themes. This is important to address for no one theme is exclusively its own. Within this dataset, however, the themes that are prevalent are those relating to activities undertaken by the elite for royal transitions, warfare and sacrifice. In connection with the lu-bat glyphic phrase, these themes show the interaction that they share with these site events, especially as is apparent in cases where there are as many as 11 and 12 glyphic phrases placed on single monument surrounding bound captives or ritual regalia (Figure 18 and Figure 19). The supporting interpretations for the connection between the lu-bat
glyph and importance of the liminal being, comes through the specific imagery and overall themes that are presented within this dataset.

5.2. Specific Imagery

The ability to decipher and interpret complete iconographic scenes requires an in depth analysis of individual elements and their associations within the overall image. This section focuses on elements that relate to warfare and royal activities as well as supernatural components. The specific imagery within the overall scene form the components that are the foundation for interpreting the themes and for showing how these themes can be connected to the usage of the lu-bat glyphic phrase. It is necessary to focus on the main elements within the imagery as those that tell the overall story of what is being depicted. While there are smaller aspects to the scene, the elements that are available are found at multiple sites and have strong connections to the hieroglyphic texts associated with them, thus presenting a possible correlation to the lu-bat glyphic phrase as well.

5.2.1. Warfare Elements

Iconographic imagery is variable in nature and sometimes makes it difficult to specific components of an overall scene in order to decipher meaning. Within in the database, some scenes represent different aspects of warfare through the specific iconographic elements. While these are not purely restricted to warfare, as they can be related to royal activity as well, they are indicative of elite interactions. The elements of warfare are constricted to battle regalia and bound captives and are readily available within this dataset.

The first element, battle attire, consisting of either a shield, a spear, or a zoomorphic mask and represents the preliminary step toward preparing for battle. At Yaxchilan, a series of
three lintels, 24, 25 and 26, depict Shield Jaguar and his wife Lady Xoc preparing for war. On lintel 26, Lady Xoc is handing Shield Jaguar a zoomorphic jaguar mask which is commented on in the accompanying epigraphic texts (Figure 200). While this is the only case in which a zoomorphic mask is presented, there are numerous others that present shields and spears as part of preparedness for battle. The spear also has a connection to blood rites and is portrayed in close proximity to bound captives, acts of auto sacrifice, and other related acts of warfare. This is seen on Bonampak Lintel 2 (Figure 21), El Cayo Lintel 3 (Figure 222), Yaxchilan Lintel 45 (Figure 233), and Piedras Negras Lintel 4 (Figure 24). Along with the spear the shield is also an element that is related to warfare. The shield is also presented in imagery that is indicative of ritual activity associated with warfare, as can be seen by the proximity of a dwarf on El Peru stela 34 (Figure 19). While the spear and shield can appear in strictly ceremonial contexts, when paired with lu-bat glyph, it appears that they have a connection to being prepared for warfare. The role of the artist with battle regalia represents an interesting connection, as can be seen on a stela of unknown provenience from Mexico (Figure 25). This stela shows a person carrying a thrusting spear (Miller and Taube 1997) which is part of royal garb related to warfare and captive taking (Marcus 1974:83) and something the resembles a brief of paper similar to those that scribes have been shown carrying on other monuments. The lu-bat glyph’s association with warfare elements suggests that the glyphic phrase may have been utilized in scenes of important site events which involved the conduit. Site milestones consists of that, through the interconnectivity of the iconography and epigraphy, show how vital the conduit was to portraying the actions and the messages of the elites.

Following the battle regalia, another common element related to warfare is that of bound captives. These captives are sacrificial victims that are taken in course of battle. Here again is the
connection to blood and warfare. The captives are usually bound and stripped of their exuberant attire. They are portrayed kneeling or sitting at the feet of royal elite, as shown in the Laxtunich panel where a ruler is being presented with three captives from a subordinate lord (Figure 26)(Akers 2008). A pair of lintels (45 and 46) from Yaxchilan shows Shield Jaguar being presented with different captives and further depicts the association of the lu-bat glyphic phrase with bound captives (Figures 23 and 27). It is also seen on Aguateca Stela 7 (Figure 28), Calakmul Stela 51 (see Ruppert and Denison 1934 plate 50 & 53), and Naranjo Stelae 12,14,24 (Figures 16,17,29) where the royal individual is standing on captives who are posed in a position that represents a pedestal. The taking of captives and sacrificing them is a vital part of warfare activity and contains ceremonial attributes. The lu-bat glyph again is present in connection with these captives and in some cases are as numerous as the captives themselves as represented by Piedras Negras Stela 12 (Figure 18) where there are as many as 12 signatures accompanying the captives. This shows that a connection exists between the glyphic phrase and imagery that represents violent and ritual sacrifice relating to milestones of warfare within the site. This connection to violence and the bat head in this glyphic phrase will also be supported in discussion of the overall iconographic themes in section 5.3.

5.2.2 Royal Activities

Iconographic scenes contain multiple elements that are related to royal elite and their actions undertaken for either ritual or divine reasons. While some of the elements contained within this division are not strictly royal in nature, they are, however, directly related to actions undertaken by royal elite. Ritual activities included the act of auto-sacrifice (or bloodletting), dancing, and other activities that are not part of the daily routines. Auto sacrifice, as represented
on Yaxchilan Lintel 24 (Figure 30), which as noted previously is part of three lintels that tell a single story, is undertaken by Shield Jaguar and his wife Lady Xoc. Lintel 24 shows Lady Xoc pulling a thorn rope through her tongue while Shield Jaguar holds a torch over her. The epigraphic decipherments of the associated texts tell the story that Shield Jaguar had already let blood and was presiding over his wife as she lets blood. The other two lintels depict Lady Xoc burning the bloodstained paper in a vision quest and helping Shield Jaguar III prepare for battle (Figures 15, 20). An interesting scene on a vessel from an unknown provenience (Kerr 3844) shows a sacrificial person within a temple surrounded by six supernatural beings, one of which is the God of Decapitation. All the beings have partaken in penile perforations and are carrying bundles (Figure 311). This scene represents different levels of bloodletting, through penile perforation and through the sacrifice of an individual as well as the iconographic depiction of a large flint weapon carried by the God of Decapitation (Boot 1996). Bloodletting and auto-sacrifice is not the only way individuals would be depicted presenting themselves to the gods. Another way is through scattering acts as shown in El Cayo Altar 4 (Figure 32), Nim Li Punit Stela 2 (Figure 33) and Piedras Negras Stela 13 (Figure 34). All three of these instances show a royal elite individual in an action of scattering onto items that are indicative of veneration, such as incense burners or flat-bottomed vessels containing paper. These vessels play a role in supernatural interactions and are discussed in section 5.2.3. In conjunction with scattering and bloodletting, dancing has royal ritual attributes as well. Dancing has been explored as an action relating to the connection between the watery underworld and the liminal ability of the elite (Looper 2003, 2004, 2009). Dancing, as shown in two scenes from an unknown site named Site R (Figure 355) and from Motul de San Jose (Figure 366), is undertaken by the royal elite and connects them with the underworld. From the Yomop stela (Figure 377) there is evidence of
dance through the decipherment of the texts. Dance in Maya sculptures is identified by the raised heel and the interpretation is disputed by numerous scholars; however, for the purpose of this thesis, the underlying and unifying element is the connection in liminal activity and supernatural interactions (Collins 2009; Grube 1992:209, 215-206; Looper 2009). Dance also represents a changing in time connected with accession and represents a ruler’s role in traversing the different worlds, specifically in death (Collins 2009).

The connection of liminal activity with accession also is represented in other scenes within the dataset. La Mar stela 1 represents the accession of Mo’ Ahk Chaahk without any clear iconographic depiction and is only supported by the associated texts (Figure 3838). This similar issue is represented with the so-called Death Head from Palenque (Figure 3939). This death head is a monkey skull sitting on a throne with accompanying text describing the accession rites of a lord. In the cases that represent accession in association with the lu-bat glyphic phrase, the limited iconography is a bridge between the liminal being. Further support of the conduit’s role in connection with the change of royalty is given from Xcalumkin vessel 8017 (Figure 400)(Boot 1996). Within these scenes there are two individuals; one is the ruler while the other is a subordinate sitting at the base of the throne. These scenes depict how the change in rulership is a powerful and vital part to the continuance of the site’s history. While change in rulership is portrayed there are also scenes that depict the ending of a period which are milestones in which the ruler and the conduit are involved in liminal activities. The three monuments that clearly depict the style associated with period endings are Piedras Negras Stela 15 (Figure 41) El Cayo Altar 4 (Figure 22), and Tonina Monument 146 (Figure 14). These scenes depict the ruler standing and dressed in ceremonial garb. The Tonina monument has the Cauac headdress that connects him to the underworld. The use of the Lu-bat glyph in conjunction with these scenes
again represents how the connection between specific site events and the liminal and divine power of the elite is portrayed through actions relating to the underworld and liminal beings.

These ritual acts by the royal elite are part of a quest related to supernatural guidance and ancestral worship. This guidance was intended to help secure power and success in warfare. However, not all actions done by royal elite are ritualistic in nature, some iconographic elements represent the power and divine nature controlled by the elite. The two main ways that this divine power is represented in the dataset is through the use of manikin scepters and ceremonial bars. These two elements play separate roles from each other while still represent the power wielded by the elite. Through the use of manikin scepters and ceremonial bars in iconography, the elite were able to present their right to rule as deriving from deep connections with divine nature and otherworld interactions. Manikin scepters have specific iconographic interpretations that relate to the contexts in which they are utilized and how they are depicted.

The manikin scepter is depicted as a small figure that is held by the ruler and is a symbol of the divine rulership possessed by the individual (Marcus 1974:92; Miller and Taube 1997:110). The iconographic variation seen in the manikin scepter does not change the underlying meaning. However, different individuals or gods maybe involved in the process, including gods that are related to rain, lightning, birth, or accession, thus further strengthening the connection between the royal elite and the underworld. When examining the different styles of manikin scepters within the dataset, variation is evident. La Corona Stela 4 (see Mathews 1998) represents the thin staff like manikin scepter that is held in both hands. From a panel of unknown provenience (Figure 42) and from Aguateca Stela 7 (Figure 28) are the traditional styles of the manikin scepter. The scepter is held in one hand and is shown as a little figure with one leg ending in a serpent and bifurcate scroll. The scepter is designed to represent K’awlil, the
personification of lightning which is a “divine patron of noble lineages” (Miller and Taube 1997:110). The scepter is a sign of authority and divine right to rule held by the lord and can be connected to accession rites. The clear depiction of the intended scene is a vital responsibility of the artist, therefore providing the artist a role in the overall action and furthering their connection to the “other” worlds as possible liminal beings. This connection becomes clear due to the use of the bat head glyph for their signature. The bat head is a clear indicator showing the connection between the mundane and supernatural worlds.

Ceremonial bars are part of royal activities that relate to the deities and the stories of beginning of the times (Anton 1970; Schele and Mathews 1991). The ceremonial bar is depicted differently throughout time; however, a strong interpretation for the Late Classic period ceremonial bar represents the ruler’s role in multilevel interactions with the gods. This liminal activity gives the holder a certain divine sense to rule and therefore cements their legitimacy. The iconographic elements of cross hatching or three knots on the ceremonial bars represent the umbilical cord of the sky which connects the ruler with this divine right (Clancy 1994; Schele and Mathews 1991; Stone 1991:196-198; Taylor 1941). These cross-hatchings are easily seen on Bonampak Lintel 4 (See Grube 1993 figure 3) and Naranjo Stela 12(Figure 16) and 14 (Figure 17). On Bonampak Stela 1, the ceremonial bar is represented as a staff that is held upright with three knots extending down the length of the shaft (Figure 43). The ceremonial bar is utilized in accession rites or period endings (Figure 14) and is associated with bound captives in the case of Naranjo. The lu-bat glyphic phrase is connected to these scenes, further presenting the vital role of the conduit, in this case a bound captive, in otherworldly interactions. While these royal activities contain supernatural elements, the dividing force is the notion that these elements are directly involved with ruler and are not strictly supernatural in nature.
5.2.3 Supernatural Imagery

Supernatural elements within the iconographic scenes in this dataset and the glyphic phrase are representative of an affiliation between the mundane and supernatural world. The supernatural nature of these elements further supports the notion that the glyphic phrase was utilized in connection with elements that are indicative of other worldly acts and associations. This dataset consists of three different types of supernatural elements that are utilized within iconography to represent the strong connection between the individual and liminality. The three different supernatural elements consist of Cauac monster, water lilies, and finally the moon goddess.

A zoomorphic representation of the Cauac monster, which represents a supernatural locale on the surface on the earth (Taylor 1978), can be found in the associated iconography. It has been suggested that the Cauac monster could be a cave (Chase 2009:225; Kidder 2009; Tate 1980; Taylor 1978), that act as a connecting portal between the surface and the underworld. The Cauac monster is strongly associated with mountains and stone, where caves can be prominently found (Miller and Taube 1997:56-57,119-121). Here, again, the connection between the underworld and the use of the bat head glyph for the signature can show a relationship between the liminal activity and the underworld and the importance placed on the conduit within the site’s history. Within this dataset, there are two different representations of the Cauac monster, but the ruler directly interacts with both versions. The Cauac monster can be either shown as a pedestal, as seen from Bonampak Stela 1 on which the lord is standing (Figure 43) or as is the case from Piedras Negras Altar Supports 4 (Figure 10, 11,12 and 13) all four supports are carved as Cauac monster heads. This representation is similar to the one being carved in the Emilliano Zapata Panel from Palenque (see Stuart 1990 page 10 figure 1). Secondly, the Cauac monster can be
represented as a niche within which the ruler is sitting as part of an accession ceremony (Chase 2009). This depiction comes again from Piedras Negras Stela 6 (Figure 44) and 14 (Figure 45). Another example within this group that represents the right to rule and the position of the lord comes in the form of a throne backrest at Piedras Negras Throne 1 which is a large Cauac monster with two ancestral individuals residing within the eyes (Figure 46). The last depiction of the Cauac monster comes from Tonina Monument 146, which depicts an individual wearing a Cauac monster headdress (Figure 14). While this representation is characterized as a headdress it is possible to argue that the headdress acts as a wearable niche. The interpretation of the Cauac monster as a portal to the underworld again represents the role of conduits and their connection to liminal activities. The role of the artists to depict the scene in which the ruler has a divine connection with the underworld through these supernatural locales shows that the conduit, through the use of the bat head glyph and signature played a part in a multi-world event. This is further supported by water-related elements.

Along the lines of the Cauac monster, water-related iconography represents the supernatural activities of the elite and the connection between the artist and other worldly activities. The most prominent element is that of water lilies. Water lilies are considered to be the “terrestrial interface between the sky and the watery underworld” (Miller and Taube 1997:184). This interface is significant as, with the Cauac monster, it has a multilevel connection in which the associated rulers can interact. Cancuen Panel 3 depicts an individual sitting upon a water lily monster with a water lily headdress encompassed by a quatrefoil inclusive of water elements (Figure 47). This depiction represents how the water lily is conceived as defining the surface of a portal to the water underworld. This connection to the underworld is further support for the use of the glyphic phrase in contexts that connect the liminal beings to scenes that are representative
of liminal activity. Even further support is lent from three vessels of unknown provenience that depict water elements such as fish, water lilies, and water lily monsters (Figures 48-50). These images, while not consisting of large extravagant scenes, do have water elements and associated texts containing the lu-bat glyphic phrase. Another case including water elements is found on a stela from Yomop depicting a lord with water lilies surrounding the feet and dance (Figure 37).

The other vessels within this dataset contain elements of supernatural activities as well, mainly through gods and serpents (Figure 51). These serpents are related to the underworld and have individuals within their maws. This style of serpent, either called the Xibalba Serpent or a vision serpent, is part of a quest undertaken by elites after auto sacrifice in which their blood-stained paper would be burned in flat-bottom vessels. This action is clearly represented on Yaxchilan Lintel 25 where Lady Xoc is standing in front of a vision serpent that is rising out of the vessel containing the bloodstained paper (Figure 15). These vision serpents are considered a “conduit between human beings and the supernatural world” (Schele and Mathews 1991:128-129), further representing the importance of the underworld and supernatural interactions of the elite.

The connection between the mundane and the supernatural world also is represented on a stone coffer from Hun Nal Ye (“house of the Moon goddess”) cave in the transitional area from Southern Lowlands to the Highlands of Guatemala (Figure 9). This coffer lid is carved with a moon goddess and her rabbit and the sides of the stone box are carved to represent scribes and artists. It has been suggested that this coffer could have housed a codex; however, none was found in association with the coffer (Woodfill, et al. 2012:107). This coffer represents a clear connection between artists and scribes with the moon goddess and the underworld, especially through its positioning in cave. The moon goddess is thought to be the mother of the gods and,
thus, represents a connection between the upper world and the underworld in which these gods reside (Miller and Taube 1997:118-119; Spinden 1970:84). From these elements, it is possible to suggest that there was strong interaction between the scribes and artists with the underworld. The second example within this dataset is Bonampak Altar 2, which further shows a connection between the artist, the moon goddess, and the underworld (Figure 52). This scene shows the moon goddess sitting with her rabbit within a crescent that is almost complete. While this could be a depiction of the moon, the headdress that is worn has Cauac elements and therefore it can be suggested that the crescent within which she resides could be a portal between the upper and under-worlds. The different aspects of the scene allows for a correlative element between the lu-bat glyph with the gods and the underworld through the placement of the glyphic phrase located near the top at the opening of the crescent. This opening is in turn related to a bat’s underworld abode during the day turn solidifying the notion that the bat head glyph is directly connected to instances of multilevel interactions. With these different elements all being related to the underworld or actions thereof, the lu-bat glyphic phrase appears to represent the artist as a conduit with liminal abilities.

5.3. Iconographic Themes

Following the discussion of specific iconographic elements in this dataset, it is vital to address the overall themes in which they are found. The interpretation of these themes gives insight into the milestones of the sites and the use of the lu-bat glyphic phrase in connection with these milestones. This dataset contains elements related to warfare, royal activities, and supernatural elements that encompass a theme of liminal interactions for the elite during changes within the site’s internal structure. Site changes can be related to rulership through accession,
warfare events, or period endings. All monuments consisting of iconographic scenes fall within one of these categories, as represented by the iconographic elements and associated texts. Understanding the connection between the texts and the scenes is vital to interpreting the entirety of the message being presented. It is the ability of the artist to clearly depict the scenes that give power to the image and the effect that it can have on the non-elite people. With this role, the artist is the conduit directly related to the interaction between mundane and supernatural worlds.

The themes of warfare, accession, and period endings are all major milestones within a site and are responsible for changes that can alter a site’s internal structure. Warfare creates a change within the site’s internal reaction toward the ruler if he is successful in battle and further promotes his power. Successful battles and the taking of captives are attributed to the ruler’s divine right and represent his ability to connect with the gods through his liminal abilities. Similarly, accession represents a strong connection between the conduit, the ruler and the divine right to rule. This can be attributed to the supernatural elements that are depicted within a scene. This interpretation is further supported by the period endings. These are represented by elements that are directly related to the ability to traverse multiple levels in order to control divine power. While there are differences between the overall meanings of the themes, there still exists a specific underlying notion that they all have a connection to otherworldly actions. When the artist depicts the scenes, he is in turn contributing to the connection between the underworld and the ruler, therefore adding power to the meaning of the scene. This is further supported by the role of the artist and the use of a bat head as the glyph in association with the bowtie glyph, both of which have connections to blood and the watery underworld. The artist is responsible for clearly depicting the intention of the scene and for showing the elements of the liminal activities
concisely. In order to present the themes in their fullest, it is imperative to utilize elements that have these connections to the other worlds.

5.4. Summary

This chapter addressed the iconographic components and overall themes found on monuments and ceramics to provide a basis for demonstrating that the lu-bat glyphic phrase was utilized to represent the conduit’s role in a major communal event. In an exploration of this connection, this chapter discussed how the different components of the iconographic scene were connected to create an overall understanding of what was being depicted on the monuments. The components of these scenes are related to warfare, royal activities, or supernatural interactions, all of which are strong indicators of the ruler’s divine right to rule and his ability to traverse the mundane and supernatural worlds. With these different elements connecting together to form an overall scene, it becomes clear that there were specific role the liminal being carried within the major milestones of a site. These milestones are embedded interactions that traverse between different levels of the mundane and the supernatural. The themes presented are related to the underworld and the gods that reside there, something supported by associated text and that strengthens the conduit’s role as a connecting medium between the divine ruler and the meaning of the scene.
CHAPTER 6: DISCUSSION AND CONCLUSION

6.1 Introduction

The hieroglyphic decipherment of the Late Classic Maya corpus is an ever evolving body of knowledge. In decipherments, it is vital to examine the entirety of the associated iconographic imagery in order to facilitate possible interpretative values for specific hieroglyphs. This is the approach I have used in this thesis to reevaluate the lu-bat glyphic phrase. I have sought to make a connection between this glyphic phrase and the role of the conduit (in some cases the carver) through an examination of the iconographic themes and hieroglyphic elements associated with the lu-bat glyphic phrase. The preceding chapters examined the spatial and temporal distribution, the epigraphic interpretations, and finally the iconographic elements associated with the lu-bat glyphic phrase. The examination of all elements included in the construction of the lu-bat glyphic phrase allowed for the re-evaluation of the possible interpretations related its use. In this chapter I conclude the thesis by considering the connection between the liminal being and the glyphic phrase, as well as the relationship between its spatial usage and distribution. Finally I provide a re-evaluation of the glyphic phrase based on the elements utilized to construct the phrase.

6.2 Evaluation of the Glyphic Phrase

With close examination of the lu-bat glyphic phrase in connection with its associated iconographic elements it is possible to argue that, while having a specific epigraphic value, the glyphic phrase is also connected iconographically to the overall scene. Therefore, it can be argued that commoners would have been able to understand the general meaning of the phrase.
and its broader iconographic message. While still lacking a clear decipherment, interpretations for the use of specific hieroglyphs has been made utilizing the associated iconography or the imagery of the glyphic texts (Anton 1970; Boot 2009; Fash and Fash 1994; Kidder 2009; Martin 2005:5-7; Schele, et al. 1986; Stuart 1986). Each glyphic component plays a specific role when trying to evaluate the glyphic phrase from a non-epigraphic standpoint. Each aspect of the lu-bat glyph has a root in or action related to sacrifice. The bat head glyph, while utilized elsewhere (refer to Section 4.2.2), within the glyphic phrase is representative of the messenger bat; the bowtie affix shows a connection to the tri-knot that is associated with sacrifice. Finally, the gouged-eye glyph is representative of death or change (Thompson 1962:182). Each of the aforementioned components is part of the overall assessment that the glyphic phrase is a connector between the liminal being and the role of the messenger bat from the underworld.

The glyphic phrase has a concise hieroglyphic value, but through the examination of the surrounding iconography and the placement of the texts in association with other texts, it can be inferred that there is a reason for the specific choice of affixes and main glyphs. The choice to use the bat head glyph, as well as the bowtie and gouged-eye glyph (which are elements of the glyphic phrase), represents the importance and value placed upon the conduit and their direct role as a liminal messenger. While the exact value of the glyphic phrase still is not fully understood, the construction of the phrase based solely on the artistic elements represent meanings that go beyond a purely hieroglyphic value.

6.3 The Artist and the Bat

The artist played a vital role in the presentation of specific imagery that related to the divine nature of rulers and their liminal activities. The bat glyph further suggests that liminal
abilities were bestowed on the individuals associated the lu-bat glyph as well as on rulers. This section expands on the connection the artist carried to the bat deity and the underworld as well as the use of the glyphic phrase within the specific contexts examined. The iconographic themes convey a specific message between the lay public and the elite social strata. Intra-site interactions with the elite allowed for a dispersion of the ideas associated with the bat glyphic phrase and, therefore, the spatial and temporal distribution of the glyph also permits an interpretative value.

The bat deity and its associated liminal abilities allowed the conduit to traverse the underworld as well as the mundane. In Chapter 4 the examination of different components and their symbolic interpretations showed that every part of the Lu-bat glyphic compound has a tie to sacrifice and death. This connection is closely tied to the different scenes that utilized the glyphic phrase. It therefore becomes apparent that the elements of the glyphic phrase were carefully chosen to convey a specific message relating to the role of the conduit within the overall theme of the scenes. This message may have been intended for the lay public who had limited knowledge of reading hieroglyphic texts. The bat is considered a messenger and, therefore, is related in these cases to the artist whose responsibility was to convey specific messages to the lay public. These messages related to historical events including the ending of calendrical cycles, change in rulership, warfare, and conquests,- all involving worldly elements and sacrifice, either of self or others. These events were seen as the direct result of the ruling elite; the conduit acted as a metaphorical supernatural messenger, facilitating communication between the ruling elite and the commoners.
6.4 Significance of Distribution

The use of the lu-bat glyphic phrase was limited both spatially and temporally in the Maya Lowlands. Temporally the glyphic phrase was utilized for less than 300 years. The limited spatial distribution in the Usumacinta area may be directly linked to the short temporal span. Later dates associated with the use of this phrase found in the outlying sites (i.e. Chichen Itza, Ek’Balam and Xcalumkin in the Northern Lowlands and Rio Amarillo in the Southern Highlands). However these outlying sites only utilized the glyphic phrase without any connection to iconographic scenes. This temporal change in usage represents the growing understanding of the written script by the artist and therefore shows the regional variations in the style in which the glyphic phrase was depicted. The constriction of the glyphic phrase may be related to how the carvers or artists were valued by their elite patron (Akers 2008; Tate 1989:9-10).

Another issue that arises with the limited temporal and spatial distribution of this phrase could be related to the collapse of the Southern Lowland Maya polities during the 8th century. The period of collapse coincides with the usage of the glyphic phrase. The limited temporal and spatial distribution of the glyphic phrase suggest that it was utilized by a specific group of scribes and sculptors. These scribes and sculptors may have had a higher social status than the general public, meaning that their role in the socio-political interactions was valued. The socio-political status of the scribes would have allowed them to be directly involved with the consignment of the monuments and therefore be positioned in a manner that would portray the role of a supernatural messenger. The usage of the lu-bat glyphic phrase declined sharply at the time of collapse, perhaps suggesting that the artist, like the scribe, became less valued as resources and energy were diverted elsewhere. The artists may have been impacted by a lack of
value bestowed upon them during this period and the change in value could be reflected in the lack of the use of this glyphic phrase at the end of the Late Classic Period.

6.5 Conclusion

In this thesis I examined the lu-bat glyphic phrase and the connection it carried to iconographic elements that represented supernatural interactions and liminal abilities of the elite. In order to address this, I first examine the epigraphic interpretations for the values given to the specific hieroglyphics. When interpreting the hieroglyphs, it is necessary to examine the evolution of decipherment in order to strengthen the values of the glyphic phrase in conjunction with associated iconography. Epigraphy and the values given to the specific texts help provide insight into the structure and use of different hieroglyphs. In the case of the lu-bat glyphic phrase, the positioning on the monument, the style of carving and the associated iconography all support the idea that the text was utilized as a signature—and ties clear connections to themes represented in the scenes. After examining the evolution of the decipherment and the associated values, it was necessary to examine the iconographic elements and demonstrate how these elements merged together to form an overall theme that presented specific notions relating to liminal activities and multilevel interactions. I find that the lu-bat glyphic phrase and its associated imagery communicated the role of the conduit as a messenger with liminal abilities who portrayed site-specific milestones related to the activities of the royal elite. This is also apparent when looking at the cases in which there are multiple lu-bat glyphic phrases on one monument. This suggests that this phrase does not indeed represent the name of the artist but rather describes the role of a conduit with liminal abilities and the role this individual plays within the overall scene.
The historical events depicted in association with the lu-bat glyph communicated and preserved the power of divine rulership in relation to the underworld. Communicating these elements of divine rulership and power were a necessary part of the artist’s role. While the artist and the ruling elite had a “symbiotic relationship,” the artist or carver also held a position of power in their own right (Closs 1992). The artist was responsible for conveying a specific message sent down by the ruling elite, and with this esteemed position, it becomes clear that the artist was indeed a significant member of the socio-political structure. This position is one that represents the liminal being as a messenger for the elite and their interactions with the underworld. These liminal beings could be the patron of the monument, the artist responsible for the work, or captives as seen in cases where the number of glyphic phrases pair the number of captives (refer to table 5). The use of the bat head glyph as a statement of the artist’s role is clearly represented in the symbolism of the messenger bat. The messenger bat is a deity of the underworld and resides within caves, which in Maya cosmology is considered a portal to the underworld. This connection between the underworld and a deity that is related to blood and sacrifice is crucial to the interpretation of the role of the artist, especially as it shows the connection between the artist and the ruling elite. In conclusion, the lu-bat glyphic phrase represents the role of an individual as a liminal being traversing the underworld. This individual could have been either the artist or even the elite individual or a captive that would be sacrificed. These individuals or “conduits” would carry a specific action or message from one world to another and therefore exhibiting liminal abilities that are represented by the components of the glyphic phrase and associated iconographic theme. Thus, the conduit was a supernatural medium responsible for conveying specific messages related to sacrifice, warfare, and royal activities during the Late Classic Lowland Maya.
APPENDIX A: MONUMENTS CONTAINING LU-BAT GLYPHS
Figure 9 Top of Hun Nal Ye stone coffer

(Drawn by Luis Luin, image courtesy of Luis Luin and Brett Woodfill)
Figure 10 Cauac Altar Support Piedras Negras 4.1–781 C.E.

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Figure 11 Cauac Altar Support Piedras Negras 4.2–781 C.E.

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Figure 12 Cauac Altar Support Piedras Negras 4.3–781 C.E.

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Figure 13 Cauac Altar Support Piedras Negras 4.4~781 C.E.

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Figure 14 Monument 146, Tonina, with texts from base

Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University [number missing]
Figure 15 Lintel 25, Yaxchilan, underside and front edge

Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, [2004.15.6.5.22, 2004.15.6.5.23][101240034, 101240035]
Figure 16 Naranjo stela 12

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Figure 17 Stela 14, Front and back, Naranjo

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[2004.15.6.2.24, 2004.15.6.2.25][9904055,99040054]
Figure 18 Stela 12, Piedras Negras

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Detail of Signatures, Piedras Negras stela 12

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Figure 19 Stela 34, El Peru

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Figure 20 Lintel 26, Yaxchilan

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Figure 21 Lintel 2, Bonampak

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Figure 22 Lintel 3, El Cayo

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Figure 23 Lintel 45, Yaxchilan

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[2004.15.6.6.16, 2004.15.6.6.17][98870069,98870152]
Figure 24 Lintel 4, Piedras Negras

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Figure 26 Panel, Laxtunich

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Figure 27 Lintel 46 with Signature, Yaxchilan

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Figure 29 Stela 24, Naranjo

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Figure 30 Lintel 24, Yaxchilan

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Figure 35 Lintel 5, Unknown Site R with detail of signature

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Figure 37 Stela from Yomop

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Figure 39 Death Head Monument, Palenque

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Figure 40 Xcalumkin Vase, Kerr 8017

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Figure 45 Stela 14 with signatures, Piedras Negras

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Figure 46 Throne 1 Backrest with signatures, Piedras Negras


107
Figure 47 Panel 3, Cancuen

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Figure 50 Kerr Rollout 8257

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Figure 51 Kerr Rollout 2774

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Figure 52 Altar 2, Bonampak

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REFERENCES

Akers, D. C.
2008 Purposeful Ambiguity in The Presentation of Captives to a Maya Ruler at the Kimbell Art Museum, Department of Fine Arts, Texas Christian University, Ann Arbor.

Anton, F.
1970 Art of the Maya; [translated from the German]. Thames & Hudson, London.

Boot, E.

2009 The Bat Sign in Maya Hieroglyphic Writing: Some Notes and Suggestions, Based on Examples on Late Classic Ceramics.

Chase, A. F., D. Z. Chase and R. Cobos

Chase, A. F., D. Z. Chase and M. E. Smith
2009 STATES AND EMPIRES IN ANCIENT MESOAMERICA. Ancient Mesoamerica 20(02):175.

Chase, D. Z. a. A. F. C.

Chinchilla Mazariegos, O. F., S. D. Houston and D. Stuart
2001 The decipherment of ancient Maya writing. University of Oklahoma Press, Norman, OK.

Clancy, F. S.

Closs, M. P.
Coe, M.

Coe, M. D. and J. Kerr

Coe, M. D. and M. Van Stone
2001 *Reading the Maya Glyphs*. Thames & Hudson.

Collins, R. H.
2009 Transition through the Abyss: Archaeological Interpretations of the Iconographic Raised-Heel In Classic Maya Sculpture.

Culbert, T. P.

Danien, E. C.
1998 The Chama polychrome ceramic cylinders, University of Pennsylvania.

Fash, B., W. Fash, S. Lane, R. Larios, L. Schele, J. Stomper and D. Stuart

Fash, B. W. and W. L. Fash

Grube, N.
1986 *An investigation of the primary standard sequence on classic Maya ceramics: paper presented at the 6th Mesa Redonda de Palenque, June 8-June 14, 1986*. University of Hamburg, [Hamburg, Germany].

1989 Observations on the history of Maya hieroglyphic writing. *Seventh Palenque Round Table*:177-186.


Grube, N. and S. Martin
2008 Chronicle of the Mayan Kings and Queens: Deciphering the Dynasties of the Ancient Maya. London, Thames and Hudson.
Houston, S., D. Stuart and J. S. Robertson  

Houston, S. A. and K. A. Taube  

Houston, S. D., D. Stuart and K. A. Taube  

Kampen, M. E.  

Kelley, D. H.  

Kerr, J., Michael D. Coe, and Barbara Kerr.  

Kidder, B. B.  
2009  Maya Scribes who would be Kings: Shamanism, the Underworld, and Artistic Production in the Late Classic Period, Texas State University.

Krochock, R.  

Lizardi Ramos, C.  
1948  Copan y el jeroglífico de los sacrificios humanos. Honduras Maya 2:40-43.

Looper, M. G.  

2004  A “Macaw Face Headband” Dance on Site R Lintel 5. Glyph Dwellers (18):5.

2009  To be like gods: dance in ancient Maya civilization. University of Texas Press.

Loten, H. S. and D. M. Pendergast  
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<tr>
<th>Author</th>
<th>Year</th>
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<tr>
<td>MacLeod, B.</td>
<td>1998</td>
<td>Deciphering the primary standard sequence, University of Texas at, Austin.</td>
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<tr>
<td>Mathews, P.</td>
<td>1993</td>
<td><em>The Proceedings of the Maya Hieroglyphic Weekend, October 31-November 1, 1992, Cleveland State University</em>.</td>
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<tr>
<td>Miller, M. E. and K. A. Taube</td>
<td>1997</td>
<td><em>An illustrated dictionary of the gods and symbols of ancient Mexico and the Maya</em> 1 pbk. Thames and Hudson, New York.</td>
</tr>
</tbody>
</table>
Seler, E.

Spinden, H. J.

Stone, A.

Stross, B.

Stuart, D.

Tate, C.
1980 The Maya Cauac Monster: Formal Development and Dynastic Context. *Cuarto Mesa Redonda de Palenque, Palenque, Mexico*.

Tate, C.
1989 Ah Ts’ ib: Scribal Hands and Sculpture Workshops at Yaxchilán. *Seventh Palenque Round Table*:95-103.

Taylor, D.

Taylor, W. W.
Tedlock, D.

Thompson, J. E. S.
1950 Maya hieroglyphic writing 589. Forgotten Books.


Woodfill, B. K. S., S. Guenter and M. Monterroso