

When Worlds Collide: Understanding the Effects of Maya-Teotihuacán Interaction  
on Ancient Maya Identity and Community

By

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*For Matt, Jackson Tess and Nora*

*I thought Archaeology would provide a lifetime of adventures,  
until I realized nothing could be as adventurous as life with you.*

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## LIST OF ABBREVIATIONS

HAP	Holmul Archaeological Project
INAA	Instrumental Neutron Activation analysis
PAAC	Copan Acropolis Archaeological Project
PAH	Proyecto Arqueológico Holmul
PD	Problematic Deposit (features excavated at Tikal)
PTP	Penn Tikal Project
PNT	Proyecto Nacional Tikal



# Chapter I - Introduction

## Introduction to the Current Work

Our understanding of the problem of interaction between the Maya and Teotihuacán has evolved in tandem with the field of archaeology over the past 50 years. Early models of interaction focused on reconstructing the culture history and explained Early Classic interaction through world systems theory based on core-periphery models. Most scholars assumed Teotihuacán played the dominant role by conquering Maya polities or establishing trade colonies (Coggins 1975, 1979b, 1983; Kidder, Jennings and Shook 1946; Pasztory 1993; Proskouriakoff 1993; Sanders and Price 1968; Sanders 1978). Dubbed as “externalist” perspectives (Stuart 2000), these models attributed an external, Teotihuacán impetus to interaction. Furthermore, many of these models suggested that contact with Teotihuacán inspired Classic period Maya state development, arguing that trade with Teotihuacán brought new ideas, technology and wealth to the Maya region, enabling the rise of powerful dynasties, and the construction of impressive kingdoms.

These core-periphery models were based on studies of only a few Maya sites known at the time and subsequent archaeological investigations by the next generation of scholars throughout the Maya region demonstrated that sophisticated Maya states existed during the Preclassic period and before the Early Classic period of intense interaction with Teotihuacán (Hansen 1991; Matheny 1980). Realizing that the balance of power leaned too heavily toward Teotihuacán in earlier models,

a new wave of theories sought to incorporate Maya agency into our understanding of Maya-Teotihuacán interaction (Demarest and Foias 1993; Laporte and Fialko 1995; Schele and Miller 1986; Schele and Freidel 1990; Stone 1989). These “internalist” models based on elite emulation (Fash and Fash 2000; Stuart 2000) acknowledged that Maya kings had their own motivations for fostering interaction with Teotihuacán, which was mainly to enhance their own wealth and power. These models suggested that interaction between the Maya and central Mexico was indirect, with Maya rulers adopting foreign styles and iconography through trade and communication networks, rather than direct Teotihuacán conquest or colonization.

Along the way, the discovery and decipherment of additional hieroglyphic texts have identified the key historical figures in the Early Classic events surrounding Maya and Teotihuacán interaction. Additional excavations have revealed that foreign interaction was more widespread and occurred through direct and indirect means and that Maya lived and died at Teotihuacán. The current understanding among Mesoamerican scholars accepts that no single model can explain the evidence of interaction at every site (Marcus 2003). Based on epigraphic and archaeological evidence the most current models incorporate both externalist and internalist perspectives and allow for both direct and indirect Teotihuacán influence during the Early Classic period (Berlo 1983, 1984; Estrada-Belli et al. 2009; Stuart 2000).

The general consensus among scholars is that a “New Order” was established in Petén in AD 378, when a new dynasty came to power at Tikal with the aid of

Teotihuacán (Stuart 2000). This dynasty helped Tikal become a superpower in the Maya lowlands and ushered in a new era of kingship based on symbols and ideology from central Mexico. Subsequent generations of Maya rulers regarded Teotihuacán as a Tollan (Carrasco 1982; Stuart 2000) a mythic place of origin or place where kings are made, and drew upon Teotihuacán symbols and styles to proclaim their legitimacy. Several monuments from sites throughout the Maya region reference a “*wi'te'naah*” structure<sup>1</sup> that has been interpreted as an Origin House associated with Teotihuacán and the location of accession rituals related to New Fire Ceremonies carried out by Maya rulers (Stuart 2000, 2004; Taube 2004). Structure 10L-16 (Temple 16) at Copan has been identified as a *wi'te'naah* (Taube 2004), prompting scholars to look for such structures at other sites that have produced evidence of interaction with Teotihuacán (Freidel et al. 2007). Scholars have also proposed that this structure was actually located at Teotihuacán and Maya rulers traveled to central Mexico as a pilgrimage to perform accession rituals and obtain symbols of authority (Fash, et al. 2009; Stuart 2000).

While these discoveries have refined our understanding of the processes of interaction between the Maya and Teotihuacán, these recent models have reverted to a focus on the culture history and hieroglyphic texts, with few theoretical applications or cross-cultural comparisons. This study attempts to move the discussion forward by considering the experience of cultural interaction and its impact on identity through an examination of the data from La Sufricaya, a site

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<sup>1</sup> The name of this structure has been spelled as *wi-te-nah* (Stuart 2000), *wi'te'naah* (Stuart 2004), *Wite' Naah* (W. Fash et al. 2009), and *Wiin Te'Naah* (Estrada-Belli and Tokovinine 2016) and has been deciphered as a “Crossed bundles house” (Stuart 2000; Taube 2004) and “Tree-root house” (Stuart 2004).

within the Holmul region of the eastern Petén that has produced hieroglyphic texts contemporary with the AD 378 event at Tikal and other material evidence of contact with Teotihuacán (Estrada Belli et al. 2009).

In doing so, I suggest that scholars examine the problem of interaction between the Maya and Teotihuacán as moments of identity formation through breaks in doxic knowledge (Bourdieu 1977) that contribute to the formation of an imagined regional elite community (Anderson 1983; Elias 1983). This imagined community was based on practices of affiliation (Yaeger 2000) such as erecting monuments that reference the AD 378 11 Eb event at Tikal, gifting cylindrical tripod vessels decorated with Teotihuacán motifs, building *talud-tablero* architecture and the use of Pachuca obsidian, in addition to performing accession rituals drawn from Teotihuacán ideology. As scholars have previously suggested, the Maya rulers used these foreign materials and ideas to bolster their own authority and transform the legitimacy of Maya rulership.

This approach not only provides a deeper understanding of the Early Classic cross-cultural interaction and its impact on Maya identity, but also brings the Mesoamerican case study into the arena of cross-cultural comparisons of culture contact and the emergence of an elite class. Along the way, I address site-specific questions including the role of La Sufricaya in the sociopolitical history of the Holmul region by analyzing the architecture of Structure 1 and elucidating the types of activities carried out by its inhabitants. I also address the question of whether or not the La Sufricaya elite had direct contact with Teotihuacán through an analysis of the architectural, ceramic, lithic, and iconographic evidence and by comparing

images of Teotihuacanos in Maya art to self-representation in art from Teotihuacán. The intended result is a holistic understanding of cross-cultural interaction at La Sufricaya at the site level, and the impact of cross-cultural interaction on Maya identity at the regional level.

### **Purpose of this Study**

This study centers on excavations carried out at the site of La Sufricaya, which is part of the Holmul region in the northeast of the Department of El Petén, Guatemala (Figure 1.1). La Sufricaya is a minor site that was constructed and first inhabited during the beginning of the Early Classic period (AD 200-450) and reoccupied in the Late Classic period (AD 700-900) (Table 1.1). This rather modest ancient Maya site has revealed elaborate painted murals, hieroglyphic inscriptions, ceramics and lithic evidence that link the inhabitants of the site to the events surrounding the Teotihuacán *entrada*<sup>2</sup> (Stuart 2000) into the central Petén during the Early Classic period. While providing new information regarding the ruling elite within the Holmul region, the work at La Sufricaya also contributes new data to the debate surrounding the degree and nature of Maya-Teotihuacán interaction during the Early Classic period.

Among its contributions to the field of Maya archaeology, this study attempts to examine the issue of cultural interaction through the lens of identity, both social (rank, status, class) and ethnic, to understand the experience of interaction and the impact on Maya society. Engaging the concepts of identity, self-consciousness

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<sup>2</sup> *Entrada* literally means “entrance” in Spanish, but Stuart coined the phrase “Teotihuacán *entrada*” in his seminal 2000 article to describe the period of intense interaction between the Maya and Teotihuacán that began in AD 378.

(Comaroff and Comaroff 1991) and imagined community (Anderson 1981; Yaeger 2000) moves the debate surrounding Maya-Teotihuacán interaction from the stagnant realm of culture history, focused on isolated pieces of the puzzle, to the active arena of studies that attempt to understand human interaction and the development of society through a holistic approach. This approach combines the analysis of archaeological material remains, historical hieroglyphic inscriptions, and art historical analysis of iconography to elucidate how contact with foreigners may have affected life at La Sufricaya, and by extension Holmul, as well as the impact on Maya identity on a regional level. Through a comparative synthesis of the evidence of Maya-Teotihuacán interaction, this project addresses not only the degree and nature of interaction between these two great civilizations, but the impact such interaction had on the self-consciousness and identity of the Maya. The application of anthropological concepts like identity, self-consciousness and imagined communities provides a basis for cross-cultural comparison of interaction in Mesoamerica, which will advance these studies in a variety of ways.

This work attempts to answer research questions on several scales of analysis. *Did La Sufricaya function as a center independent from Holmul? If not, for what purpose was La Sufricaya constructed outside of the Holmul ceremonial center? Does the construction of La Sufricaya represent a rift in the Holmul dynasty/ruling elite? If so, did the nearby site of Tikal and foreigners from Teotihuacán play a role in the politics of the Holmul region? Did the elite residents of La Sufricaya have direct contact with people from Teotihuacán? If so, what form did it take and what impact did it have?*

## **Research Goals**

These guiding questions lead to specific research goals that address several scales of analysis. On the most fundamental level of analysis, this study aims to understand the role of La Sufricaya within the Holmul region. The primary objective of this study is to understand the relationship between the inhabitants of La Sufricaya and the Holmul dynasty and the local sociopolitical events that led to the construction of La Sufricaya during the Early Classic period. La Sufricaya may represent the Early Classic seat of power in the region (Estrada Belli et al. 2009). Other possible functions include a ritual complex for the performance of accession rituals by the Holmul rulers (Foley 2005), or a secondary palace inhabited by a faction of the Holmul dynasty (Estrada Belli et al. 2006).

On a larger scale of analysis, this study attempts to understand the nature of foreign interaction at La Sufricaya. Specifically, I aim to determine whether the La Sufricaya lords had direct contact with emissaries from Teotihuacán, or indirect contact, perhaps mediated by Tikal, and whether this interaction was limited to elite ritual behavior or if people of all strata of society were exposed to foreign ideas.

Finally, this research will examine the experience of cross-cultural interaction and its impact on Maya elite ethnic identity. This broadest level of analysis draws from anthropological research that examines the formation and transformation of ethnic identity during moments of culture contact.

## **Research Domain**

La Sufricaya is a minor center located 1.1 km from the central plaza of the larger site of Holmul. Under the direction of Dr. Francisco Estrada Belli, the Holmul

Archaeological Project (HAP) has mapped and excavated portions of La Sufricaya over the past eight years. The site consists of a ceremonial core comprised of an 11 m high platform surmounted by a building complex (Structure 1). The ceremonial core also contains two small funerary temples and a ball court. A number of quarries, *chultunes* (subterranean storage pits) and 21 residential groups surround the ceremonial core. Several re-deposited stelae (stone slab monuments) and stela fragments have been located at the site, representing the only known carved and dated monuments within the immediate Holmul domain (Grube 2003).

The excavations within Structure 1 have revealed several intriguing lines of evidence for elite interaction between La Sufricaya and Teotihuacán. Some of the evidence, like Pachuca obsidian and Teotihuacán-style ceramic forms, fit the patterns of interaction evident at other sites in the Petén, but others do not conform to the patterns, such as unique Teotihuacán-style iconography and ceramic forms, and could represent direct contact between the people of La Sufricaya and Teotihuacán. The most intriguing lines of evidence are the murals painted on the walls within Structure 1, which depict individuals wearing central Mexican style attire, and carrying foreign-style weapons. A separate mural, Mural 7, contains a hieroglyphic text that commemorates the date in AD 378 when the ruler of the nearby city of Tikal died on the same day that Teotihuacán emissaries arrived at Tikal. Unfortunately, important parts of the text are damaged, so we do not have a full reading of the text, but it seems likely that the lords of La Sufricaya were somehow linked to this turning point in regional politics.



## Archaeological and Theoretical Background

The Central Mexican city of Teotihuacan is located over 1,000 km to the west of the Maya lowlands of Guatemala, yet archaeologists have recovered evidence of periodic cross-cultural interaction between the regions spanning the Late Preclassic period (400 BC – AD 200) to the Late Classic period (AD 700-900). The widespread distribution of foreign artifacts and iconography during the Early Classic period, however, represents a more intense period of interaction that has intrigued generations of scholars. This evidence is based on stylistic markers of Teotihuacán identity like green-colored obsidian from the Pachuca source in Mexico, distinctive architecture and ceramic forms, images of the deity Tlaloc and elements of his regalia, as well as representations of individuals dressed in central Mexican-style attire and carrying weapons such as the *atlatl* spear-thrower.

The appearance of foreign artifacts and styles has led to a number of theories concerning the impetus for, and models of, the process of interaction. At the heart of the various models is the nature of cross-cultural interaction and its impact on Maya society and development. These models generally fall into one of two categories, described as “externalist” or “internalist” by Stuart (2000). Externalist models argue for an overt, direct and perhaps disruptive Teotihuacán presence in the Maya area that led to profound changes in Maya society. The externalist models attribute secondary Maya state formation, military conquest, trade monopolies and dynastic coups to Teotihuacán (Adams 1999; Brown 1977; Cheek 1977; Sanders and Price 1968; Santley 1983). On the other hand, internalist perspectives argue that the Maya were not passive recipients of Teotihuacán influence, but instead were active

agents in the appropriation of foreign symbols, styles and artifacts for purposes of enhancing their own status, wealth and power (Demarest & Foias 1993; Stone 1989; Schele & Freidel 1990). According to these models, the Teotihuacán presence in Mesoamerica was indirect and did not have a profound impact on local developments.

In light of new evidence and re-evaluations of earlier evidence, scholars have realized that Maya-Teotihuacán interaction occurred in various ways and no single model can accurately explain the processes of cross-cultural interaction throughout the Maya region. Through a synthesis of various lines of evidence from Maya sites, Marcus (2003) has developed four models that describe processes of interaction with Teotihuacán and provide a comparative framework for understanding foreign interaction throughout the Maya region. Some Maya sites may have experienced a “single-event interaction” that could have been violent (a raid) or amicable (elite gift-giving). In other areas, “multistage interaction” is characterized by a relationship between two sites that fluctuates over time between symmetry (military or marital alliance) and asymmetry (conquest of one site by the other). A “simple dyadic interaction” in which Teotihuacán is the only foreign power affecting a Maya site is used in most models of interaction. Marcus proposes that the fourth model “Multiple Partners or Interactions Mediated through Multiple Sites” is more applicable to the growing body of evidence. This model is based on the understanding that Maya cities may have had ties to other Maya cities as well as to other non-Maya cities throughout Mesoamerica. The ties between cities could have been direct or indirect and, in some cases, other Maya sites may have played the role

of intermediary in cross-cultural contact with Teotihuacán (Marcus 2003: 348-52).

The implication of Marcus' models is that the impetus for interaction must be determined on a site-by-site basis. While these models may not completely or accurately describe the complexities of cross-cultural interaction, since several models could be applied to a particular site, they provide a foundation for further investigations by establishing a comparative framework for individual cases of interaction.

The problem of interaction between the Maya and Teotihuacán is another case study in the anthropological study of culture contact<sup>3</sup>. Culture contact, or cross-cultural interaction, has long been a focus of anthropological research because no human society has ever existed, for any significant length of time, in isolation from others. Cross-cultural interaction, therefore, appears to be a universal aspect of human societies. Furthermore, cross-cultural contact has a dichotomous impact on society –interaction contributes to the spread of information and the creation or development of social identities but at the same time is inherently destructive because it challenges people's views of themselves and others (Cusick 1998:3).

The concepts of ethnicity and social identity are inherent to studies of cross-cultural interaction, yet most Mesoamerican models neglect these key components. While Marcus' models contribute to a greater understanding of the what, why and how of cross-cultural interaction, they do little to elucidate the experience of interaction and the impact it may have had on ethnic and group identity. Although

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<sup>3</sup> This area of study is also called interregional interaction, intersocietal interaction and cross-cultural interaction in anthropological literature. I prefer the term cross-cultural interaction, which is used throughout this work.

scholars have been reluctant to do so, the problem of Maya-Teotihuacán interaction presents a challenging arena in which to study the dynamic aspects of ethnic and social identity, and may provide a basis for the development of the more comprehensive models that Marcus calls for.

The concept of ethnicity is complex and based on a combination of opposing perspectives. Ethnic identity is defined through subjective and objective traits recognized by members of particular groups as well as by outsiders. Ethnic affiliation and identity is often felt on a subconscious level and formed through lived experiences that may not be consciously recognized; yet it is also actively portrayed, performed and even manipulated. Ethnic identity is inherently dichotomous, since it allows people to recognize affiliation with each other, yet also distinguish themselves from, and maintain boundaries between, others (Barth 1969; Emberling 1997; Van den Berghe 1981).

Bourdieu's concepts of *habitus* and *doxa* can be used to explain how ethnic identity is formed through the unconscious dispositions of shared social practice and the break in doxic knowledge that occurs during interaction with other groups (Bourdieu 1977, 1990). According to Bourdieu, the enduring and acquired patterns of perception, thought and behavior that constitute the *habitus* are formed by the individual's experience with the objective and material world. The *habitus* creates a pattern of social structures which guide behavior and the individual's understanding of the world and his place in it. *Doxa*, which is the common-sense understanding of self in relation to the world, forms when the subjective internal structures of *habitus* coincide with the objective external structures of daily life.

However, the mode of existence can be brought into question through culture contact or a political or economic crisis. During these periods, doxic knowledge is transformed into orthodoxy (the denial of alternative beliefs) or heterodoxy (acknowledging the existence of a choice between different forms of knowledge) in order to accommodate the newfound awareness and recognition of other ways of life and beliefs (Bourdieu 1977: 164). Social interaction with other groups causes a break in doxic knowledge because individuals are forced to realize that their cultural practices are arbitrary (a realization that was masked by *doxa*), and allows them to examine their social practices from a comparative and perhaps, objective perspective. This self-reflexivity requires, and permits, change that allows individuals to rationalize and systematize their cultural practices in relation to the practices of other groups. It is often during this social interaction and break in doxic knowledge that ethnic categories are produced, reproduced and transformed. Cultural differences become objectified and the cultural practices and beliefs that were part of the *doxa* become reified as coherent and concrete objects in opposition to the practices of other groups (Jones 1997: 95). Therefore, ethnic identity is also relational because it is constructed, in part, when confronted with other groups.

A sense of collective identity or participation in an imagined community can bridge the gap in social structures caused by breaks in doxic knowledge. Anderson (1983) applies the concept of imagined communities to explain the rise of nationalism. The nation is a social construct imagined by people who perceive themselves as part of a larger group but the feeling of membership is not based on daily interaction. Anderson's model explains how print capitalism contributed to

the development of an official nationalism in multi-ethnic empires by enabling people of various and dispersed ethnic groups to imagine themselves as part of a larger dynamic and to feel a sense of affiliation with others. The print media reinforced the imagined community by conveying messages about the nation and addressing citizens as “the public” (Anderson 1983: 6-7).

While Anderson identifies very specific cultural roots and a medium of perpetuating the imagined community, the essential qualities of an imagined community can be applied to other cultures. Yaeger (2000) adapted the frameworks of *habitus* and imagined community to his analysis of the development and internal organization of the small, Classic Maya rural settlement of San Lorenzo and its relationship to the larger polity of Xunantunich in western Belize. Yaeger argues that a local community identity at San Lorenzo was shaped by “practices of affiliation” that represent commonalities and affinities among individuals and explicitly define membership in the community (Yaeger 2000:125). Daily practices related to food production and consumption and the material culture used in these pursuits (manos and metates, ceramic vessels for food production and storage, use and production of chert tools, etc.) defined the local, subconscious *habitus* for the residents of San Lorenzo and they consciously engaged in feasting rituals to reinforce this community identity.

Certain residents of San Lorenzo also engaged in practices that represented and created affiliations with groups outside of the local San Lorenzo community, specifically with the ruling elite of Xunantunich. Membership in the “imagined regional elite community” was signaled by practices of affiliation based on wearing

adornments made from exotic raw materials such as marine shell and greenstone, the construction of residences that resembled elite residential compounds at Xunantunich, and the construction of a venue at San Lorenzo for ritual performance. Yaeger suggests that the Xunantunich elite initiated the formation of the imagined community in order to forge social bonds that would provide corvée labor and tribute from the local populace, while the San Lorenzo participants benefited from the distinction in status afforded to them by membership (Yaeger 2000:133-136).

Yaeger's analysis serves as a case study for the integration of the concepts of *habitus* and imagined community in an archaeological context. This theoretical framework provides a model for understanding the appropriation of foreign styles by the Maya elite through an examination of the Teotihuacán-style artifacts and symbols in terms of how they may have been manipulated to create an imagined community that united rulers of polities throughout the Maya lowlands. This imagined community, based on practices of affiliation such as the display and exchange of Teotihuacán-style materials and iconography, established the participants as members of a regional elite class that traced its origins from Teotihuacán for the purpose of legitimizing rulership and establishing alliances.

I contend that the problem of Maya-Teotihuacán interaction presents an opportunity to integrate these frameworks of analysis in order to understand the actual experience of contact with a foreign ethnic group. This contact resulted in a break in doxic knowledge when the unconscious aspects of Maya identity were brought to the conscious level due to the recognition of differences or similarities in Maya and Teotihuacán *habitus*. At the same time, learning about an alternative

ideology and ways of life, may have brought subconscious social tensions out into the open and resulted in changes in Maya society. For example, many scholars have recognized that Maya rulers appropriated certain symbols and aspects of Teotihuacán ideology to further their own wealth and power (Demarest and Foias 1993; Stone 1989), but they have not addressed the question of why it was necessary. Social tensions, perhaps caused by the apparent Late Preclassic collapse at many sites and the subsequent growth of Early Classic centers, may have required Maya rulers to prove their legitimate right to rule in new ways. Contact with a powerful group like Teotihuacán could have provided the impetus to transform the office of ruler and define it in new ways with foreign symbols.

I propose that certain Maya rulers used these symbols as the media of an imagined regional elite community, to borrow Yaeger's term, based on external sources of power and rulership. The use of exotic prestige symbols is a cross-cultural strategy used by elites (Blanton et al. 1994; Goldstein 2000; Helms 1993; Polyani et al. 1957; Schortman 1989) and one already recognized by Mayanists. Trading and displaying foreign materials and symbols distances elites from the rest of the population and legitimizes their authority. In the case of the Early Classic imagined regional elite community, the Teotihuacán styles and symbols not only distinguished elites from their subjects, but also from their peers at sites throughout the Petén who were not members. This model does not preclude direct contact between Teotihuacán and the Maya, nor will it apply to every Maya site that has produced evidence of cross-cultural interaction, but it may contribute to a deeper understanding of the process and effects of cross-cultural interaction. The site of La



Sufricaya presents a unique setting to test this framework.

## **Overview of Methodology**

This study consists of a comparative analysis of the La Sufricaya data (including architectural, ceramic, lithic, hieroglyphic and iconographic data) with evidence from other Maya sites and Teotihuacán itself in order to address my research questions.

The primary objective –understanding the role of La Sufricaya within the Holmul domain – can be accomplished by determining the function of Structure 1, and by extension, La Sufricaya, by elucidating the types of activities performed within the building and at the site. If the lords of the La Sufricaya were carrying out administrative, ritual and domestic activities within Structure 1, these activities could indicate fragmentary power within the Holmul dynasty, but if the complex only served residential and domestic ritual functions the site could have merely served as a residence of high-ranking people. An analysis of the buildings within Structure 1 will examine the architectural features, layout, and access points and compare them to contemporary palaces within Mesoamerica. Additionally, examining the ceramic and lithic material in terms of function (domestic, ritual or administrative/political) will also shed light on the activities performed within Structure 1.

In order to determine the nature and degree of cross-cultural interaction at La Sufricaya, I compare the foreign ceramics, obsidian and iconography from the site to the foreign evidence from other Maya sites, as well as to local examples from Teotihuacán. The comparison includes an examination of the contexts in which

these materials were used in both regions in an attempt to discern how they were used to signify identity. This analysis will help determine if the foreign-style artifacts are imports from Teotihuacán or local interpretations of Teotihuacán style.

The material evidence at the heart of this work, the architecture, ceramic, lithic and iconography of La Sufricaya, contribute to an understanding of the local, elite *habitus* at the site. Identifying changes in the material culture, the forms as well as the social contexts in which they were used, may shed light on the impact of cross-cultural interaction on the construction of Maya identity. I also employ this material evidence in elucidating connections between the lords of La Sufricaya and other sites, in turn identifying the members of the Early Classic imagined regional elite community based on practices of affiliation featuring material and symbols related to Teotihuacán.

The experience of the Maya during periods of interaction is documented in Maya art like the La Sufricaya murals. This artwork represents evidence of cross-cultural interaction that moves beyond the presence of static artifact assemblages and provides an opportunity to examine the Maya-Teotihuacán problem through the lenses of ethnic identity. These pieces of art depict the heterodoxy and/or orthodoxy that the Maya experienced during cross-cultural interaction by representing artistic styles of two cultures on the same piece of art through stylistic juxtaposition. In murals and carved stone monuments the Maya depict themselves in opposition to foreigners and the salient cultural differences they depict represent the Maya perception of Self and Other.

A comparative analysis of representations of Teotihuacán foreigners in Maya

art will not only help us understand how the Maya perceived themselves and others, but may also correspond to Marcus' models of interaction and help explain the degree and nature of interaction on a site-by-site basis. Additionally, this analysis will elucidate the signs, symbols and the material objects the Maya ruling elite used to signify membership in an imagined community that permitted interaction with Teotihuacán and forged alliances between Maya sites.

### **Outline of the Current Work**

In the subsequent chapters, I present and interpret the data from La Sufricaya while comparing it to evidence from other lowland Maya sites and Teotihuacán itself. Chapter II provides background information of the research domain including the geography of the Petén and Holmul region, the site layout and history of La Sufricaya and a discussion of the challenges in categorizing La Sufricaya in terms of traditional site typologies. Chapter III provides an in-depth discussion of the problem of Maya and Teotihuacán interaction and the theoretical framework of the analysis.

Chapter IV reconstructs the occupation and construction history of Structure 1 and includes a comparison of Early Classic Maya and Teotihuacán palaces and elite residences. An analysis of the architectural features of each room provides a foundation for interpreting the function of the complex.

Chapter V focuses on the ceramic evidence from La Sufricaya. The chapter outlines the ceramic chronology of the site, which is the foundation for dating the occupation of La Sufricaya. The results of the INAA analysis conducted on La Sufricaya and Holmul ceramics provides intriguing insights into the regional and

inter-regional connections of the Holmul region. A comparison of the foreign ceramic styles and iconography used in decorative motifs indicates that contact with Teotihuacán may have been more direct than at other Maya sites.

Chapter VI consists of an analysis of the lithic evidence from La Sufricaya. The lithic material provides clues to the activities of the inhabitants of Structure 1, which in turn supports the interpretation of the function of Structure 1. Furthermore, the lithic evidence can be used to understand how La Sufricaya participated in trade networks and sheds light on the role of the elite inhabitants of the site in regional sociopolitical developments. The Pachuca obsidian recovered from the site is compared to evidence from other Maya sites and the obsidian industry at Teotihuacán in order to understand the degree and nature of foreign interaction and imagined community at La Sufricaya.

Chapter VII examines the murals of Room 1 in Structure 1 and offers an interpretation of the rare Early Classic artwork. The analysis of the foreign regalia and iconography includes a comparison to the ways in which Teotihuacanos are depicted by Maya artists and at Teotihuacán in order to determine the degree and nature of cross-cultural interaction at La Sufricaya. This analysis leads to a discussion of the link between ethnic identity, *habitus* and how the practices of Maya and Teotihuacán *habitus* were depicted in art.

Chapter VIII consists of a discussion of the theoretical framework employed in this work. This discussion includes a review of sociopolitical developments in the Maya region and at Teotihuacán in the century preceding the Early Classic period of Teotihuacán influence in the Petén. These developments led to breaks in doxic

knowledge and a rise of self-consciousness that precipitated the formation of an imagined community of Maya lords based on foreign styles and iconography from Teotihuacán. Chapter IX presents the conclusions of this work that summarize the evidence from La Sufricaya pertaining to the research questions and includes some considerations for future research.

### **Significance of the Current Work**

This research is significant on several levels of analysis and represents an original contribution to the field of Archaeology. On the most basic, and significant, level it presents the first comprehensive synthesis of the architectural, ceramic, lithic and iconographic data from La Sufricaya. This information is crucial to recreating the local sociopolitical history of the Holmul region, and presents a point of comparison for development in the area during the Early Classic period. Since unaltered Early Classic architecture is rarely encountered *in situ* in the Maya region, the documentation and interpretation of the palace (Structure 1) at La Sufricaya that this work provides will be a valuable resource to current and future scholars alike.

On an inter-regional level, the research will test models of cultural interaction and examine a new dynamic of an unresolved problem in Mesoamerican archaeology. The evidence from La Sufricaya may provide further details regarding the sociopolitical developments within the central Petén during a crucial period in Maya history. In addition to understanding the processes of foreign interaction at La Sufricaya, this study attempts to address the long-standing problem of interaction between the Maya and Teotihuacán through the interpretive

frameworks of ethnic identity and imagined communities. This approach will examine the issue in terms of the dynamic and complex nature of ethnic identity, which is an improvement over existing archaeological models that do not adequately address the social processes involved in interaction or the effects of foreign influence on individuals.

Finally, since the proposed research applies and tests models of the cross-cultural, elite interaction, the La Sufricaya project could provide a sample study for cross-cultural and inter-disciplinary studies of ethnic identity, the formation of community and the emergence of elite classes. Many of the anthropological and archaeological case studies of ethnic identity formation and transformation are based on colonial contexts in which one group clearly dominates the other. The problem of interaction between the Maya and Teotihuacán and the data from La Sufricaya provides an example of how elements of identity can be transformed while others are maintained during moments of interaction with outside groups.



**Figure 1.1** Map of Mesoamerica (inset) and the Maya region showing locations of the sites discussed in this study (After Martin & Grube 2000 with additions by the author)

Date	Time period	Altun Ha	Copan	Holmul	Kaminaljuy	La Sufricaya	Rio Azul	Tikal	Teotihuacán
-	Late Post-Classic	Uayeb			Chinuatlá			Caban Abandoned	Teacalco
1400			Abandoned						Chimalpa
-				Abandoned					Zocango
1200									
-	Early Postclassic	Abandoned	Ejar		Ayampuc abandoned		Abandoned		
1000									
-	Terminal Classic		Abandoned	Kisim					Atlátongo
800		Pax	Late Coner		Pamplona	Abandoned	Tepeu 3	Eznab	Mazapan
-	Late Classic	Muan	Mid. Coner	Ik-Chuah	Amatle	Ik-Chuah	Tepeu 2	Imix	Xometla
600		Kankin Mac	Early Coner			Chak	Tepeu 1	Ik	Oxtoticpac Metepec
-	Early Classic	Cen	Late Acbi	Chak	Esperanza		HIATUS	Manik 3B	Late Xolalpan
400		Yax	Early Acbi	K'ahk 3		K'ahk 3	Tzakol 2-3	Manik 3A	Early Xolalpan
-		Ch'en	Bijac 2	K'ahk 2	Aurora			Manik 2	Late Tlamimilolpa
200	Terminal Preclassic	Mol		K'ahk 1			Tzakol 1	Manik 1	Early Tlamimilolpa
-		Yaxkin	Bijac 1	(Wayaab)	Santa Clara	Itzamkanak	Chicanel	Cimi	Miccoatli
BC/AD			Chabij	Itzamkanak	Arenal			Cauac	Tzacualli
-	Late Preclassic							Chuen	
200			Sebito						
-		Xul			Verbena		Mamom		
400				Yax Te				Tzec	
-									
600									
-									
800				Ixim				Eb	
-									
1000				K'awil					

**Table 1.1 Ceramic chronologies and occupation periods of sites discussed in the study**



## **Chapter II - The La Sufricaya Research Domain**

### **Introduction**

La Sufricaya (Figure 2.1) has been categorized as a minor center within the Holmul region, which implies that the inhabitants played a subordinate role to the Holmul elites. The characteristics as well as the architectural features of Structure 1 within close proximity to a major site center refute traditional definitions of minor site centers and their role in Maya sociopolitical organization. Archaeologists have come to understand minor site centers as the domains of low-level elites who may have played administrative or ritual roles in the suburbs or hinterlands of larger polities, but scholars assume that these elites possessed little political power of their own. However, the presence of monumental architecture, a ballcourt, carved stela with hieroglyphic text, and mural art inside Structure 1 implies that the elite residents of La Sufricaya Structure 1 possessed esoteric knowledge and a certain degree of power within the Holmul region.

How then, do we interpret La Sufricaya? And what does the site tell us about the political organization of the Holmul region during the Early Classic period? One of the main goals of this work is to interpret the role of La Sufricaya within the Holmul region and in doing so, I consider whether or not it was an autonomous center and examine the activities carried out at the site in order to determine its role in Holmul sociopolitical history.

My intentions in this chapter are to set the stage for the analysis of the material evidence from La Sufricaya. Here I provide a description of the

environment around La Sufricaya as well as an overview of previous research conducted at the site and within the Holmul region. A discussion of Maya site typologies provides comparative case studies and a framework for interpreting La Sufricaya.

### **Description of the region around La Sufricaya**

La Sufricaya is located in the northeastern portion of the department of El Petén, Guatemala (Figure 2.2). This northern region of Guatemala is known as the central Maya lowlands and is located south of Mexico's Yucatan Peninsula and the states of Quintana Roo and Campeche, an area known as the northern Maya lowlands. The Petén is bordered on the west by the Mexican states of Chiapas and Tabasco, on the east by Belize and the south by the Guatemalan departments of Alta Verapaz and Izabal. The Petén, which could be considered the cradle of Classic Maya civilization, was once home to hundreds of thousands (if not millions), of ancient Maya and the location of some of the greatest and largest Maya cities. Now the 200 km by 200 km region (36,033 km<sup>2</sup>), is the site of the Maya Biosphere (a federally protected area), and is sparsely populated with an estimated population of less than 500,000.

Scholars once argued that the semi-tropical climate and environment of the Petén region was not healthy for humans or conducive to the development of civilization (Meggers 1979). While the geology and climate of the region provides challenges to human habitation the ancient Maya utilized every aspect of this diverse environment to create one of the most sophisticated civilizations in human history.

## Natural environment of El Petén, Guatemala

El Petén is located south of the limestone platform of the Yucatan Peninsula. The northern part of the Petén is characterized by karst (porous) and dolomitic limestone with topography ranging from 100-250 m above sea level and characterized by sub-surface drainage. The northeast region where Holmul and La Sufricaya are located is approximately 100 m above sea level (West 1964:71-3).

The location of El Petén south of the Tropic of Cancer in the *tierra caliente* of Guatemala means that the temperature does not change drastically between the summer and winter months. The isthmian character of Central America causes a generally humid climate as oceanic air passes over the narrowed land mass. The Petén is classified as tropical rainy climate with rainfall in every month of the year, but has a short dry period during January through May (Vivó Escoto 1964:188)

The lacustrine drainage system, in the heart of the Petén, is an area of large inland lakes, such as Lake Petén Itza (Tamayo 1964:99). Three major river systems drain from the Petén, including the Rio Hondo, Holmul and Belize River, which served as routes of communication and trade during the Preclassic and Classic periods. The closest of these rivers to the Holmul region is the Rio Holmul, and it is a seasonal river that is dry from January through July when the rainy season begins.

The entire region is filled with *aguadas* (ponds) and *bajos*, which are swampy depressions between slopes that provide drainage and are covered by a lens of clay that retains water. In fact, Landsat imagery shows that 80 % of the region is covered in *bajos*. These *bajos* were important seasonal sources of water for the Maya, since they fill with water during the rainy season, but they also make travel

throughout the region very difficult -as any visitor would attest. Any vehicle larger than a pack mule will quickly become stuck in the mud of the *bajos*.

### Vegetation

The vegetation of El Petén is classified as tropical rainforest, defined as three or four stories of evergreen trees with a dense canopy and growing to a height of 50 m in some areas (Wagner 1964:224). Visitors to this tropical forest may find it inhospitable, full of biting and stinging insects, spiny plants and vines that catch and trip. But it takes a knowing eye to appreciate all it has to offer, including fruit-bearing trees, water-bearing vines, and materials, like *guano* palms, that are perfectly suited to provide shelter in the rain. The *ramón* (*Brosimum alicastrum*) tree is most abundant in the forest and dominates the middle story of the canopy, while mahogany (*Swietenia*), mastic (*Sideroxylon*) and wild fig dominate the upper story (Wagner 1964:228). Although the Petén forests are known as mahogany forests, these trees are not the predominate species. Their great height, which towers over other species, lends to the perception that they dominate the forests; in reality, mahogany is rather scarce (*ibid*).

It is easy to perceive the forest as primordial, unexplored and mysterious, but one must remember that the forest as we see it today has only existed for a thousand years, since it grew over the abandoned cities of the Maya. The Maya clear-cut much of the forest to construct their cities and plazas, and may have also cultivated certain species to meet their dietary and material needs. While the forest may have been tamed for a short period, it quickly reclaimed its territory, but still bears the influence of the hands of men and women.

## Fauna

Central Mesoamerica has a very diverse mammalian population. In fact, according to one scholar, the Petén is one of the most distinct biotic provinces in Central American in terms of diversity of wildlife and asserts that it must have been “a center of considerable evolution” (Stuart 1964:355). Some of the mammal species found in the Petén include howler (*Alouatta*) and spider (*Ateles*) monkeys; the coati or pisote (*Nasua*), represents the raccoon family; jaguar and jagaurundi represent the feline family; the elusive tapir (*Tapirus*) is the only perissodctyl (odd-toed ungulates) found in Central America. White-tailed deer and peccaries represent the cloven-hoofed mammals, and were a staple of the ancient Maya diet. Numerous rodents including squirrels, rabbits, mice, rats and Tepezcuintle (*Cuniculus paca*) inhabit the region, as well as leaf-nosed bats (*Phyllostomidae*), which like to congregate in the dark, cool rooms of abandoned Maya buildings. A cacophony of birds, including toucans and parrots can be found in the Petén. The quetzal (*Pharomachrus mocinno*), which was indigenous to the region and supplied feathers for ancient Maya headdresses and costumes, is now endangered and very rarely seen. The species of reptiles found in the Petén include turtles; lizards, including geckos and iguana; snakes, most notably the *Boa constrictor*, and a poisonous pit viper, the fer-de-lance (*Bothrops*) are commonly found in the forest. The insects and invertebrates found in the Petén are too many to list, but include scorpions, tarantulas, cockroaches, and a number of harmful insects that carry parasites and transmit disease including malaria, leishmaniasis, trypanosomiasis, the beef worm and ticks (Stuart 1964:337).

## The Holmul Region

The Holmul region consists of Holmul<sup>4</sup> (also known locally as La Riverita) as well as several smaller sites, including La Sufricaya, that surround the Late Classic center (Figure 2.3). Since excavation of these sites (including Hahakab, Cival, and Hamontun to the north, K'o, Riverona and T'ot to the south and La Sufricaya to the west), has been limited, the reality of the Holmul region as a sociopolitical unit during the Classic Period remains uncertain. La Sufricaya has been given an individual site name, but it may be another precinct of Holmul. Some of the other sites, such as the Preclassic site of Cival, may have never had social or political ties to Holmul. The entire region is located in the Maya Biosphere Reserve, an area measuring 21,000 square kilometers in the northern Petén that was established in 1990 through an agreement between Mexico, Guatemala and Belize. A 3 by 3 km area surrounding Holmul has been established as the Holmul Parque Arqueológico by the Guatemalan government to protect the site from the loggers and *chicleros* that regularly pass through the area to log timber and collect *chicle*, a rubber-like substance used in chewing gum.

Holmul and the surrounding sites are most easily accessed from Melchor de Mencos, a town that serves as a major border crossing between Guatemala and Belize. The journey from Melchor to Holmul is approximately 35 km and takes roughly 3 hours if the roads are in good condition, but must be traveled by 4 wheel-drive vehicles. The trail ascends escarpments and passes through several *bajos* as it

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<sup>4</sup> The name Holmul has been translated as “House of Ants” or “Ant Hill” (Quintana & Wurster 2001) but in the Yucatec Mayan language “*hol*” means “head” and “*mul*” means hill. In his 1905 map, Maler translates Holmul as “*cerro con entradas*” or “hill with entrances” (Maler 1908: Fig. 8).

skirts the Belizean border. In fact, El Castillo at the site of Xunantunich can be seen from the trail. This portion of the trail is maintained by logging concessions that use heavy trucks and machinery to transport lumber from the forest to Melchor. As a result, the unpaved road is often heavily rutted and occasionally littered with stuck logging trucks after a heavy rain. The trail to Holmul diverges from the main road, which continues to the lagoon and logging camp at Yaloch. From this point, the journey follows a smaller trail ascending N/NW before it enters an 8 km stretch of the Bajo El Jobal. This portion of the trail is often where vehicles become stuck in the mud when the road becomes impassable after even the slightest episode of rain. The trail continues to ascend and crosses several streams before reaching the Holmul campsite and field laboratory located approximately E/SE of the Holmul site center.

Holmul is located on an L-shaped ridge that extends NW-SE approximately 180 m above sea level, and is surrounded by *bajos* to the west, south and east. The geographical coordinates of the site center are longitude 89°: 16': 23"W and latitude 17°: 18': 43" N (Estrada-Belli 2000). The Holmul River, the seasonal river that flows during the rainy season, is located approximately 1 km north of the site.

La Sufricaya is situated 1.2 km southwest from the Holmul site center on top of a hill that fronts a *bajo*, and approximately 8 km east of the Bajo Santa Fé that borders the Tikal area. The geographical coordinates of the site are 89°17.11' and 17°18.25' (Quintana & Wurster 2001:82). Small pyramids and residential groups are visible from the trail from the Holmul site center, and it is apparent that the

entire area between Holmul and La Sufricaya was populated, without a clear boundary between the two sites (Gardella et al. 2004).

The road to La Sufricaya passes through the Holmul site center and past Group II, descends into a small *bajo* then ascends a small hill as it branches from the road that continues to Hahakab and Cival. Vehicles must stop in a clearing near Structure 11 while visitors continue on foot following a path that extends eastward to the site center. Two foot paths also provide access to La Sufricaya from the Holmul site center by foot. One path begins at the northwest corner of Group III near Altar 4 and descends into the lower court and continues past Structure 8 and scattered residential groups before reaching La Sufricaya at the northeast corner of the lower terrace, past Structure 3. Another path begins near Group II and continues through dense forest, past scattered residential groups before arriving at La Sufricaya near the northwestern residential groups.

## **Previous Research**

Teobert Maler first included Holmul, along with the nearby site of Nakum, on a map of the Maya region in 1908 (Figure 2.4); he had heard reports of the site but had never visited the ruin (Merwin and Vaillant 1932). Raymond Merwin and Alfred Tozzer first visited Holmul during an expedition sponsored by the Peabody Museum in 1909. Merwin conducted excavations at the site in 1911 and revisited it in 1914. His excavations focused on the site center of Holmul, especially Building B of Group II, Ruin X and Buildings A and B of the palace in Group III. Merwin's research established the first stratigraphic ceramic sequence in the Maya region and set the standard for subsequent field projects. Merwin's excavations in Building B of



Group II uncovered a number of Protoclassic tombs. The unique polychrome ceramic vessels included in the burial offerings became known as the definitive markers of the Protoclassic ceramic style. Tragically, Merwin died of a tropical illness before he could finish his reports, but George C. Vaillant used Merwin's notes to reconstruct the excavations (unfortunately Vaillant could not produce a site map from Merwin's notes and never visited the site itself), and published a monograph through the Peabody Museum in 1932.

Merwin made no mention of the smaller sites scattered throughout the Holmul region in his reports, and it is safe to assume that he did not visit these sites. William R. Bullard apparently visited the Holmul region during his brief survey of the Northeast Petén during 1958, but did not comment extensively on the area (Bullard 1960). The site, and the region, was forgotten by the academic world until the 1980s and 1990s when rescue expeditions were sent to document the sites. Unfortunately, while the academics may have overlooked Holmul in order to study the larger sites in the area with carved inscriptions, looters were very well aware of the sites within the Holmul region and had 70 years to wreak havoc upon them. Nearly every structure at La Sufricaya has at least one looters' trench cutting into it, which have destroyed architecture, disturbed burials and stolen invaluable information.

La Sufricaya was first visited and reported by Ian Graham in the 1980s. Graham named the site after the trees of the same name that now grow around the ceremonial core. Graham completed a preliminary map of the site and recorded one stela but did not conduct excavations. La Sufricaya was visited in 1998 and 1999 as

part of El Programa de Rescate that visited sites throughout the northeastern Petén with the goal of mapping and documenting the condition of the sites. The project produced a plan and isometric drawing of Group 1 though it is not as detailed and accurate as the map produced by the Holmul Archaeological Project (Figures 2.5 and 2.6). In 1999, Karl Herbert Mayer recorded the GPS coordinates of the site (Quintana & Wurster 2001: 82).

Extensive excavations did not begin at La Sufricaya until 2001 when members of the Holmul Archaeological Project (HAP) re-mapped the site, cleared looters' trenches in Structure 1 and investigated the fallen stelae (Estrada Belli 2001). Team members excavated two residential groups during the following field season, and initiated excavation in Structure 1 as well (Estrada Belli 2002; Tomasic and Estrada Belli 2003). Extensive excavations within Structure 1, which are the basis for this work, began in 2003 under the direction of the author (Estrada Belli and Foley 2004; Foley 2005; Foley 2007).

### **La Sufricaya site layout and history**

La Sufricaya is, for lack of a better name, a minor ceremonial center consisting of a modest ceremonial precinct, including an acropolis, temple pyramid, and stelae surrounded by 21 residential groups of various sizes and degrees of complexity. A ballcourt and second temple pyramid lie outside the ceremonial precinct (see Figure 2.1).

As mapped by HAP, La Sufricaya covers an area of approximately 1,000 by 500 meters, though this boundary is arbitrary rather than a reflection of the ancient territory. The area of human habitation is confined to a 150 m area atop the SW-NE

ridge. The area south of Group 1 (the south-east quadrant of the site map) consists of a steep terrain that is unsuitable for construction. The ceremonial precinct is constructed on top of a broad, platform terrace that measures 131 x 118 meters and raises the ceremonial precinct 3 meters above the natural ground line and the plaza where the ball court and residential groups are situated. The platform terrace of the ceremonial precinct is constructed on a natural rise so that rather than forming a complete square, the eastern and western edges terminate on land formations and a southern side edge was unnecessary. Staircases on the northern face of the terrace provided access to the ceremonial precinct from the lower plaza (Tokovinine 2007, 2009).

The ceremonial precinct is dominated by Platform 1, which abuts a hill. In fact, the natural topography seems to have been incorporated into the construction of the entire ceremonial precinct and served to elevate the sacred from the profane. Platform 1 is 11 meters tall and measures 60 x 52 meters. A massive looters' trench cut through the central north-south axis of the platform and extended approximately six meters into the platform, then upward into Room 1 of Structure 1 before it was consolidated during the 2004 field season. The remnant of a staircase on the northern face of the Platform 1 was visible in the profile of the looters' trench, and presumably provided the main access to the top of the platform. This presumption was tested during the 2007 field season and proved that the staircase was constructed in two phases (Tokovinine 2007, 2008).

Ceramic sherds recovered from the fill indicate that occupation of area around La Sufricaya began in the Terminal Preclassic, though this is based on the

presence of Sierra Red ceramics, and as Callaghan (2005) notes, the use of Sierra Red may have continued in the Holmul region after it was discontinued at other sites in the Petén. In either case, it appears that human occupation of La Sufricaya may have begun during the Terminal Preclassic period, near AD 250 followed by the construction of Platform 1 beginning circa AD 300 (Estrada Belli et al. 2009).

A small acropolis, denominated Structure 1, surmounts Platform 1 and occupies the north-west corner of the platform (Figure 2.7). Structure 1 is actually comprised of several adjoining structures, many of which were vaulted and decorated with murals on the interior walls and at least one was decorated with a molded stucco frieze. All of the murals are in a poor state of preservation and will be discussed in more detail in Chapter 7. Murals 1-3 may depict Maya and Teotihuacán lords assembled for a local political event. Mural 4 is too fragmentary to interpret while Mural 5 appears to include a scene of scaffold sacrifice, perhaps as a component of accession rituals. Mural 6 and 6-North might portray accession rituals and a pilgrimage undertaken by a La Sufricaya lord to obtain symbols of rulership. Mural 7 is a hieroglyphic text that recounts a dedication ceremony carried out by a local lord with the title *chak-tok-wayaab'* (cloud-red-dreaming place) in AD 379. The text and dedication ceremony marks the one-year anniversary of the arrival of *K'awiil* (the Classic Maya Lightning God) to *Mutal* (Tikal) on the day 11 Eb 16 Mak and the last clause of the mural includes the name *Sihyaj K'ahk'* (Estrada-Belli et al. 2009).

During the relatively brief period that it was occupied (AD 350-450) the rooms and structures within Structure 1 were renovated several times (to be

discussed in more detail in Chapter 4). The last residents ritually terminated the complex by removing cache offerings, sealing doorways and white-washing the murals. The rooms were then filled with midden material and rubble, and the entire acropolis was sealed off with a plaster cap, creating a new surface, or blank canvas, atop the platform.

This surface was re-occupied during the Late Classic period by people who built their houses in the courtyard on top of Platform 1. Though the structure probably did not serve the same functions as its Early Classic incarnation, the sacred memory of the platform seems to have been maintained by the later inhabitants, as evident by the many small offerings and Late Classic burials with modest grave offerings uncovered in the area. The fortunes of the Late Classic period residents seem to have diminished, illustrated by the lack of sophisticated construction techniques and modest household objects. A structure comprised of low stonewalls (2-3 courses high), that supported a perishable superstructure was constructed on top of Structure 1 during this period, which may have served some ceremonial functions. A staircase built on top of Structure 1 led to the courtyard of Platform 1 and the residential structures (Structures 146, 148 and 149). None of the other smaller structures on top of Platform 1 have been investigated, which is unfortunate because their date and function could shed light on the Early Classic function of Structure 1.

Structure 2 is the other major feature of the ceremonial precinct. This 4-m high temple-pyramid was bisected by looters' trenches but probably served as an Early Classic tomb, as evidenced by the thick layer of chert flakes in the profile of the

looters' trench. A layer of chert flakes placed over tombs is a hallmark of Early Classic royal burials (Hammond et al. 1996). The inhabitants of La Sufricaya used a vaulted superstructure as a tomb by depositing the remains on the floor of the room then covering the entire structure with construction fill. A circular altar at the western base of the temple also indicates the importance of this structure. A tree has grown over a portion of the altar, and the inscription that it once bore is illegible.

A small ball court lies to the west of Structure 2. It was cursorily investigated in 2001 with the hope of locating a carved ball court marker in the alley. The ball court was thoroughly excavated in 2005, which determined that it was constructed during the Early Classic period (Tokovinine 2005). The presence of this ball court at the site may be an important clue to the role of La Sufricaya within the Holmul region, to be discussed in more detail below.

A second temple pyramid, Structure 3, lies outside of the immediate ceremonial precinct to the northeast of the terrace, and was constructed on the main plaza floor. Lamentably, this temple was also heavily looted but may have also contained an Early Classic tomb (Tokovinine 2005).

Several stela fragments, five of which are carved, have been uncovered at La Sufricaya, and some of these represent the only known dated monuments within the Holmul region (Estrada-Belli et. al. 2001). None of these fragments were discovered *in situ* and excavations throughout the site have failed to locate their original positions. The stelae, reviewed in approximate chronological order, are keys to reconstructing the dynastic history of La Sufricaya and Holmul.

Stela 1 was recovered in three fragments<sup>5</sup> and depicts a lord standing in profile, facing to the viewer's left. The lord wears a headdress and holds an unidentifiable object aloft in the air with his right hand while he cradles another unidentifiable object in his left arm (Figure 2.8). Ian Graham and Peter Matthews first reported this monument in 1985 and Karl Mayer photographed and published it during the El Programa del Rescate operations (Mayer 2001). While Stela 1 does not contain any hieroglyphic text, Grube notes that the pose of the lord is similar to other monuments that predate Baktun 9 (AD 435-830), which stylistically dates the monument to the Early Classic period (Grube 2003).

Stela 2 was found in association with a looters' trench in Structure 2 (Figure 2.9). Though it is not clear how the monument itself was associated with the temple-pyramid and Early Classic tomb, it may have been erected as an altar-stela pair at the base of the structure. Stela 2 does not bear any legible glyphs, nor does it depict a human figure, but has been dated to the Early Classic period based on the scrolls, braid motif and trefoils carved on its face. Traces of red, blue and black paint are preserved on the monument.

Stela 6 is perhaps the most intriguing, and frustrating, monument recovered from La Sufricaya (Figure 2.10). It was discovered broken in several pieces in front of a residential group to the south of the ceremonial precinct. The reassembled pieces form the top of the stela, which was probably carved on both sides. Grube identified seven columns and five rows of glyphs on the main fragment, along with a partial Long Count of 8.17. 9.9. The partial date falls between April 20, 377 AD and

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<sup>5</sup> The top fragment was originally denominated as Stela 1 and the bottom fragment as Stela 8 before Nikolai Grube reassembled the fragments.

March 6, 387 AD, which makes Stela 6 the earliest known dated monument in the eastern Petén. The rest of the text is too eroded to discern except for the glyph in block D3, which could be the name of Sihyaj K'ahk', the Teotihuacán lord named on monuments at several other sites in the Petén (Grube 2003).

Stela 5 is carved on both sides and is comprised entirely of hieroglyphic text. The text is composed of 18 blocks of glyphs arranged in three columns. Grube notes that the unusual number of columns is a trait that Stela 5 and 6 share and may have been a specific characteristic of the La Sufricaya scribes. The text begins with the Long Count 8.19.6.8.5.8 Chicchan 3 Xul or August 6, 422 AD (Figure 2.11). This date is accompanied by an accession glyph and a glyph that could be a title or name of the protagonist. The glyph is similar to the name of a ruler from Naranjo, Ah Wojsal, who ascended to the throne of that site in AD 546.

The presence of so many carved monuments at a relatively modest site is intriguing, especially since they were created during the Early Classic period, a time in which very few sites possessed carved monuments and none from this period have been recovered from Holmul. While the absence of monuments at Holmul may be due to looting or deliberate destruction in antiquity, the stelae of La Sufricaya suggest that the lords enjoyed some autonomy from the Holmul dynasty and possessed enough power to commission and erect their own monuments. On the other hand, if La Sufricaya was not an autonomous site, the stelae indicate that the site was significant for the Holmul ruling elite.

The residential groups flanking the ceremonial precinct to the north and west have been dated to the Late Classic period through excavations and surface



reconnaissance. Two residential groups were investigated in 2002 and revealed vaulted architecture dating to the Terminal Classic period (Estrada Belli et. al. 2002). Based on construction technique and layout, these groups range in size and relative complexity, which in turn suggests a degree of social stratification within the populace of La Sufricaya. Some residences were constructed on top of low platforms while others form modest plaza groups built directly on top of the plaza floor. Test excavations within Group 16, a modest group located to the north of the ceremonial precinct and adjacent to a quarry, revealed an Early Classic plaza floor and Terminal Preclassic and Early Classic ceramics in midden deposits (Foley 2007). This evidence suggests that there was Early Classic domestic occupation outside of the ceremonial precinct. Therefore, it is possible that some of the other residential groups had Early Classic antecedents and that there could have been a substantial population at the site prior to and during construction of the ceremonial precinct.

Several subterranean *chultunes* are placed throughout the site, including within the ceremonial precinct near the base of Platform 1. Most of these *chultunes* have not been investigated, however, one *chultun*, placed within a residential group contained Terminal Classic water jars, indicating that it was used for water storage (Estrada-Belli et. al 2002).

The monumental construction of the ceremonial precinct, molded stucco and mural art that adorns Structure 1 and the carved monuments at La Sufricaya imply that the founder of the site wielded sufficient power to demand corvée labor and enlist specialized craftsmen like scribes, mural and stucco artists. Excavations have only revealed a limited Early Classic population at La Sufricaya, which could have

provided a small workforce, but it seems most likely that the labor force and craft specialists would have been enlisted from Holmul.

### **Discussion of site typologies**

La Sufricaya is an enigmatic site because the area, number and size of structures as well as the relative quality of construction suggest it should be classified as a minor site inhabited by elites who were subordinate to the rulers of Holmul. Other features of the site, however, contradict this classification and correspond to the attributes of a major center. The presence of the carved and dated stelae imply that the elites of La Sufricaya enjoyed a certain degree of authority and independence from the Holmul dynasty, which permitted them to erect monuments commemorating their deeds and status. Furthermore, while ball courts are ubiquitous throughout Mesoamerica, they are typically found at major sites. These contradictory site features underscore the point that La Sufricaya does not easily fit categories of site typologies developed by scholars, which makes interpreting its role and function within the Holmul region challenging.

During his survey of the Petén, Bullard (1960) identified several Minor Ceremonial Centers in the area, which he defined as including one or more pyramidal structures associated with lower buildings arranged around a plaza. While the minor centers typically included range “palace” structures, Bullard noted that these structures were not organized in the extensive compound arrangement found at Major Ceremonial Centers (Figure 2.12). Bullard also observed that none of the Minor Ceremonial Centers he visited contained stelae, altars or ball courts (Bullard 1960:360). Furthermore, Bullard remarked that Minor Ceremonial Centers

presided over a zone of occupation consisting of 50-100 house mounds, similar to a town or township. Major Ceremonial Centers are the nuclei of larger settlement “districts,” and Bullard notes that the settlement may be clustered around the ceremonial core or more spread out, as in the case of Holmul, where settlement (as evidenced by the presence of house mounds) is more dense along the parts of the Holmul River and along the borders of the Bajo de la Chamaca than around the site center (Bullard 1960:368).

In recent years, scholars have dropped the term “ceremonial” from the nomenclature since it limits the scope of functions carried out at the sites and harkens to the period of Mesoamerican archaeology when Maya sites were regarded as empty ceremonial centers rather than as vibrant cities and settings for multitudes of human activity. Scholars have also recognized the shortcomings of Bullard’s rather simplistic three-tiered hierarchy, especially as more sites have been discovered and excavated.

Hammond (1975) created a settlement hierarchy based on nine levels of site sizes located in Northern Belize. The scale of the sites relevant to this study were defined as Level 5 (minimal ceremonial center) and Level 6 (minor ceremonial center) typified by the sites of Santa Rita and Chowacol respectively (Hammond 1975: 41-42)(Figures 2.13 and 2.14). Chowacol is located within the domain of the major ceremonial center Nohmul. Level 5 sites may possess stone monuments if they are within the domain of larger sites. However, sites of neither level are characterized by the presence of ball courts. In fact, Level 7 (small major ceremonial centers like Colha) is the lowest level order of sites in Hammond’s

hierarchy that include ball courts. The sites in the survey area did not possess carved monuments (this may be a factor of looting rather than a reflection of Maya practices in Northern Belize). Aside from speculating that some smaller centers may have provided administrative and ceremonial functions for outlying settlements of major centers, Hammond did not investigate the roles these sites played within the sociopolitical organization of the region. While Hammond's study demonstrates that Maya settlement and social organization is more complex than Bullard's basic typologies suggest, he admits that his hierarchy is specific to the region and would have to be adapted for other areas of the Maya region.

Haviland's (1981) examination of Group 7F-1 at Tikal was designed to test the identification of Minor Centers (according to Bullard's site hierarchy) within the domain of Major Centers. Haviland chose Group 7F-1 from two possible candidates located 1.25 m from Tikal's Great Plaza. Group 7F-1 consists of a temple, range structures and two stela (Stelae 23 and 25), which were moved from the center of Tikal and re-set in the elite residential group (Figure 2.15). The main residence in Group 7F-1 (Structure 7F-32) is similar in layout to Structure 5D-46 on the Tikal Acropolis, which was the residence of the Early Classic Tikal ruler Chak Tok Ich'aak (Great Jaguar Paw).

Through iconographic analysis, Haviland and Clemency Coggins concluded that Group 7F-1 was inhabited by the surviving family members of the deceased (and possibly murdered) ruler who once resided in Structure 5D-46 of the Acropolis. The family's status diminished with the demise of the king and they were banished to Group 7F-1 (Haviland 1981: 106-7). Haviland concluded that the group

was in essence a dower house rather than a Minor Ceremonial Center because the types of activities carried out within the group were limited to household ceremonies such as burials and offerings (Haviland 1981, 2015). The excavations produced no evidence of public religious ceremonies or administrative activities.

A new wave of research focused on understanding rural complexity has shed more light on the diversity of “middle level-settlements” (Iannone & Connell 2003). Once again, the nomenclature has been revised to avoid implications regarding the function and scale of the sites in question. While scholars may agree on the revision of the name, they do not agree on the function, purpose or the sociopolitical and socioeconomic significance of middle-level settlements. Scholars have suggested that middle-level settlements are evidence that 1) the Maya lived in poorly integrated, decentralized states; 2) the Maya lived in tightly integrated, centralized states; and that 3) there were political fluctuations between centralization and decentralization (Iannone & Connell 2003: v).

The studies included in Iannone and Connell’s edited volume demonstrate that the hierarchies constructed by Bullard and Hammond belie the complexity of middle-level settlements. In fact, recent field projects have demonstrated that middle-level settlements do contain stelae, altars, ball courts and causeways and the presence of these features contributes to the overall variability of this settlement level. In reality, there is no consistent pattern in form or context of these sites and they break the mold created by previous settlement hierarchies (Iannone and Connell 2003:2). Furthermore, these studies have demonstrated that the inhabitants of middle-level sites were involved in a range of activities and some of

the sites may have been autonomous or semi-autonomous. Some scholars have suggested that certain middle-level settlements served as the settings for administrative, ritual and economic institutions and their facilities that were dispersed throughout Maya realms (Chase and Chase 2003; Connell 2003; Iannone 2003; Tourtellot et al. 2003).

The main problem with previous settlement pattern studies and site typologies is that they relied primarily on site size and architectural components to categorize various levels of settlement and predict relationships between sites. These studies also assumed a hierarchical relationship between paramount and middle-level settlements and could not account for variability in settlement characteristics or relationships. Recent analyses have suggested that models based on heterarchical as well as hierarchical relationships may enable a better understanding of the diversity evident in middle-level settlements and their relationships with larger polities. In terms of settlement patterns, heterarchy is a system of organization based on variables that can be ranked in a number of different ways (Iannone and Connell 2003; Schortman and Urban 2003).

Therefore, in heterarchical analyses of settlement patterns, an array of variables must be considered when describing, comparing and interpreting middle-level settlements. Some of these variables include site size, function, and the wealth, power and autonomy of the residents of middle-level settlements (Schortman and Urban 2003: 132-33). Studies along these lines have examined archaeological correlates such as architectural forms, construction techniques, presence of exotic items, mortuary practices and ceramic forms, among others, to examine

heterarchical variables and interpret middle-level settlements (Iannone 2003; Connell 2003; Yaeger 2003). This approach allows for heterogeneity in settlement and political organization and results in robust interpretations of ancient Maya settlement and political organization.

## **Conclusion**

Within the confines of earlier site typologies, La Sufricaya may be called a Minor Ceremonial Center according to Bullard, or a hybrid of Hammond's Level 6 and Level 7 (because it does not conform to either site type), but it certainly does not conform to the definition as outlined by Bullard since it exhibits many of the features of a Major Ceremonial Center. The difficulty in categorizing La Sufricaya according to these settlement typologies underscores their futility. This begs the question of how to accurately define and interpret La Sufricaya – the presence of a ballcourt, carved stelae and an altar suggest it could be a Major Ceremonial Center in its own right, but the proximity and hieroglyphic connections to the Holmul rulers, and the probable dependence on the Holmul populace and craft specialists suggest it was a Minor Center/middle-level settlement or perhaps an ancillary group of Holmul. It is interesting to note that Bullard was aware of Holmul while conducting his survey, though his reports do not include any mention of the site. He does not mention the existence of La Sufricaya at all; perhaps he would have been forced to revise his categorizations of Petén settlement had he visited the site.

La Sufricaya may be best described as a Minor Ceremonial Center within the Holmul region. Bullard acknowledges that Minor Ceremonial Centers may be located within 1 km of a Major Ceremonial Center when domestic settlement around

the Major Center is quite dense (Bullard 1960:369). This is certainly the case of Holmul and La Sufricaya as evidenced by the nearly continuous settlement between the two centers. But Bullard also recognizes that it can be difficult to distinguish Minor Ceremonial Centers from architecturally independent outlying groups of a Major Center (ibid). Though La Sufricaya has been called a Small or Minor Ceremonial Center in the literature (Estrada-Belli 2000, 2001, 2002, 2003, 2004, 2005; Estrada-Belli et al. 2009; Foley 2005; Tomasic & Estrada-Belli 2004), it may be more accurate to label it an outlying or ancillary group of Holmul.

Following more recent settlement pattern analyses, the subsequent chapters examine the architectural, ceramic, lithic and iconographic evidence from La Sufricaya in order to identify the activities carried out by its residents. These materials can also shed light on the relative wealth and status of the La Sufricaya elite. This analysis will in turn provide a basis of comparing La Sufricaya to other middle level settlements and interpreting its relationship to Holmul and its role in the sociopolitical structure of the Holmul region. Several interpretations of La Sufricaya have been posited during the course of excavation (Estrada-Belli 2003, Tomasic and Estrada Belli 2004; Foley 2005). The current understanding of the site is that it was the location of the Holmul dynastic seat of power during the Early Classic period with Structure 1 serving as a royal palace (Estrada-Belli et al. 2009). The analysis presented here supports this interpretation and illustrates the evidence that led to this conclusion.



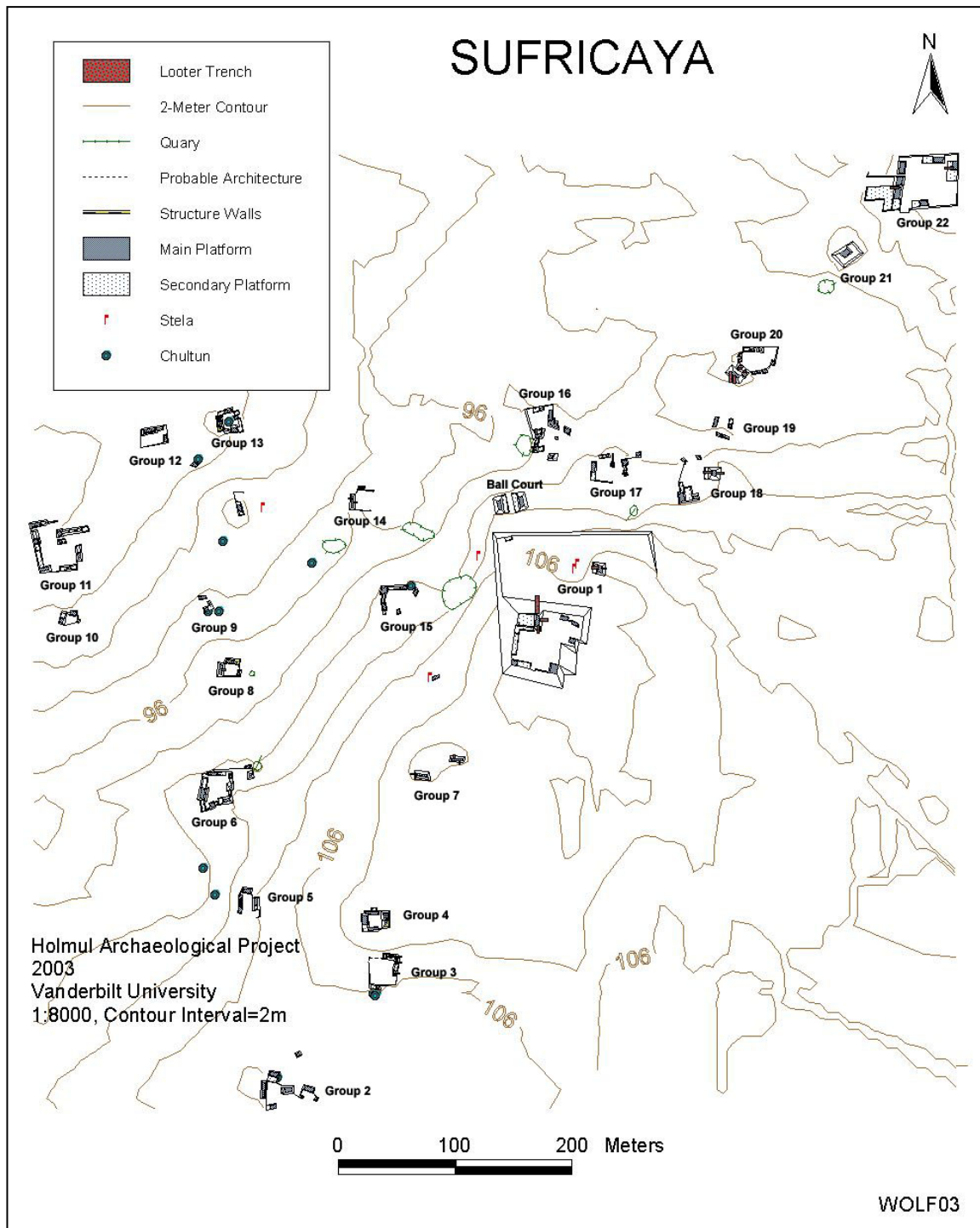
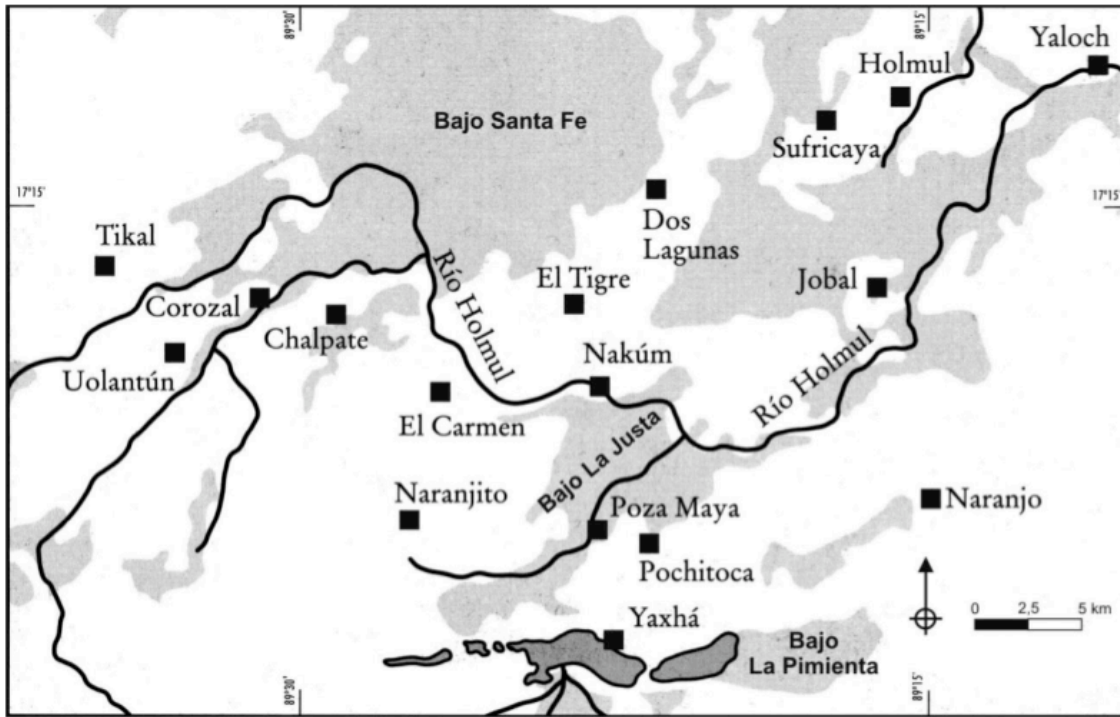


Figure 2.1 Site plan of La Sufricaya by Marc Wolf



**Figure 2.2** Map of the eastern Petén showing the location of La Sufricaya in relation to other sites and geographical features (After Kozskul et al. 2008: Fig. 1)

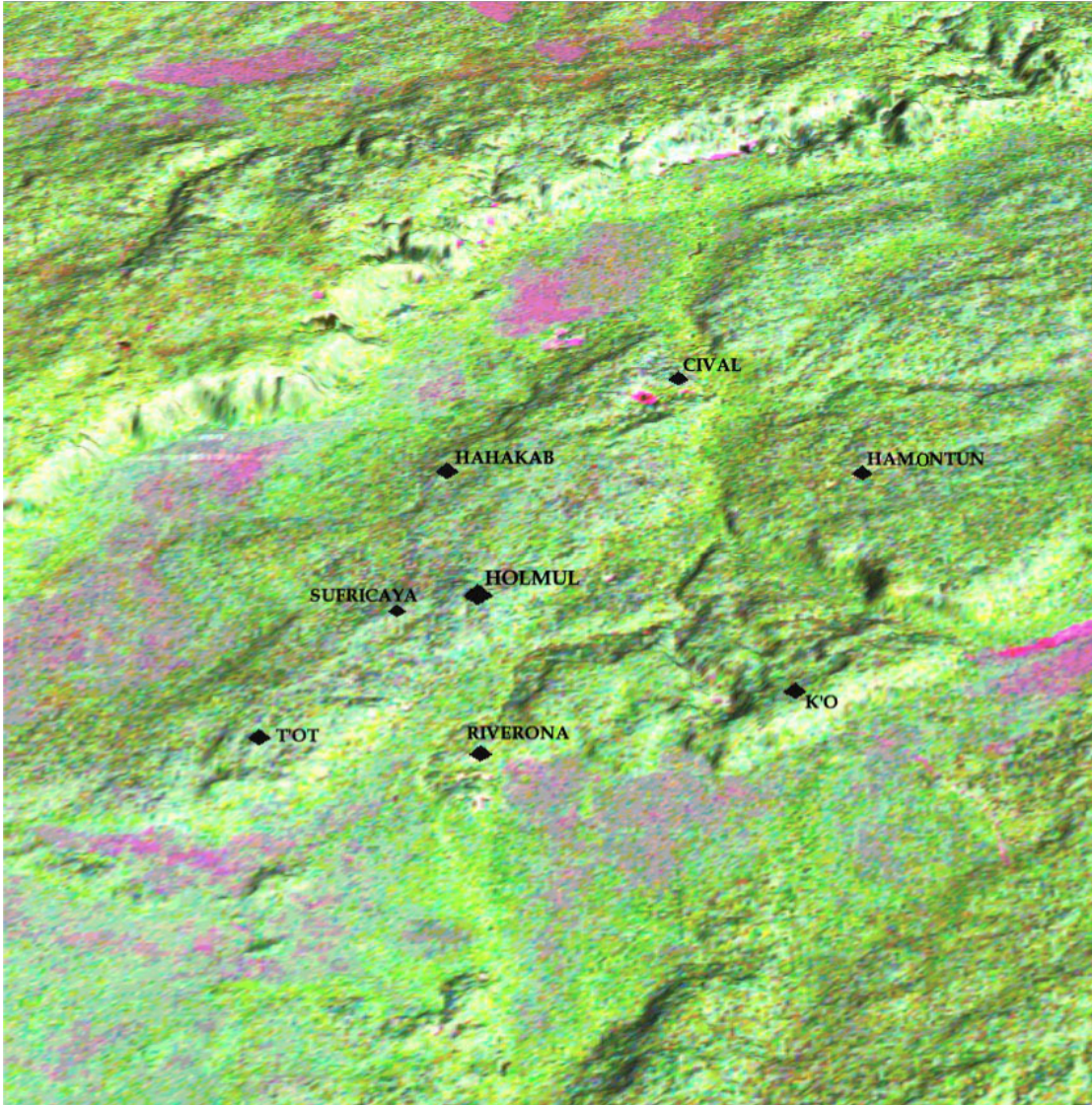


Figure 2.3 GIS map of the Holmul region by Francisco Estrada-Belli

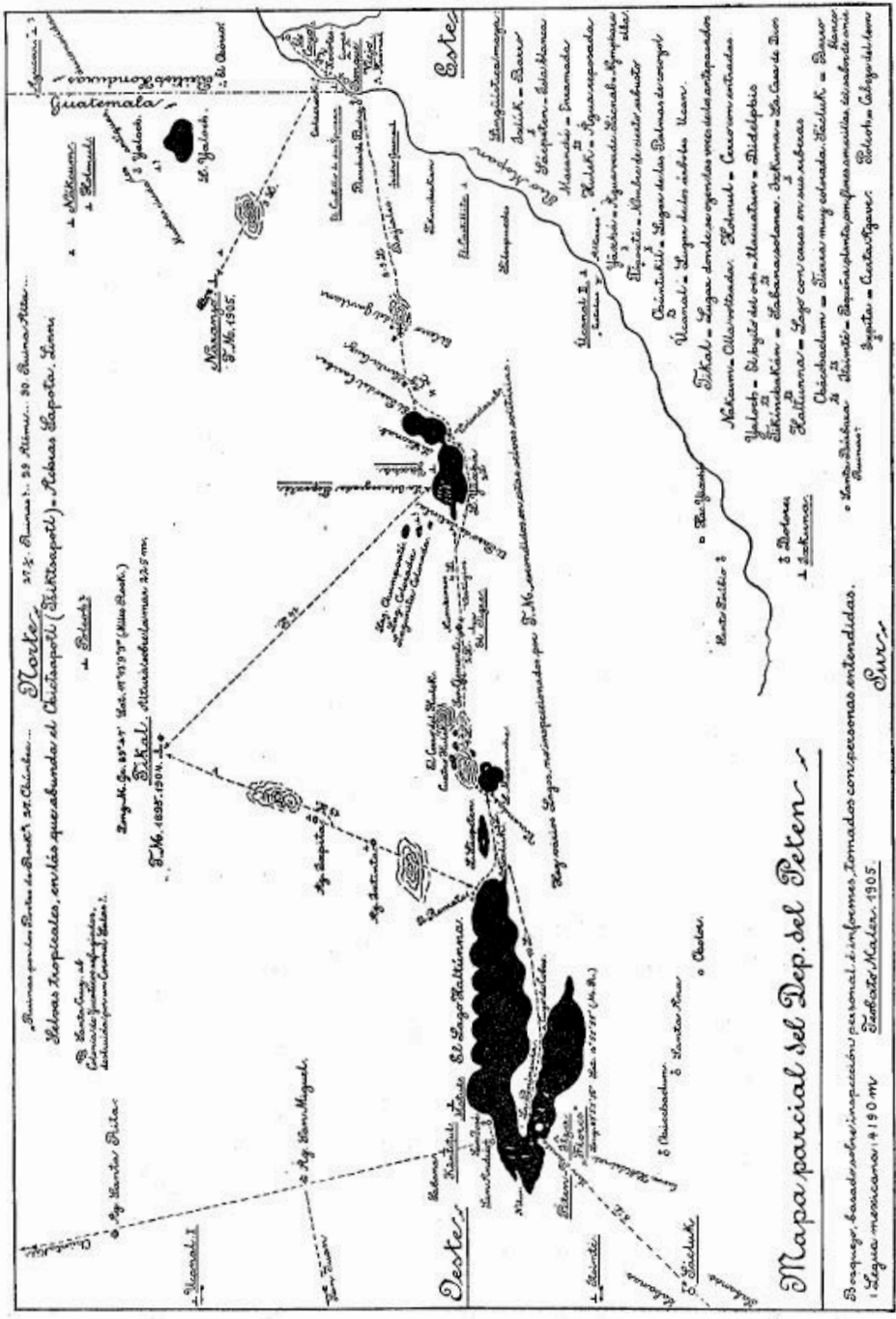
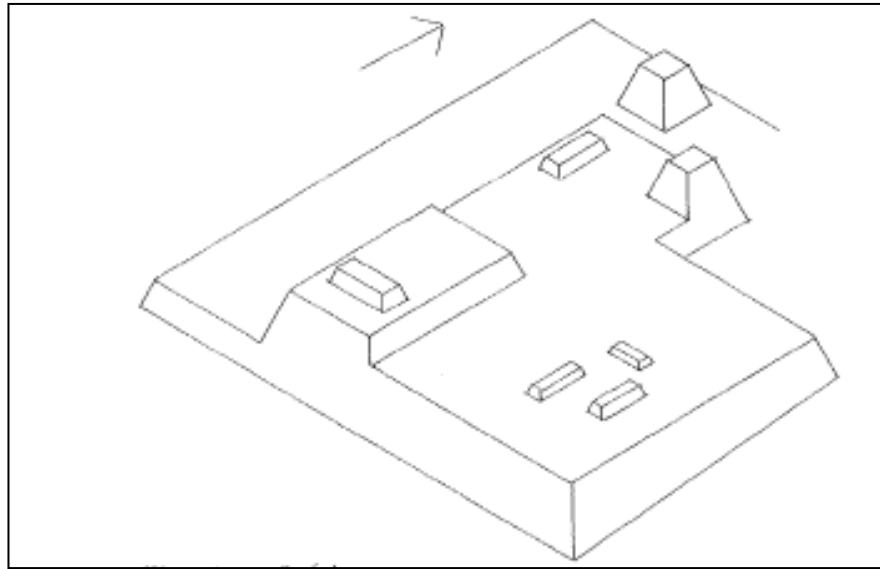
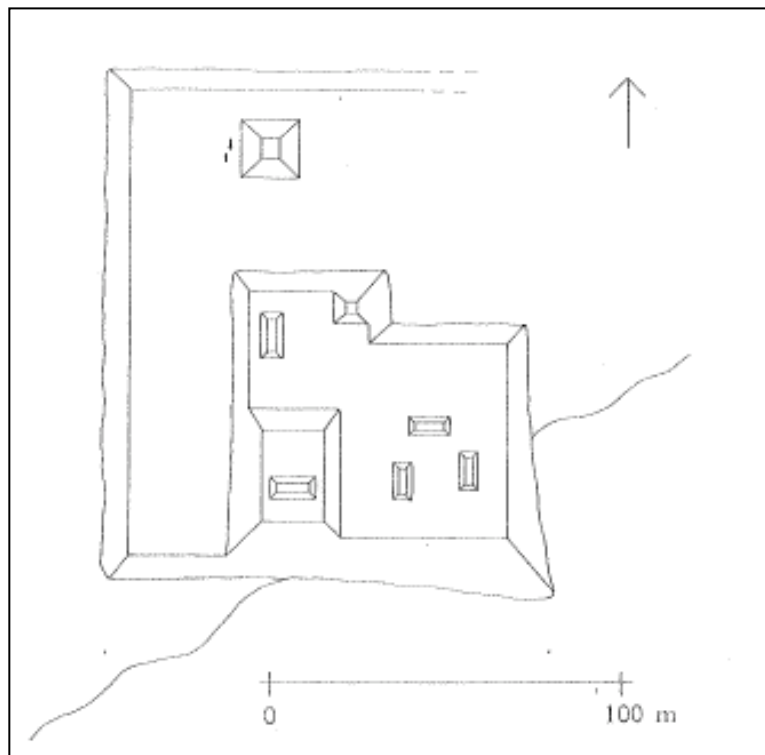


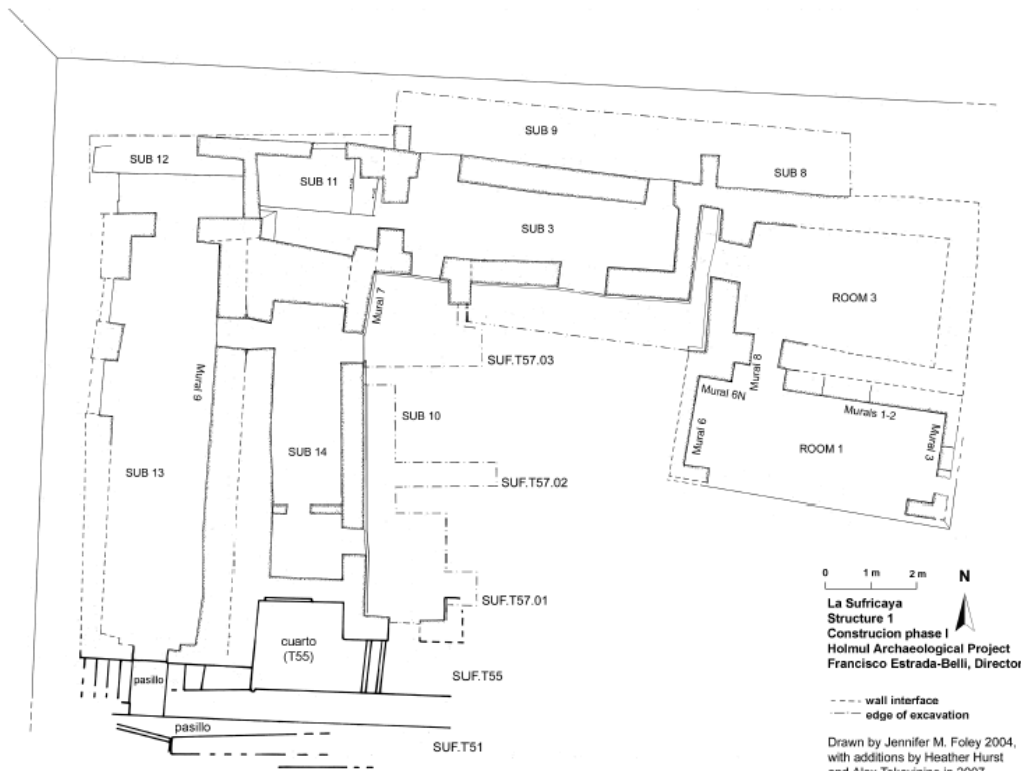
Figure 2.4 Maler's sketch map of the central Petén produced in 1905. Note the location of Holmul in the northeast quadrant (After Maler 1908: Fig. 9)



**Figure 2.5** Isometric plan of La Sufricaya Group 1 created by El Programa de Rescate in 1998. The cardinal orientation of the group and location of Structure 1 are incorrect. (After Quintana & Wurster 2001: Fig. 125)



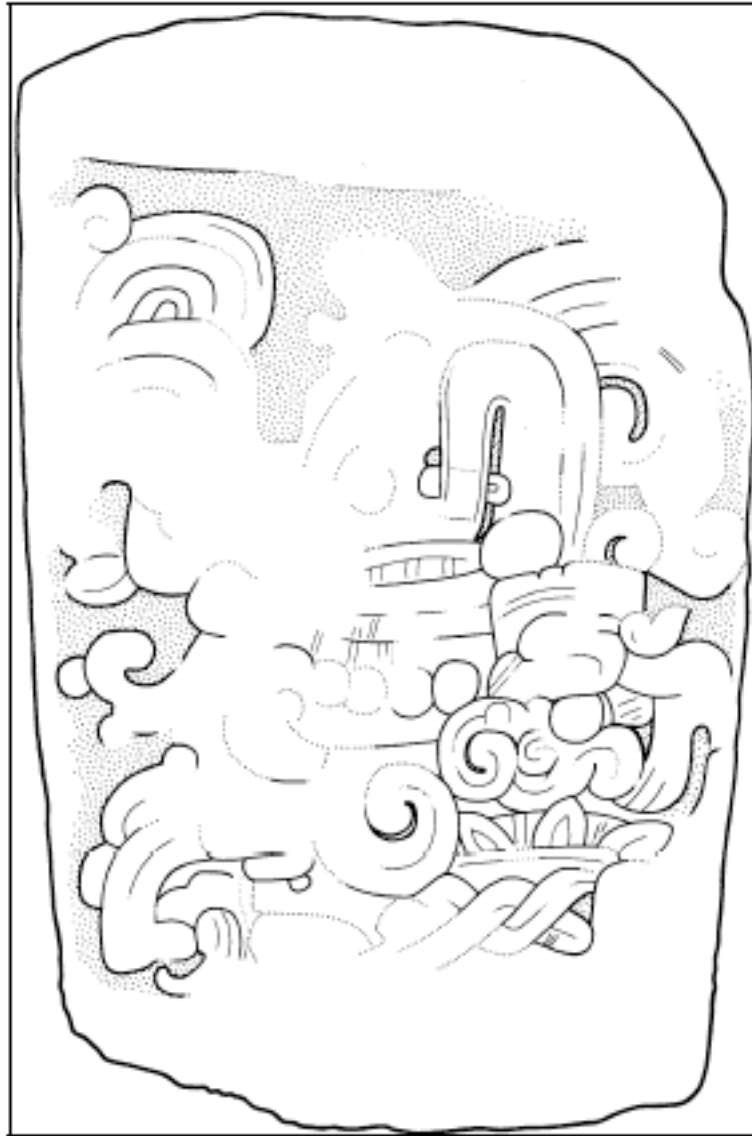
**Figure 2.6** Plan of La Sufricaya Group 1 created by El Programa de Rescate in 1998. The plan as drawn is oriented to the west instead of to the north. (After Quintana & Wurster 2001: Fig. 126).



**Figure 2.7 Plan of La Sufricaya Structure 1 drawn by the author with additions by H. Hurst and A. Tokovinine**

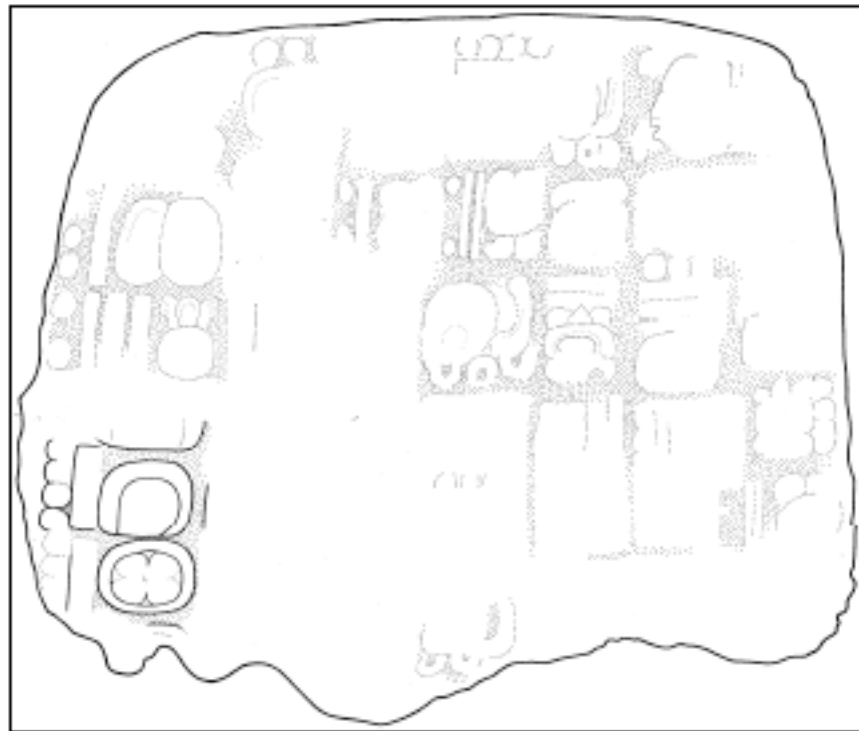


**Figure 2.8 Drawing of La Sufricaya Stela 1 by Nikolai Grube (After Grube 2003: Fig. 1)**



**Figure 2.9 Drawing of La Sufricaya Stela 2 by Nikolai Grube (After Grube 2003: Fig. 2)**





**Figure 2.10 Drawing of La Sufricaya Stela 6 by Nikolai Grube (After Grube 2003: Fig. 4)**

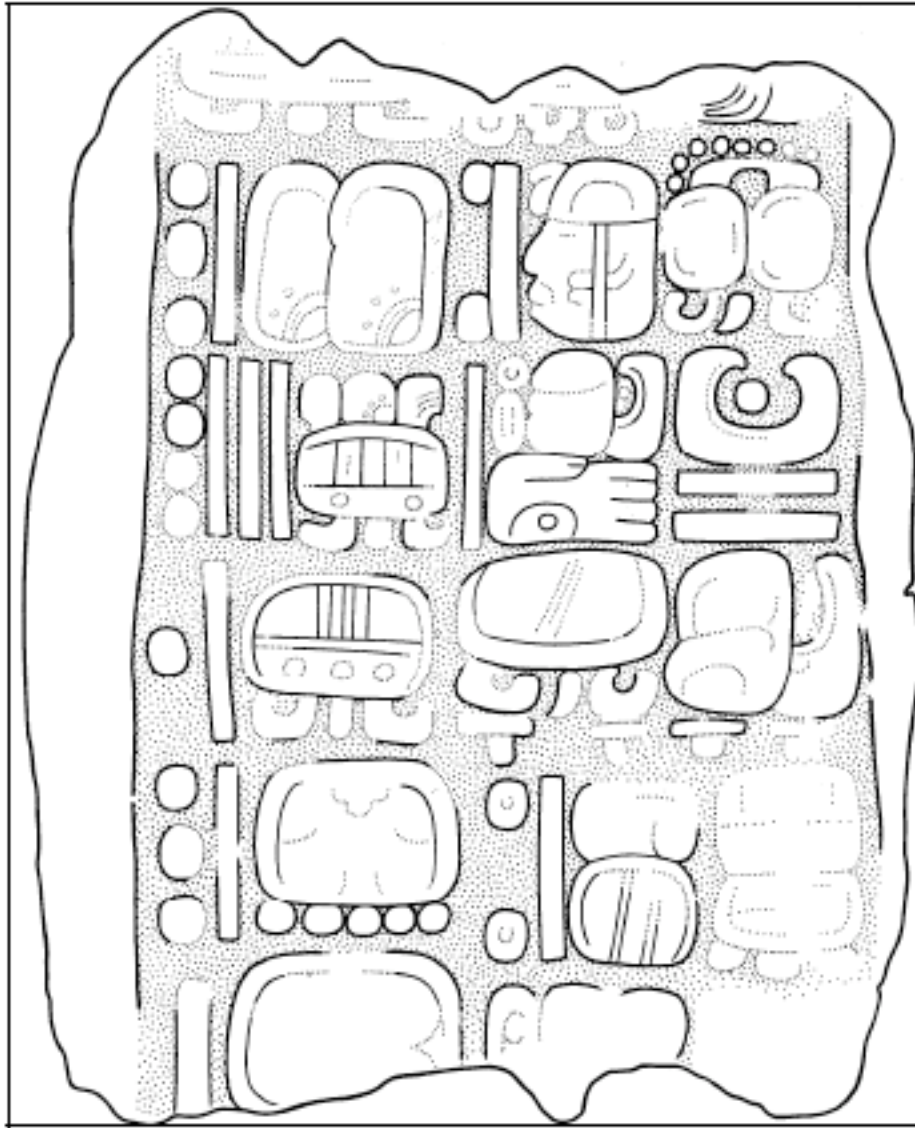
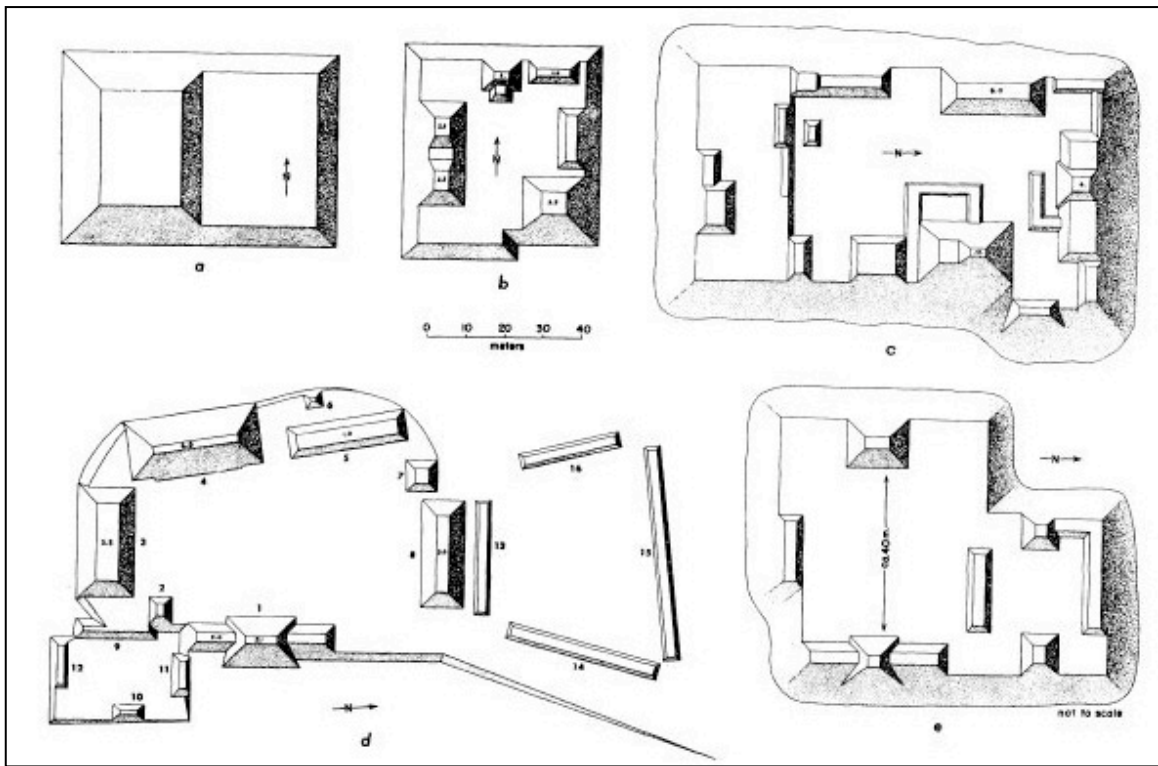
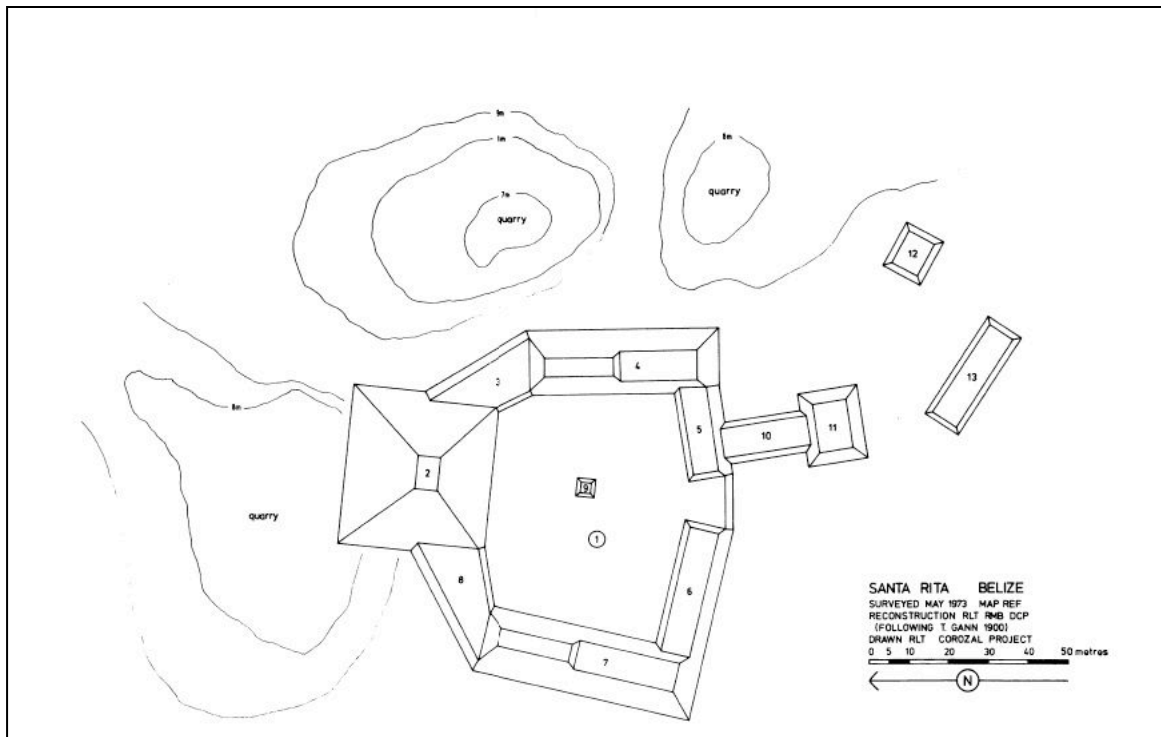


Figure 2.11 Drawing of the front face of La Sufricaya Stela 5 by Nikolai Grube (After Grube 2003: Fig. 3a)



**Figure 2.12** Examples of ancient Maya sites classified by Bullard as Minor Ceremonial Centers. *a* La Flor; *b* Dos Aguadas Group F-1; *c* Dos Aguadas Group B-1; *d* Yaxhá Hill; *e* El Venado (After Bullard 1960: Fig. 3)



**Figure 2.13 Plan of Santa Rita, an example of Hammond's Level 5, minimal ceremonial center site category (After Hammond 1975: Fig. 4)**

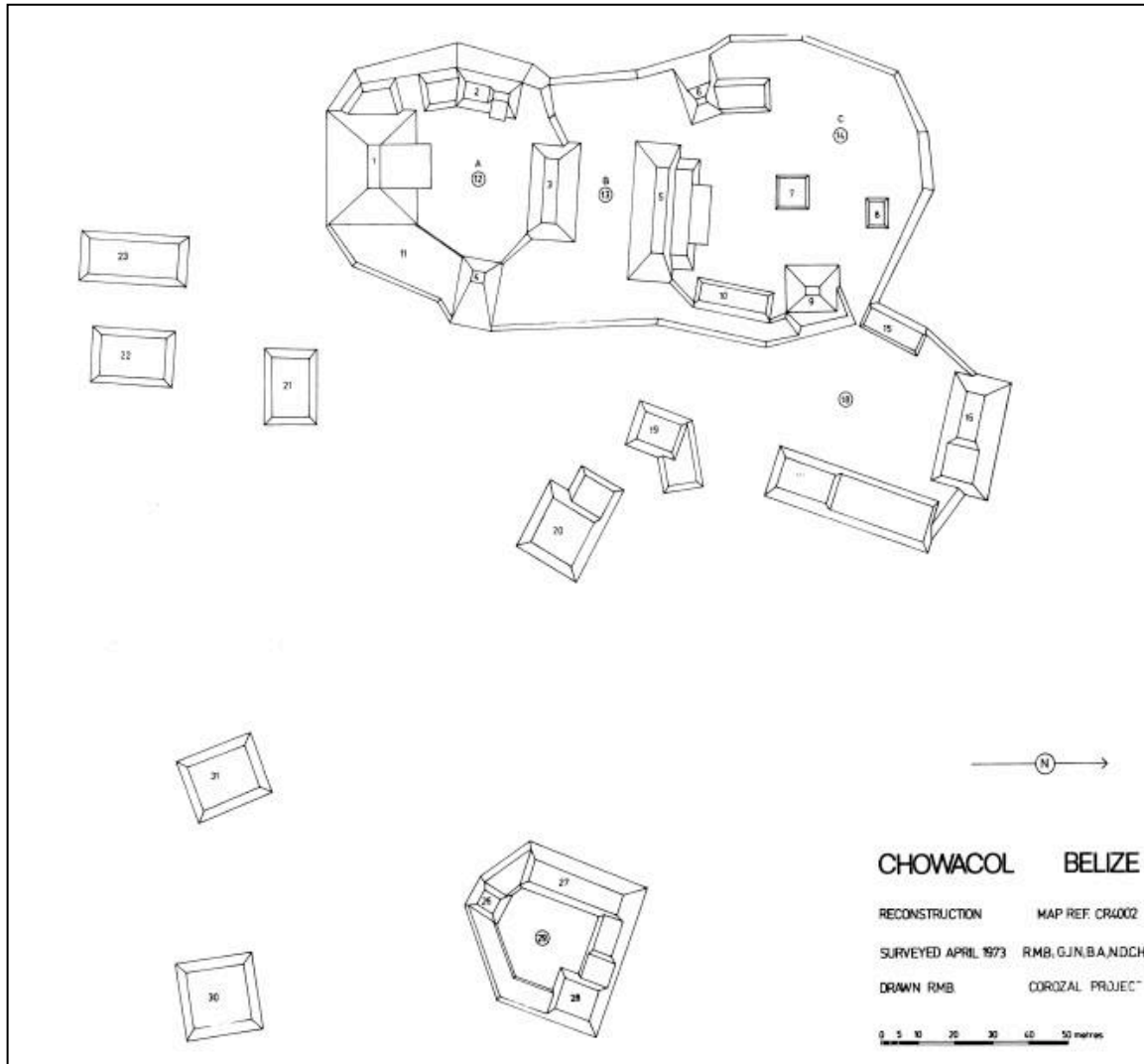
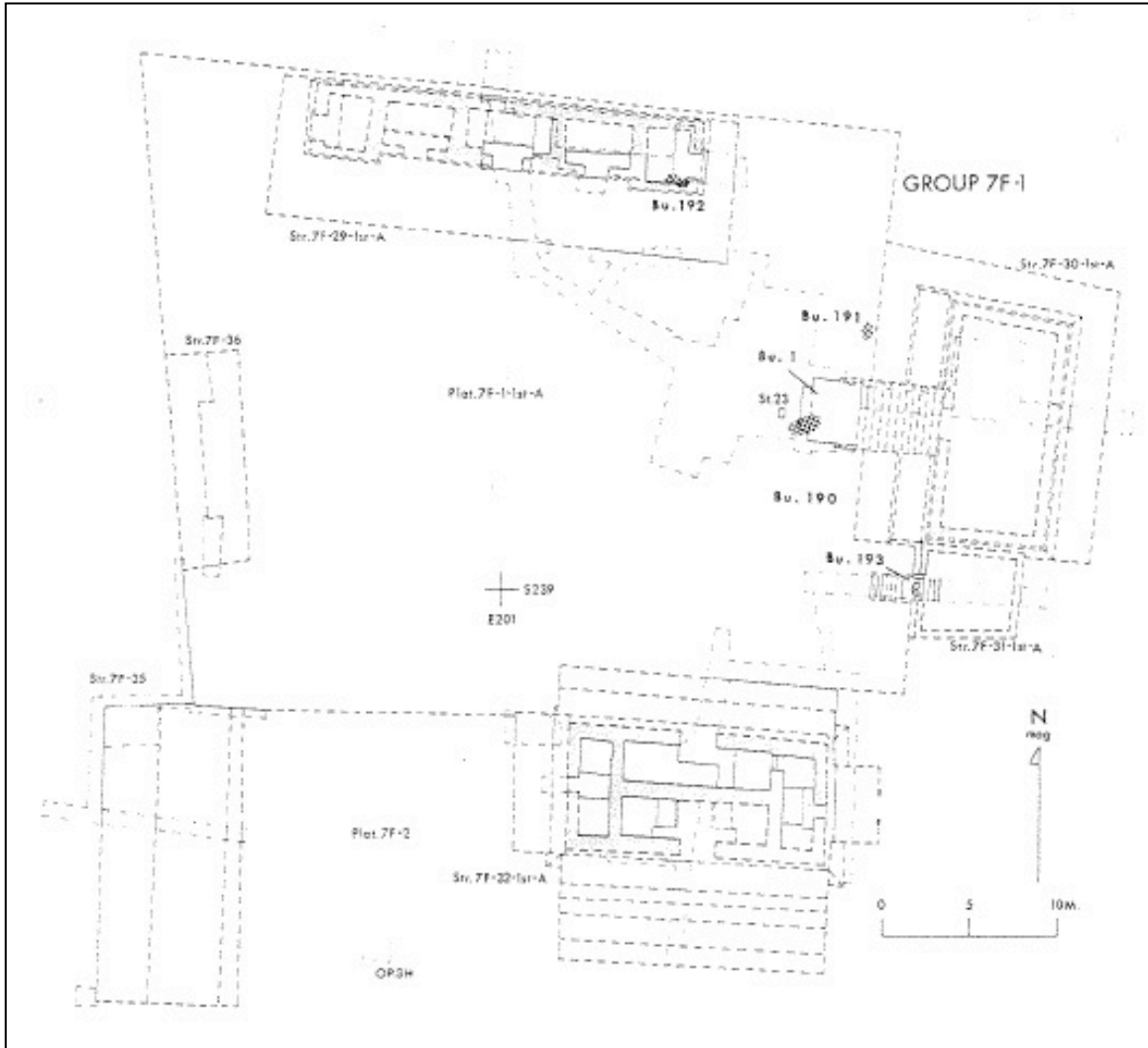


Figure 2.14 Plan of Chowacol, an example of Hammond's Level 6, minor ceremonial center (After Hammond 1975: Fig. 5)



**Figure 2.15 Plan of Tikal Group 7F-1, a minor center interpreted as a dower house (After Haviland 1981: Fig. 5)**

## **Chapter III - The Problem of Maya-Teotihuacán Interaction**

### **Introduction**

Generations of Mesoamerican scholars have debated the nature and impact of cross-cultural interaction between the Maya and the central Mexican site of Teotihuacán. Excavations at sites throughout the Maya lowlands and highlands, as well as at Teotihuacán itself, have revealed tantalizing tidbits of evidence that have led to numerous theories and models regarding this interaction. Though the overall picture has come into better focus, little progress has been made toward resolving the questions of why and how interaction occurred, since the lines of evidence are so varied and much of the circumstances and processes of interaction remain unknown.

What is for certain is that during the late 4<sup>th</sup> through 6<sup>th</sup> centuries, heavy interaction between Teotihuacán and various Maya sites occurred (Figure 3.1). Some scholars referred to this timeframe as a Teotihuacán horizon because Teotihuacán influence (in the form of architecture, art, iconography, ceramics and Pachuca obsidian) was seen to extend throughout Mesoamerica during this period, which coincided with the apogee of the size and power of Teotihuacán before its decline began in AD 550. Many scholars also regarded these centuries as a period of Teotihuacán hegemony, which resulted in Teotihuacán-controlled trade systems and Maya secondary state formation through the oversight and influence of enclaves of Teotihuacanos installed at sites throughout Mesoamerica and the Maya region

(Borhegyi 1956; Cheek 1977; Kidder, Jennings and Shook 1946; Sanders and Price 1968).

The debate concerning interaction between the Maya and Teotihuacán has centered primarily on the degree and nature of the interaction. Scholars have also argued over the duration of the political, social and economic exchanges between the two regions as well as how active or passive the role of the Maya were in the cross-cultural interaction (Braswell 2003). The two sides of the debate have become dichotomized into “externalist” vs. “internalist” models of interaction. Essentially, the externalists argue for an overt and physical presence of Teotihuacán in the Maya area through military conquest or political domination (Adams 1999; Borhegyi 1956; Brown 1977; Cheek 1977; Sanders & Price 1968; Santley 1983). Some externalists go so far as to argue that Teotihuacán influenced secondary state formation among chiefdoms in the Maya region. On the other side, the internalists argue that interaction took place in the form of trade and other diplomatic means and the foreign Teotihuacán styles found at Maya sites are actually local appropriations of Teotihuacán political, economic and military ideology to enhance or legitimate elite power, and that Teotihuacán did not play a role in Maya political development (Berlo 1983; Demarest & Foias 1990; Schele & Freidel 1990; Stone 1989).

As excavation continues at the sites that originally produced the evidence of Teotihuacán interaction, and throughout the Maya region, we are gaining a better understanding of local processes of sociopolitical development, which has shown that Maya state formation began well before the period of Teotihuacán influence. In



some cases, continued excavation has also shown that the foreign styles attributed to Teotihuacán interaction were not so foreign after all and actually had local antecedents (Braswell 2003; Laporte 2003). Other studies have demonstrated that the artifacts, and people, that were originally identified as imports from Teotihuacán actually had local origins (Buikstra et al. 2004; Reents-Budet et al. 2004, 2006; Valdés & Wright 2004; Wright et al. 2010).

These new lines of evidence have necessitated the revision of the existing models and theories regarding cross-cultural interaction, in some cases disproving these models altogether, and have also generated new insights into the problem. Scholars have come to recognize that a single model or theory does not explain the myriad instances of cross-cultural interaction documented by archaeological evidence. Following Marcus (2003), scholars now recognize that several models may be appropriate and that interaction between the Maya and Teotihuacán occurred at various sites in different ways for different reasons.

The following is a review of the evidence for Maya-Teotihuacán interaction during the Early Classic period and the models and theories that have been developed to explain and interpret the evidence. The review focuses on the sites that have produced the bulk of information, namely Kaminaljuyú, Tikal and Copán and traces the development of our current understanding of cross-cultural interaction at these sites. The evidence from Uaxactún, Río Azul, El Peru/Waka' and Altun Ha are also included in this chapter; however, the amount of published information about these sites is not equal to our knowledge of the three larger sites. While evidence for culture contact between Teotihuacán and the Maya has been

recovered from a number of other sites in the Petén, northern Maya lowlands and the highlands and Pacific Coast of the Maya region, I have not included that evidence in this analysis because the interaction does not date to the same time period and/or the evidence is not based on the same archaeological correlates as those found at La Sufricaya.

This chapter also presents a new model for understanding the impact of cross-cultural interaction between the Maya and Teotihuacán based on the framework of ethnic identity and attempts to explain the impetus for the adoption of foreign styles throughout the Maya lowlands during the Early Classic period through the formation of an imagined regional elite community.

## **Background**

As members of a culture area, the ancient civilizations of Mesoamerica shared many cultural traits such as pyramid architecture, ritual blood-letting and sacrifice, diets based on maize, beans and squash, ancestor veneration and the ballgame, despite being adapted to diverse environments. These cultural similarities permitted mutually beneficial cross-cultural interaction through trade, political and marriage alliances, but also precipitated less benevolent forms of interaction such as warfare, conquest and slavery.

## **Teotihuacán**

Archaeologists have recognized that interaction took place between the Maya and Teotihuacán since some of the earliest large-scale excavation projects took place in the Maya region in the 1930s. For decades, scholars interpreted this

interaction as a cultural horizon that spread from the awe-inspiring city of Teotihuacán and contributed to secondary state development of other civilizations throughout Mesoamerica. This one-sided interpretation of archaeological evidence is perhaps the result of scholars' own impressions of Teotihuacán as a singularly powerful civilization. The Aztecs referred to Teotihuacán as the place where gods are born and scholars have followed suit in their reverence for the site (Boone 2000: 372; Sahagún 1959-1972).

Teotihuacán is indeed an awe-inspiring place, covering 20 square kilometers and comprised of a central area dominated by the Moon Pyramid, the Pyramid of the Sun (63 meters high), the Temple of the Feathered Serpent, the Ciudadela and the Avenue of the Dead, which extends for 2.5 kilometers through the central precinct (Figure 3.2). Teotihuacán was a highly organized urban state, laid out in a grid pattern and its populace housed in state-sponsored apartment compounds that were divided into distinct *barrios* inhabited by people who had immigrated to the city from regions throughout Mesoamerica. At its apogee in the Xolalpan phase (AD 350-500), it was the sixth largest city in the world and home to an estimated 125,000 people (Millon 1993). The Teotihuacán state controlled the people and resources of the entire Valley of Teotihuacán in the northeast portion of the Basin of Mexico and established trade networks in other regions of Mesoamerica, yet it never developed into an empire.

The Valley of Teotihuacán is situated on a high plateau, 2,250 meters above sea level, in central Mexico. The region is characterized by a temperate, semi-arid climate and, deep alluvial soils, a system of shallow lakes at its center and many

adjacent springs. The Valley of Teotihuacán possessed abundant subsistence resources, including obsidian deposits, and was intensively settled by the second century BC. Most of the valley was de-populated in the first century AD, when 85% the populace was moved, perhaps by force or coercion, into the urban center of Teotihuacán (Sanders et al. 1979).

The monumental construction of the Pyramid of the Sun began at the end of the Tzacualli phase (AD 50-150) and it was placed above, and centrally aligned with, a sacred cave representing a place of origin (Heyden 1975). The entire ceremonial core reflects the natural and sacred landscape, including the Avenue of the Dead and the Moon Pyramid, which are oriented to Cerro Gordo and represent the original ritual and religious focus of the city.

Later, during the Miccoatl phase (AD 150-225), the ritual focus of the city was shifted to the south when the Ciudadela complex was constructed. The Feathered Serpent Temple, the latest of the three pyramids, was constructed in the Ciudadela complex around A.D. 200-250 during the transition from the Miccoatl to Early Tlamimilolpa phases (Sugiyama 2005). The Ciudadela may have once served as the royal residence of the Teotihuacán rulers and the Great Compound lies across from it, which may have been the market and bureaucratic center of the city (Cowgill 1983, Millon 1993). Factional competition within the sociopolitical structure of Teotihuacán may have contributed to the decline of the city, which began in A.D. 550 and culminated in the deliberate, fiery destruction of the Ciudadela and most of the structures along the Avenue of the Dead (R. Millon 1988).

The religion of Teotihuacán celebrated a pantheon of at least eight gods including two or three goddesses (Paulinyi 2006). The Storm God (commonly referred to by the name of a similar Aztec god, *Tlaloc*) was a principle deity in the Teotihuacán pantheon and one that came to be revered by other Mesoamerican groups (Cowgill 2015; Paulinyi 2006). The Storm God frequently appears in murals throughout Teotihuacán and is the only deity depicted in profile (all other deities appear in frontal view) and is associated with the elite and warfare (Pasztory 1993:58). The depictions of the Storm God in profile may actually be representations of ritual actors or impersonators rather than the deity (Annabeth Headrick personal communication 2017). The Storm God has several distinctive features, which make him recognizable throughout Teotihuacán and Mesoamerica: eyes encircled by rings or “goggles”, curving upper lips with fangs and a bifurcated tongue (Pasztory 1974).

The sociopolitical structure of Teotihuacán may have been organized around a corporate model of governance. Pasztory (1992) proposed this model based on the lack of royal portraiture in Teotihuacán art as well as an overall de-emphasis on individual identity. Pasztory suggests this artistic style may have been a strategy of the state aimed at integrating Teotihuacán society and promoting a collective state ideology. Millon (1993) points out that although richly attired individuals are portrayed in the murals (found throughout the city in both public and domestic contexts) of Teotihuacán, they are not depicted in positions of dominance over others. Headrick (2007) refined the corporate model by arguing that several smaller

corporate entities based on the office of the ruler, lineages and military solidarities were integral to the governance of the Teotihuacán state.

The art and monumental architecture of Teotihuacán were designed to reinforce state ideology and the role of the individual to work for the benefit of the state, which in turn ensured the benefit of all (Headrick 2007). This ideology was based in part on sacrifice to the gods, depicted in numerous murals portraying priests making offerings to the deities by scattering or sprinkling precious items like shells and jewels. Sacrifice at Teotihuacán also took the form of blood, heart and human sacrifice, as illustrated in murals depicting warriors and priests carrying knives with sacrificial hearts impaled on the tip, and murals that depict animals consuming hearts. The murals depicting animals and hearts have been interpreted as metaphors for heart sacrifice (C. Millon 1988) or depictions of ritual cannibalism (Headrick 2007:84-5). The art of Teotihuacán suggests that human sacrifice was practiced in various forms, and excavations within the Feathered Serpent Pyramid revealed that it was practiced on a massive scale as well, when over 200 individuals were sacrificed and interred inside the temple during complex dedication ceremonies (Sugiyama 2005:224). Militarism and warfare were also integral components of the state ideology and were depicted in murals portraying warriors of various military orders and in the sculptural façade of the Feathered Serpent Pyramid. At Teotihuacán, the Feathered Serpent embodied sacred warfare and sacrifice (Sugiyama 2005:84; Taube 1992).

Teotihuacán developed relationships with a number of regions throughout Mesoamerica. These relationships seem to have been mainly based on trade,

nevertheless, contact with Teotihuacán had profound economic, ideological, cultural and even political impacts on other groups (R. Millon 1993). While we do not know exactly how the Teotihuacán state forged these alliances, Clara Millon (1973) suggested that emissaries of a particular social rank, perhaps warrior priests, and associated with the Storm God, established foreign relations. These emissaries or ambassadors wore a distinctive headdress, the “tassel headdress,” which signified their role and status and appears in art in the Maya region and Monte Alban (C. Millon 1973:305). Sanders (1977) later proposed a model based on the Aztec *pochteca*, who were a traveling merchant class that acted as spies on behalf of the Aztec empire. Sanders applied this model in particular to Kaminaljuyú, arguing that Teotihuacán merchants established a colony at the site in order to control trade networks for the central Mexican state.

Regardless of the purpose and means of these foreign relations, several material correlates of life in Teotihuacán became salient markers of the state identity, recognizable to outside groups as well as meaningful for members of Teotihuacán society. These markers are frequently found in regions outside of central Mexico and are the basis for identifying cross-cultural contact between particular polities and Teotihuacán. Some of the markers of Teotihuacán identity include *talud-tablero* architecture, cylindrical tripod vases, Thin Orange ware, Pachuca obsidian, *Tlaloc* and tassel headdress imagery, *atlatl* spear throwers and darts and specific ceramic forms (*floreros*, *candeleros* and theater censers) related to household ritual. All of these materials were used by residents of Teotihuacán and represented the state ideology and economic power in various ways.

*Talud tablero* architecture, actually originated in Tlaxcala and Puebla but was adopted by Teotihuacán and used throughout the city but is most prominent along the Avenue of the Dead (Plunket 1998). Headrick argues that *talud tablero* architecture was a salient marker of identity for Teotihuacanos because it recalls warfare ideology based on butterfly symbolism, though the architectural style probably did not have the same connotations elsewhere in Mesoamerica (Headrick 2007:125).

Thin Orange ware is also a Teotihuacán marker of identity that originated elsewhere. The ceramic ware was manufactured in Puebla and perhaps given to Teotihuacán in tribute, where it was used throughout the city and redistributed or traded to other regions by the state. Thin Orange ceramics are found at Teotihuacán in burial and ritual contexts as well as in every (excavated) apartment compound (Rattray 1990). Like Thin Orange ware, Pachuca obsidian was a hallmark of Teotihuacán trade relationships. Pachuca obsidian from the Sierra de las Navajas source in central Mexico is known by its distinctive green color. There is clear evidence that the Teotihuacán state controlled the distribution of Pachuca obsidian within the city, central Mexico and beyond (Spence 1981).

Maya scholars weighing in on the Maya-Teotihuacán debate, especially the proponents of externalist models of interaction have often ignored the evidence of a Maya presence at Teotihuacán. Some of the first archaeological investigations of Teotihuacán have reported local productions of Maya-style ceramics as well as actual imports (Taube 2003). Excavations in the Tlamimilolpa residential compound produced Early Classic ceramics from the Petén, including basal-flange



bowls, which are a hallmark of Early Classic Maya elite-ware (Linné 1942:178). Significant quantities of ceramics from the lowland Maya region have also been recovered from the Merchant's barrio, including Petén gloss-ware and Dos Arroyos Orange Polychrome basal-flange bowls from the Early Classic (Rattray 1989:123). The earliest phase of occupation in the Merchant's barrio are associated with foreign-style ceramics that are similar to Late and Terminal Preclassic Maya types. Excavations in the Pyramid of the Sun revealed lowland Maya Chicanel phase sherds, which indicates that cross-cultural contact between the Maya and Teotihuacán took place as early as the first century AD (Smith 1987; Taube 2003).

Elements of Classic Maya ideology and iconography have also been discovered in murals throughout Teotihuacán including depictions of the Maya wind and maize gods, elements of royal Maya costume like jaguar-pelt kilts and quetzal-feather headdresses (Taube 2003: 277-279). In a recent review of the murals from the Tetitla compound, Taube (2003) examined the so-called "Realistic Paintings" and identified Classic Maya themes such as scenes of celebration and Maya supernaturals that are unlike mural scenes found elsewhere in Teotihuacán. The Realistic Paintings also include single Maya glyphs (identified in Millon 1973) and two linear Maya texts, one of which is written in phonetic Mayan, which has led Taube to conclude that that painter of the text and certain readers within the Tetitla compound were not only knowledgeable about Maya glyphs but were conversant in Mayan. The forms of the glyphs in the Realistic Paintings date the murals to the mid-fifth and sixth centuries AD (Taube 2003:286).

While the Maya-style ceramics and mural art may indicate an indirect relationship between the Maya and Teotihuacán, recent isotopic analysis of skeletal remains has identified the direct presence of Maya at Teotihuacán. White et al. (2002) conducted an analysis of the oxygen-isotope ratios of bones and tooth enamel of sacrificial victims buried in the Pyramid of the Feathered Serpent and found that some were from the Guatemalan highlands and had relocated to Teotihuacán and lived there for some time before their deaths. The pyramid was constructed from AD 150-250, which predates the Teotihuacán influence in the Maya lowlands during the Early Classic period.

Although archaeological research has been carried out at Teotihuacán since the early part of the 20<sup>th</sup> century, there are still many aspects of the sociopolitical nature of the city and its interregional relations that remain enigmatic. The people who built this civilization and influenced every contemporary civilization left few traces of their own voices or personal identities. We do not know what they called themselves or the city, what language(s) they spoke or their ethnic identities. We do not know very much about the rulers of the site, nor how they were able to forge and maintain relationships with other Mesoamerican regions. Finally, we do not know what caused the collapse of the Teotihuacán state that resulted in the burning of the elite and civic-ceremonial core during the Metepec phase (AD 600-650) (Cowgill 1996).

### **Teotihuacán and the Maya**

Evidence of interaction with Teotihuacán has been recovered at sites throughout Mesoamerica including the Maya region. The nature and variety of this

evidence, however, has confounded scholars and contributed to the complexity of the problem. In general, the correlates of elite Maya interaction with Teotihuacán are *talud-tablero* pyramid architecture; green Pachuca obsidian; foreign-style ceramics such as cylinder tripod vessels often adorned with painted stucco, other ritual forms and Thin Orange ware; iconography related to the central Mexican Storm God, *Tlaloc*, and in the Maya lowlands, hieroglyphic texts that refer to the 11 Eb event of the Early Classic period, Teotihuacano political figures and a particular type of structure (*wi' te' naah*), that recalls Teotihuacán origins and was used for accession rituals.

Several lines of evidence of have been recovered at some Maya sites, while others have only single correlates such as caches of Pachuca obsidian. The models explaining cross-cultural interaction, however, have largely been developed based on evidence from a single site and applying them to other sites has proven to be problematic. This shortcoming is due, in part, to the fact that scholars often neglected to consider the evidence from other sites when formulating models of interaction. While scholars once jumped to the conclusion of a direct Teotihuacán presence based on scant evidence, they now regard multiple correlates as testimony to the degree and nature of foreign contact. Scientific analyses, such as Stable Isotope analysis of tooth enamel and bone as well as Instrumental Neutron Activation analysis (INAA) of ceramic clays have refuted earlier models that identified the presence of Teotihuacanos in the Maya region based on stylistic evidence. The primary sources of evidence of cross-cultural interaction and the models generated from that evidence are outlined below.

## **Kaminaljuyú**

The site of Kaminaljuyú is located in the highland region of Guatemala, underneath modern-day Guatemala City (Figure 3). The site was continually occupied from the Middle Preclassic period (1000 BC) through the Late Postclassic period (AD 1400). The longevity of the site is attributed to the control of the El Chayal obsidian source by the ruling elite, who maintained a widespread trade network throughout the history of the site (Sharer 1994).

Excavations carried out by the Carnegie Institution in 1936 focused on Mounds A and B and identified several architectural and ceramic traits that appeared to be intrusive and deviated sharply from earlier practices at the site. During the investigations, the excavators noted similarities in construction technique between Structures A-7, A-8 and B-4, which date to the Esperanza period (AD 400-600) with those of Teotihuacán (Kidder, Jennings & Shook 1946). The structures were constructed in the *talud-tablero* style that has become known as a hallmark of Teotihuacán, which consists of a sloping *talud* surmounted by a vertical *tablero* and is framed by a molding (Figure 3.4). This construction style also departed from earlier periods in technique and materials. The earlier phases of Mounds A and B were constructed of pure adobe, while the later phases included pumice lumps in dark clay for the structural fill and the use of *piedrín*, or small volcanic stones to coat the outer surface of the structure, much like concrete and construction techniques employed at Teotihuacán (Kidder, Jennings & Shook 1946: 44).

Two tombs (A-VI, B-II), dating to the Esperanza phase located within Mounds A and B also deviated from known lowland Maya and local practices. The tombs consisted of pit-like shafts in which elite personages were interred in the seated “tailor” position, often with a number of sacrificial victims or servants (Kidder, Jennings & Shook 1946: 256). These tombs also contained a wealth of offerings, which included Teotihuacán-style ceramics, in addition to local forms and wares. The foreign-style ceramics included slab-footed cylinder tripod vessels, Thin Orange vessels, stucco-coated and painted vessels with both Teotihuacanoid and Mayaoid motifs, vessels with the “screw head” decorative appliqués, pyrite mirrors (one with Teotihuacanoid deity painted on the back) two *floreros* and a single *candelerero* (Figure 3.5).

Several of the vessels are painted in a distinctly Teotihuacán style and include decorative motifs that are regarded as hallmarks of the central Mexican site. Eleven vessels in particular, recovered from tombs A-VI and B-II, exhibit these traits, which include images of butterfly deities (now known as the Great Goddess), men holding *atlatls*, and other Teotihuacán-style iconography such as flowered speech scrolls, Tlaloc goggles and tassel headdresses.

Ultimately, the Carnegie investigations concluded that during the Esperanza phase, Kaminaljuyú was a busy port of trade with contacts in Mexico, the Petén, the Motagua Valley of Guatemala, Copan and El Salvador. Kidder et al. remarked that the Teotihuacán influence was along ceremonial lines and generally confined to elite and ceremonial contexts. They argued for the possibility that “warlike adventurers” introduced Teotihuacán traits through the conquest of Kaminaljuyú and who

became overlords of the local populations and married local women (Kidder, Jennings & Shook 1946: 255). Presumably, the individuals interred in the elaborate tombs within Mounds A and B were the very warlike adventurers that introduced the foreign styles and came to rule Kaminaljuyú. This scenario explains the lack of foreign styles in domestic contexts throughout the site, and their presence in public and elite burial contexts, since the wives of the warlords would have continued to produce and use local utilitarian wares rather than foreign wares.

The investigators noted the absence of *candeleros* and portrait figurines in the Kaminaljuyú assemblage, which are abundant at Teotihuacán. They admit that the absence of these artifact types could be used to argue against the presence of actual Teotihuacanos at Kaminaljuyú, but also point out that these artifacts may have been part of a folk religion that was not practiced by the elite adventurers who came to rule the site (Kidder, Jennings & Shook 1946: 256). Therefore, the evidence for interregional interaction recovered by the Carnegie project was interpreted from an externalist perspective: the Teotihuacán influence was disruptive to local traditions and greatly impacted the sociopolitical development of Kaminaljuyú, although it was limited to the elite segment of the population. Kidder Jennings and Shook do not develop the impetus and processes of interaction and merely attribute it to warlike adventurers who were presumably in search of new land and resources.

Kaminaljuyú again became the subject of a large-scale project in the 1970s when Pennsylvania State University conducted excavations under the direction of William T. Sanders. The Penn State investigations focused on areas that had not

been investigated by the Carnegie project, including the Palangana compound in the northern sector and several residential sectors of the site. These excavations supplied further evidence of Teotihuacán influence and interaction at the site and also refined the chronology of the Middle Classic period of interaction. The investigators also posited several models and theories regarding the nature and degree of the Teotihuacán presence at Kaminaljuyú.

Charles Cheek excavated the Palangana compound, which forms the eastern portion of the area known as the Park. The Palangana was found to have Late-Terminal Formative (0-100 AD) origins, but underwent major architectural and construction technique changes during the Middle Classic Esperanza phase. These changes resulted in Teotihuacán-style *talud-tablero* architecture and included the *pedrín* and pumice construction materials noted in the Carnegie investigations (Cheek 1977: 20). During the subsequent Late Classic Amatlé II phase (AD 600-800), the compound was renovated twice, but the construction methods reverted to earlier traditions that employed adobe and stone rather than pumice and *pedrín*.

Cheek noted that the Teotihuacán-style architecture was limited to the public centers of the site, with the possibility of one elite residence located near the ceremonial core, that may have been constructed in the *talud-tablero* style (Cheek 1977: 128). Cheek also compared the construction techniques and materials, as well as the architectural forms, of the Kaminaljuyú structures with those of Teotihuacán and suggested a foreign origin for the use of volcanic material, specifically pumice, in the structural fill; this technique was not used during earlier periods at Kaminaljuyú. Cheek observed, however, some differences in the

architecture and construction techniques of the two sites. For instance, while the Kaminaljuyú structures included staircases with balustrades, a *remate* was not incorporated into the balustrades. At Teotihuacán, the *remate* is a rectangular cap on the balustrade that projects beyond the edge of the balustrade and is common to most structures at the site (Cheek 1977: 130-4).

Cheek identified several phases of interaction between Kaminaljuyú and Teotihuacán, which were characterized by varying degrees of intensity in the relationship. According to Cheek, Phase I, the Contact Phase, began in AD 400 and continued until AD 500 and consisted of non-coercive contact initiated by representatives from Teotihuacán who were interested in establishing trade alliances. The ruling elite of Kaminaljuyú in turn borrowed prestigious elements of Teotihuacán culture in order to increase their own status. Additionally, other elements of Teotihuacán culture (i.e. burial practices) were gradually incorporated into Kaminaljuyú life.

Phase II, the Teotihuacán Phase, continued from AD 500-550. The sudden construction of talud-tablero style structures and symbols of Teotihuacán militarism depicted in the art and iconography of ceramics characterize this phase. This evidence prompted Cheek and other scholars to surmise that Teotihuacán had gained political control of the site. Cheek suggests that these new rulers from Teotihuacán were part of a merchant-warrior class that managed external affairs for the Teotihuacán state and married into the local Kaminaljuyú dynasty (Cheek 1977). The final phase of Kaminaljuyú-Teotihuacán interaction, the Withdrawal Phase from AD 550-700, is characterized by a waning in Teotihuacán influence with a



subsequent return to local styles. Cheek suggests that during this period, Teotihuacán withdrew political power from the ruling elite, but he could not identify a reason for the withdrawal of power. Later excavations at Teotihuacán pinpointed the collapse of the political structure of the site, which dates to A.D. 600 and corresponds to the final phase of interaction at Kaminaljuyú.

### Recent investigations

In recent years renewed interest in Kaminaljuyú and its role in the interregional interaction puzzle, due in part to modern threats to the site, have resulted in intriguing studies that have revised many of the earlier models. Continued excavation has refined the chronology of the site and shed light on local sociopolitical development, and placed the intrusion of foreign styles within the context of this development (Inomata et al. 2014). Additional studies have employed new testing techniques, such as stable isotope analysis and instrumental neutron activation analysis (INAA), have allowed scholars to determine the geographic origin of the individuals buried in Mounds A and B, as well as the ceramics included as offerings in these burials.

### Excavations

Excavations at Kaminaljuyú have continued since the Penn State project, though many of them were part of salvage operations carried out in order to document areas of the site endangered by encroaching modern construction. Three large-scale projects were carried out by Guatemalan and Japanese scholars, including the Proyecto Kaminaljuyú/San Jorge (Popenoe de Hatch 1997), the

Proyecto Arqueológico en el Centro y el Sur de Guatemala (Ohi et al. 1994) and the Proyecto Arqueológico Miraflores II (Martínez et al. 1996). These projects investigated areas that had not previously been studied by earlier projects and contributed to a refined chronology of the site. It is important to note that none of these projects encountered additional foreign-style architecture, ceramics or other artifacts outside of the main ceremonial core, and only a handful more foreign-style sherds within the Acropolis.

In a review of the Kaminaljuyú archaeological data, Braswell (2003b) points out several problems in establishing the time span of the Esperanza phase and the use of talud-tablero architecture. The refined dates of the Esperanza phase, based on revisions of the ceramic chronology correlated with carbon sample dates, are AD 350/450-500/650. The introduction of talud-tablero architecture is uncertain but could date to as early as AD 370 with the construction of the structures of Mounds A and B, followed by construction of the Acropolis and Palangana structures in AD 500-600 (Braswell 2003b: 97-99). Braswell concludes that the evidence of Maya-Teotihuacán interaction at Kaminaljuyú post-dates its appearance at lowland sites in the Petén and Belize, where interaction is evident as early as the Terminal Preclassic period. This conclusion refutes some models that suggested Kaminaljuyú served as the mediator for Teotihuacán influence at other sites in the Maya region (Coggins 1975, 1979).

Braswell surmises that Teotihuacán artifacts and symbols were manipulated by local people who had some knowledge of the foreign styles, but chose not to copy, or even ignored, the specific details of Teotihuacán technology, ritual and style

(Braswell 2003b: 83). Though Braswell allows for the possibility that Kaminaljuyú architects may have been sent to train at Teotihuacán or that Teotihuacanos could have been brought to Kaminaljuyú in order to build *talud-tablero* building (as is argued by Houston et al. 2003), he argues that the appearance of foreign styles in elite and public or ceremonial contexts does not substantiate models that call for a Teotihuacán enclave at the site (Braswell 2003c: 135).

### Stable isotope analysis

Juan Antonio Valdés and Lori E. Wright (2004) sampled teeth from a series of Kaminaljuyú skeletons including those of the Esperanza period tombs in Mounds A and B as well as earlier and later burials from domestic contexts in order to obtain carbon and oxygen isotopic ratios. The carbon isotopes in tooth enamel reflect maize consumption at Kaminaljuyú, while the oxygen isotopes reflect the ground water consumption. The oxygen isotopes from ground water reflect those of specific geographic locations. Since teeth retain the isotopic signals from the food and drink consumed during childhood as the enamel formed, it is possible to identify migrants whose isotopic ratios differ from the local geography.

Valdés and Wright found that the Early Classic skeletons from the Esperanza tombs possessed outlying isotopic ratios when compared to the domestic (and therefore local) population (Valdés and Wright 2004: 349). While some of the individuals may have been foreigners, they were not from Teotihuacán. The isotopic signatures match those of the Petén and the Copan Valley. One individual may have spent part of his childhood in Teotihuacán, but this is not certain (Valdés and Wright 2004: 350-1). This study refutes Kidder's identification of the

Esperanza tombs as those of the warlike adventurers from Teotihuacán, and seems to support Brown's port of trade model.

An earlier study conducted by White et al. (2000) found similar results but did note that the principal skeleton from Tomb A-V of Mound A (AD 500-550) was born in Kaminaljuyú, but may have spent part of his childhood in central Mexico. Wright et al. (2010) confirmed this conclusion in the most recent study and suggest that this individual (an adult aged 35-49 years old) moved to Teotihuacán around the age of 7 and lived there during his or her late childhood and adolescence, returning to Kaminaljuyú in adulthood (Wright et al. 2010:174). This study also demonstrated that many of the peripheral skeletons interred in the Early Classic tombs (mostly children and probably sacrificial victims) were immigrants to Kaminaljuyú from the Petén, Motagua River Valley and Pacific Coast of the Maya region.

#### Instrumental Neutron Activation Analysis

Dorie Reents-Budet, Ronald Bishop, Juan Antonio Valdés and James Blackburn (2006) conducted a study of the Kaminaljuyú ceramics in order to determine if any of the foreign-style ceramics were actual imports from Teotihuacán. The study examined the chemical composition of the paste of ceramics recovered from domestic, funerary and elite contexts. A total of 34 samples were analyzed, and the majority of the vessels were produced locally (Reents-Budet et al. 2006). Although the study did not include all of the cylinder tripod vessels from the Esperanza tombs, one was analyzed, and the chemical composition of the paste did not match the signatures of Kaminaljuyú, Tikal, Copan or Teotihuacán and may

instead be from a site in the Alta Vera Paz or Motagua River Valley, perhaps Quirigua.

While a few imported vessels were identified, they were imported from other areas within the Maya region, not Teotihuacán. Seven vessels were identified as imports from the Petén, other areas of the Pacific Coast, and, as noted above, the Motagua Valley. The study did not include any of the Thin Orange ware vessels recovered from the Esperanza tombs, and only included one of the cylinder tripod vessels. The authors admit that there is a possibility that some of these vessels may be actual imports.

This neutron activation analysis dispels the notion that the foreign-style ceramics that were used to infer high-status and foreign affiliation of the tomb occupants were imported from Teotihuacán. Instead, it seems that Kaminaljuyú potters were able to produce imitations of foreign styles that may have been introduced through trade. The origins of the actual imported vessels coincide with the geographical locations of a number of the trade partners Brown (1977) identified in his study of the Valley of Guatemala.

#### Summary of Interaction at Kaminaljuyú

The recent investigations at Kaminaljuyú paint a very different picture of cross-cultural interaction in relation to the earlier studies. Neither the archaeological nor bioanthropological data support the presence of a Teotihuacán enclave at the site. Furthermore, foreign styles were not introduced to the Maya lowlands through Kaminaljuyú since the evidence of interaction at the site postdates

evidence from the lowlands and in fact suggests that the foreign styles were introduced to Kaminaljuyú from the lowlands.

Braswell follows Schele, Freidel and Miller (Schele and Freidel 1990; Schele and Miller 1986) in suggesting the evidence for interregional interaction at Kaminaljuyú can best be explained through the participation of the Kaminaljuyú ruling elite in a pan-Mesoamerican cult centered on warfare and sacrifice that imbued participants with the legitimate authority to rule. Participation in the cult may have entailed pilgrimages to and training in Teotihuacán, or perhaps visits to the city in order to take part in rituals of legitimization. This theory may account for actual imports (as gifts), locally produced imitations (as the main occult objects that carry iconographic messages) and hybrid forms (as local interpretations of the cult imagery). The dearth of foreign styles in domestic contexts at Kaminaljuyú is also explained by this theory since participation in the cult was limited to the ruling elite (Braswell 2003c: 138-40).

## **Tikal**

Tikal, which is located in the central Petén of Guatemala, is one of the most well-known and best studied Maya sites (Figure 3.6). The construction of monumental architecture at the site began in the Late Preclassic (250 BC), and occupation of Tikal continued until the Terminal Classic period (AD 1000). The carved monuments from Tikal detail the illustrious dynastic history of the site and indicate that it was a superpower in the region. The rulers of Tikal frequently engaged in warfare against neighboring and distant sites and controlled trade networks throughout the Maya lowlands. Unlike Kaminaljuyú, the integrity of the

site has been largely preserved, and therefore a wealth of information, along several lines of evidence, regarding interregional interaction has been recovered from the site. The majority of evidence for Maya-Teotihuacán interaction at Tikal came to light in the 1950s and 1960s when the University of Pennsylvania conducted a large-scale, interdisciplinary field project at the site under the direction of Edwin Shook and William Coe. The archaeological evidence from Tikal, which is similar to that of Kaminaljuyú, namely *talud-tablero* architecture, cylinder tripod vessels, Pachuca obsidian and foreign iconography, is supplemented by a number of epigraphic texts that provide intriguing, yet confounding, insights into the dynastic history of Tikal and the effects of cross-cultural interaction on the sociopolitical development of the site.

### Epigraphic texts

A number of carved stelae were uncovered during the Penn Tikal Project (PTP) excavations, and these monuments have allowed the dynastic history of Tikal to be reconstructed and have also provided crucial evidence, and debate material, to the problem of Maya-Teotihuacán interaction. Additional sources of information include inscribed ceramic vessels recovered from burials and Problematic Deposits<sup>6</sup>, as well as some inscriptions painted on the walls of the tombs themselves.

The most renowned source of information is Tikal Stela 31, which was found broken and ceremonially cached within the inner temple room of Structure 5D-33-2<sup>nd</sup> (Figure 3.7). This structure was constructed over the tomb of the ruler Stormy

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<sup>6</sup> Problematic deposits are so-named because they contain material from middens and burials that have been re-deposited and sealed underneath a floor. These deposits contain domestic and ritual material but scholars do not fully understand for what purpose they were created.

Sky<sup>7</sup>, which dates to AD 457; the monument itself was dedicated in AD 445. Stormy Sky (who may have been the son of the foreign ruler Curl Snout) is depicted on the front of the monument. He is flanked by two figures<sup>8</sup> carved on the sides of the stela dressed in foreign regalia, carrying *atlats* and rectangular shields. The hieroglyphic text mentions several dynastic figures associated with a number of calendar dates. Curl Snout's predecessor, Great Jaguar Paw, is mentioned in the text, and Coggins speculated that his death was also mentioned in association with the date 8.17.1.4.12 11 Eb (Coggins 1976: 255).

Based on the inscriptions, Coggins and Proskouriakoff (1993) reconstructed a portion of the dynastic history, which began in the Cauac, or Late Preclassic period (0 BC-AD 150). Coggins attributed the origin of the three Preclassic rulers to Kaminaljuyú and the Pacific slopes region. The dynastic sequence was interrupted in the Early Classic period by the arrival of Curl Snout, who Coggins believed to be a half-Mexican from Kaminaljuyú who gained dynastic and economic power at Tikal by marrying the daughter of the ruler, Jaguar Paw (Coggins 1975: 145).

Proskouriakoff, however, identified Curl Snout as a foreigner, probably from Teotihuacán, and suggested that the Maya called these foreigners the "Tlaloc shield-spearthrower" people (Coggins 1975: 143). A number of Mexican traits were introduced during Curl Snout's reign, but these nearly disappeared during the reign of his successor, Stormy Sky.

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<sup>7</sup> Scholars can now read the real names of these important figures but I use the nicknames given by Tatiana Proskouriakoff and other scholars based on the descriptions of their name glyphs because the works cited do so.

<sup>8</sup> These figures may be the same individual viewed from the left and right side.



## Tombs

Although the PTP investigated many areas of the site, the bulk of the evidence for Maya-Teotihuacán contact derives from the elite burials in the North Acropolis. In particular, Burial 10 provided the bulk of the ceramic material, including cylinder tripod vessels and vessels that include Teotihuacán iconography in the decorative motifs. This burial was excavated in 1959 under the direction of Edwin Shook and was interred in a partially collapsed tomb beneath (and along the centerline of) Structure 5D-34, which is a temple pyramid located in the southwest front of the North Acropolis.

Nine children, who may have been sacrificial victims, accompanied the principal skeleton, as well as Manik phase (AD 250-550) ceramics, many of which are decorated with central Mexican deities and motifs (Coe 1990). Stelae 4 and 18, which are attributed to the ruler Curl Snout, were reset in front of Structure 5D-34. The placement of the stelae, along with other lines of evidence, led Coggins to suggest that the individual buried in the tomb was indeed Curl Snout (Coggins 1975: 146-8). A jade ornament carved in the shape of part of Curl Snout's name, as well as foreign regalia depicted on Stela 4 and included in the burial, support Coggins' identification. Coggins compared the offerings included in Tikal Burial 10 with those included in the Esperanza tombs of Mounds A and B at Kaminaljuyú and concluded that the objects in Burial 10 were imported from Kaminaljuyú (Coggins 1975: 146). Coggins also dated the interment to AD 426 (*ibid.*).

In her study of the ceramics and the iconography painted on them, Coggins identified a number of imported vessels, possibly from Kaminaljuyú, as well as

Teotihuacán iconographic motifs such as Tlaloc imagery. Coggins noted that Maya elements were incorporated into the central Mexican motifs, and that on some of the painted vessels, the decoration more closely resembled the murals from the Tetitla compound rather than typical ceramic decoration from Teotihuacán (Coggins 1975: 175-6)

Burial 48, a tomb placed in a pit in front of the stairway of Structure 5D-26-1<sup>st</sup>, dates to A.D. 456 and has been identified as the tomb of Stormy Sky (Coggins 1975:188-189). Like Burial 10, this tomb included Pachuca obsidian and cylinder tripod vessels decorated with foreign motifs, which Coggins likened to the offerings in the Kaminaljuyú tombs, though the offerings in this tomb did not include as many foreign-style ceramics as Burial 10. The painted mural on the interior walls of the tomb include a long count date of AD 457, which indicates that the construction of the tomb was completed one year after the death of the ruler

### Problematic Deposits

The Tikal Project also located and excavated several Problematic Deposits (PD), which are defined as such because they were encountered in unusual locations and/or because they contain unarticulated human remains and other material. Moholy-Nagy (1999) refers to the deposits that contain a substantial amount of human bone as "Burial-like Problematic Deposits (BPD)" and suggests that they were burials encountered during remodeling of structures in antiquity, removed and reburied while other deposits could represent desecration of earlier burials. Coggins focused on two of these deposits because of the foreign nature of their

contents. Problematic Deposit 50 was located in a midden to the west of the North Acropolis and tentatively identified as a re-deposited tomb by Coggins (1975: 177).

Seven skeletons, Pachuca obsidian, a mosaic plaque and several foreign-style cylinder tripods were included in the deposit. Coggins likened the assemblage to the Esperanza tombs at Kaminaljuyú and noted that the funerary assemblage of Problematic Deposit 50 was not representative of the Early Classic funerary traditions at Tikal. Coggins discusses two of the cylinder tripods in detail, which she noted are both unusually large in diameter and short in height for Maya vessels, but are not uncommon among Teotihuacán ceremonial vessels (Coggins 1975: 177-8). One of the vessels has a double row of “coffee bean” or “screw head” appliqué around the base, which is a common decorative motif at Teotihuacán. The other vessel, (Figure 3.8) depicts a scene that Coggins interpreted as the historic moment when foreigners arrived at Tikal (Coggins 1975: 179-82).

Problematic Deposit 22 was located at the center of the North Acropolis in front of Structure 5D-26. According to Coggins, the deposit contained masses of undecorated ceramics that are purely Teotihuacán in style, as well as a monumental stone portrait of Tlaloc, denominated Stela 22 (Figure 3.9). A vessel included in the deposit is a hybrid consisting of a foreign form with an inscription composed of Maya vocabulary. The vessel is also decorated with the coffee bean appliqué (Coggins 1975: 182).

The PTP investigations resulted in models that were very similar to, and in fact tied to, those generated by the Kaminaljuyú data. The general consensus was that foreigners from Teotihuacán (or perhaps Kaminaljuyú) conquered Tikal and

installed a new ruler in order to gain power of important trade resources and routes (Coe 1972; Coggins 1975, 1976; Proskouriakoff 1993).

### Recent investigations

Excavations have continued at Tikal after the end of the PTP under the direction of Guatemalan scholars. In addition to refining the chronology of the site and elucidating local sociopolitical developments, these investigations have contributed further artifact and epigraphic evidence of cross-cultural interaction, and have also inspired the revision of earlier models. Additional advances in the translation of Maya hieroglyphic texts have filled in some of the gaps in the dynastic history of Tikal, most notably, the actual names of rulers are now known. These new translations, however, have also sparked some debate because the exact meanings of the deciphered texts remain ambiguous. Bioanthropological studies have examined the skeletons from the elite tombs in order to determine the geographic origin of possible foreigners.

### Excavations

Continued excavations have refined the Tikal chronology and elucidated the sociopolitical development of the sites, which stems from the Preclassic period. Most notably, the excavations have refined the Manik ceramic phase, dividing it into three sub-phases. Culbert's (1996) ceramic chronology dated the Manik phase to AD 250-550. The Proyecto Nacional Tikal was able to refine this period by distinguishing between the Manik 1 phase (AD 250-300), which is considered to be the transition period between the Preclassic and Early Classic periods, the Manik 2

phase (AD 300-378), which is the period when foreign styles were introduced to the region and the Manik 3A phase (AD 378-480), which is when the foreign styles were most heavily used and the Manik 3B phase (AD 480-550) phase in during which the use of foreign styles waned (Laporte et al. 1992).

The Proyecto Nacional Tikal carried out excavations in several residential groups near the Mundo Perdido complex, including Group 6C-XVI (Laporte 1987, 1989) and Group 6D-V (Iglesias Ponce de Leon 1987). These investigations revealed *talud-tablero* architecture as well as elite burials and Problematic Deposits that contained some foreign ceramic styles, locally produced vessels that include foreign iconography and Pachuca obsidian, all of which date to the Manik 3A phase (AD 378-480). Laporte and Fialko noted that a great deal of the iconography from Manik 3A ceramics and other artifacts reflects pan-Mesoamerican symbolism based on military technology and ideology (Laporte and Fialko 1990: 62). In a recent re-evaluation of the Tikal data, Iglesias Ponce de Leon (2003) concludes that the material evidence, especially the evidence recovered from residential contexts, is too insubstantial to support models of Teotihuacán enclaves at the site.

Excavations within the Mundo Perdido complex have demonstrated that the *talud-tablero* architectural style was used at Tikal since the Late Preclassic period (Laporte 2003). The style was not widely used at Teotihuacán during this period, so it seems unlikely that Teotihuacanos introduced the style to Tikal. Instead, Laporte argues that the architectural style was a part of a pan-Mesoamerican stylistic horizon that was used widely across the cultural area, where it was modified to adapt to local architectural characteristics (Laporte 2003: 294).

## Epigraphic texts

Scholars have also deciphered the names of Tikal rulers, restoring the dignity and power to these individuals, which was negated by the nicknames used by scholars. New texts have also provided more precise dates of the reigns, births and deaths of the rulers, which in turn have allowed scholars to reconstruct the events associated with the arrival of strangers to Tikal. Great Jaguar Paw is now known as Chak Tok Ich'aak I and ruled from AD 360-378. Yax Nuun Ayiin I (or Nuun Yax Ayiin according to Stuart 2000), once known as Curl Snout, replaced Chak Tok Ich'aak I, and ruled from approximately AD 379-410. Siyaj Chan K'awil II (a.k.a. Stormy Sky) succeeded his father, Yax Nuun Ayiin I, to the throne in AD 411 (Martin and Grube 2000; Stuart 2000).

As the study of the epigraphic texts continued, new figures emerged from the past. One of these was Sihyaj K'ahk', also known as Smoking Frog, who is mentioned three times on Tikal Stela 31 and is believed to be a foreign warlord or emissary who played an integral role in establishing the foreign dynasty (Martin and Grube 2000; Schele and Freidel 1990; Stuart 2000). Another figure is Spearthrower Owl, mentioned on Tikal Stela 31 and on the "Marcador" discovered in the Mundo Perdido group, who may have been the ruler of Teotihuacán and the father of Yax Nuun Ayiin I (ibid.).

According to current interpretations of the texts, Sihyaj K'ahk' arrived at Tikal on January 31, 378, the same day that the ruler, Chak Tok Ich'aak I "entered the water", which is a Maya euphemism for death (Stuart 2000). Sihyaj K'ahk' is responsible for establishing a "New Order" in the Petén by installing new rulers on

the thrones of various sites including Tikal, Uaxactún, Rio Azul and Bejucal (Martin and Grube 2000:30). At Tikal, this new dynastic line was represented by Yax Nuun Ayiin I, who is believed to be the son of Spearthrower Owl, a lord with direct ties to Teotihuacán (ibid.). Though Yax Nuun Ayiin I was named as the ruler, Sihyaj K'ahk' is named several times as his overlord. Scholars have speculated that this relationship was necessary because Yax Nuun Ayiin I was just a child when he acceded to the throne in September 379.

Another integral epigraphic discovery at Tikal in recent years was that of the Tikal Ballcourt Marker, or the “Marcador”, which was recovered by the Proyecto Nacional Tikal from a residential group (Group 6C-XVI) outside of the Mundo Perdido complex (Laporte 1989). The dedication date of the marker is unknown but could be AD 416. The hieroglyphic text inscribed on the marker includes the name of Sihyaj K'ahk', which is mentioned three times. Laporte and Fialko (1990) interpreted part of the text as the inauguration date of Sihyaj K'ahk' on 11 Eb 15 Mac with the title of *Kalomte* (Laporte and Fialko 1990:46). The Marcador also depicts an owl armed with an *atlAtl* in its center, and also mentions Spearthrower Owl's name in the text. The text also refers to his accession in AD 374, though the location of his kingdom is not known, some scholars believe he was the king of Teotihuacán (Martin and Grube 2000: 31; Stuart 2000: 483).

The discovery of this ballcourt marker within a residential group that is comprised of a number of structures in the *talud-tablero* architectural style led Laporte and Fialko to conclude that this group served as the seat of a lineage at Tikal that adopted foreign traits and was involved in the dynastic events of the Early

Classic period (Laporte and Fialko 1990:33). Laporte and Fialko assert that the *Ma'Cuch* lineage may have been involved with specific functions within Tikal society, such as calendrics, the ball game, war and sacrifices to the Old God (Laporte and Fialko 1990:52). It is important to note that in the model put forth by Laporte and Fialko, Sihyaj K'ahk' was not a foreigner, but rather a local Tikaleño of the *Ma'Cuch* lineage who also gained political control of Uaxactún (Laporte and Fialko 1990: 57). This reconstruction is in stark contrast to the widely accepted models espoused by Schele and Freidel (1990) and Stuart (2000).

#### Stable isotope analysis

Lori E. Wright (2005a) conducted a study of the stable isotopes from enamel of the teeth from individuals interred in Tikal Burial 10, including 2 adults and at least three children approximately six years of age. The principal skeleton in the tomb is believed to be that of Yax Nuun Ayiin I, the son of Spearthrower Owl, who was installed on the throne of Tikal by Sihyaj K'ahk' after the death of the previous ruler, Chak Tok Ich'aak I.

Wright examined the strontium isotopic ratios to determine whether any of the individuals, specifically Yax Nuun Ayiin I, were immigrants to Tikal. The difference in geology at Tikal and Teotihuacán results in different strontium levels in the soil. The isotopic signal is absorbed through diet and preserved in the tooth enamel as it is formed in childhood. Wright sampled three permanent teeth and two deciduous teeth from Burial 10, including the probable tooth of Yax Nuun Ayiin I (which is filed in a distinctive manner) and three of the individuals interred with him, and compared the strontium isotope ratios to those recovered from other



skeletons in the Tikal area (Wright 2005a: 97). All of the teeth from Burial 10 have strontium isotope ratios that fall within the local mean, and Wright concludes that none of the individuals can be identified as migrants from other sites. Ultimately, Wright concludes that Yax Nuun Ayiin I spent his childhood in Tikal, though she admits that the analysis cannot conclusively determine whether or not he was born at Tikal and still allows for the possibility that his father was not a local lord (Wright 2005a: 98).

A more recent study conducted by Wright tested the isotope values of the remains from burials spanning the Preclassic period (800 BC-AD 25) through the Late Classic period (AD 550-850) and included elite, non-elite and Problematic Deposit remains (Wright 2012). The results indicate that Tikal experienced an in-migration of people from various areas of the Maya region during the Early Classic period, including the arrival of two elite women from the Copan area<sup>9</sup> (Wright 2012:13-14).

A single tooth recovered from Problematic Deposit PTP-PD231 possessed values consistent with an area comprised of volcanic soils. This deposit was found in a *chultun* located northeast of the Perdido reservoir near Group 6C-5 and may have been a re-deposited royal tomb. Wright suggests that the individual was from central Mexico and further speculates that it was Sihyaj K'ahk' (Wright 2012:14).

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<sup>9</sup> Burials PTP-182 associated with Structure 5D-46 in the Acropolis and PNT-141A associated with group 6C-XVI in the Mundo Perdido complex.

### Summary of Interaction at Tikal

The epigraphic texts from Tikal have supplied the names and aspects of personality and identity of the people involved in interregional interaction at Tikal, in contrast to the nameless and faceless actors at Kaminaljuyú. While the texts have supplied intriguing insights into the events and processes surrounding Maya-Teotihuacán interaction at Tikal, they also contradict other lines of evidence. Scholars have perhaps been too eager to accept these texts as historical fact and have overlooked the role of these texts in ancient Maya political propaganda and machinations. Nevertheless, the current understanding of interregional interaction at Tikal is similar to that of Kaminaljuyú: Maya rulers participated in a pan-Mesoamerican cult based on the ideology of sacred war, which also legitimated their right to rule. In Stuart's (2000) model (which is also based on the Copan evidence and texts), the Maya regarded the city of Teotihuacán as a Tollan, a primordial city from which they traced their ancestral origin and political foundation (Stuart 2000; 504). Unlike the scenario at Kaminaljuyú, however, most scholars still allow for the possibility that foreigners from Teotihuacán had a direct and disruptive role in the political history of Tikal.

### **Copan**

The site of Copan is located in the southeastern periphery of the Maya region in Honduras (Figure 3.10). The site was occupied from the Late Preclassic through the Postclassic period. Despite its marginal location, Copan grew to become a very powerful site due to the control of the trade networks and the Ixtepeque obsidian source by the ruling elite (Sharer 1994). Like the evidence from Kaminaljuyú and

Tikal, the foreign styles found at Copan, (including *talud-tablero* architecture, Pachuca obsidian, Thin Orange ceramics, cylinder tripods vessels and foreign iconography) are limited to Early Classic elite burials and public, ceremonial contexts. This evidence has been brought to light by the Copan Acropolis Archaeological Project (PAAC), which was carried out from 1988-1995 under the direction of William L. Fash. Robert J. Sharer directed the investigations of the early phases of the Acropolis, which uncovered the bulk of the foreign style artifacts and material (Sharer et al. 1992; Sharer et al.1999).

The PAAC investigations have elucidated the Early Classic period of the Copan dynastic history, which begins with the reign of K'inich Yax K'uk' Mo', who is often depicted in foreign regalia. The depictions of K'inich Yax K'uk' Mo', along with epigraphic texts and the Teotihuacán-style artifacts have led scholars to theorize that the founder of the dynasty was placed upon the Copan throne with the political and economic aid of the central Mexican city. Several Early Classic tombs (Hunal, Margarita and Motmot) contained the remains of members of the royal dynasty accompanied by lavish mortuary offerings that included Teotihuacán-style ceramics. The evidence from Copan, however, is less substantial than that of Tikal, and has spurred less debate as well.

### Architecture

The tunneling project within the Copan Acropolis identified the earliest phase of the complex, which is associated with the first ruler, K'inich Yax K'uk' Mo', and dates to AD 420-440, approximately 40 to 60 years after the Tikal 11 Eb *entrada* event (Fash and Fash 2000; Sharer et al. 1999). The principal structure, nicknamed

Hunal, was comprised of a *talud-tablero* façade and a superstructure with painted murals in the Teotihuacán style. Sharer et al. surmise that this structure served as the residence of K'inich Yax K'uk' Mo' (Sharer et al. 1999: 5). Sharer has also noted that the ratio of the *talud-tablero* is closer to those of the structures at Teotihuacán than any other structure in the Maya region.

Another structure within the Early Classic Acropolis has provided additional evidence. The structure is part of the 10L-26-Subgroup, which was founded during the reign of K'inich Yax K'uk' Mo', and probably served as the setting for public rituals carried out by the Copan ruler (Sharer et al. 1999: 9). The structural fill of the Yax structure, so nicknamed by the excavators, contained a very high proportion of Pachuca obsidian. In fact, the proportion of Pachuca obsidian was higher than that of any other type of obsidian, including the nearby Ixtepeque obsidian source (Fash and Fash 2000: 443).

### Burials

Several Early Classic burials located within the Acropolis included foreign-style artifacts, regalia and other materials. The Hunal tomb, located within the Hunal structure at the heart of the Acropolis, is believed to be the resting place of K'inich Yax K'uk' Mo' himself (Sharer et al. 1999: 7-8). The remains within the tomb are those of a robust male who was between 50 and 70 years old at the time of his death. The remains were painted with red cinnabar (indicating that the tomb was re-entered in antiquity) and placed upon a burial slab supported by stone pedestals. A variety of Early Classic vessels, including cylinder tripod vessels with slab-foot supports, were placed beneath the slab as mortuary offerings (Figure 3.11). The

identification of occupant as K'inich Yax K'uk' Mo' is based, in part, on a jade bead incised with the mat motif that adorned the skeleton.

The Margarita tomb (Burial 93-2) was placed in a vaulted burial chamber below the Margarita structure, which was constructed on top of the Hunal structure. This tomb held the remains of an elderly woman accompanied by an array of adornments and mortuary offerings including a painted stucco cylindrical tripod vessel (nick-named the “Dazzler” because of its exceptionally fine painting and blend of Maya and Teotihuacán traits) that may depict K'inich Yax K'uk' Mo'. The lavish offerings suggest she was a member of the royal family and scholars have suggested she was the wife of K'inich Yax K'uk' Mo' and mother of Ruler 2 (Bell 2002; Sharer et al. 2005).

The Motmot tomb (Burial 37-8) was placed in a circular masonry chamber and contained the remains of a 22-29 year-old woman (Price et al. 2010). The chamber was sealed with a stone slab, nicknamed the “Motmot marker” which depicts K'inich Yax K'uk' Mo' and his son, Ruler 2 and celebrates the 9.0.0.0 (A.D. 435) *baktun* ending. The style of the tomb recalls Teotihuacán burial practices (Fash 2001; Fash and Fash 2000).

The “Tlaloc Warrior” burial, which was placed axially in front of the Margarita structure, has supplied additional evidence for Maya-Teotihuacán interaction at Copan. The adult male was interred with dozens of projectile points and wore shell Tlaloc goggles (like the goggles K'inich Yax K'uk' Mo' is depicted wearing on Altar Q) on his forehead (Fash and Fash 2000: 443). Another Early Classic burial, placed to the east of the ballcourt, included shell goggles, Thin Orange

ceramics, a slate-backed pyrite mirror and the remains of a shell platelet headdress. The shell platelet headdress is part of the Teotihuacán military costume depicted at other Maya sites (Fash and Fash 2000: 443-5; Stone 1989).

### Epigraphic texts

The most widely known epigraphic text from Copan is Altar Q, which is a retrospective monument that traces the line of the Copan dynasty from the founder, K'inich Yax K'uk' Mo' to the 16<sup>th</sup> ruler. The monument, which was dedicated in AD 776, was carved 350 years after K'inich Yax K'uk' Mo' ruled, and depicts the king wearing shell Tlaloc goggles and carrying a small rectangular shield (Figure 3.12). The hieroglyphic text on the top of the altar documents the foundation of the dynasty on September 5, 426 when the founder took the *k'awil* scepter and rose to power. Three days later K'inich Yax K'uk' Mo' went to the "Foundation House", which is associated with dynastic origins and appears to be of Mexican origin, and 152 days later arrived at Copan (Martin and Grube 2000: 192-3). The "Foundation House" mentioned in the text could be a *wi'te'naah*, or "Tree-root House" and may be the Tollan that Stuart posits as the mythical origin of dynastic power (Stuart 2000). The name of Sihyaj K'ahk' is mentioned in association with that of K'inich Yax K'uk' Mo' on an Early Classic step that dates to A.D. 439, and the two figures share the title of "Lord of the West" (Fash and Fash 2000: 446).

Pachuca obsidian was recovered from Early Classic hilltop settlements outside of the Copan center in contexts that predate the founding of K'inich Yax K'uk' Mo's dynasty. The presence of the Pachuca obsidian indicates that elites outside of the site core had access to exotic prestige items, which led scholars to

conclude that the political climate of the Copan region was unstable before the foundation of the Copan dynasty. The epigraphic texts and foreign styles found within the Early Classic Acropolis suggest that K'inich Yax K'uk' Mo' was a foreigner who arrived at Copan and consolidated his power through his association with Teotihuacán and by marrying into the local dynasty (Fash and Fash 2000: 449). Sharer et al. however, state that the initial ties between Teotihuacán and Copan (circa AD 420-500) were probably indirect and may have been the result of connections between Copan and Tikal or Kaminaljuyú. The Teotihuacán styles found within the Early Classic Acropolis were probably symbolic expressions that the early rulers of Copan used to associate themselves with the power, prestige and success of those other Mesoamerican cities (Sharer et al. 1999: 20).

#### Recent investigations

Some recent investigations have revealed interesting details regarding the identities of the apparent foreign individuals and ceramics found within the Early Classic tombs of the Copan Acropolis. The Margarita, Motmot and Hunal tombs all contained elaborate mortuary offerings including Teotihuacán-style ceramic vessels, slate-backed pyrite mirrors and other foreign styles. The exotic and foreign nature of the offerings suggested to archaeologists that the individuals buried in the tombs were indeed foreigners but recent analyses have proved otherwise. These new findings have necessitated the revision of models that posit the foreign origin of the founder of the Copan dynasty, K'inich Yax K'uk' Mo'.

### Stable Isotope analysis

Buikstra et al. (2004) analyzed the skeletal remains from the Early Classic tombs through a life-history approach that combined an examination of archaeological historical contexts with bioarchaeological techniques to reconstruct detailed accounts of the lives of the people interred in the tombs. The analysis of the skeletal remains of K'inich Yax K'uk Mo' revealed intriguing details of the ruler's life. The ruler sustained a number of blunt force traumas, including a "parry" or "nightstick" fracture in his right forearm not long before his death. The authors of the study also speculate that restructuring of the bones in the thorax, head and limbs may have been caused by injuries sustained in battle or while playing the ballgame (Buikstra et al. 2004: 196-7).

The study also included an analysis of the stable strontium and oxygen ratios of bone and tooth enamel in order to reconstruct the residential histories of the tomb occupants. The isotopic study determined that both K'inich Yax K'uk Mo' and the woman interred in the Motmot tomb spent their childhoods in the central Maya Lowlands, probably the Petén. While K'inich Yax K'uk Mo' moved closer to Copan during his adolescence, the woman did not move to Copan until adulthood, and therefore was probably not a member of the local dynasty. In contrast, the woman interred in the Margarita tomb was born and raised in the Copan region and may indeed have been a member of the local ruling family. While the founder of the Copan dynasty was a foreigner, he was not from central Mexico, as some of the models have proposed (Buikstra et al. 2004: 210-211).



### Instrumental Neutron Activation Analysis

A recent analysis of the chemical composition of the pastes of ceramics from the Early Classic tombs in the Copan Acropolis was conducted in order to determine if any of the vessels were actual imports from Teotihuacán (Reents-Budet et al. 2004). The study examined 20 vessels and 4 lids from the Hunal tomb (the resting place of K'inich Yax K'uk' Mo'), 15 vessels and 1 lid from the Margarita tomb (believed to be that of K'inich Yax K'uk'Mo's wife).

Ten of the vessels and two of the lids from the Hunal tomb were locally produced, including cylinder tripod vessels with slab-foot supports. Three vessels were identified as imports from the Mexican highlands, which include two Thin Orange bowls and a typical Teotihuacán jar that is coated with stucco and painted. The jar is painted with Teotihuacán iconography that includes a figure holding a round, feathered shield as well as an *atlatl* and darts. Two vessels were produced in or near Quirigua. Two tripod vessels were identified as imports from the Petén, and may have come from the Naranjo region. Finally, two vessels were of indeterminate origin. Reents-Budet et al. attribute the cross-cultural nature of the collection to economic and political ties K'inich Yax K'uk' Mo' maintained with various regions (Reents-Budet et al. 2004: 169-174).

The vessels from the Margarita tomb also reflected the cross-cultural ties of K'inich Yax K'uk' Mo' and his wife. Five vessels were locally produced, including a cylinder tripod vessel and three bowls that were imitations of Thin Orange vessels. Three vessels were imported from the Mexican highlands, including two Thin Orange bowls and a stuccoed and painted cylinder tripod vessel. A basal-flange

bowl was imported from the Petén, and a single vessel was produced in the southern Guatemalan highlands. The authors of the study could not determine the exact origin of the cylindrical tripod vessel depicting K'inich Yax K'uk Mo', but suggest that the vessel was manufactured in highland Mexico and imported to Copan where it was painted by a master artist versed in both Maya and Teotihuacán artistic canons (Reents-Budet et al. 2004: 174-180).

### Summary of Interaction at Copan

While these studies have not completely dismissed earlier models of interregional interaction at Copan, they do call for revisions. Scholars now understand that though K'inich Yax K'uk Mo' was a foreigner to Copan, he was not from Teotihuacán. The foreign styles evident in the Early Classic Acropolis may be the result of indirect ties to Teotihuacán through his homeland, which perhaps was Tikal. Other aspects of the models seem to hold true, namely that he married into the local ruling family in order to consolidate his power (Sharer 2004). In line with Stuart's proposed model centered on Teotihuacán as an Early Classic Tollan, Taube argues that Structure 10L-16 at Copan served as a *wi'te'naah*, or lineage fire house, that was associated with accession rituals involving fire and may have Teotihuacán origins (Fash et al. 2009, Taube 2003, Stuart 2000). According to Stuart, these structures and rituals are mentioned in texts from a number of sites including Tikal, Quirigua, Machaquila, Yaxchilán, Río Azul and Tres Islas. At Tikal, Stela 31 records an event that Yax Nuun Ayiin I performed at such a structure before his inauguration.

Stable isotope analyses indicate K'inich Yax K'uk Mo' was a foreigner to the Copan region, but that he spent his childhood in the Petén rather than central Mexico (Buikstra et al. 2004; Price et al. 2010). It is important to note that the Copan dynasty was founded 48 years after the 11 Eb *entrada* at Tikal and therefore K'inich Yax K'uk Mo' may not have been a contemporary of the lowland rulers involved in these events<sup>10</sup> but rather a member of the subsequent generation that still claimed legitimacy through foreign ancestry and connections to Teotihuacán.

### **Uaxactún**

Located 22 km north of Tikal, Uaxactún was occupied from the Middle Preclassic through the Early Postclassic period. The site is much smaller than Tikal but excavations have demonstrated that the Uaxactún rulers maintained close dynastic ties to Tikal throughout its history. The first major excavations at the site were conducted from 1926 through 1937 by the Carnegie Institute and uncovered some of the first evidence of interaction between the Maya and Teotihuacán. Pachuca obsidian, foreign-style ceramics (cylinder vessels with apron lids and slab-footed tripods) that defined Tzakol 3 elite wares and Central Mexican influence were recovered from elite tombs in Structure A-V. Three burials in particular, A29, A31 and A22 were very elaborate, consisting of specially constructed burial chambers, multitudes of Tzakol 3 ceramics and other offerings and the skeletal remains were all painted with red ochre (Smith 1950).

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<sup>10</sup> Age estimates of the skeletal remains in the Hunal tomb, believed to be that of *K'inich Yax K'uk Mo'*, indicate that the man was between 55 and 75 years old at the time of his death. If *K'inich Yax K'uk Mo'* did indeed live to be 75 years old, and he died in AD 437 (Sharer 2004), then he would have been 16 years-old in AD 378 and could have been involved in the 11 Eb events. If he only lived to the age of 55, then he would have been born in AD 382, four years after the 11 Eb event.

Burial A29 was the earliest in the sequence of the three tombs, and placed in the center of the plaza courtyard, on the central axis, of Structure A-V below a building that could have been a central shrine. Smith describes this tomb as “the most pretentious” because it included elaborate offerings of 25 ceramic vessels, pieces of jade, fragments of jade mosaics, perforated conch shells, stingray spines and a possible codex (Smith 1950:97). Valdés (1989) suggested that this king ruled circa AD 400 and was a contemporary of Yax Nuun Ayiin I of Tikal. In their reconstruction of the Uaxactún dynasty, Valdés and Fahsen later proposed that this man was actually Sihyaj K’ahk’ who reigned at Uaxactún after it was conquered by Tikal in AD 378 (Valdés and Fahsen 1995).

Burial A31 was placed in a tomb that cut into the floor of the lower terrace of Structure A-V in front of Stela 26 and dates to AD 445 based on the date and placement of Stela 26. Burial A22 was placed beneath a wall of Room 8 and included, among the many offerings, an incised bowl with the date AD 465. A platform and 2-room superstructure were built over the tomb in tribute of the interred ruler. Stela 22 was erected 30 years later in Room 16 of this structure (Smith 1950). The retrospective monument, dating to AD 495, may have signaled the end of the dynastic period related to Teotihuacán since Burial A22 was the last of the elaborate Tzakol 3 tombs.

The epigraphic and iconographic evidence is even more intriguing. Stela 5, which was erected in front of Structure B-VIII, includes a Long Count date of 8.17.1.4.12 11 Eb 15 Mac or January, 16, 378 (Figure 3.13). This monument could be a portrait of Sihyaj K’ahk’ and may, as some scholars argue, chronicle the

conquest of the site by Tikal (Schele and Freidel 1990; Valdés and Fahsen 1993). The illustrious warlord is depicted in profile carrying an *atlatl* in his left hand and a spiked club in his right. Stela 4 was dedicated by Sihyaj K'ahk' in 396 and erected next to Stela 5 (Figure 3.14). Stela 22 was discovered inside a room of Structure A-V and dates to AD 504. Though it is badly eroded, it appears to be a retrospective monument that refers to the 11 Eb date.

A mural from Structure B-XIII (which was destroyed by exposure to the elements after it was documented) depicts an encounter between Maya and Central Mexican lords. Structure B-X-III was an elite residence in the Early Classic period. The mural consists of several registers and depicts a number of Maya men and women engaged in conversation and other courtly activities. The scene that scholars regard as most significant portrays a Maya lord, his right arm crossed in front of his chest in greeting, facing a lord carrying an *atlatl* in his right hand and a club in his raised left hand. This lord wears knee garters and anklets similar to those worn by Sihyaj K'ahk' on Stela 5 as well as a feathered headdress and back shield. His attire and the weapons he carries identify him as a Central Mexican, perhaps from Teotihuacán. A line of hieroglyphs border the bottom of the mural, and Thompson identified them as a sequence of the sacred calendar beginning with 12 Imix and ending with 5 Eb representing one-fifth of a *tun*, or a period of 72 days (Smith 1950: 56-58). In a review of the glyphic text, Valdés and Fahsen identified the names of Sihyaj K'ahk', Siyaj Chan K'awil II of Tikal and a Uaxactún lord named Mah Kina' Mo' (Valdés and Fahsen 1993: 46).

### Summary of Interaction at Uaxactún

The Carnegie project represented one of the first large-scale excavation projects in the Maya lowlands and established a protocol for recording artifacts, but the investigators did not have an extensive knowledge base to which they could compare their findings. Although they recognized that cross-cultural interaction took place at Uaxactún, they did not attribute the foreign styles to Teotihuacán, nor did they posit any models of interaction.

It seems that the elite lords who lived in Group B had some sort of interaction with Sihyaj K'ahk' and connection to the 11 Eb event, since they erected monuments in 378 and 396 and painted a mural in commemoration. Three subsequent rulers were buried in elaborate tombs in Structure A-V, accompanied by Tzakol 3 ceramics, circa AD 400-465. The ruler laid to rest in tomb A29 may have been on the throne in AD 378, and his heir, a contemporary of Siyaj Chan K'awil II, might have been interred in burial A31 in AD 445. The lord interred in Burial A22, who died in AD 465, would have been the next in the line of succession.

The evidence of foreign interaction uncovered by Carnegie investigations has not been studied by new generations of scholars, perhaps because they are not readily available. Isotopic analysis of the skeletal remains could shed light on the geographical background of the lord buried in tomb A-29. INAA analysis on the ceramics included in his mortuary offerings could elucidate relationships with lords of other Maya sites and perhaps Teotihuacán by identifying where the vessels were produced.

While excavations at Uaxactún have been carried out in recent years by Guatemalan archaeologists, no further evidence of interaction with Teotihuacán has been recovered. The poor preservation of the stone monuments has hampered reconstructions of the dynastic line at Uaxactún. Recent interpretations of the evidence focus on the conflict between Tikal and Uaxactún (Valdés 1989; Valdés and Fahsen 1993). These interpretations identify Sihyaj K'ahk' as a lord of Tikal and tend to downplay the central Mexican connotations of the iconography and funerary assemblages.

### **Río Azul**

Located in the northeast corner of the Petén, Río Azul is in a remote area near the Mexican border (Figure 3.15). While occupation in the area dates to the Middle Preclassic, the ceremonial core of the site was founded in AD 380 and Early Classic altars dating to AD 385 depict the capture, torture and execution of Río Azul lords, while a later monument, Stela 1, dating to AD 392 depicts a figure standing over a captive. The badly damaged hieroglyphic text possibly contains the name of a Río Azul lord, Zak Balam, along with the name of Sihyaj K'ahk' (Figures 3.16 & 3.17). Adams (1999) interprets these monuments as historical records of the conquest of Río Azul by Tikal in AD 385.

Several Early Classic tombs (1, 19, 23, 25, 31) from Río Azul shed more light on the situation. Tombs 1, 19 and 23 contain elaborate hieroglyphic murals, Pachuca obsidian and foreign-style cylinder tripod vessels, some of which were coated in stucco and painted with Tlaloc motifs. The murals of Tomb 1 include the birth date of the occupant, nicknamed Governor X, as 417 CE and name his father as Siyaj Chan

K'awil II and grandfather as Yax Nuun Ayiin I, who were both rulers of Tikal and members of the dynasty involved with the 11 Eb *Entrada* event. Tombs 19 and 23 were associated with Tomb 1 and scholars have interpreted them as tombs of the advisors of the ruler laid to rest in Tomb 1, Governor X. Both of these tombs contained Teotihuacán-style ceramics. R.E. W. Adams speculates that one of the advisors was a foreigner from Teotihuacán while the other was Mayan (Adams 1999: 142). Tomb 25 was the resting place of an elite woman and contained Pachuca obsidian as well as Teotihuacán-style ceramics. The motifs on the ceramics suggest to Adams that she was originally from Uaxactún and married into the Río Azul dynasty

The sociopolitical history of Río Azul, as reconstructed by Adams, begins with violent military conquest of local lords by Tikal and the founding of the city to serve as an installation along the northern border of the Tikal region against the neighboring state of Calakmul. The model combines an overt and direct presence of foreigners at the site who helped establish a ruling dynasty allied with Tikal. As of yet, the skeletal remains and foreign-style ceramic vessels have not been analyzed to determine whether they are of local or foreign origin.

### **El Peru/Waka'**

El Peru, now called by its ancient name, Waka' is located in Northwestern Petén approximately 100 km west of Tikal. The site is situated atop an escarpment overlooking the San Juan River, 6 km north of where it joins the San Pedro Mártir River with a natural harbor on the San Juan nearby. Scholars assert that it was well-suited to be a fort or citadel and that it may have maintained a naval installation that



served to protect convoys of trading canoes as they journeyed along 80 km of calm river route that linked the interior of the Petén with the Usumacinta region. Waka' was also connected to southern Campeche and Calakmul via an overland route crossing north-south trending ridges (Freidel et al. 2007).

The evidence for interaction with Teotihuacán is entirely epigraphic in nature -thus far no other hallmarks of foreign styles such as Pachuca obsidian, *talud-tablero* architecture or cylinder tripod vessels have been recovered from excavations at the site.

Stela 15<sup>11</sup> is a retrospective monument dedicated in A.D. 415, 40 years after the event it commemorates (Figure 3.18). The full hieroglyphic monument was erected by the successor of the ruler K'inich Balam, who received Sihyaj K'ahk' eight days before he arrived at Tikal on the 11 Eb date in 378. The fragmentary text describes the performance of some sort of action by Sihyaj K'ahk' at a "*wit-e-place*", perhaps accompanied by K'inich Balam. The text is incomplete but Freidel et al. believe this glyph refers to a *wi'te'naah* or founder's house as described in Taube's (2003) analysis of founding events at Copan.

Freidel et al. conclude that K'inich Balam of Waka' was recognized as an important ally to Sihyaj K'ahk' and that the arrival of Sihyaj K'ahk' signaled the Waka' king's formal and voluntary incorporation into the New Order hegemony before the events at Tikal took place. Furthermore, the creation and erection of the monument by K'inich Balam's successor 40 years later is a testimony to the

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<sup>11</sup> Fragments of Stela 15 were originally recorded by Ian Graham in the *Corpus of Maya Hieroglyphics* and have been cited in models of interaction such as Stuart's (2000) seminal article. Several additional fragments have recently been discovered and the reassembled monument has revealed more details of the dynastic history of Waka'

significance of the events in the dynastic history and socioeconomic success of Waka' (Freidel et al. 2007:194).

Stela 16 is a fragmented Early Classic monument with an accession date of A.D. 458 and a possible dedication date of A.D. 465 (Figure 3.19). The monument was originally drawn by Ian Graham and later revised by David Freidel and colleagues (Freidel et al. 2007). The face of the monument includes a portrait of a lord wearing a headdress and collar. The details added by the revised drawing of the monument include central Mexican elements of costume including pecten shells and a headdress with three circular adornments in the center. Freidel and his colleagues suggest the lord cradles a crossed bundle in his left arm, which they associate with the *wi'te'naah* and Teotihuacán related fire rituals. Furthermore, they argue that this monument is a posthumous portrait of Sihyaj K'ahk' (Freidel et al. 2007: 199-200).

Based on these monuments, a looted object called the Costa Rican Back Mirror<sup>12</sup> that names K'inich Balam and evidence of interaction at other sites, Freidel et al. have developed a model of interaction that centers on the Teotihuacán desire to control strong points along the trade route between the Maya region and central Mexico. The Teotihuacán strategy for establishing control included diplomatic alliances and conquests. The diplomatic alliances were sealed through bestowing foreign gifts upon the Maya lords, who in turn gifted them to neighboring lords to establish local alliances (Freidel 2007:195).

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<sup>12</sup> I was not able to locate any published descriptions of this object and therefore do not discuss the evidence Freidel and his colleagues cite because it cannot be confirmed.

### Summary of Interaction at El Peru/Waka'

While the epigraphic evidence from Waka' is intriguing and provides a possible reconstruction of the route that *Sihyaj K'ahk'* may have traveled on his way to Tikal, the model that Freidel and his colleagues propose is based on conjecture and interpretations of evidence from other sites rather than any substantiating archaeological evidence from El Peru/Waka'. In fact, the research at Waka' is guided by the hieroglyphic texts and Freidel et al. state that one of their research goals is to test existing models of cross-cultural interaction. Based on their interpretation of Stela 16 they are looking for the *wi'te'naah* associated with the crossed-bundle the lord holds. Very little Early Classic occupation has yet to be uncovered at Waka' and without this contextual information it is very difficult to interpret the monuments and reconstruct the process of interaction with Teotihuacán that may have taken place in this area of the Petén.

### **Altun Ha**

Located in Northern Belize near the Caribbean coast, Altun Ha is a small secondary center that was occupied from the Early Preclassic period (ca.1000 BC) through the Classic Period. The evidence for interaction with Teotihuacán is limited to the contents of a cache offering deposited above a royal tomb in Structure F-8 around AD 250 (Pendergast 1971). The offering included more than 248 Pachuca obsidian eccentrics and points as well as imported ceramics from central Mexico. The obsidian offering is similar to offerings at Teotihuacán during the Miccoatlí/Early Tlamimilolpa phase (AD 150-250) (Spence1996). Pendergast has interpreted this offering as homage to the ruler entombed below bestowed by

Teotihuacán. The offering did not herald a period of Teotihuacán dominance over Altun Ha, a trade alliance between the two cities or even an influx of foreign styles into the region. Instead, the offering appears to have been an isolated event that does not shed very much light on the problem of interaction between the Maya and Teotihuacán (Pendergast 2003:246).

### **Summary of the evidence of cross-cultural interaction in the Maya region**

Our current understanding of Maya-Teotihuacán interaction is that it began much earlier than scholars once thought, as evidenced by Pachuca obsidian found in Late Preclassic contexts at Tikal, and that some sites may have experienced direct contact, though most evidence does not support the presence of Teotihuacanos in the Maya region. Direct contact may have occurred during the Early Classic period in the Petén between Teotihuacán emissaries, led by Sihyaj K'ahk' in AD 378. This group probably traveled down the Río San Pedro Mártir, stopping at sites like El Peru/Waka' and Bejucal, before arriving at Tikal.

Either through internal factional competition or through Teotihuacán intrusion, the reigning king of Tikal, Chak Tok Ich'aak I, was dethroned and possibly murdered. A new ruler, Yax Nuun Ayiin I, rose to power in AD 379, and Sihyaj K'ahk' may have served as his regent or overlord for a period of time early in his reign. Yax Nuun Ayiin I was the son of Spearthrower Owl, a lord whose name had not yet been deciphered but who ascended to that throne of an unknown polity, possibly Teotihuacán, in AD 374 and who died in AD 439.

During the reign of Yax Nuun Ayiin I (AD 378-404?), the use of Teotihuacán-style ceramics, iconography and Pachuca obsidian spread throughout the Petén. These materials were generally restricted to elite ritual and burial contexts. In subsequent years sites like Uaxactún, Río Azul, Copan, Kaminaljuyú and other sites in the Petén made allusions to the 378 events at Tikal by portraying themselves in Teotihuacán-style regalia, erecting retrospective monuments that reference the date and including Teotihuacán-style ceramics and other exotic materials in their tombs. The rulers of a few of these sites, namely Copan and Kaminaljuyú, may have spent time at Teotihuacán, but these travels took place after AD 378.

The Maya came to regard Teotihuacán as a Tollan, or a symbolic center that “represents the achievement of an elaborate level of social and cosmological integration” (Carrasco 2000: 64-65). Teotihuacán was called the “Place of Cattails”, a name equivalent to “Tollan” by the Maya and was regarded as a place of origin (Stuart 2000). Maya rulers incorporated accession rituals derived from central Mexican New Fire ceremonies carried out at a *wi'te'naah* or “Origin House,” which may have actually been located at Teotihuacán and required that pilgrimages be made to central Mexico by new rulers before they ascended to the throne (Fash et al. 2009; Stuart 2000; Taube 2004). During the course of the Early Classic period the authority of the Maya ruler became dependent on Teotihuacán symbols and ceremonies, yet life beyond the elite levels of society was not greatly impacted by cross-cultural interaction with the central Mexican city.

## **Models of Interaction**

As the preceding discussion details, early scholars developed models of cross-cultural interaction that were based on partial evidence and recreated scenarios of interaction that seem like wild leaps of the imagination in retrospect. Unfortunately, these models, which usually proposed a direct and intrusive form of interaction with an unequal balance of power between the Maya and the Teotihuacán emissaries, have dominated Maya scholarship for much of the past twenty years.

Joyce Marcus (2003: 348-352) has summarized the current state of the problem of Maya-Teotihuacán interaction with four models that describe the process of cross-cultural interaction as scholars understand it at several Maya sites. As Marcus herself notes, these models underscore the complexity of the issue because no single model can explain the process of interaction throughout the Maya region. It is clear that cross-cultural interaction occurred for a variety of motives and by various means and the evidence at a particular site must be assessed on an individual basis and within the sociopolitical context of the site. While these models are descriptive rather than explanatory, they are useful for the purpose of characterizing foreign interaction at any given site.

Single event – This model describes interaction at sites like Altun Ha, Nohmul and Becan at which a single episode took place. The only evidence of foreign interaction at these sites comes from caches of green Pachuca obsidian and Teotihuacán-style ceramics that appear to commemorate a visit from or relationship with Teotihuacán. Marcus notes that the single event can be destructive rather than

commemorative, such as a raid rather than elite gift-giving, but the archaeological evidence has yet to support this scenario.

Multi-stage – The second model describes multistage interaction during which the relationship between two groups shifts from a symmetrical and mutually beneficial alliance to an asymmetrical relationship with one group gaining power over the other. Marcus suggests that these types of cross-cultural interaction begin with a symmetrical relationship formed on the basis of military or marital alliances. The relationship may later become asymmetrical when one site gains control over the other by usurping dynastic power. This model really describes debunked hypotheses that were once used to explain the presence of “foreign” rulers at Tikal and Copan and still views Teotihuacán as the more powerful and influential party in the relationship. As Marcus points out, the takeover of these sites by foreign usurpers to the throne, backed by Teotihuacán military force, have been disproved by biological evidence from skeletal remains, which have demonstrated that dynastic founders were not so foreign after all. A more likely scenario for multi-stage interaction would involve trade alliances established during different periods of time that contributed to the rise in power and wealth of one site over another, which is a possibility that Marcus does not discuss. This model could be more dynamic if it also considered the evidence for presence of Maya people at Teotihuacán. While Maya may have been living, and dying, at Teotihuacán the credible evidence for enclaves of Teotihuacanos living in the Maya region is slim.

Simple dyadic – Marcus cautions against the tendency of scholars to assume a simple dyadic relationship between two sites because recent evidence has

demonstrated that many sites with evidence of Teotihuacán influence were in contact with more than one foreign source. Scholars who ascribe evidence to this model assume direct and sole interaction between the Maya and Teotihuacán rather than considering the involvement of other cultural groups in Mexico and the Maya region.

Multiple Partners or Interactions Mediated through Multiple Sites - This model is more akin to a web of interaction throughout Mesoamerica rather than direct lines of interaction across regions. The growing evidence suggests that the rulers of most Maya cities fostered ties to other Maya cities and in some cases, cities outside of the Maya region altogether. These relationships were probably both direct and indirect and varied in intensity over time. A few major Maya sites, like Tikal and Kaminaljuyú, may have had direct ties to Teotihuacán, while smaller sites experienced indirect contact through these intermediary Maya sites. This model also provides a more personal role in cross-cultural interaction by explaining the disparity of foreign styles at neighboring Maya sites as a reflection of personal contacts between the ruling elites. The Multiple Partners/Mediating Sites model most accurately reflects the situation in the Maya lowlands during the Early Classic period, as most of the evidence of foreign interaction at sites in the Petén appears to have been introduced by Tikal.

Marcus aptly points out that the variability in the evidence for foreign interaction is due to differences in the types of interaction that took place at each site and suggests that the sociopolitical complexity of a Maya site prior to foreign contact may have been the impetus for cross-cultural interaction. In other words,



the Teotihuacanos did not want to bother themselves with protracted interaction with less influential sites like Altun Ha that did not possess resources or political influence, but deemed prolonged negotiations and contact with strong early states like Tikal an advantageous expenditure of time and effort.

Marcus encourages archaeologists to avoid the foibles of earlier scholars by balancing the discussion of foreign artifacts and influence with an examination of local artifacts and sociopolitical development. She also calls for a healthy skepticism about foreign-style artifacts that leads to testing the source of these objects rather than an automatic assumption of outside provenience. For instance, the clays of foreign-style ceramics can be sourced to determine whether or not they are actual imports. Whenever possible, isotopic analyses of skeletal remains should be conducted to determine geographical origin. In short, more rigorous scientific testing will lead to a more robust understanding of the motives, processes and effects of cross-cultural interaction. These analyses have contradicted earlier models based predominantly on epigraphic texts, which should serve as a cautionary tail for scholars against models that rely too heavily on one line of evidence. While great progress has been made in deciphering the hieroglyphic texts, we must remember that in most cases the text is incomplete –whether due to the poor preservation of the monument or undeciphered elements. Furthermore, the texts were created by Maya rulers with an agenda and may have served to manipulate public perception rather than providing an unbiased history.

Guided by Marcus' advice, this work considers multiple lines of evidence, including architecture, ceramics, lithics and iconography to understand cross-

cultural interaction at La Sufricaya. Comparing the data to evidence from other Maya sites and Teotihuacán may help determine the degree of interaction by examining the contexts in which the foreign-style artifacts and iconography were used. This work also examines the historical contexts that preceded periods of interaction at La Sufricaya and other sites in the Petén in order to reconstruct the process of interaction. The aim of this analysis is to develop a more complete model of cross-cultural interaction that addresses the motivations of both the Maya and Teotihuacán, the processes of direct interaction with central Mexico and indirect interaction through other Maya sites. In doing so, this work frames the question of Maya-Teotihuacán interaction in terms of ethnogenesis and collective identity.

### **Ethnic Identity and the Problem of Maya-Teotihuacán Interaction**

Although scholars have been reluctant to do so, the problem of Maya-Teotihuacán interaction presents a challenging arena in which to study the dynamic aspects of ethnic and collective identity, and may provide a basis for the development of the more comprehensive models that Marcus calls for. Previous models have only superficially addressed the issue of ethnicity by focusing on the identification of Teotihuacán-style materials in the Maya region and ethnic enclaves of Teotihuacanos in the Maya region or enclaves of Maya at Teotihuacán (Santley 1984; Kidder, Jennings & Shook 1946; Rattray 1993). These studies, to varying degrees of success, identify ethnic groups based on markers of ethnic identity recovered from the archaeological records but do not fully address the dynamic and complex aspects of ethnicity in Mesoamerica. Furthermore, the early studies

assume that similarities in material culture reflect the presence of a particular ethnic group and an index of social interaction.

Research in anthropology and in sociology has demonstrated that a one-to-one relationship between ethnic identity and cultural similarities or differences cannot be assumed, yet archaeological research in ethnicity generally makes this assumption (Emberling 1997: 297; Jones 1997: 113). This identification of cultural material with ethnic identity presents a problem since it is dependent on artifact style, which was once considered a sound basis of classification, but has recently been recognized as a dynamic form of communication and expression of identity. Style is at once an analytical tool for archaeologists, a reflection of cultural practices, and a system of information exchange (Wobst 1977; Conkey & Hastorf 1990; Sackett 1990; Shennan 1989). Sackett (1990) has outlined two forms of style: iconological style actively communicates identity through decorative and symbolic motifs, while isochrestic style is the result of making objects in a certain way and reflects the function of the artifact (Sackett 1990:13). The standardization of isochrestic variation can become iconic of ethnic groups, thereby promoting ethnic identity and group cohesion as well as maintaining ethnic boundaries and arbitrating interaction with others (Sackett 1990:36).

The concept of ethnicity can provide a more nuanced, encompassing framework for understanding Maya-Teotihuacán interactions. Ethnicity is dynamic, complex and based on a combination of opposing perspectives. Ethnic identity is defined through subjective (emic) and objective (etic) traits, or characteristics, recognized by members of particular groups as well as outsiders (Emberling 1997;

Jones 1997). Ethnic affiliation and identity is often felt on a subconscious level and formed through lived experiences that may not be consciously recognized; yet, it is also actively portrayed, performed and even manipulated. The strong and enduring bonds of ethnic affiliation are formed during early processes of socialization in childhood and to some degree constitute an involuntary primordial attachment (Weber 1968; Geertz 1973; Shennan 1989; van den Berghe 1981). On the other hand, ethnicity can be situationally manipulated to mediate social relations and negotiate access to resources (Barth 1969; Jones 1997; van den Berghe 1981). Ethnic identity is inherently dichotomous, since it allows people to recognize affiliation with each other, yet also distinguish themselves from, and maintain boundaries between, outside groups.

Ethnic identities and boundaries were even more important in Mesoamerica because the cultures shared so many similar traits yet competition for resources led to the creation and maintenance of strict ethnic boundaries. Nowhere is this more evident than in the art. There are numerous monuments and murals that depict members of two different groups in the same tableau. Pasztory (1989) cites these as examples of stylistic juxtaposition that delineate and reinforce ethnic boundaries. These pieces of art also depict the unique cultural traits and ideology of each group and can be used to understand how groups perceived themselves in opposition to others. The ideology of a particular group is depicted in the costume, posture and implements portrayed as well as in the artistic style itself.

Inspired by artwork that depicts moments of interaction, this project aims to understand the psychological aspect of cross-cultural interaction and what impact it

may have had on ethnogenesis and change. What did the Maya think of these foreigners? What elements of Teotihuacán culture impressed them? Did they recognize any similarities between themselves and the foreigners? This is still a one-sided study because the Maya created artwork that depicted their intertwined experiences while the Teotihuacanos did not.

Ethnic ascription is evident in public art and monuments including Tikal Stela 31 and the vessel from Problematic Deposit 50, Uaxactún Stela 5 and the La Sufricaya murals. The Maya may have depicted what they perceived to be foreign aspects of Teotihuacanos, which became salient symbols and markers of Teotihuacán identity for the Maya. These symbols were meaningful because they were so different from the Maya worldview and experience and they provided a point of contrast that helped define Maya ethnic identity.

An intriguing aspect of the artistic representations of others cross-culturally is that the nature and content of these depictions are dependent on the sociopolitical factors and processes surrounding interaction (Hallam & Street 2000; Levine 1997). For example, the Pharonic state art of ancient Egypt employed ethnic stereotypes to depict neighboring cultural groups like the Libyans, Asiatics and Nubians in order to distance the civilized Egyptian empire from its subjects (Smith 2003). The Aztec employed similar tactics when describing and depicting the conquered ethnic groups within their empire (Berdan 2008). Therefore, the style in which the Maya depicted Teotihuacanos as well as the objects, costume and symbols included in the representations could provide insight into the constitution of ethnic identification and social boundaries. Elements of material culture often play a key

role in cross-cultural interaction by expressing social status and identity. It is first necessary to determine which elements of material culture, and the contexts in which they were used, were significant to particular groups (Janusek 2002).

### **Processes of ethnogenesis and ethnic change**

It is clear from the preceding discussion that ethnic identity is a complex social phenomenon that has a variety of meanings for people and therefore must incorporate many opposing viewpoints. In order to analyze the diverse issues surrounding ethnic identity, scholars have generally selected the aspect of ethnicity and appropriate perspective that suits their needs, but this method does not necessarily address the myriad meanings, functions and formation processes of ethnicity. However, the theory of practice developed by Pierre Bourdieu (1977) provides a way to integrate the various aspects of ethnicity, resulting in an analytical framework for studying the formation, transformation and maintenance of ethnic identity.

Bourdieu's concepts of *habitus* and *doxa* can be used to explain how ethnic identity comes into being through the unconscious dispositions of shared social practice and the break in *doxic* knowledge (which is formed through *habitus*) that occurs during interaction with other groups (Bourdieu 1977, 1990). The theory of practice explains how ethnic identity can be both subjectively and objectively defined, as well as be a subconscious or actively manipulated form of social identity.

Bourdieu's theory of practice is based on the precept that the particular material conditions of existence produce the structures of *habitus*, or principles and inclinations toward certain behaviors and practices (Bourdieu 1977: 72). Social

knowledge and identity are thereby constructed through the *habitus* and the experience of daily practice, or life, which is in turn guided by past conditions and existing structures (ibid). The structures of habitus are rarely consciously recognized or explicitly defined, but provide the basic practices of individual actions and enable people to cope with and react to new and unforeseen experiences (Bourdieu 1977: 73-6).

The dispositions of habitus are produced and reproduced by agents through social practice and also contribute to group habitus, which is the result of homogeneous conditions of life (Bourdieu 1977: 80). The homogeneity of habitus produces a commonsense world, which is based on group consensus of the meanings of practices and the world. The experiences of agents become harmonized through the continuous reinforcement they receive from individual or collective, improvised or programmed, expressions of similar or identical practices (ibid). Therefore, the practice approach to ethnicity explains how subjective definitions of identity are formed through group habitus and shared experience, and also explains the primordial and subconscious feelings of ethnic affinity through the reinforcement agents receive from other members of the group who share subconscious dispositions and habitus.

According to Bourdieu, the correspondence between habitus and the conditions of existence results in a social experience called *doxa*, which is defined by the misrecognition and naturalization of divisions in the social order. This doxic knowledge in turn leads to the reproduction of the social order (Bourdieu 1977: 164). Therefore, when the dispositions of the habitus correspond to daily existence,

individuals are not faced with experiences that challenge the established social structures. Doxic knowledge is based on this stasis in the existing social structure and social experience.

Bourdieu's model also takes the relational aspect of ethnic identity into account by acknowledging that breaks in doxic knowledge can occur during moments of culture contact or internal society crises. People become conscious of the subconscious dispositions of *habitus* during these moments and doxic knowledge is transformed into orthodoxy (the denial of alternative beliefs) or heterodoxy (acknowledging the existence of a choice between different forms of knowledge) in order to accommodate the newfound awareness and recognition of other ways of life and beliefs (Bourdieu 1977: 164).

Comaroff and Comaroff argue that the liminal space between conscious and unconscious awareness of social structures (*habitus*) gives rise to symbols and practices that become part of explicit consciousness, ideological assertion and social and political contestation (Comaroff & Comaroff 1991:29). During moments of interaction, the unconscious becomes conscious as people are forced to recognize differences or similarities between themselves and others. The essential qualities of their ethnic identity, which may have been subconscious, are forced into conscious expression. Additionally, these moments of interaction may provide the means of expressing pre-existing, yet unrecognized social tensions. Furthermore, Comaroff and Comaroff later argue that ethnicity cannot exist without interaction with other groups because it is inherently based on the recognition of cultural differences (Comaroff & Comaroff 1992).



## Imagined Communities

The self-consciousness that arises out of cross-cultural interaction and breaks in doxic knowledge can lead to the formation of collective identities. In turn, collective identities that transcend geographic and physical boundaries may be considered imagined communities. Anderson (1983) applies the concept of imagined communities to explain the rise of nationalism. The nation is a community that transcends the differences among its population and is conceived of as a “deep horizontal comradeship”. It is an imagined community because most members will never know each other – because of vast geographical distance or other factors (1983:15-16). Anderson emphasizes that an imagined community develops out of pre-existing cultural roots. These cultural structures eventually dissolve due to what is essentially a break in doxic knowledge and the development of new ways of thinking. Specifically, nationalism arose out of 1) a sacred script language that provided privileged access to knowledge; 2) rule by monarchs who received their power by some divine or cosmological force; 3) a conception of time in which cosmology and history were indistinguishable.

While Anderson’s model of imagined community arose out of a particular historical moment, it provides a foundation for understanding how people form social identities that transcend ethnic affiliation during moments of cross-cultural interaction. Since the members of an imagined community do not regularly interact and reinforce their identity through daily practices (or *habitus*), practices of affiliation are required to cement the relationship (Yaeger 2000). The practices of affiliation, such as exchanging certain prestige goods, remind people of their

membership in the imagined community and allow them to publicly signal their participation to outsiders (Goldstein 2000; Helms 1993).

This theoretical framework provides a model for understanding cross-cultural interaction between the Maya and Teotihuacán and the appropriation of foreign styles by the Maya elite. Cross-cultural interaction, in addition to pre-existing social tensions, precipitated a break in Mayan doxic knowledge that revealed the subconscious dispositions of *habitus*. For certain Maya rulers in the Petén, this break in doxic knowledge introduced new forms of ideology related to royal authority that could reinforce their tenuous hold over their polities. These rulers then developed an imagined regional elite community that solidified alliances and signaled membership through practices of affiliation involving the display and exchange of Teotihuacán-style ceramics, iconography and Pachuca obsidian, as well as accession rituals based on central Mexican rites. Over time, this imagined regional elite community based on ties to Teotihuacán transformed the way Maya rulers claimed their legitimate right to rule and authority, through connections to the Teotihuacán Tollan.

The proposed model integrates externalist and internalist perspectives, allowing for the possibility of direct cross-cultural interaction as well as the importance of Maya agency. This framework also bridges a gap in the current understanding of Maya-Teotihuacán interaction: why do foreign-style artifacts, iconography and retrospective references to the 11 Eb event appear at sites that do not have evidence of direct contact with Teotihuacán? The answer is that the ruling

elite of these sites participated in an imagined regional elite community that used allusions to Teotihuacán to distinguish themselves from non-members.

## **Conclusion**

This overview of the evolution of archaeological models for Maya-Teotihuacán interaction illustrates how early models focused on the identification of foreigners in Maya dynastic histories and relied too heavily on stylistic and iconographic evidence. These models neglected to take into account the motivations of Maya rulers in displaying Teotihuacán-style objects and symbols. Later models attribute agency to Maya rulers, but also deny any form of direct contact with Teotihuacán. Current models allow for direct cross-cultural interaction at some sites (Stuart 2000), consider the motive of Maya rulers in appropriating foreign symbols (Braswell 2003) and the possibility of Maya lords traveling to, and spending time in, central Mexico (Fash et al. 2009).

Technological advances in scientific testing have provided exciting information about the true origins of ceramics and people once believed to be foreign imports to the Maya region. Stable isotope and INAA analyses have demonstrated that the Maya of the Early Classic were very mobile and polities were interconnected via trade networks and social alliances (marital and kinship ties). Recent isotopic analyses even suggest that children of the elite class may have been fostered at other Maya and Mesoamerican sites, perhaps among their mother's family, before returning to the sites where they lived their adult lives (Wright 2012).

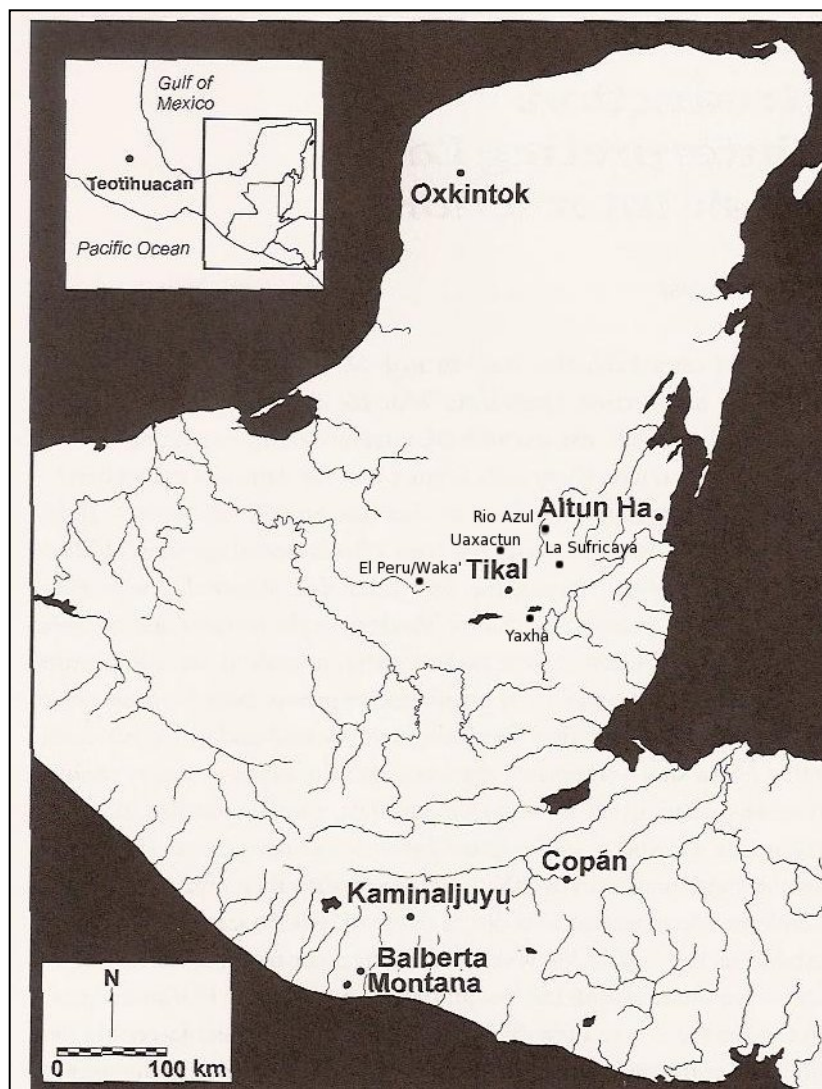
Likewise, advances in epigraphic research have deepened our understanding of dynastic succession, alliances and conflicts among the ancient Maya. The

decipherment of texts has also contributed to models explaining the process of interaction and our understanding of how the Maya perceived Teotihuacán (Stuart 2000; Taube 2004). We must be mindful, however, that most of the history was recorded on monuments erected by later kings, not the people who actually participated in the Early Classic events, and these subsequent rulers had their own motives for recounting these events.

As scholars, we must not forget the lesson learned by previous generations: relying too heavily on limited lines of evidence does not generate a complete understanding of events and can even mask the truth of the past. Both isotopic and INAA analyses have limitations based on sample size and similarities in the geography throughout Mesoamerica. Wright (2012) acknowledges that it is difficult to discern differences in isotope ratios between lowland Maya sites, due to similarities in the environmental signatures left on enamel and bone, as well as the lack of samples from some sites. INAA analysis faces the same challenges (Reents-Budet et al. 2007). Fortunately, as excavations continue, these shortcomings will be addressed. Robust models of Maya-Teotihuacán interaction must consider multiple lines of evidence in order to stand the test of time.

In the subsequent chapters, I summarize the architectural (Chapter 4), ceramic (Chapter 5), lithic (Chapter 6) and iconographic (Chapter 7) evidence for cross-cultural interaction at La Sufricaya. This multivariate evidence is compared, in each chapter, to material from Teotihuacán and other Maya sites that have exhibited cross-cultural interaction with central Mexico. This comparison provides a basis for defining the social contexts in which cross-cultural interaction occurred

and determining the degree and nature, according to Marcus' models, of culture contact at La Sufricaya. In turn, this comparison will help discern the material correlates of *habitus* and ethnicity that became salient markers of identity during moments of interaction. Finally, I reconstruct the practices of affiliation that signified the membership of the La Sufricaya lords in an imagined regional elite community based on ties to Teotihuacán.



**Figure 3.1** Map of Maya sites with Early Classic evidence of interaction with Teotihuacán (After Braswell 2003 Figure 1.1 with additions by the author).

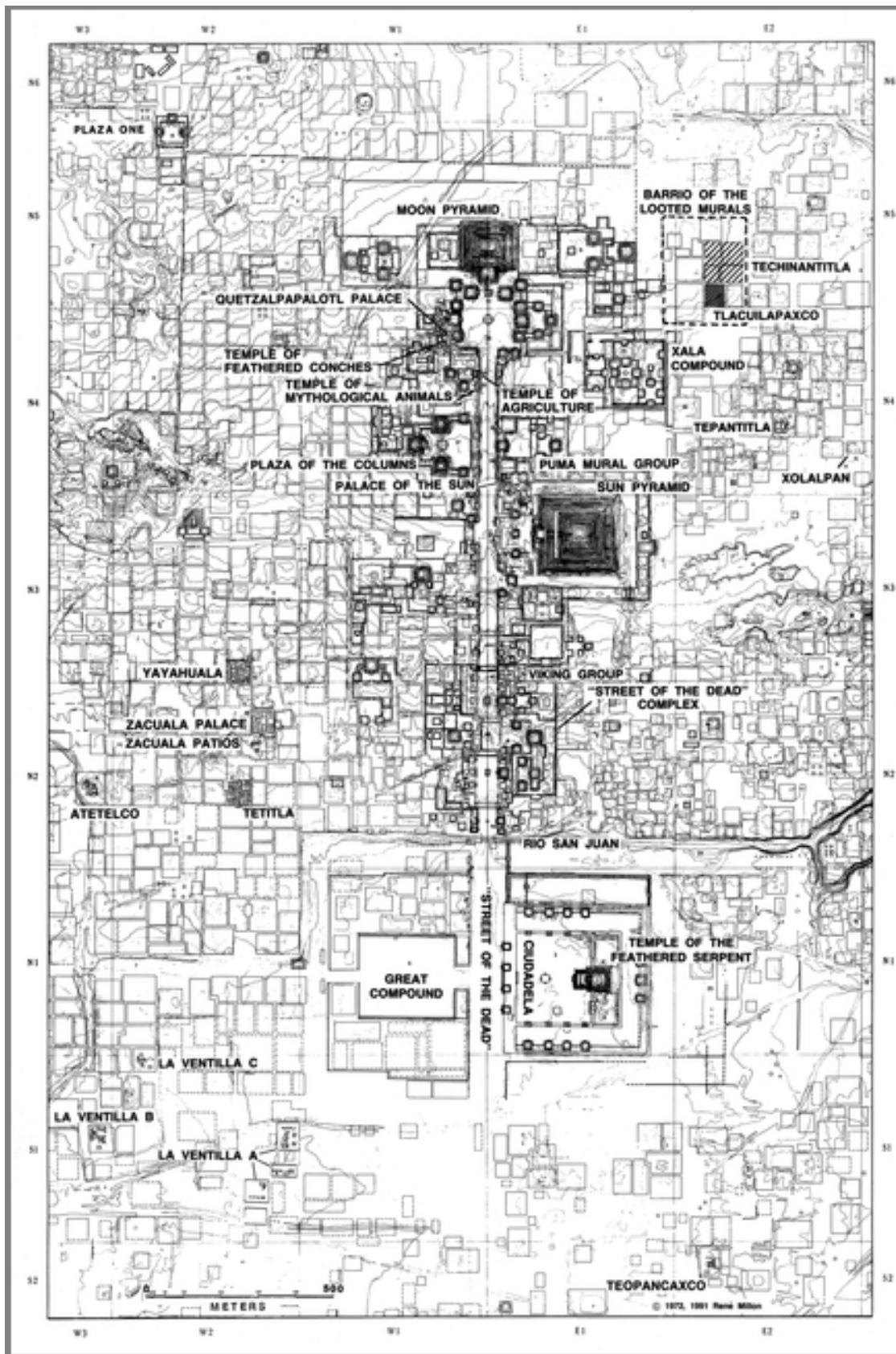


Figure 3.2 Site plan of Teotihuacán (After Millon 1973)

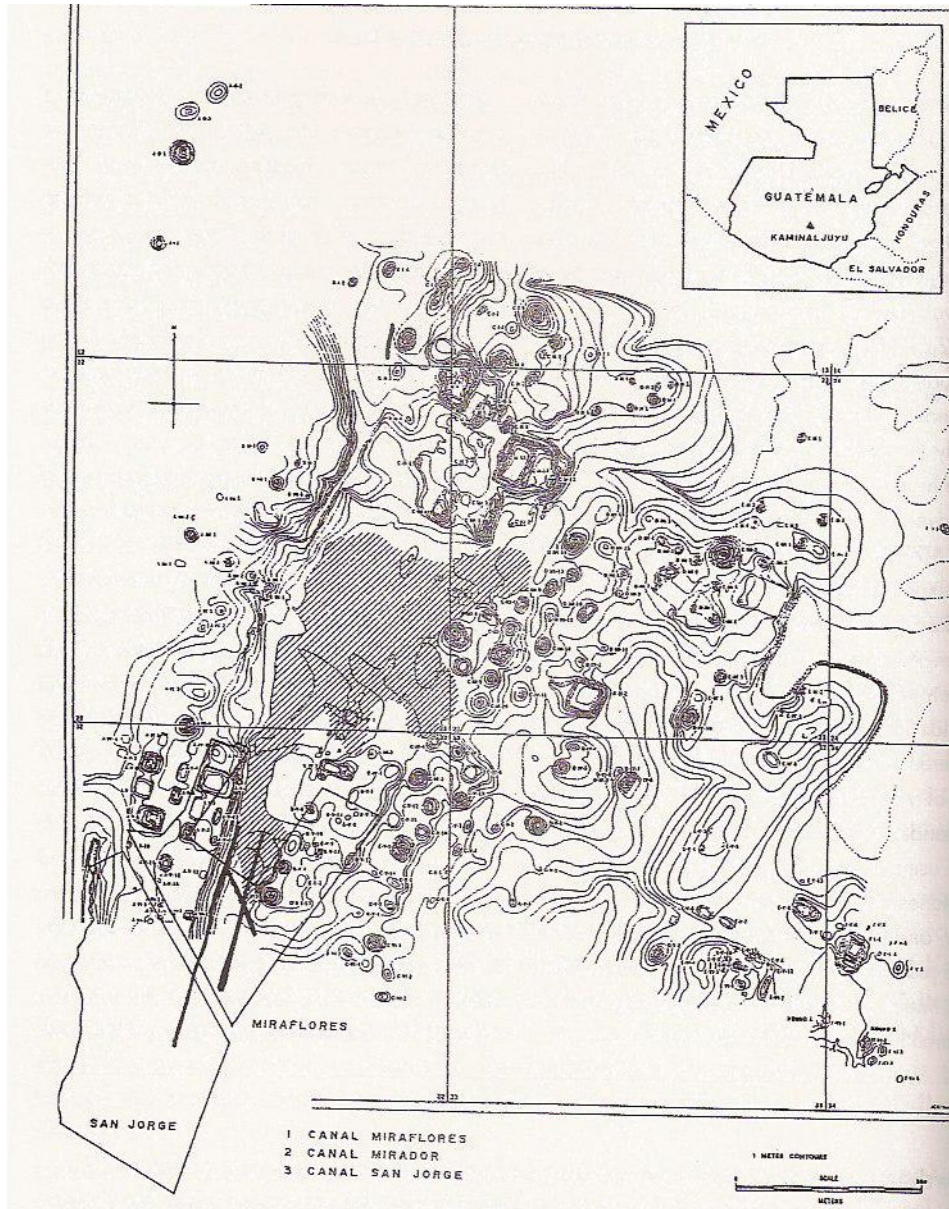
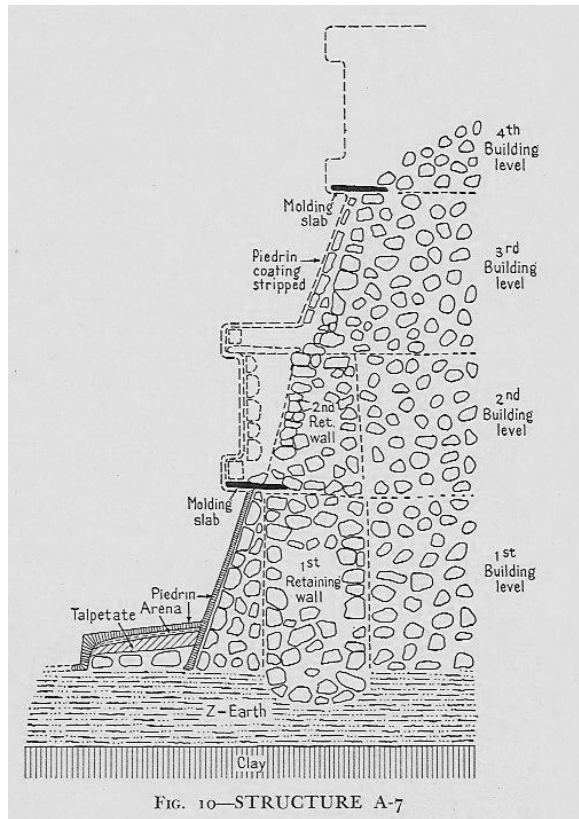


Figure 3.3 Site plan of Kaminaljuyú (After Sharer 2006 Fig. 5.7)



**Figure 3.4 Back mirror with Teotihuacán iconography recovered from Mound A tomb at Kaminaljuyú (After Kidder, Jennings and Shook 1946 Fig. 175a)**





**Figure 3.5 Profile of *talud-tablero* architecture at Kaminaljuyú (After Kidder, Jennings and Shook 1946 Fig. 10)**

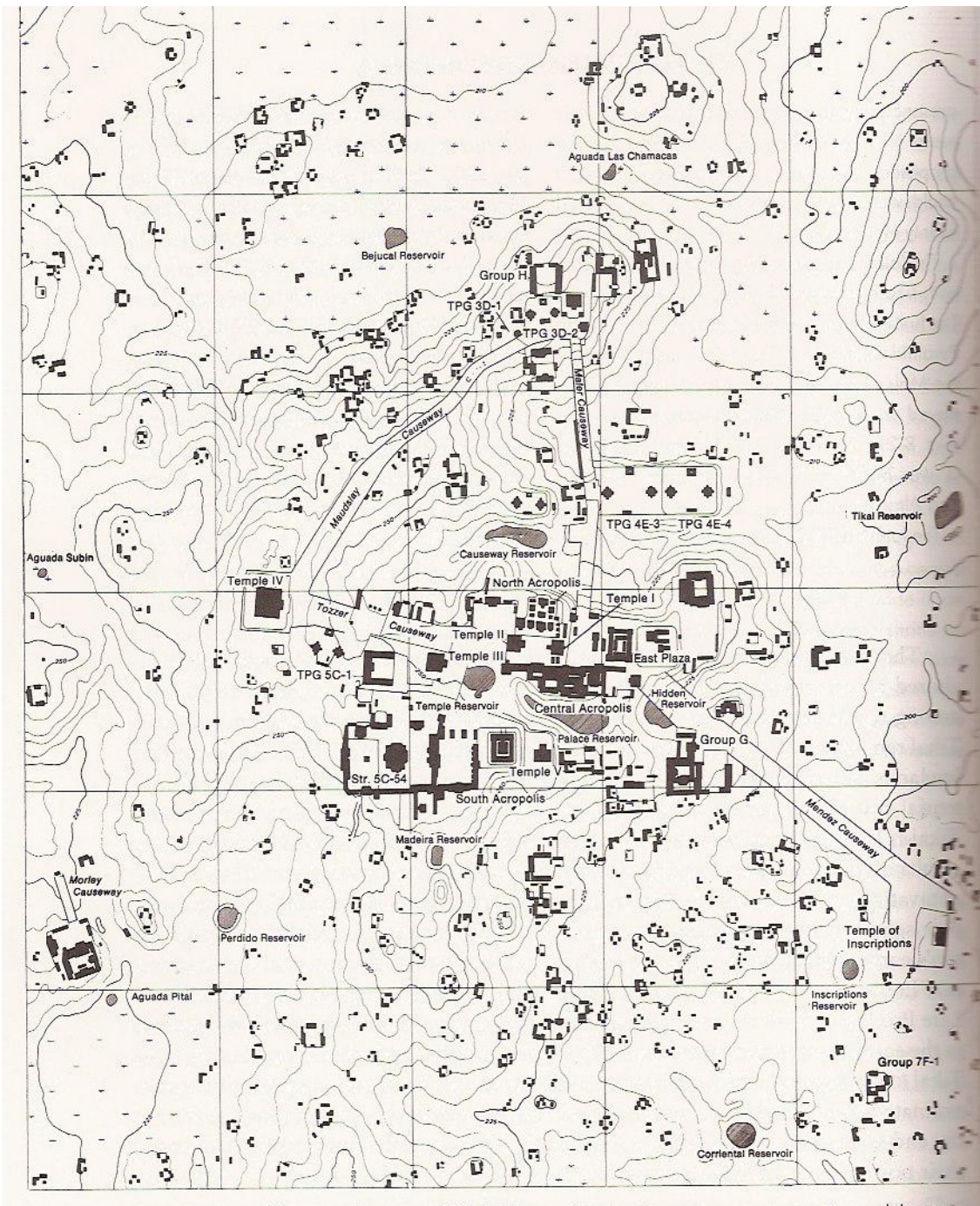
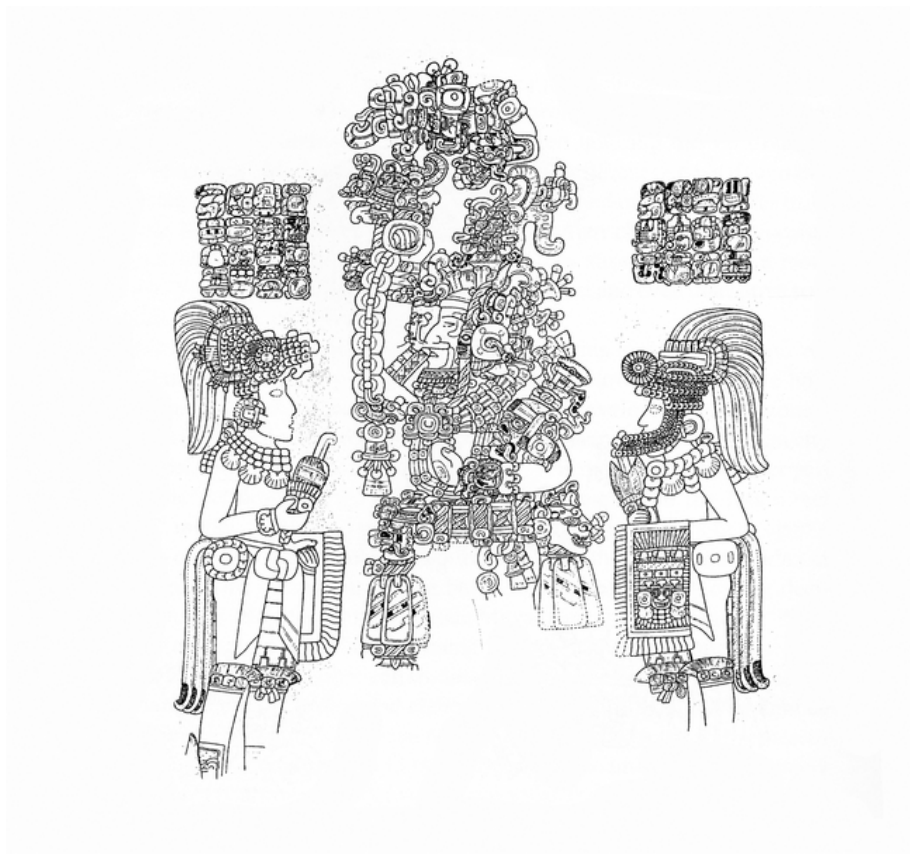


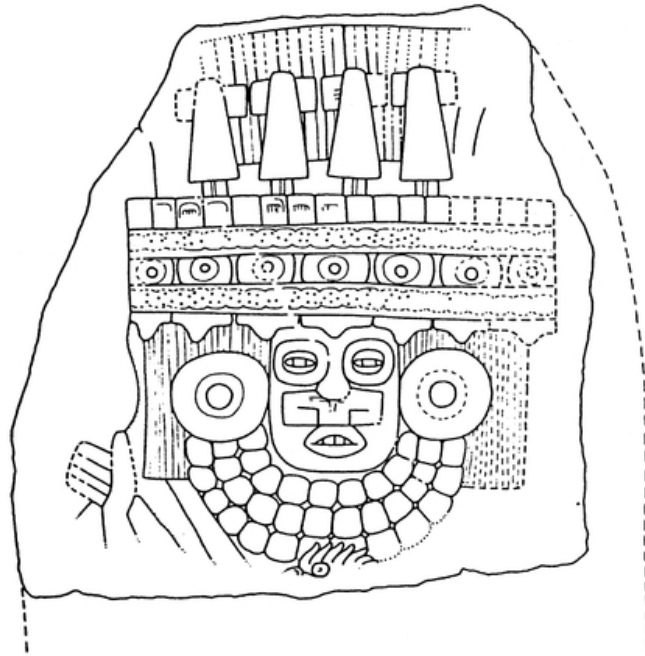
Figure 3.6 Site plan of Tikal (After Sharer 2006 Fig. 7.1)



**Figure 3.7 Drawing of Tikal Stela 31, AD 445, depicting Siyaj Chan K'awil II flanked by his father, Yax Nuun Ayiin I (After Schele and Freidel 1990 Fig. 4:25)**



**Figure 3.8 Line drawing of vessel from Problematic Deposit 50 depicting Teotihuacán emissaries arriving at a Maya site (After Schele and Freidel 1990 Fig. 4:26)**



**Figure 3.9 Drawing of Tikal Stela 32 depicting an image of the Teotihuacán deity Tlaloc (After Jones and Satterthwaite 1982 Fig. 55a)**

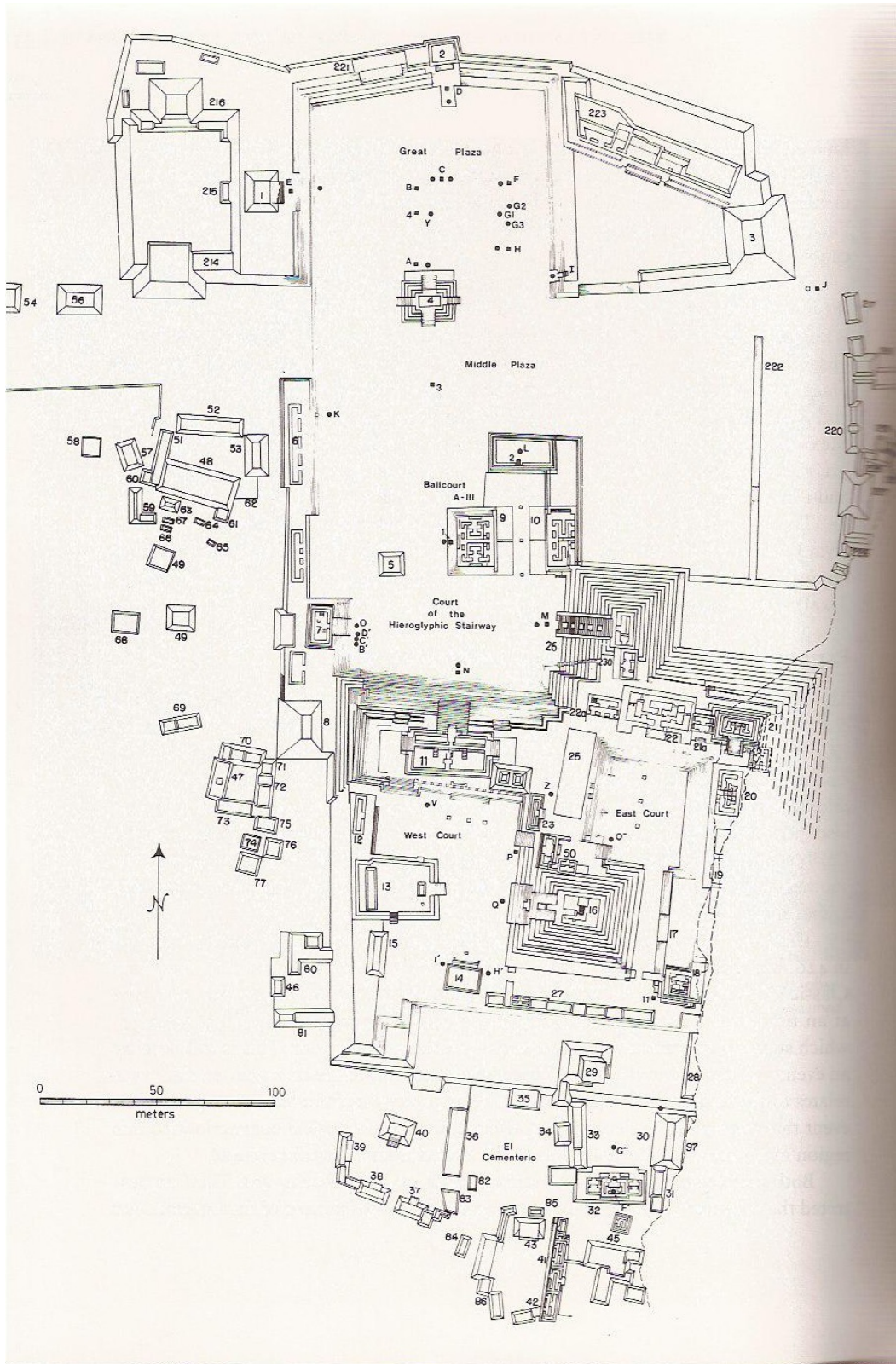


Figure 310 Site plan of Copan (After Sharer 2006 Fig. 7.19)



Figure 3.11 Cylinder tripod vessels from the Hunal tomb decorated with stucco painted with Teotihuacán-style iconography (After Sharer 2006 Plate 7b)

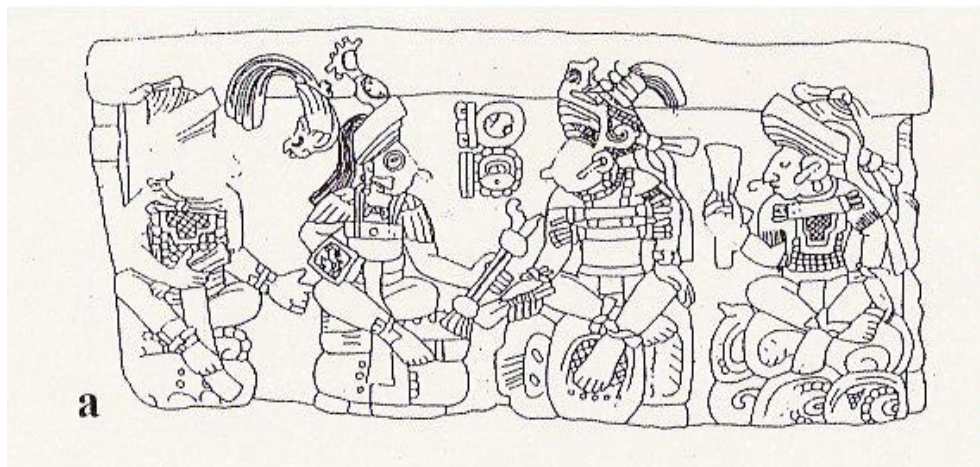
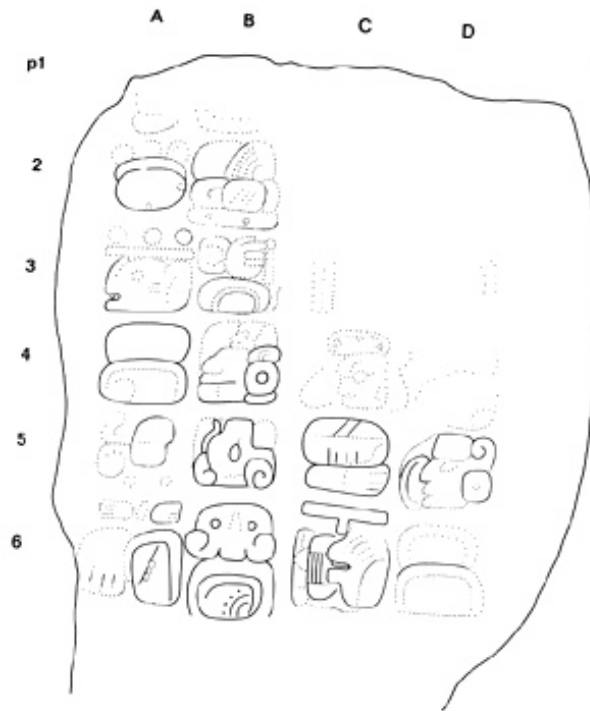


Figure 3.12 Drawing of Copan Altar Q depicting the K'inich Yax K'uk Mo' (After Taube 2004 Fig. 13.1)



**Figure 3.13 Drawing of Uaxactún Stela 5, AD 378 depicting Sihyaj K'ahk' (After Schele and Freidel 1999 Fig.4: 15)**



**Figure 3.14 Drawing of back of Uaxactún Stela 4, AD 396 (After Graham 1986:142)**



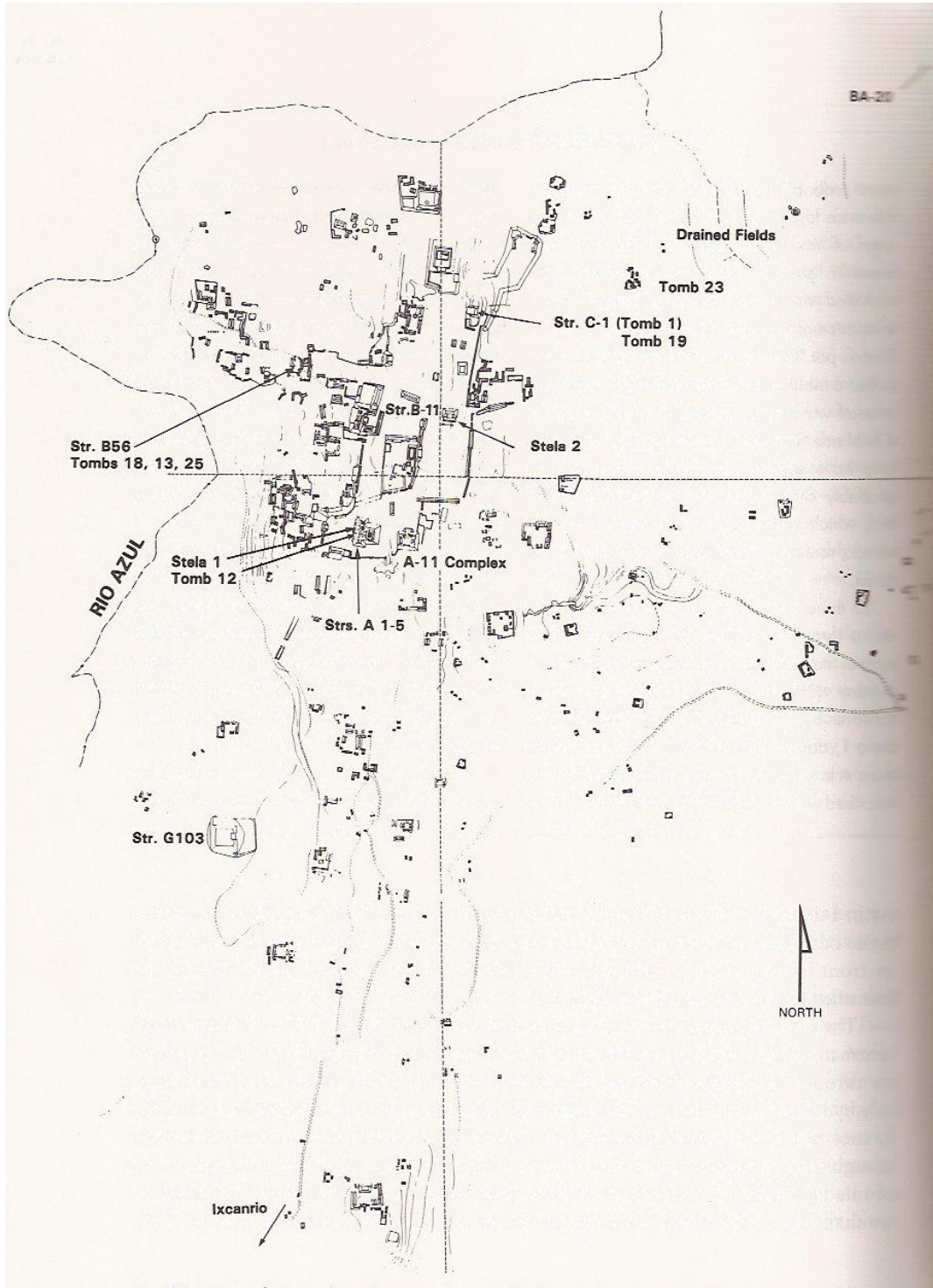
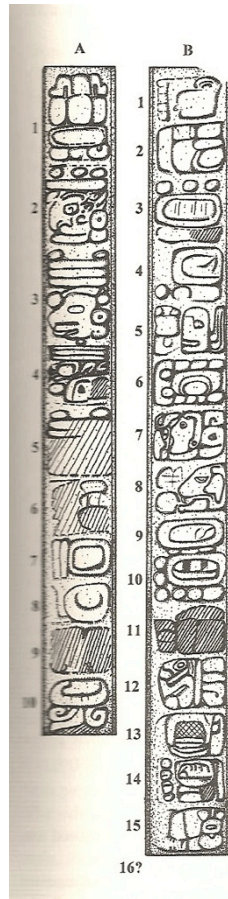


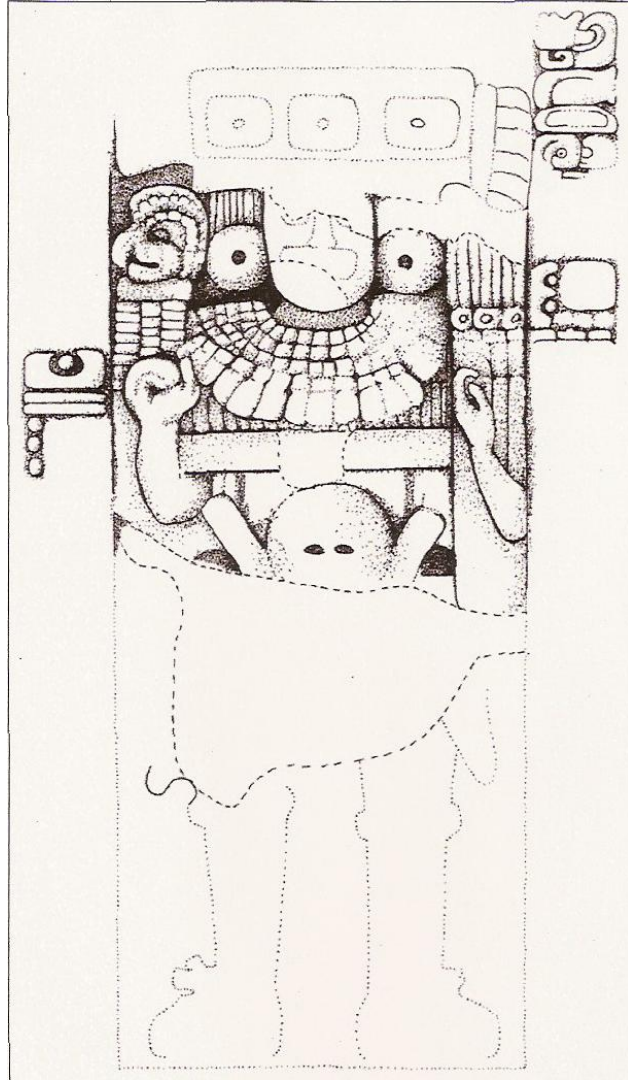
Figure 3.15 Site plan of Rio Azul (After Sharer 2006 Fig. 7.14)



**Figure 3.16 Drawing of hieroglyphic text on north and south sides of Río Azul Stela 1, AD 392 (After Adams 1999 Fig. 3-32)**



**Figure 3.17 Drawing of bound rulers on Río Azul Column Altar 1 AD 385 (After Adams 1999b Fig. 31 a & b)**



**Figure 3.18 El Peru/Waka' Stela 16, possibly a portrait of Sihyaj K'ahk', AD 465 (After Freidel et al. 2007 Fig. 9.3)**

## Chapter IV - Analysis of the Architecture of Structure 1

### Introduction

The modern-day visitor to La Sufricaya is forced to scale the over-grown northern façade of Platform 1 in order to gain access to Structure 1. The reward of doing so is a commanding view of the plaza and the waft of a cooling breeze that cannot be felt at the lower plaza level. In the midst of the tranquility of the empty and overgrown site, it is very easy to imagine what life was like for the inhabitants of La Sufricaya during the Early Classic period. The yells from a team of ballplayers practicing in the ball court drift up from the lower plaza while peasants collect water or food from the storage *chultunes*. Children play in the courtyard of their family's home outside the ceremonial precinct. But what is happening within the labyrinth of rooms that comprise Structure 1 while daily life goes on in the plaza below? Is the local lord holding audience in his throne room? Is his wife overseeing the household or weaving in an adjacent room? Are his children playing in the courtyard? Or does the complex remain empty until priests arrive to carry out rituals or sacrifice?

This chapter attempts to elucidate the function of Structure 1 within the context of La Sufricaya. The primary question is whether Structure 1 served as a royal palace or an elite residence. Though palaces and elite residences may be indistinguishable in terms of architectural features, layout, construction quality and decoration, the activities of life within the structures set them apart. Palaces served

residential, ritual and political/administrative functions for the ruler and royal family whereas elite residences served purely domestic functions (Christie and Sarro 2006). In conjunction with the following chapters that attempt to recreate the function of La Sufricaya and Structure 1 through ceramic, lithic and iconographic evidence, this chapter analyzes the architectural features and layout of the Structure 1 complex to determine how each building may have been used by the residents.

Interpreting the function of Structure 1 is the first step toward understanding the relationship between La Sufricaya and Holmul. Possible interpretations of the site include a location for accession rituals for the Holmul rulers (Foley 2005), a secondary site center established by a dissenting faction of the Holmul elite (Estrada-Belli et al. 2006) or the Early Classic seat of power for the Holmul region (Estrada-Belli et al. 2009).

Comparing La Sufricaya Structure 1 to other Maya palaces and elite residences also serves to interpret the function of the complex, and provides a means to understanding the nature of foreign interaction at the site. The layout and construction methods of the buildings within the complex will be compared to similar structures at other lowland Maya sites, as well as to apartment compounds at Teotihuacan in an attempt to determine whether the complex was constructed by local Maya elites or foreign emissaries from Teotihuacan. This analysis comes with a caveat- Structure 1 at La Sufricaya is a rare example of Early Classic elite architecture that was not subsumed by later construction phases. This fact makes La Sufricaya Structure 1 a significant addition to the corpus of Maya palaces and elite residences, but also presents a challenge for valid comparisons. Much of our

understanding of Maya palaces stems from typologies and analyses based on Late Classic architecture. While some hallmarks of palace architecture may not be present within the complex, the analysis of Structure 1 presents an opportunity to trace the developments of palace architecture.

This chapter reconstructs the construction phases while examining the architectural data of Structure 1. I attempt to interpret the function of each room through an analysis of the layout, architectural details and interior decoration. This analysis may elucidate which types of activities were carried out within the complex, thereby contributing to an interpretation of the role of La Sufricaya within the sociopolitical history of the Holmul region. The following chapters consist of analyses of the artifacts associated with the complex as well as the epigraphic and iconographic analysis of the murals contained within and the stucco motifs that adorn the exteriors. This interdisciplinary analysis is the basis for understanding the sociopolitical role of La Sufricaya within the Holmul domain, and the role its inhabitants played in regional dynamics and interregional interaction during the Early Classic period. Similarities in the architectural features and floor plan between Structure 1 and elite residences and palaces at Uaxactún and Tikal suggest interaction or exchange of ideas between local lords and the lords of these sites. These shared features serve as practices of affiliation among the imagined regional elite community of the Early Classic period.

### **Maya palaces and elite residences**

Due to its prominent location, one might automatically assume that the Structure 1 complex was a royal palace or elite residence. It follows the typical

Maya blueprint of household compounds, consisting of several range structures surrounding a central courtyard, albeit on a grander scale (Figure 4.1).

Archaeologists have often assumed these range structures to be palaces with residential and/or administrative functions (Smith 1950; Spinden 1913; Tozzer 1911), but the function of these structures is rarely explicitly investigated. Many scholars have recognized the problem of the ambiguous definition of “palace” as applied to range structures and attempts have been made to clarify and expand the definition to include non-residential functions (Becker 1971; Coe & Haviland 1982; Harrison 1970; Robertson 1985; Satterthwaite 1935). Recent studies have combined several lines of evidence, including epigraphy and iconography, to understand the complex role of palaces and elite residences within ancient Maya society (Ahlfeldt 2004; Christie 2003; Hendon 1987; Plank 2003; Schele & Freidel 1990). These studies have resulted in more complex and holistic interpretations of these structures.

These recent studies have resulted in a typology of palace structures, which Christie outlines in her edited volume (Christie 2003: 316-322). Palace-type I, the most common form of Maya palace, is composed of range structures that sit on low platforms, contain large numbers of rooms and doorways and are arranged around multiple courtyards. These palaces resemble the residential patio groups of the Maya commoners, but are executed on a much grander scale. Typically the buildings surrounding the courtyard contain two rows of parallel longitudinal or tandem rooms along with one or two transverse rooms at either end. The rooms contain benches and the facades face the courtyard and, in some cases, are decorated with

sculpture. The Central Acropolis at Tikal, the Palenque Palace and Early and Late Classic palaces of Copan are all examples of the palace-type I complex (Figure 4.2). Furthermore, this type of palace complex is often found outside the ceremonial core in non-royal, elite residential areas. Examples of this architectural group have been excavated at Las Sepulturas at Copan (Hendon 1987) and in Group 7F-1 at Tikal (Haviland 1981). The size and quality of construction of the compounds help scholars distinguish between royal palaces and elite residences. The multitude of rooms and varying degrees of privacy within the compounds suggest that Palace-type I patio groups served both residential and administrative purposes and were the home of multiple generations of the royal lineage and/or extended members of the royal court.

Palace-type II structures are large, multi-room structures that may be several stories tall and accessed by a central monumental stairway. These palaces are self-contained and are not part of a patio group. These impressive buildings are often decorated with elaborate sculpture. Examples of the palace-type II include the Great Palace at Sayil, the House of the Governor at Uxmal and the Caana at Caracol (Figure 4.3). These structures have been interpreted primarily as royal residences, but Kowalski (1987) has also suggested an administrative function for the House of the Governor as the *Popal Nah*, or council meeting house at Uxmal

Palace-type III buildings are open, colonnaded galleries that surround a courtyard, which is often sunken. These gallery-patio compounds are characterized by a great deal of open space and lack of privacy. An example of this type is the Mercado complex at Chichén Itza (Figure 4.4). The palace-type III architectural



form is also late development in Maya architecture; the Mercado at Chichén Itza dates to the Early Postclassic period. Palace-type III buildings often contained benches and daises, and while they may have served residential functions, the open space within suggests they were often the location of gatherings of large numbers of people for ritual and/or administrative purposes, which is how Kowlaski (2003) interprets the Mercado at Chichén Itza.

Finally, palace-type IV structures seem to have purely administrative functions. As defined by Demarest et al. (2003) at Dos Pilas, these “presentation palaces” were single room structures that contained a throne and the façade of the building was open to public space (Figure 4.5). Structure N5-3 at Dos Pilas probably had wooden posts supporting a canopy so that the entire north side of the building was open to the public and the ruler could be seen within. Other palace-type IV structures identified by Valdés (2001:150-153) at Copan, Aguateca and Tamarindito had masonry façades with unusually wide doorways.

The general consensus among scholars is that the structures casually labeled as “palace” by explorers and scholars alike served as settings for complex human dramas and served residential, administrative and ritual functions (Inomata and Houston 2001). In order to fully understand this complexity, archaeologists must employ an interdisciplinary approach that combines architectural, artifactual, epigraphic and iconographic evidence. The following chapters examine the data from La Sufricaya with the aim of understanding the multi-faceted role of the Structure 1 complex.

## **Layout and Construction Sequence of Structure 1**

Excavations within Structure 1 began in 2001 when the looters' trenches were investigated in order to provide a basic understanding of the structure and occupation date. Room 1 was investigated first, revealing Murals 1, 2 and 3 and the significance of the site (Estrada-Belli 2001, 2002). John Tomasic investigated the area around Room 1 in 2002 to discern the layout and discovered Murals 4 and 5 (Tomasic and Estrada-Belli 2003). These excavations, along with the presence of the murals, indicated that Structure 1 must have been a place of importance, but the complete layout, function, occupation sequence and significance of the murals remained unclear.

I resumed the research at La Sufricaya in 2003 with the goal of addressing all of these questions. While the previous excavations focused on the eastern portion of the complex, the 2003 excavations began on the central axis of the complex and revealed the post-abandonment Late Classic period occupation and the central courtyard of the Early Classic complex. The 2003 excavations also revealed the western edge of the Room 1, including Mural 6, 6-North and 8, as well as Room 3A. The 2004 field season focused on clarifying the layout of Structure 1 with the intention of revealing additional rooms that could shed light on the function of the building. In the process, Rooms 3B, 7, 8, 9, 10, 11, 12, 13 and 14 were all uncovered as well as Murals 7 and 9. Heather Hurst and Alexander Tokovinine resumed excavations in 2007. Hurst investigated the southwest corner of the complex and uncovered Room 15, a staircase that may have led to a second level of the complex and the southern wall built to enclose complex in a later phase. Hurst also

investigated Room 10 with aim of discerning the eastern room of the room; her excavations concluded that Room 10 was open to the courtyard on its eastern side. Tokovinine exposed the staircase on the northern façade of Platform 1 and looked for a formal staircase on the western façade. These excavations revealed some stairs and an Early Classic midden but no formal staircase on the western façade of Platform 1.

The label “Structure 1” is a misnomer applied to the unexcavated mound atop Platform 1 as the site was being mapped. Structure 1 is actually composed of a minimum of five adjoining structures that were constructed in several phases (see Figure 4.1). At least three of the five structures included vaulted roofs, as evidenced by surviving remnants of the vaults, and they all surrounded an interior courtyard. The structures were labeled as sub-units or rooms of Structure 1 according to the sequence in which they were excavated and do not reflect the actual construction sequence that is reconstructed in this chapter. For the sake of simplicity I follow Hurst’s (2009) re-naming of the structures and rooms that comprise the Structure 1 complex rather than the nomenclature used in field reports and professional presentations and articles (see Table 4.1). This revised scheme denominates all of the areas within Structure 1 as “Rooms,” though there is considerable variability among the architectural features of each room of the complex. For example, some rooms consisted of range structures with vaulted masonry roofs, while others were patios that may or may not have been protected by a thatch or perishable roof. The discussion of the architecture in this chapter will include apparent gaps in the numbering sequence as the excavation of the complex uncovered later phases of

architecture before the earliest phases. For instance, Rooms 2 and 4 refer to some of the latest phases of renovations within the complex and will be discussed after the earlier phases. The areas delineated as Rooms 7, 8 and 9 were named as such during the 2004 season, but upon further excavation during the 2005 season, these areas were found to be outdoor terraces or patios lacking significant architectural features, with no trace of the types of activities that may have occurred within them, and will not be discussed in great detail.

Three of the buildings within Structure 1 (Rooms 3B, 13 and 14) can be described as “range” structures – long, rectangular rooms with corbel-vaulted roofs and multiple doorways. These structures sit upon basal platforms approximately 40 cm high, and they all include multiple doorways on opposing sides of the buildings serving as public entryways providing access to the complex from the platform and private exits onto the inner courtyard. While none of the buildings contain interior benches, which would indicate residential or administrative functions, they do feature other architectural features that may provide clues to the activities that took place within, such as cord holders (niches inset into doorjambs that were used to tie curtains back, allowing the doorway to be open or closed), holes for setting subspring beams across the width of the room (which could have supported curtains for privacy and partitioning the room), windows, murals and niches. Two exterior benches on the north side of the complex, in Room 11 and Room 12, could have served administrative and/or leisurely pursuits.

All of these rooms were renovated numerous times to suit the changing needs of the residents during the various occupation phases of the complex. The

overall trend of the renovations resulted in restricting access to and within the complex by remodeling spaces that were once open, and perhaps public, into intimate and private spaces. These renovations suggest a change in function of the rooms and the entire complex over time from public ritual and administrative activities to a private residential space. The following is a description and interpretation of the function of the principle structures within the construction sequence of complex.

<b>Original nomenclature</b>	<b>Revised nomenclature</b>	<b>Location/notable features</b>	<b>Year excavated</b>
Structure 1 Sub-1 Room 1	Room 1	Southeast corner/Murals 1, 2, 3, 6, 6North and 8	2001 & 2004
Structure 1 Room 2	Room 2	South of Room 1/Murals 4 & 5	2002
Structure 1 Sub-1 Room 3	Room 3A	Northeast corner, north of Room 1	2004
Structure 1 Sub-3	Room 3B	North/central portion of complex	2004
Structure 1 Room 4	Room 4	Central courtyard	2003
Structure 1 Sub-7	Room 7	Northern edge of complex/North of Room 3A	2004
Structure 1Sub-8	Room 8	Northern edge of complex/North of Rooms 3A & 3B	2004
Structure 1 Sub-9	Room 9	Northern edge of complex/North of Room 3B	2004
Structure 1 Sub-10	Room 10	West of Room 14/Mural 10	2004 & 2007
Structure 1 Sub-11	Room 11	North of Room 13 & 14/Bench	2004
Structure 1 Sub-12	Room 12	North of Room 13/Bench	2004
Structure 1 Sub-13	Room 13	Western side of complex/ Mural 9	2004 & 2007
Structure 1 Sub-14	Room 14	East of Room 13	2004
	Room 15	Southwest corner/South of Room 14	2007

**Table 4.1 Correlation of original and revised nomenclature for rooms and structures within the Structure 1 complex**

## Room 1

Structure 1 Sub-1 Room 1 may have been one of the first structures constructed on top of Platform 1. The c-shaped structure is situated in the southeastern corner of the complex and has an open portico to the south (Figure 4.6). The southern entrance, spanning 4.4 meters, provides the main access to the building but there is also a door to Room 3A in the western section of the northern wall. The room extends 6.5 meters east-west and approximately 2.0 meters north-south. The interior walls of this room are completely painted in murals that may depict historic scenes and royal accession rituals (see Chapter VII for a detailed discussion), making it the most intriguing room within the complex and perhaps indicating that it was the focal point of elite rituals or royal audiences. There is no evidence, such as cord holders set into the doorjambs, that curtains were ever used to restrict the doorways of Room 1, which indicates that the room was not designed for privacy or residential use. The walls of Room 1 are approximately 30 cm thick and while no trace of the roof remains, a flat masonry roof probably covered the room.

Unfortunately this room was also the focal point for looters and the havoc they wrought within the interior of the room makes discerning its function much more difficult. The interior floor was mostly destroyed by a massive hole dug by looters, a small portion remains along the western wall and northern doorway. Murals 1 and 2 are painted on the northern wall (context number ST05.10); they were probably part of a single mural that spanned the entire wall in antiquity, but a large looters' cut now divides it into two pieces (Figures 4.7 and 4.8). Mural 3 is

painted on the eastern wall (ST05.08), which was also damaged by looters. Murals 6 and 6-North are painted on the western wall (context number ST17.26) and western section of the north wall (ST17.27) respectively. The doorjambs (ST17.28, ST17.29, ST17.38 & ST17.39) in the northern wall are also painted with red bands and Mural 8 depicting additional seated warriors.

The exterior walls were also elaborately decorated, as evident by a small section of the northwest corner exposed in 2003 (Figure 4.9). The elaborate frieze is decorated with chains of chevrons and quatrefoils punctuated by a plaster head painted red with facial tattoos, comprised of black, horizontal bands, inlays in the teeth and long appendages in his ears. Chevron chains are known from the Mixteca codices to represent a warpath and are associated with martial symbolism and weaponry at Teotihuacán (Caso 1977: 29; Langley 1986: 62-67 and Fig. 40). The quatrefoil is a pan-Mesoamerican symbol that represents caves in the Preclassic period but in later periods is identified as a Cosmogram and is associated with rulership (Egan 2011).

The stucco head likely represents an elite lord, but it is impossible to know if it served as a portrait of a local lord or not. The appendages in his ears, which do not resemble Classic period rounded ear flares, may actually be pieces of paper put in place to humiliate an elite captive when his ear flares were removed (A. Headrick pers. comm. 2003). During the Late Classic period, rulers were expected to demonstrate their prowess prior to accession by taking a captive in ritualized warfare. The captives were then publicly humiliated by being stripped of their finery and binding their hands and feet (Miller and Taube 1993). The possible

identification of the ear appendages as paper along with the martial iconography of the chevron bands suggests that the stucco head might represent an elite captive taken during accession rituals involving ritualized warfare. The exterior frieze and interior murals of Structure 1 Room 1 comprise an impressive, and perhaps intimidating, statement of power and legitimacy. If this small section represents the entire façade of Room 1, it must have been a very imposing building.

The original phase of Room 1 may not have included a doorway in the north wall. The north wall of Room 1 abuts the south wall of Room 3A, which suggests that the rooms were constructed in separate construction events rather than as a single phase (see Figures 4.7 and 4.27). After Room 3A was constructed, a section of the north wall of Room 1 may have been removed, which would have destroyed a section of Mural 1. A narrower section of the southern wall of Room 3A was also removed, which resulted in a double doorjamb (Figure 4.10) between the two rooms. Mural 8 was then painted on the doorjamb between Rooms 1 and 3A, which explains the different style and technique apparent in Mural 8. The seated Teotihuacano figures in Mural 8 are painted on a slight incline, rather than in a straight line, resulting in a scene that seems as if it was haphazardly painted rather than being a planned segment of the overall tableau depicted in the other murals. This haphazardness, along with the difference in style indicating a different artist painted this mural, suggests that Mural 8 was painted after the other murals in Room 1, which would have been necessitated by the renovation to the room by the addition of the doorway to Room 3A. The purpose of this renovation is unknown but the addition of Room 3A could have provided storage space or served as a “dressing



room” or staging area for the lord of La Sufricaya before he performed rituals in Room 1 or joined the visiting dignitaries who awaited him. The elaborate interior and exterior decoration of Room 1 along with the complete absence of any domestic architectural details indicates that this structure was used for ritual and/or administrative purposes.

### Room 13

Room 13 was also probably a component of the earliest construction phase of the complex. This structure is located on the western edge of Platform 1 and measures 1.74 m wide (east-west) and 8.9 m long (north-south). A cornice with inset panels once extended across the northern and southern faces of the structure and a vaulted roof extended to the south (Figure 4.11). The room has entrances to the north, south and east and west, suggesting that the structure served as the hub of the complex and allowed the inhabitants access to all other areas of the compound from this area.

The eastern wall (context number ST08.73), of the structure contains a small window, which was filled with rubble when an additional room, Room 14, was constructed to the east (Figure 4.12). Mural 9, which depicts the god Itzamnaah conversing with an avian messenger, is painted on the wall beneath the window (Figure 4.13). Itzamnaah, also known as God D, is regarded as the god of rulership (Miller and Taube 1993). A graffiti of the mat motif, also a symbol of Maya rulership, was later scratched onto the wall near the mural, perhaps indicating that this area served as the throne for the ruler, who sat upon a mat made of perishable material (Estrada Belli et al. 2009).

The western wall (ST08.70) of Room 13 has not been fully exposed because the fill at the edge of the platform is unstable. The excavated portion of the wall includes two doorways that were sealed shut while the complex was occupied (Figure 4.14). The doorways were filled with stone blocks and the interior faces were sealed with plaster. Based on the length of the room and spacing of the known doorways, it is possible that the western wall contains two more doorways, making a total of four entryways. There are remnants of red paint on the western wall and streaks of brown residue, which could be copal incense, perhaps burned during the termination of the room.

The floor (context number ST08.74) of Room 13 contains cuts for three caches, though they were emptied in antiquity, probably prior to the termination of Structure 1. The cuts for the caches were filled with rubble once the ritual items were removed but the floor was not repaired with a new layer of plaster, suggesting that the offerings were removed at the same time the complex was terminated. These caches may have been dedicatory deposits placed coinciding with foundation rituals during the construction of the complex. The fact that the ritual items were removed implies that the contents of the caches related to the lineage ancestors of the elite residents, who took the items with them when they abandoned Structure 1 and presumably moved to another area of the Holmul region (McAnany 1995). A termination offering (ST08.87) was hastily placed in the cut of the cache located near the southern doorjamb of the northernmost doorway (ST08.89) in the western wall during the in-filling of Structure 1. The offering consisted of an *olla* (a

utilitarian water storage jar) and was left in the emptied cache cut before the room was filled with rubble (Figures 4.15 and 4.16).

The presence of the caches, window and mural as well as the graffiti on the eastern wall of Room 13 all suggest that this structure served as the seat of the La Sufricaya lineage and perhaps as a throne room of the founder of the site. The multiple doorways provided easy access to the room from all areas of the complex, which negated any sense of privacy and reinforces the interpretation of this structure as a public space used for administrative functions. The absence of cord holders, which would indicate that curtains were used to cover doorways for privacy, supports the interpretation of this room as a public space. Subsequent renovation projects resulted in restricting access to Room 13 by sealing the western and northern doorways (Figure 4.17). Room 13 could only be accessed from the southern doorway or through Room 14 once these entrances were sealed. These renovations suggest a shift in function from public administration to private space. This renovation may have occurred when the throne room was moved to another location or after the death of the founder of La Sufricaya (who was then buried in Structure 2), when his descendants repurposed the space. The complex was occupied for at least two human generations, which is a relatively brief period of time in comparison to the occupation span of many ancient Maya sites. This brevity of occupation implies that subsequent residents of La Sufricaya did not hold the same title, role or amount of power as the founder of the site, and may not have required the same use of space within the complex.

### Room 3B

Room 3B may have been the third component in the initial construction phase of the Structure 1 complex. Room 3B is aligned on the east-west axis, perpendicular to Room 13 and situated on the northern edge of Platform 1 between Room 13 and Room 1. The structure measures 5.8 meters east-west and 1.8 meters north-south. Five doorways granted access to the building, with a principle entrance from the inner courtyard to the south flanked by walls containing cord holders (Figure 4.18). This doorway (context number ST08.28) is wider (1 m) than the other four entrances (50-70 cm) in the building and may have led to a staircase that descended into the inner courtyard. A second entrance (context number ST08.33) in the western end of the southern wall provided access to the area denominated Room 10 (Figure 4.19). A doorway (ST08.35) in the western wall provided access to the enclosed patio, Room 11. Two doorways (ST08.08 and ST08.37) in the northern wall (context number ST08.11) provided access to the northern portion of the platform, and the area denominated Room 9. The entire room was constructed on top of a basal platform and was once vaulted, as evidenced by the remnants of the vault at the eastern end of the room and the remaining spring stones of the vault at the top of the southern wall (Figures 4.20-4.22).

During subsequent renovations of the structure, the western doorway (ST08.37) in the northern wall was partially sealed to create a window (Figures 4.23 & 4.24). Once Room 14 was built adjacent to Room 13, the doorway (ST08.33) in the western end of the southern wall was bricked up and sealed, from the inside of

Room 3B, with a layer of plaster, which cut off access to Room 10 where Mural 7 was painted. This doorway was re-opened during excavation.

Although Room 3B contains two doorways that open onto the northern edge of Platform 1 and the plaza below, Room 3B seems to have been used for personal, private functions rather than public administrative functions since the narrow doorways, use of curtains in the southeastern doorway and partially sealed door forming a window restrict access and the visibility of inhabitants from the plaza below and provide a degree of privacy.

### Room 3A

Located at the northeast corner of the Structure 1 complex, Room 3A provides access between Room 1 and Room 3B through doorways in the western (context number ST17.32) and southern walls (ST17.30). The excavated portion of the room measures 2 meters east to west and 2.2 meters north-south; the room was not fully excavated because the rubble fill was very unstable.

Compared to the rest of the rooms in the complex, Room 3A is rather non-descript; there are no cord holders or other architectural features to provide clues to its function. All of the walls of Room 3A are covered in rough limestone plaster unlike the finely painted walls of Room 1. Faint traces of red and orange paint are visible, implying that the walls were once painted with the same colors as the mural room.

The passageway between Rooms 3B and 3A is very narrow (approximately 40 cm), indicating that it, and perhaps Room 3A, was not part of the original design of the complex (Figure 4.25). Initially this passage may have been an open alley but

a wall (ST08.43) was later constructed between the northern walls of Room 3B and Room 3A in order to enclose the passage (Figure 4.26). Enclosing the passage created a solid façade along the northern face of the Structure 1 complex, forming the southern wall of Room 8 (Figures 4.27). The floor of Room 3A extends through the western doorway and partially covers the eastern portion of basal platform of Room 3B, which creates an even surface for walking between the two structures. The excavation photo in Figure 4.25 shows the western wall of Room 3A abutting the northeast corner of Room 1 and the floor that partially covers the southwest corner of the basal platform of Room 3B, indicating that Room 1 and Room 3B were constructed before Room 3A.

During a later renovation event the doorway (ST17.33) in the western wall was filled with rubble and sealed shut from the inside of the room with white plaster. The plaster sealing the doorway also appears to have been burned, as there were gray burned patches on the lower portion of the door. This doorway may have been sealed while the complex was still in use, which would have cut off the passageway between Room 3B and Room 1. The doorway that provides access to Room 1 to the south was merely filled with rubble when use of the complex was terminated.

Evidence of burning in the form of dark gray patches in the northwest and southwest corners of the room on the floor and on the western wall could indicate that this room was used for some sort of ritual activity; alternatively the burned patches may have been caused by a termination ritual fire or simply by censers used to provide light within the room. A line of dark brown residue approximately 1.1

meter in length extends across the lower portion of the western wall just above a burned patch on the same wall, which may have been caused by the burning of copal incense. This evidence of ritual activity, coupled with the access the room provides to Room 1 suggests that the residents of Structure 1 used Room 3A in tandem with the rituals performed in Room 1.

#### Room 14

Room 14 was constructed adjacent and parallel to the eastern side of Room 13. The structure measures 1.5 meters wide (east-west) and extends 6.2 meters to the south. Access to the structure is gained by stepping up into the room from Room 13 through the doorway (ST08.72) in the western wall (ST08.95) as well as doorways in the northern (ST08.93) and southern (ST08.113) ends of the eastern wall (ST08.94). Room 14 was once vaulted, as evidenced by the first row of vault stones, which are still in place above the eastern and western walls. The eastern face of the east wall includes a cornice painted with red, violet and orange bands as well as a basal platform, indicating that the eastern wall was the exterior of the building that faced onto the central courtyard<sup>13</sup> (Figure 4.28). The greatest variety of architectural features and evidence of activities are found within Room 14, indicating that the structure may have been the hub of ritual, and perhaps residential, activity within the complex.

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<sup>13</sup> The artist's reconstruction of the complex in Estrada-Belli et al. 2009 includes a third range structure denominated Sub-10. The archaeological evidence does not support the existence of a third structure with a vaulted roof that was built in tandem with Sub-13 and Sub-14. Hurst's excavations in 2007 did not find an eastern wall in Room 10, indicating that the room was open to the courtyard on the east.

Numerous architectural features within Room 14 provide clues to the function of the room. Cord holders flank the top and bottom of the southern doorway in the eastern wall, which provided some privacy when the curtain was closed (Figure 4.29). Both the eastern and western walls have recessed holes carved into them, which may have held wooden beams used to support the vault or curtains used to partition the room (Figure 4.30). A niche in the western face (interior) of the eastern wall and a circular hole in the eastern face (exterior) of the wall may have served as a vent. The niche is located almost exactly on the centerline of the room. The inside of the niche is coated in plaster and the plaster surrounding the circle is painted red. This niche may have been used to hold an *incensario* and the hole could have provided an outlet for the smoke as a vent. The niche was sealed closed with plaster, perhaps at the time when Room 10 was converted to an open portico.

At some point Room 14 was renovated to add a thin and crudely constructed wall (ST08.95) across the southern end of the room to create a smaller room, which perhaps served as an antechamber to the main room (Figures 4.31 and 4.32). This wall includes a doorway (ST08.105) that measures 0.52 m wide and 1.66 m high. The wall is coated in plaster that has traces of red and black paint. The northern face of the wall appears to have a recessed panel carved into the top of it. The southern face of the wall has a small outset cornice built with cut blocks at the top.

The interior walls and floor of Room 14 are painted red and also show signs of burning, especially in the corners and along the interface between the walls and floor. A ring-shaped burn mark is visible on the floor in the southern portion of the



room. Two cuts into the floor of Room 14 may have once held dedicatory caches but the offerings were removed before the complex was terminated. Like the cuts in the floor of Room 13, these were filled with rubble fill but the floor was not repaired with plaster when the contents were removed, indicating that the removal took place when use of the complex was terminated.

The cord holders, holes for subspring beams and the wall forming the southern antechamber suggest Room 14 was partitioned for privacy and indicates that the structure served as a residence. The dedicatory caches, niche and evidence of burning indicate that a variety of ritual activities also took place within the structure. Room 14 may have been used as the residence and perhaps administrative seat of the founder of La Sufricaya.

### Room 10

The area denominated Room 10 was initially part of the central courtyard and was accessed through the southwestern doorway in Room 3B and the eastern doorways in Room 14. This area was originally an exterior space since smoke from the niche in Room 14 would have vented out into this space and the exterior façade (the cornice of the roof and the basal platform) of Room 14 is visible from this area. The residents of Structure 1 renovated the space to partially enclose it by adding a short wall (ST08.40) that extends north-south for 0.54 m from the southern wall of Room 3B. The southwestern door of Room 3B may have been sealed shut at the same time, which would have restricted access to and protected the northwest corner where Mural 7 is painted. A partially demolished L-shaped wall (ST08.115) at the southern extent of the space forms a doorjamb with the western wall of Room

14 and provides some symmetry with the wall to the north (see Figure 4.1). These walls define the space as a portico and may have supported poles for a thatched roof over Room 10.

The hieroglyphic mural (Mural 7) is painted on the northern extent of the exterior face (ST08.81) of the eastern wall of Room 14 (Figure 4.33). The text, which consists of four clauses, has been deciphered as

Clause 1: “...On the day 11 *Kib’ 14 Mak* when “G6” is at the edge of the paper, eight days since the lunar month of ... days named ... arrived, the stone of Grandfather ... Cloud-Red *Wayaab’* is ... at the Three-“Temple”-House...”

Clause 2: “...Sixteen days, six months, and one year have passed since the stone- binding on the day 1 *Ajaw 8 Ch’en...*”

Clause 3: “...Four days and one year have passed since *K’awiil* arrived to *Mutal* (Tikal) on the day 16 *Mak 11 Eb’...*” (Estrada-Belli et al. 2009)

Clause 4: Indecipherable except for the name *Sihyaj K’ahk’* mentioned twice

Crucial passages of the text are missing, including the name of the protagonist and the verb describing the action undertaken at the Three-“Temple”-House. Furthermore, the glyph translated as “Temple” has not been deciphered and this identification is based on the iconography of the glyph. The first clause could be interpreted as the dedication of an object associated with Structure 1 or even a section of the complex on January 15, 379. Alternatively, the passage could refer to an event carried out at another site with a group of three temples, such as the North Acropolis at Tikal or Structure A-V at Uaxactún. The second clause establishes the date of another event at the “Three Temple House”, which occurred sixteen days, six months and one year after the period ending date of October 21, 376. Therefore, the event took place on September 6, 377. The third clause refers to an event in the past – the arrival of *K’awiil* to *Mutal* on January 16, 378- which is the day that *Sihyaj*

K'ahk' arrived at Tikal, whose name is mentioned twice in the fourth clause (Estrada-Belli et al. 2009: Table 2).

The text of Mural 7 commemorates the 11 Eb *entrada* event at Tikal a year after it occurred and references the date specifically. This is one of the few contemporary references to the event found in the Petén; most of the other references to the 11 Eb event have been retrospective monuments. The text has been interpreted as an allusion to the 11 Eb event by a local lord who may have sought to draw a connection between the foundation of the new political order at Tikal with the dedication of a new seat of power at La Sufricaya. The local lord and Sihyaj K'ahk' were involved in a dedication ceremony that took place one year after the 11 Eb 15 Mac event, but the relationship between the local lord and Sihyaj K'ahk' remains unclear. The title of the protagonist of the events outlined in Mural 7, *Chak tok wayaab'*, refers to a high-ranking priest but not a king, or *ajaw*, and this title is associated with the Holmul elite from the Early Classic through the Terminal Classic period (Estrada-Belli et al. 2009: 19-21).

Although Room 10 was not fully excavated for fear of destabilizing the rubble fill and damaging Mural 7, it is clear that the outside space was converted to a partially enclosed space, perhaps once Mural 7 was painted. The area served as the main entrance to Room 14, which was likely the residence of the lord of La Sufricaya. Guests of the La Sufricaya lord, and anyone entering the residence, would pass Mural 7 and be reminded of his political connections to Sihyaj K'ahk' and Tikal.

## Room 11

Room 11 is a private room that was created by enclosing the outside space where the northwest corner of Room 3B and the northeast corner of Room 13 meet the northern exterior wall of Room 14 to (Figure 4.34). The residents of the Structure 1 complex created a peaceful and private retreat by erecting a false wall (a wall that does not provide structural support and was erected in front of the northern wall of Room 14), to even out the interface of the structures. The southern wall (ST08.53) of Room 11 is crudely faced with a thick layer of plaster and almost appears to have been haphazardly constructed, as evident by the brush marks in the plaster. A bench (context number ST08.45), 2.60 meters long (E-W), 1.14 meters wide (N-S) and 0.54 meters high was constructed in front of the southern wall (Figure 4.35 and 4.36). The bench not only spans the space in between Rooms 3B and 13, but it incorporates the architecture of the two buildings. The floor of Room 3B continues seamlessly from the western door onto the surface of the bench, while the cornice of the eastern wall of Room 13 is incorporated into the sloping backrest of the bench, giving the appearance of the profile view of *talud-tablero* architecture. Traces of red paint are visible on the face of the bench, which along with the orange band painted along the exterior wall of Room 3B, indicates that the patio was once brilliantly decorated.

Room 11 was initially open to the northern portion of the complex but was gradually enclosed. A series of walls of varying height, width, thickness and construction methods extend from the corners of Rooms 3B and 13 to enclose Room 11 on the north (ST08.48, ST08.49, ST08.50 and ST08.51). The variation in height

and construction method of the walls indicates that the room was gradually enclosed over a period of time rather than at the outset of the renovation. The room may have had a doorway in the northern wall before the room was completely enclosed; cord holders in the walls flanking the central portion of the northern façade suggest that wall ST08.48 is actually a sealed doorway (Figure 4.37, north profile). After this doorway was sealed, the only entrance to Room 11 was through the western doorway of Room 3B.

Room 11 is also unusual in that it was constructed with several floor surfaces (Figure 4.37 east profile). The floor that extends from Room 3B through the doorway ends in a plinth, or the basal platform of Room 3B, at the base of the doorway. There is a stair below the basal platform, which rests above the floor. A drain extends from beneath the stair to the north and terminates at the corner of the northern wall, which indicates that while the area was gradually enclosed, it remained an outdoor space. The varying heights of the walls of Room 11 could not have supported masonry roof but it is possible that a thatch roof once covered the space.

The bench in Room 11 indicates that the space was used for either sleeping or administrative purposes. When the doorway to the north was open, the room and bench might have been used for administrative purposes, but the cord holders in the flanking walls indicate that curtains were used for privacy. Once the northern entrance was sealed it is clear that Room 11 served purely residential purposes.

## Room 12

Room 12 is located on the on the northwest corner of Platform 1 and may have been exterior space rather than a room. The main feature of the room is the bench (ST08.65) located in front of the northern wall of Room 13 (see Figure 4.11b). The bench, which is 3.04 meters long, 0.40 meters high and 0.94 meters wide, was constructed after the northern doorway of Room 13 was closed and sealed and may cover stairs that led to the room (see Figure 4.17). Room 12 shares a wall (ST08.47) with Room 11 on the east. The western side of the room is defined by two walls (ST08.66 and ST08.67) that were constructed in separate phases (see Figure 4.14). A low wall (ST08.119) measuring 0.92 m runs N-S and is located just 36 cm north of the bench. This wall is the only surviving architecture in the northern extent of the room since the northwest corner of Platform 1 has collapsed. Interpreting the function of Room 12 is challenging due to the collapse of the platform, which makes our understanding of the room incomplete. The bench, however, indicates that the space was used for administrative purposes or for sleeping. Like Room 11, the function of the bench and Room 12 may have changed over time as the space was gradually enclosed, if a wall once existed to the north.

## Rooms 7, 8 and 9

Rooms 7, 8 and 9 span the northern edge of Platform 1 and are located to the north of Rooms 3A and 3B (Figure 4.38). Room 7 was not fully excavated because a looters' trench, SL04, runs underneath the floor and the area was very unstable. The northern extent of the rooms is unknown due to the collapse of the platform, but scarring on the floor surface in Room 9 indicates that a wall of cut stone blocks once

stood at the edge of the platform; it is impossible to know whether this wall enclosed Room 9 or was simply a perimeter wall akin to a balustrade at the edge of the platform.

Room 7 consists of a wall (ST08.17) that extends 1.4 meters N-S and abuts the northern wall (ST08.06) of Room 3B. It is possible that this wall represents the southern wall of a room constructed in tandem with Room 3A. Alternatively, the wall could have provided architectural support for the wall behind it or was used to seal a doorway in the northern wall of Room 3A. A short wall (ST08.15) running perpendicular to wall ST08.17 divides Room 7 from Room 8 and sits on top of the apron molding or ledge (ST08.14) attached to the northern wall of Room 3A. This wall appears to have collapsed in antiquity and may have originally extended further north, as evidenced by the first row of stones that still sit on the floor of Room 7.

Room 8 may have simply been exterior space in between Rooms 7 and 9 rather than an actual room (see Figure 4.27). The apron moulding of wall ST08.06 indicates that the southern portion of Room 8 is the exterior face of the northern wall of Room 3A. A circular cut in the southwest corner of Room 8 may have been a posthole. A perpendicular wall (ST08.04) extending 0.70 meters N-S on the western side of Room 8 covers the interface between Rooms 3A and 3B and divides Room 8 from Room 9 (Figure 4.39). A shorter wall (ST08.12) abuts wall ST08.04 and blocked access between the two rooms.

Room 9 is defined by wall ST08.04 on the east and a flanking wall (ST08.125) on the west. These walls did not span the entire eastern and western sides of the room, suggesting that Room 9 may have been an open portico similar to Room 10.

#### Room 4

Room 4 is located in the central portion of the complex and is a later phase of construction in the courtyard consisting of a staircase leading to a room that is open to the south (Figures 4.39 and 4.40). The staircase, which is at least 4.7 meters wide, includes five stairs covered in well-preserved plaster. The staircase was built adjacent to Room 1 and covers a portion of the southern wall. The riser of the utmost stair is painted with a possible glyph.

Room 4 is located south of Room 3B and effectively closes off access from Room 3B to the center of the complex. The room is c-shaped with a doorway that is approximately 2 meters wide open to the south. The northern wall of the room (ST20.25) extends N-S for 4.7 meters and is 3.3 meters tall. This wall abuts the northwest exterior corner of Room 1 and the western wall of Room 1 forms the eastern boundary of Room 4. The stucco mask on the exterior façade of Room 1 is visible in Room 4. A poorly preserved bench (measuring 2 meters wide and 1.2 meters deep) or altar sits in front of the northern wall, and fills the doorway most of the space within the room, leaving only a meter of open space on either side. The western (ST20.34) and southern walls (ST20.32 and ST20.33) were not fully excavated. The southern walls abut the sides of the bench or altar, so that anyone wishing to enter the room would have to climb onto the bench to gain access. The southern walls are constructed of stacked stones that are not filled with mortar or



faced with plaster. The rough finish of these walls suggests that they were not intended for public viewing.

Room 4 is so small that it could not have been a residence. The prominence of the bench suggests the room served as a throne room. Based on the limited accessibility of the room and the rough finish of the interior face of southern walls an alternative interpretation of Room 4 is that it served as a temple with an altar inside.

## Room 2

Room 2 is located south of Room 1 and is a c-shaped, narrow room open to the south. Murals 4 and 5 are painted on the northern interior wall. Mural 5 depicts the scaffold sacrifice of a lord, which was perhaps performed as part of an accession ritual (Tomasic and Estrada-Belli 2002). The construction of Room 4 closed off access to Room 1 from the southern plaza of Platform 1. The northern wall of the room extends 12 meters E-W and is 2 meters tall. The room is devoid of architectural features that would provide clues to its function.

Room 4 appears to have functioned solely for the display of Murals 4 and 5 and therefore served as a billboard. The scale of the room and murals is larger than that of any other room in the complex and Room 4 appears to have been constructed for the sole purpose of sending a message. The fact that the room closes off access to the complex implies that the message is related to the end of the elite occupation of Structure 1 and perhaps the relationship between the founding lord and interregional elite imagined community centered on Teotihuacán iconography.

### Termination of Structure 1 and Late Classic occupation

Structure 1 was terminated in a series of acts that culminated in the burial of the complex. When the elite residents abandoned the complex they removed several dedicatory caches from Rooms 13 and 14. The walls painted with murals were covered in a coat of whitewash. It is possible that termination rituals involving burning copal incense were performed, which left residue on the walls of Room 13 and Room 3A. The rooms within Structure 1 were filled with midden material, construction rubble (including pieces of molded stucco), stones and dirt. As the infilling of the rooms began, someone deliberately placed fragments of ceramic vessels at the base of walls in Rooms 9, 11 and 12 (Figure 4.41). This act may have been one of veneration or a termination offering of the only materials at hand – pieces of vessels pulled from middens. Once the rooms were filled, the entire complex was sealed with a thick (20 cm) plaster surface, transforming the complex into a platform.

A staircase on the southern side of the platform provided access to the top of the platform where a structure made of wattle and daub with a foundation wall of cut stones was constructed directly on top of the plaster seal (Figures 4.42 and 4.43). This structure was renovated at least once and the interior floor was resurfaced. The artifacts found in association with this structure indicate that it was a Late Classic residence.

### **Summary of the construction history of Structure 1**

Determining the exact construction sequence of the Structure 1 complex is challenging because many of the rooms were excavated by tunneling into the rubble

fill rather than exposing them from top to bottom. The benefit of this method of excavation is that the murals were not completely exposed to the elements and therefore were preserved. The downside, however, is that some of the interfaces between structures, walls and floors remain unclear. The HAP excavations did not cut through the floors of the complex, but investigation of the emptied caches demonstrated that the complex was constructed on a single floor surface.

The structures comprising the northern, eastern and western sectors of the Structure 1 complex were built during at least three major construction phases. The residents adapted these structures to meet their changing needs during numerous episodes of renovation. The major construction phases are summarized here, including later phases that sealed off the southern access to the interior courtyard.

Phase 1: Construction of Rooms 13 and Room 1

Phase 2: Addition of Room 3B and Room 14

Phase 3: Addition of Room 3A

Phase 4: Renovation of Room 14 to add southern antechamber. Creation of patio Room 11 between Room 3B and Room 13; the alley between Rooms 3B and 3A may have been enclosed

Phase 4: Sealing of western and northern doors of Room 13; Addition of bench in Room 12 patio; Sealing of southwest doorway of Room 3B

Phase 5: Construction of southern wall containing Murals 4 and 5 (Room 2) to enclose portico of Room 1 (access to Room 1 granted through the courtyard); stairway constructed adjacent to western wall of Room 1;

Phase 6: In-filling of complex with rubble and midden material, burial of complex by sealing with a plaster cap.

Phase 7: Late Classic occupation on surface created by plaster seal including staircase and wattle and daub structure.

## **Early Classic Mesoamerican palaces and elite residences**

One of the factors that makes Structure 1 a fascinating subject of study is that it is a rare example of Early Classic elite architecture; few examples survive because the Maya usually demolished or buried structures under later construction phases. While it is difficult to find contemporary structures that could be used to interpret the function of Structure 1, several architectural groups that date to the later part of the Early Classic period demonstrate similarities in layout and construction methods. All of the groups, including Structure 1, incorporate architectural features that become hallmarks of Maya elite architecture.

### **Tikal**

#### The Central Acropolis

The Central Acropolis of Tikal served as the primary location of the royal court from the Early Classic through the Late Classic period (see Figure 4.2). The visible architecture was excavated and consolidated by the University of Pennsylvania Project from 1964-1967 and most of it dates to the Late Classic period. Peter Harrison's (1971) functional analysis of the buildings within the Central Acropolis was based on the floor plans of the structures correlated with secondary architectural features like additional stories, windows, niches, benches, subspring

beams, Special Deposits, burials and modifications over time that added or altered access routes. The analysis led to the identification of four categories of structure configurations that indicate the function of the rooms. Category 1 configurations, defined by the presence of tandem and transverse rooms, are the most complex floor plans and contain the greatest number of secondary features. Harrison interpreted these structures as permanent elite residences. Most Category 1 floor plans include roughly symmetrical transverse rooms that flank, and are perpendicular to, the central tandem room(s) (Figure 4.44).

An example of the Category 1 configuration is Structure 5D-46, which is located at the eastern end of the Central Acropolis and dates to the Early Classic period. In fact, a vessel included in a dedicatory cache placed in the central stairway identifies Structure 5D-46 as the residence of Chak-Tok-Ich'ak, the ruler who was deposed during the Teotihuacan *entrada* of AD 378. The building was preserved and occupied through the Late Classic period, which is perhaps a testament to the legacy of Chak-Tok-Ich'ak. The central portion of the structure is the original Early Classic construction while the flanking patios and rooms on the perimeter were added in the Late Classic period. The Early Classic core of the building consists of three vaulted range structures that have tandem rooms and two transverse rooms. Architectural features within Structure 5D-46 such as niches, subpring beams (which Harrison suggests could have been used to hang curtains to partition off the room), benches and the presence of burials identify the complex as a permanent residence, rather than a multi-use palace that served administrative and residential functions (Harrison 2003).

Category 2 floor plans consist of tandem rooms without transverse rooms (Figure 4.45). Many of the structures within Category 2 are vaulted range structures with multiple doorways in the main façade of the building. Harrison suggests that these structures were men's ritual houses or boy's premarriage houses based on ethnographic evidence and the lack of domestic features such as benches and food preparation areas (Harrison 1971:278).

Category 3 floor plans include transverse rooms but lack tandem rooms (Figure 4.46). Category 4 floor plans are single structures that do not have tandem or transverse rooms (Figure 4.47). Based on ethnographic evidence, the smaller structures with a single doorway may have been shrines/oratories or storage rooms (Harrison 1971:296).

La Sufricaya Structure 1 also exhibits the tandem/transverse layout of the Category 1 structures identified in the Central Acropolis. Rooms 13 and 14 are tandem rooms with Room 3B forming a transverse room. Alternatively, Rooms 13 and 14 correspond to the Category 2 floor plan consisting of tandem rooms without transverse rooms. Some of the Category 2 structures in the Central Acropolis have three doorways in the primary façade, similar to the western façade of Room 13, but there are also multiple doorways between the two rooms, while there is only a single doorway between Room 13 and 14. It is important to remember that Harrison's analysis was based on the Late Classic architecture of the Central Acropolis but it is clear that similar floor plans manifest during the Early Classic period.

Structure 1 also includes many of the architectural features found throughout the Central Acropolis and, notably, Structure 5D-46. These features

include subspring beams, cord holders, niches, benches and windows. Harrison identifies the presence of benches inside the rooms as crucial clues to their function. Permanent stone benches were prominent features of Late Classic elite residences but they are not common in Early Classic architecture. The benches in Room 11 and Room 12 however, do coincide with Late Classic patterns at Tikal (Figure 4.48). The bench in Room 11, formed by a sloping backrest abutting the cornice of Room 13, creates the profile of *talud-tablero* architecture. While it is impossible to know if this was an intentional design choice that makes allusions to Teotihuacán, the form of the bench is not uncommon in the Maya region.

#### Group 7F-1

Group 7F-1 is a minor center located 1.25 km southeast of the Great Plaza of Tikal. The center was founded between AD 522-525 and consists of several temples and residences arranged around a plaza. Stela 23 was reset within the group and two prominent burials. Burial 160 and Burial 162 were interred during the initial phases of construction (Haviland 1981, 1992). The initial phase of construction included Structure 7F-30, a temple situated on the eastern edge of the group that consists of a large, c-shaped room, and Structure 7F-32, a vaulted range structure that was the main residence of the group. Structure 7F-32 is comprised of two central tandem rooms flanked by transverse rooms (Figure 4.49). It is interesting to note interior benches were not included in the initial construction phase of Structure 7F-32, but several were added to every room during subsequent phases.

Burial 160 was interred along the central axis of Structure 7F-30 making it the first of numerous burials that were interred in this structure throughout the

occupation history of the group. The elaborate nature of Burial 160 and the sumptuous offerings have led to the hypothesis that the approximately 50 year-old male interred in the tomb was an Early Classic ruler of Tikal who was buried in Group 7F-1 by his wife and co-ruler, the woman buried in Burial 162. The man in Burial 160 may have been Kaloomte' B'alam, the 19<sup>th</sup> ruler of Tikal and co-regent with the Woman of Tikal, possibly buried in Burial 162. The reign of these rulers ended circa AD 527 and coincides with the founding of Group 7F-1 (Haviland 2015).

There are many similarities between Group 7F-1 and La Sufricaya. Both groups were established within equivalent distances from major centers; both have a funerary temple or shrine located in the eastern sector of the group (Tikal Structure 7F-29 and La Sufricaya Structure 2); the founders of the groups had ties to the ruling dynasty; and the primary residence consisted of tandem and transverse rooms. The main difference is that Group 7F-1 was primarily an elite residential group with little evidence of public ceremonial activity (Haviland 1981), while La Sufricaya was a minor center where public ceremonies were carried out, as evidenced by the ball court, large open plaza and numerous stelae.

#### Mundo Perdido Group 6C-XVI

Group 6C-XVI is located approximately 400 meters south of the Mundo Perdido complex and was occupied for 300 years from AD 300-600. The Proyecto Nacional Tikal (PNT) excavated the group in the 1980s. These excavations revealed 23 construction phases that transformed the group from multiple residential and ceremonial structures surrounding four plazas to two large ceremonial platforms in the final phases (Laporte 1989). Construction phases 7 and 8 (Figures 4.50 and



4.51) are roughly contemporaneous with La Sufricaya and date to the end of late Manik 2 period (AD 350-378) and beginning of the Manik 3-A period (AD 378-480) respectively.

The PNT excavations also uncovered Teotihuacán-style material in burials and Problematic Deposits and the Tikal Ball Court marker that includes hieroglyphic references to Spear Thrower Owl, all of which led scholars to suggest interaction occurred between Teotihuacán and the inhabitants of the group. Three platforms, Sub-04, Sub-17 and Sub-26, included *talud-tablero* architecture on the front facades flanking the central staircase. The *talud-tablero* appears as early as the phase 3 in the construction sequence, which predates the *entrada* of AD 378 and influx of Teotihuacán-style ceramics and iconography. This architectural style was in use until the 9<sup>th</sup> and 10<sup>th</sup> construction phases when the plaza floors were raised, which truncated the sloping *talud* of the platforms. Due to the early appearance of the *talud-tablero* architectural style in Group 6C-XVI, Laporte does not believe it is evidence of Teotihuacán influence. Structure Sub-48, an altar resembling Teotihuacán *adoratorios* was erected in the north plaza during the 8<sup>th</sup> construction phase and also consisted of *talud-tablero* architecture. The Ball Court marker was originally erected in the center of the altar then interred inside the structure during the 12<sup>th</sup> construction phase when the plaza surface was elevated and buried the altar (Laporte 1989:270).

During the Manik 2 phase, the most common type of structure within the group were palace structures with one or two rooms and wide, central doorways, defined as palace types A, B-1 and B-2 by Laporte (1989:150-159). Palace type A

structures are single, c-shaped rooms with wide entrances. Palace type B-2 structures are comprised of tandem rooms with centrally placed doorways providing access between the two rooms. The front room is usually c-shaped and Laporte notes that these walls could not have supported a vaulted roof, but were covered by a flat roof. Internal architectural features such as cord holders, benches or niches that could shed light on the function of these structures were not detailed by Laporte. While Laporte does not explicitly interpret the function of these palace types, the name alone implies that they served residential or administrative functions.

The Manik 3 period (AD 378-550), brought drastic changes in the architecture of Group 6C-XVI, which Laporte attributes to a shift in function within the group itself to ritual activities centered around the ball game (Laporte 1989:157). The palace types A, B and C are replaced by palace type D structures, which are comprised of two or three tandem rectangular rooms. The front room contains three doorways and a central doorway provides access between the rooms (Figure 4.52).

None of the floor plans of palace structures within Group 6C-XVI correspond to the tandem/transverse layout of Harrison's Category I, which would identify a permanent residence within the group. Palace type A structures correspond to the no-tandem/no-transverse floor plan of Category 4 structures in the Central Acropolis. Palace type D structures correspond to the tandem/no-transverse floor plans of Category 2 structures in the Central Acropolis, some of which also have three doorways in the front room. Palace type B-2 structures, though they are

tandem rooms, do not have a correlation within Harrison's categorization. Although the structures consist of a tandem/no-transverse floor plan, they are not vaulted range structures like Category 2 structures in the Central Acropolis. Palace type B-2 structures are more akin to buildings found within Teotihuacán apartment compounds, which include tandem rooms with a centrally placed doorway between them. The front room is often an open portico with columns. The front room of palace type B-2 structures is c-shaped with a wide, central doorway measuring at least 3 meters (see Laporte 1989 Fig. 57). Laporte does not consider the front rooms of these structures to be a portico like those found in the Teotihuacán apartment compounds, however, since there are no traces of pillars, columns or posts (Laporte 1989:156). While it is possible that the palace type B-2 structures are a local imitation of Teotihuacán architecture it is important to remember that these structures were predominant during the Manik 2 period, prior to the events of AD 378, so they may simply be variants of local styles.

There are some similarities between the layout of Structure 1 and the structures within Group 6C-XVI. Rooms 1 and 3A are tandem rooms with an open, c-shaped front room like palace type B-2 structures, however the doorway between the rooms is offset rather than placed centrally. Another difference is that Room 3A is a separate edifice constructed adjacent to Room 1 with a doorway created between the two buildings while palace type B-2 structures are a single construction. Rooms 13 and 14 resemble palace type D structures, (as well as Category 2 structures), but again the doorway between rooms is offset rather than placed centrally. Although a variety of Teotihuacán-style artifacts were recovered

from Group 6C-XVI and the residents probably had connections with the Central Mexican city, most of the architecture of the group is grounded in Maya style and patterns.

## **Uaxactún**

### Group B, Structure B-XIII

Structure B-XIII is located in Group B, an important locus of Early Classic development and which is where Stela 5 depicting Sihyaj K'ahk' was erected. Like La Sufricaya Structure 1 the structure appears to be a complex of multiple rooms or structures rather than a single edifice. The complex consists of ten rooms constructed in separate phases. The core of the Structure B-XIII is comprised of three tandem rooms, Rooms 2, 3 and 4, flanked by a transverse room, Room 5. Smith (1950) interpreted the structure as an elite residence and the mural depicting a Maya lord greeting a foreign lord<sup>14</sup> was painted on the western wall of Room 7, a c-shaped room with an open portico to the east (Figure 4.53). The wall on which the mural was painted contained a niche, perhaps for an *incensario*, and a bench with a sloping backrest, which was removed in antiquity. These architectural features are all similar to those found in various rooms of Structure 1.

In addition, the construction methods and architecture of Room 7 of Structure B-XIII are very similar to La Sufricaya Structure 1 Room 3B and the patio of Room 11 (Figures 4.54-4.57). The two structures are constructed with rough-cut blocks that are bonded with mortar and coated with thick, rough plaster. They also

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<sup>14</sup> Smith does not identify this lord as a Teotihuacano (Smith 1950: 55-56) though later generations of scholars identify him as such.

include narrow doorways between rooms that are tapered at the top and become wider at the bottom. These shared architectural features as well as some ceramic evidence discussed in the following chapter, hint at interaction between the elites living in Uaxactún Structure B-XIII and La Sufricaya Structure 1.

The similarities in architectural features (murals, niches, and benches with sloping backrests) and construction methods between Structure 1 and Structure B-XIII strongly suggest interaction and communication between the lords of the sites. These buildings can be viewed as another type of practice of affiliation, signaling an alliance with the inter-regional elite imagined community.

## **Teotihuacán**

### Teotihuacán apartment compounds

The majority of the estimated 125,000 residents of Teotihuacán during the Early Classic period lived in 2,200 multifamily apartment compounds. According to Millon (1981), many of these compounds were constructed during Late Tlamimilolpa phase (AD 300-400). While the walled compounds varied in size, layout and quality of construction, they shared a general plan (Figure 4.58). The compounds are generally square and the exterior walls ensured privacy while a single, exterior entrance restricted access to the compound. Most of the apartments within the compounds were arranged around a central courtyard containing a small, central altar or *adoratorio*. The apartments within the compounds consist of two or more structures surrounding small patios, and these structures are comprised of an enclosed back room with an open, but roofed, portico in front (Sanders and Evans 2006). The doorway between the front portico and the private back room is always

centrally placed. The compounds were planned and constructed in a single event (Millon 1981).

### Palaces

Scholars have not been able to identify the rulers of Teotihuacán, which suggests a sociopolitical organization that was drastically different than the Maya and based on cooperative or joint rulership. Three precincts have been identified as possible royal palaces at Teotihuacán, including the Xalla compound, located in the northeast zone, which may have been the earliest palace (Manzanilla and López Luján 2001). The perimeter walls enclose an area of 35,500 m<sup>2</sup>, making the Xalla compound ten times larger than average apartment compound. A central courtyard at the heart of the compound is surrounded by four temples with a building, possibly a shrine, in the center of the courtyard (Figure 4.59). This layout is unusual at Teotihuacán and has been interpreted as a quincunx representing the four cardinal points and center of the cosmos (Nielsen 2014:8-9).

The Ciudadela Compound was constructed in the late second century AD and may have represented a shift in the social and political structure of the city (Pasztor 1997). The compound has been identified as a major religious precinct based in part on the central court, which was large enough to hold most of the population of Teotihuacán (Cowgill 1983). The compound is defined by four great platforms surmounted by small temples and a monumental stairway provides access to the compound. The Feathered Serpent Pyramid within the compound may have been the ritual shrine of the complex, dedicated to the ruler entombed at its center. While some of the structures within the Ciudadela Compound have been

labeled as palaces, there is very little archaeological evidence supporting residential functions, suggesting the compound primarily served public functions (Sanders and Evans 2006:262-263).

The Street of the Dead Complex (an elite architectural complex not to be confused with the entire Street of the Dead, pyramids and temples), which may have been built around AD 300, consists of a compound of courtyards and symmetrical rooms that could have served administrative, residential and ritual functions (Figure 4.60). The complex has not been extensively excavated so stratigraphic data that would elucidate the development of the complex and very little information regarding associated artifacts and features, which would shed light on the types of activities carried out within the compound, has been published (Sanders and Evans 2006: 269).

## **Conclusion**

This analysis of the architecture of La Sufricaya Structure 1 addresses many of the research questions set forth in this work. First and foremost, the architectural features of the complex support the interpretation of Structure 1 as an elite residence that served domestic, ritual and perhaps administrative functions. Individual rooms within the complex appear to have served multiple functions as the residents of Structure 1 expanded and renovated the complex over time.

Mural 7, which includes the title *Chak tok wayaab'*, ties the inhabitants of La Sufricaya to the Holmul elite, where the title appears on artifacts recovered from Early Classic and Terminal Classic contexts. The title corresponds to a high-ranking priest rather than an *ajaw* though, so the founder of La Sufricaya may not have been

a member of the Holmul ruling dynasty. It is possible, however, that the *Chak tok wayaab'* title was associated with the Holmul dynasty instead of the *ajaw* title or that it was held by males of the ruling family who were not in the line of succession. The murals within Structure 1 were political statements that proclaimed the position of the founder of La Sufricaya as well as his participation in regional sociopolitical events.

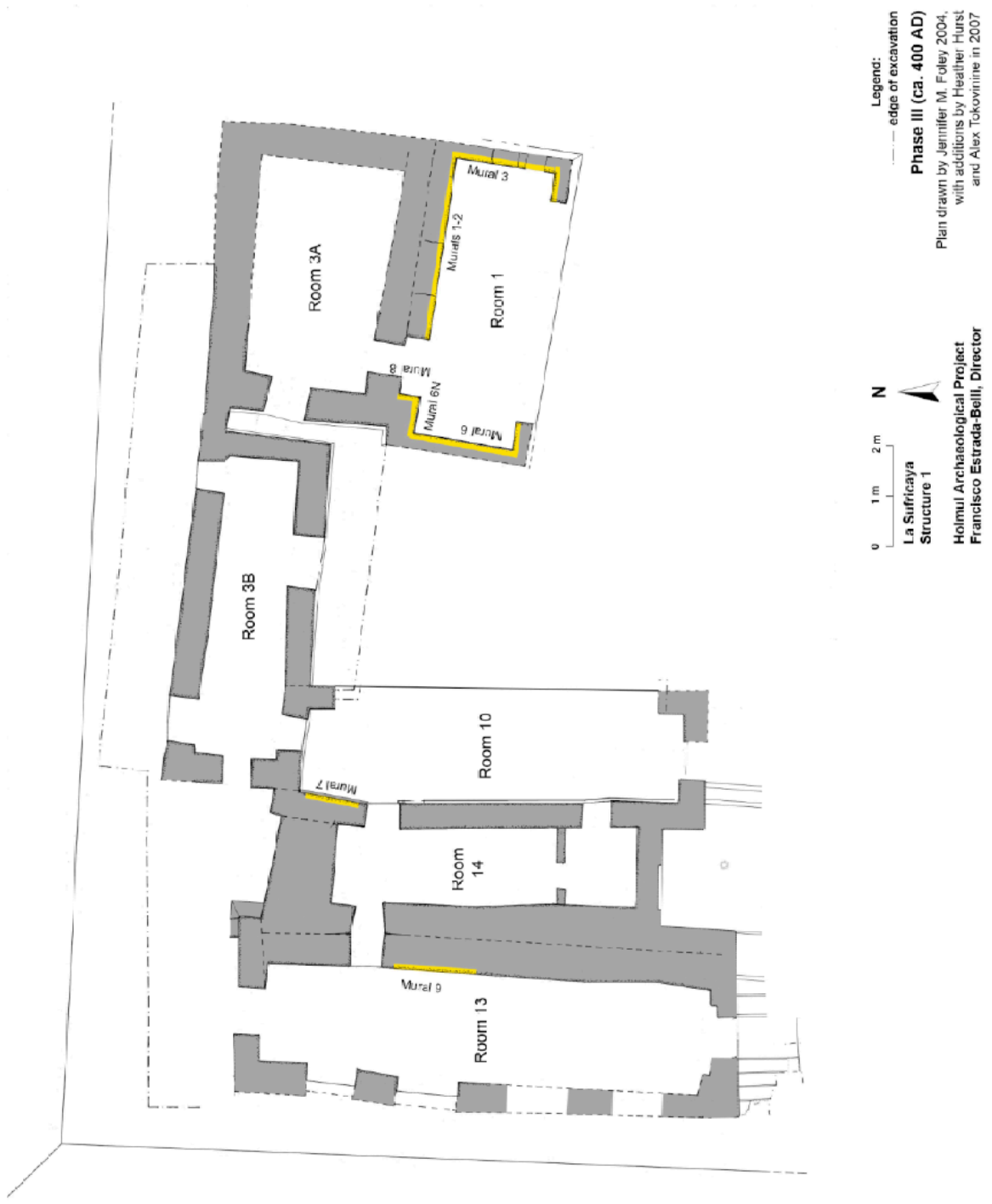
The Early Classic Maya palaces and elite residences discussed here, including La Sufricaya Structure 1, conform to Palace-type I layouts, which are comprised of multiple structures surrounding a courtyard. This layout is essentially a Maya household group executed on a grander scale – including raised platforms, masonry architecture, vaulted roofs, modeled stucco decoration and painted walls. The construction sequences of many of the complexes appear to have evolved organically with changes made to the layout based on the needs, or whims, of the residents. These complexes leave no doubt that the residents held a prominent position in society.

In contrast, Teotihuacán apartment compounds are uniform in layout and individual compounds remained largely unchanged over several construction phases. The fact that a definitive palace has not been identified at Teotihuacán speaks to a fundamental difference in leadership, identity and social stratification between the Maya and Teotihuacán. Whereas Maya rulers and the elite class sought to distinguish themselves from the rest of the society by situating their residences in prominent locations and investing significant resources to construction materials and methods as well as decorative features, Teotihuacán rulers seemed to have



blended into the community. Based on the size, layout and decorative features, many of the apartment compounds within the city appear to have been inhabited by people who possessed economic wealth and/or political power. These compounds make pinpointing a palace difficult and suggest that an extensive ruling class controlled the city.

Finally, the hieroglyphic text of Mural 7 and several architectural features within Structure 1 can be interpreted as practices of affiliation that signified the participation of the La Sufricaya *Chak tok wayaab'* in an imagined regional elite community centered on the events of the 11 Eb *entrada* and Teotihuacán iconography. Mural 7 specifically mentions the 11 Eb date and commemorates the arrival of a *K'awil* to Tikal. In addition, Murals 1 and 2 depict an assemblage of both Maya and Teotihuacano lords. The nearby site of Uaxactún also commemorated the 11 Eb date (Stela 5) and a meeting of Maya and Teotihuacano lords in a mural painted inside an Early Classic elite residence, Structure B-XII. This structure is actually a complex of rooms, many of which are open, c-shaped rooms similar to Structure 1 at La Sufricaya. The shared architectural features of the structures (benches with sloping back rests, niches, c-shaped rooms and murals) leave little doubt that the lords of the site interacted and participated in political events of the Early Classic period.



**Figure 4.1 Plan of Structure 1, phase 3 (updated plan by H. Hurst)**

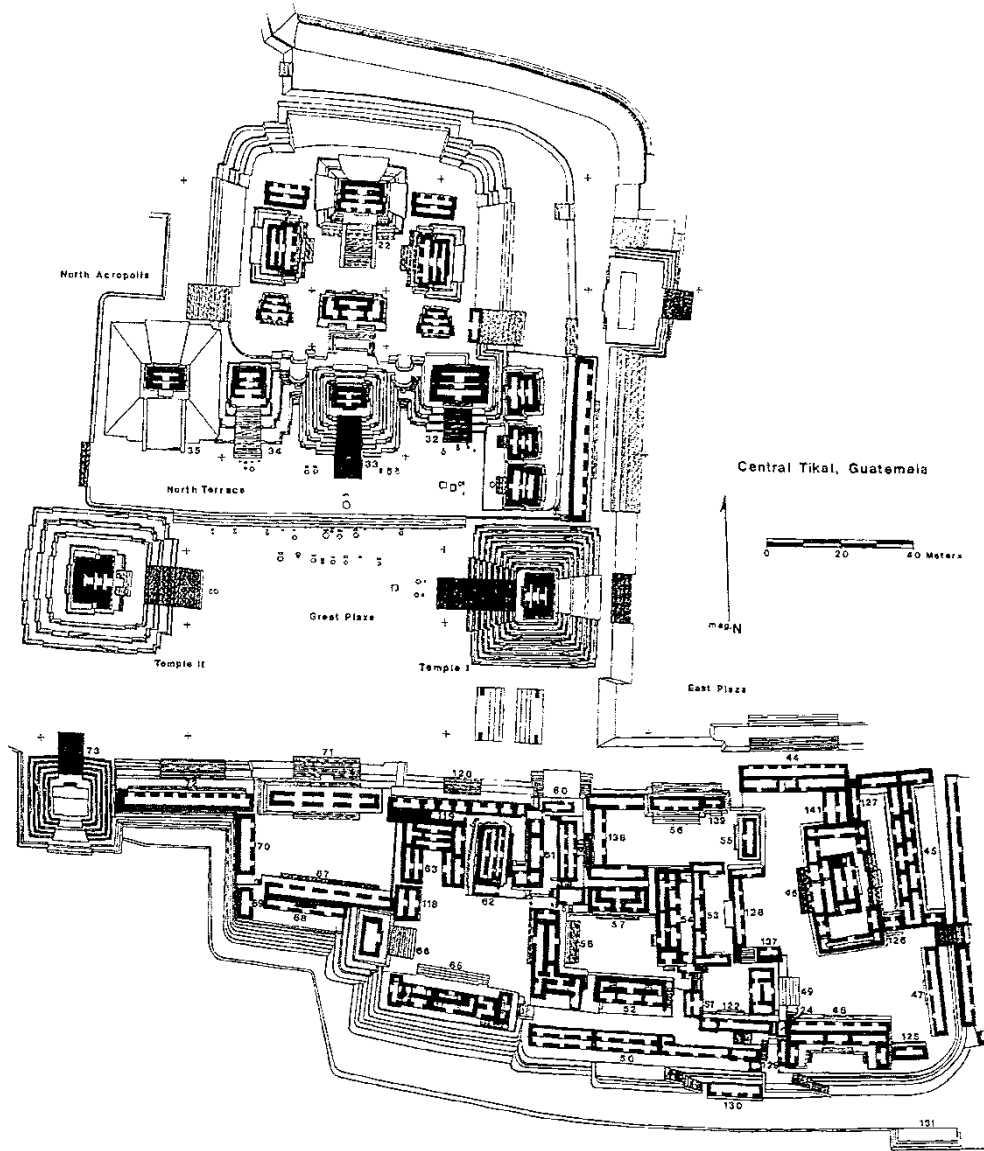


Figure 4.2 Plan of the Central Acropolis at Tikal, an example of a palace-type I complex (After Harrison 2003:Fig. 4.2)

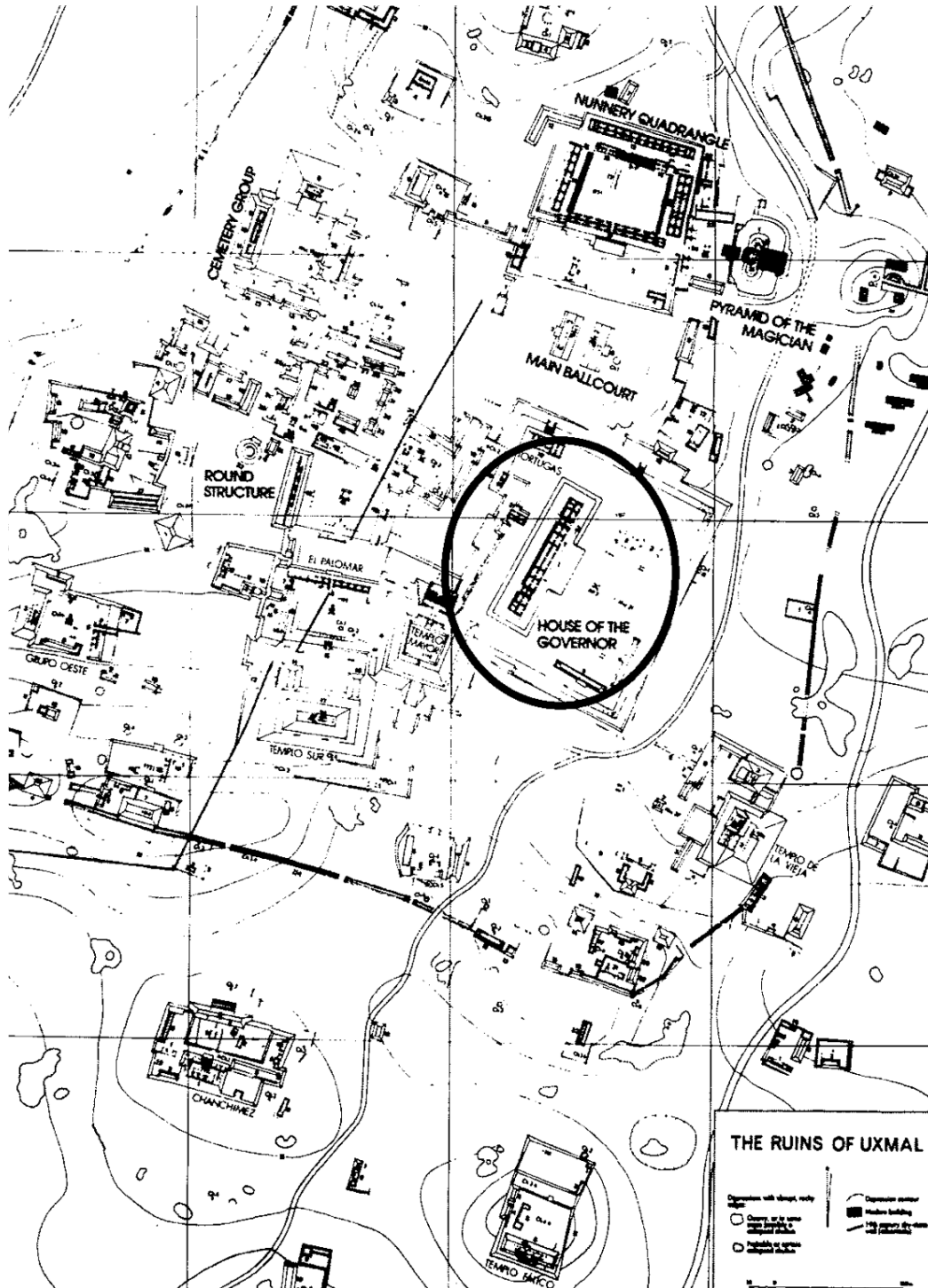
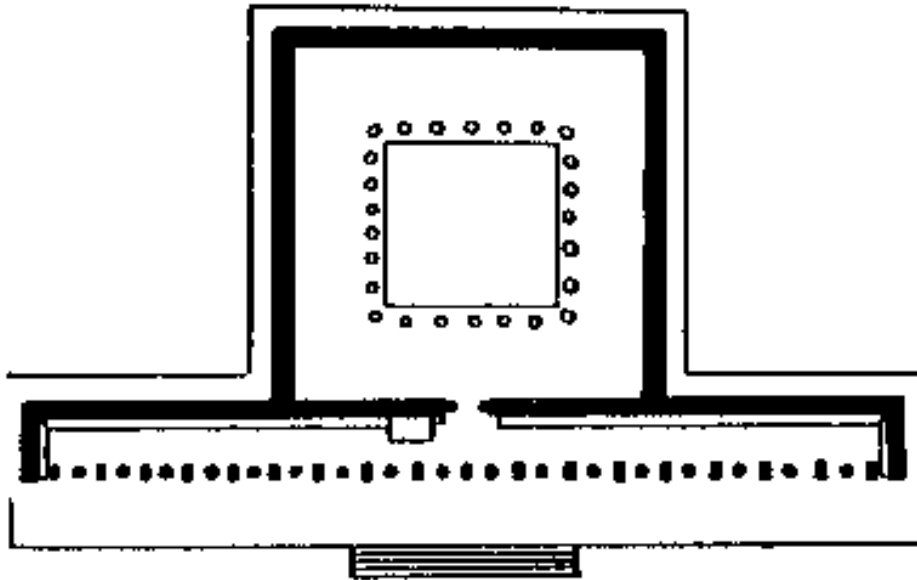
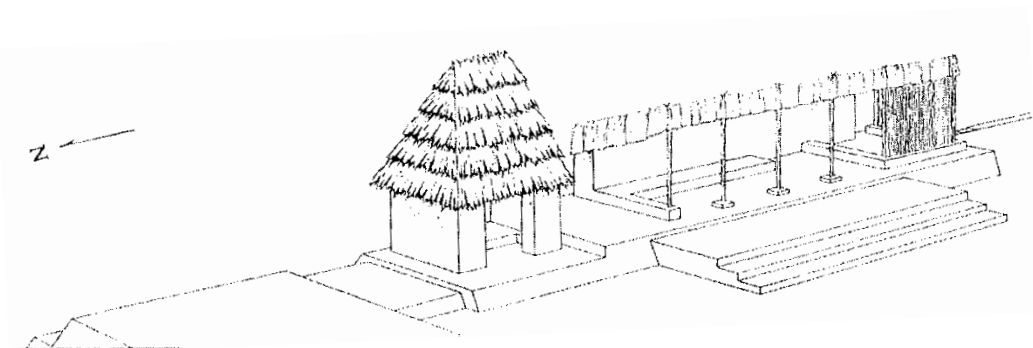


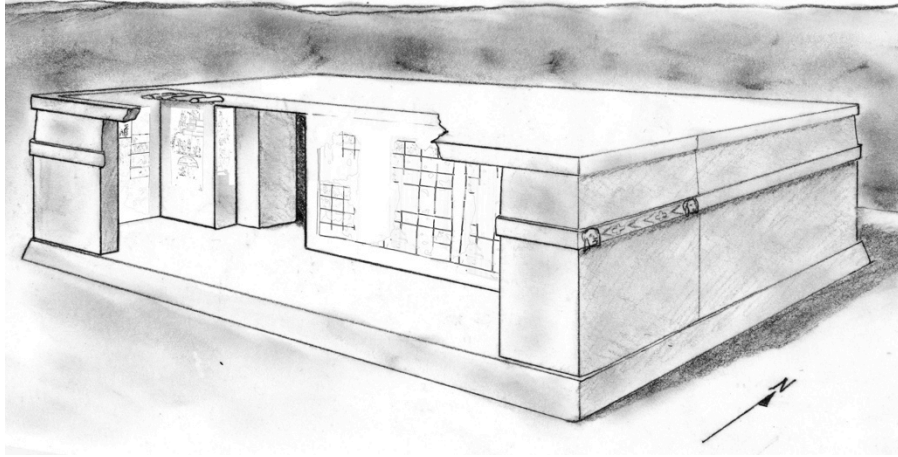
Figure 4.3 Plan of Uxmal. Note the House of the Governor, located in the center of the site, an example of a palace-type II structure. (After Kowalski 2003:Fig. 8.5)



**Figure 4.4 Plan of the Mercado at Chichén Itza, an example of a palace type III structure (After Kowalski 2003:Fig. 8.19)**



**Figure 4.5 Drawing of Dos Pilas Structure N5-1, an example of a palace-type IV presentation palace (After Demarest et al. 2003:Fig. 5.10)**



**Figure 4.6** Artist's reconstruction of La Sufricaya Room 1 (drawing by H. Hurst)



1.

**Figure 4.7** Photo of north wall of La Sufricaya Room 1, note the southern wall of Room 3A visible behind it (photo by F. Estrada-Belli)

HOLMUL 01  
SLT 05 11/06/0  
DAN SLATER

W ————— E

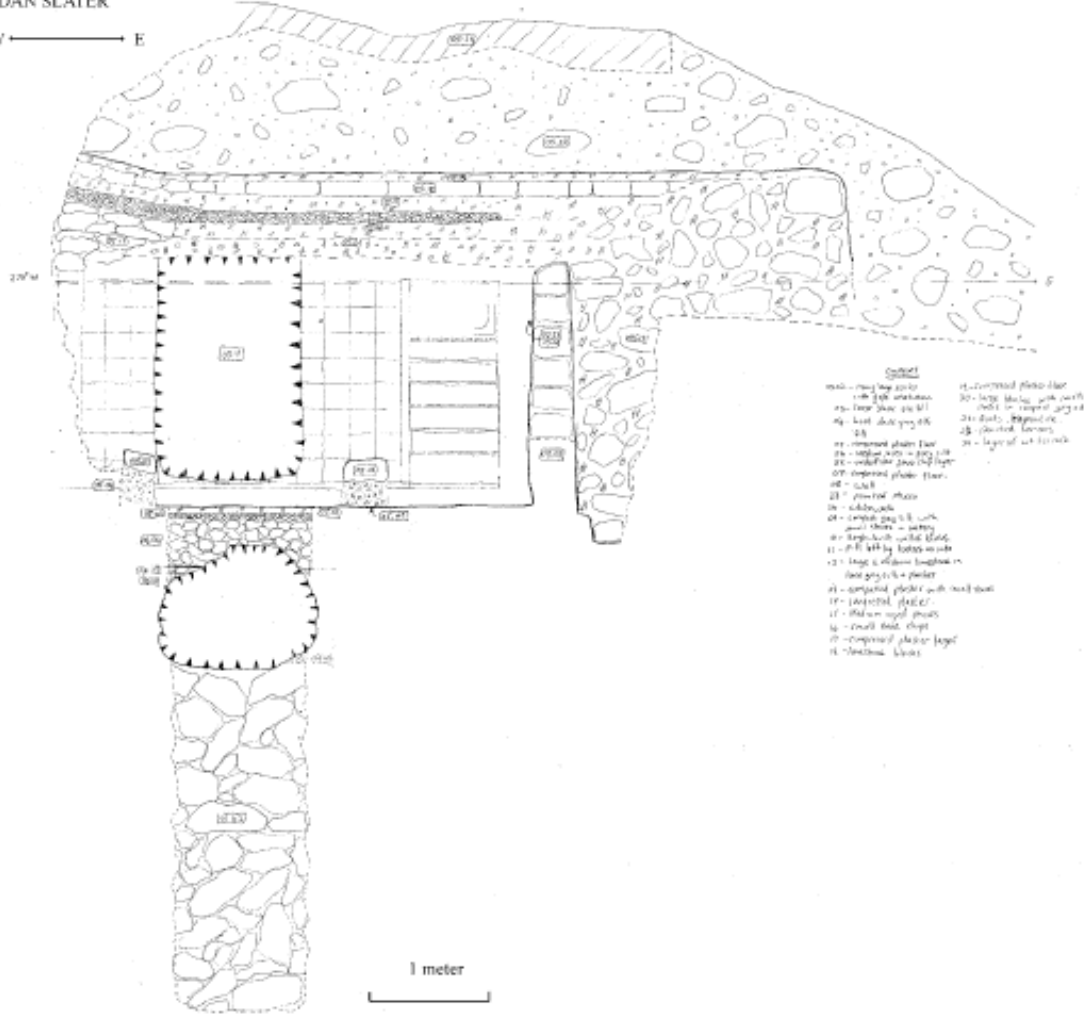
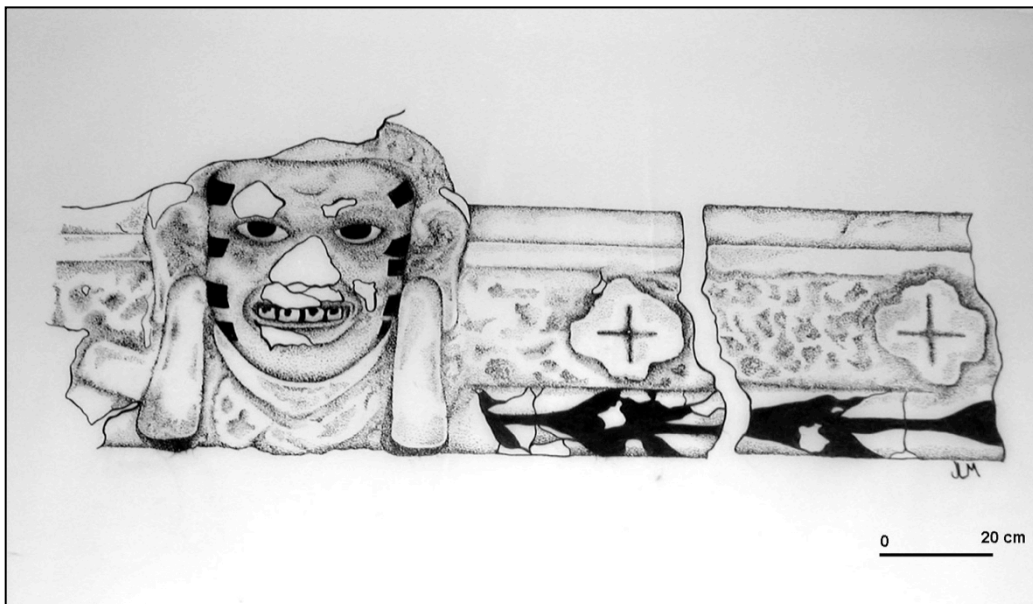


Figure 4.8 Profile of north wall of Structure 1 Room 1 (drawing by D. Slater)



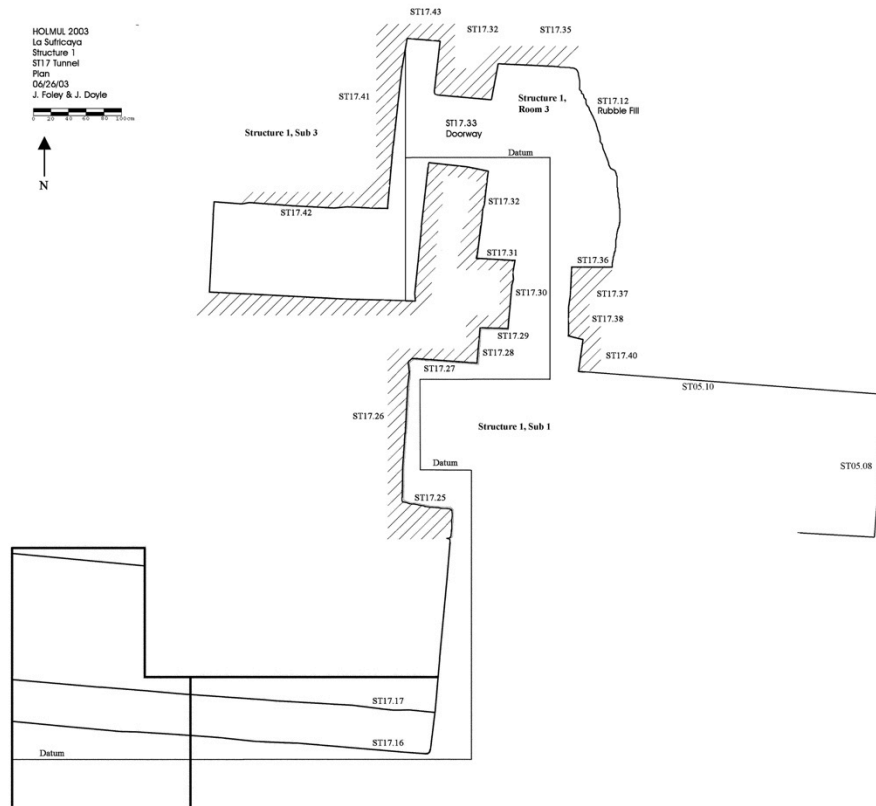
a.



b.

**Figure 4.9 La Sufricaya Structure 1 Room 1, a) Photo of the exterior frieze (photo by the author) b) Drawing of exterior frieze of (drawing by J. Mundt)**

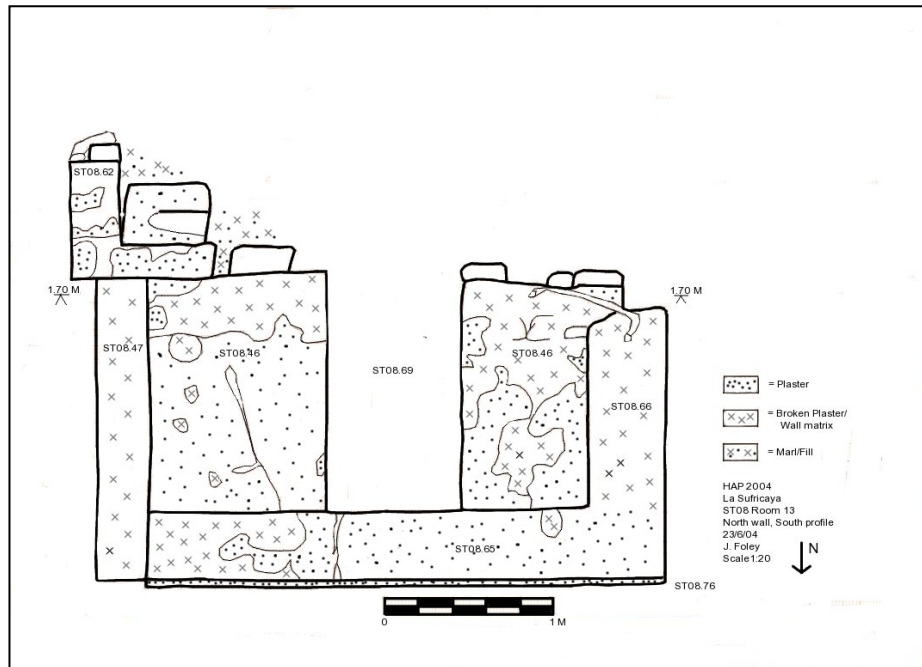




**Figure 4.10 Plan of tunnel excavated in Rooms 1 and 3A. Note the double doorjamb formed by the north wall of Room 1 and south wall of Room 3A (Plan by J. Foley & J. Doyle).**



a.



b.

**Figure 4.11 Structure 1 Room 13, a) Photo of north entrance showing the remnants of the cornice of the roof (photo by the author). b) Profile of the north entrance (drawing by the author)**

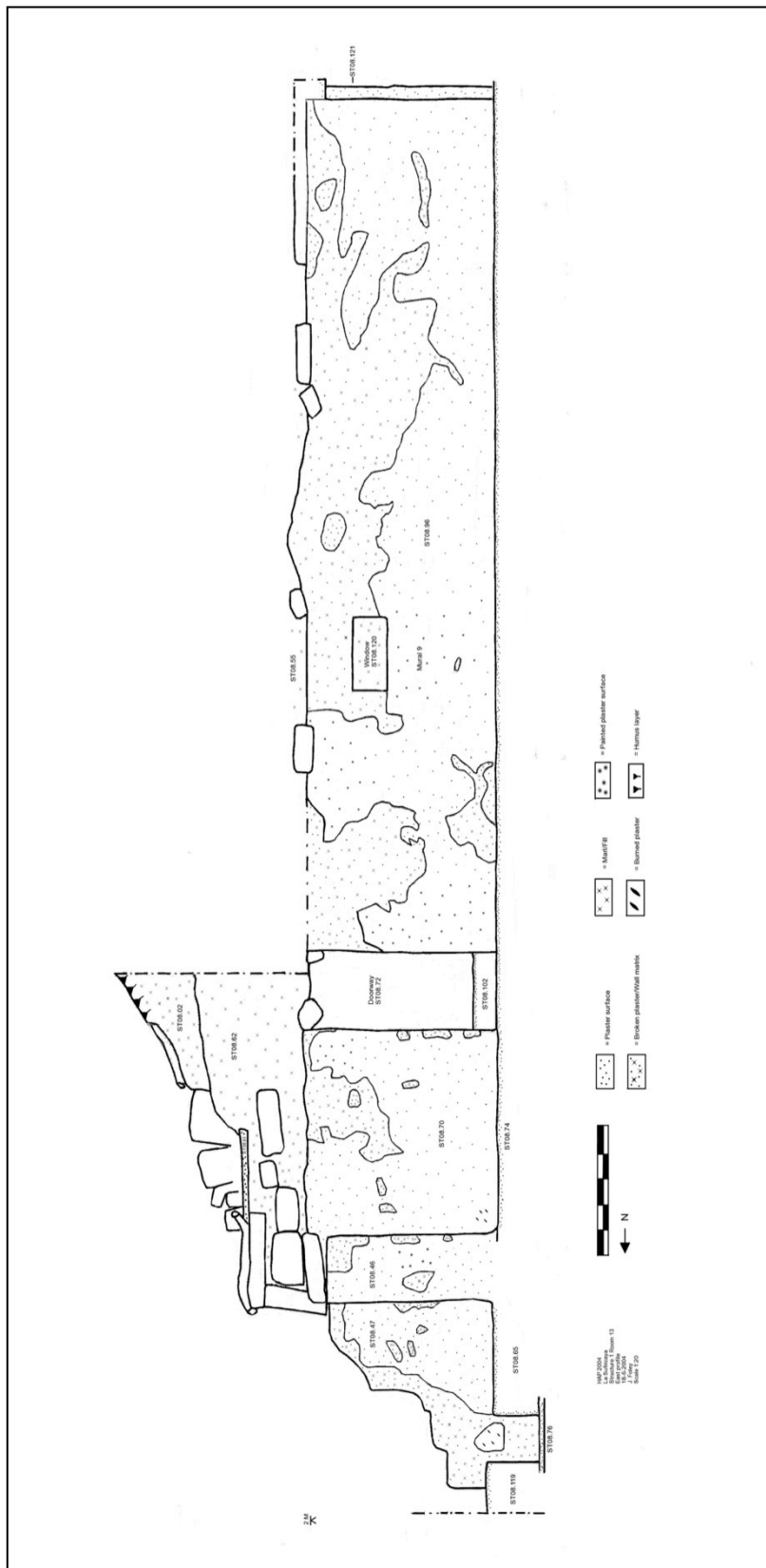


Figure 4.12 Profile of eastern wall of Structure 1 Room 13 (drawing by the author)

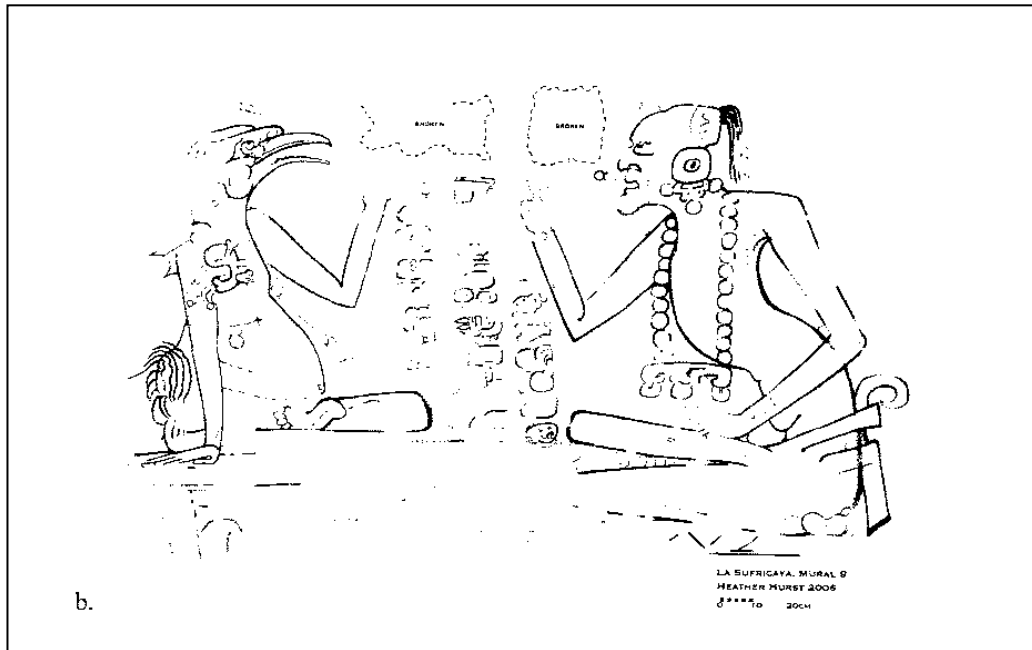


Figure 4.13 Drawing of Mural 9 (drawing by H. Hurst)

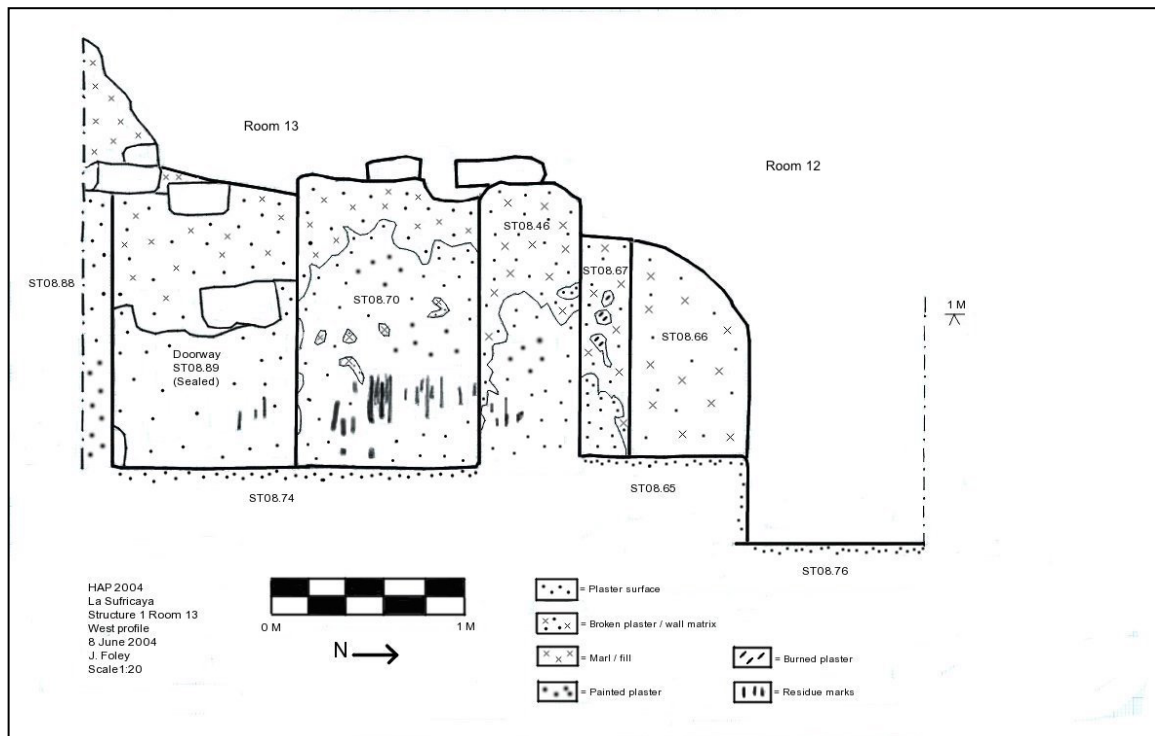
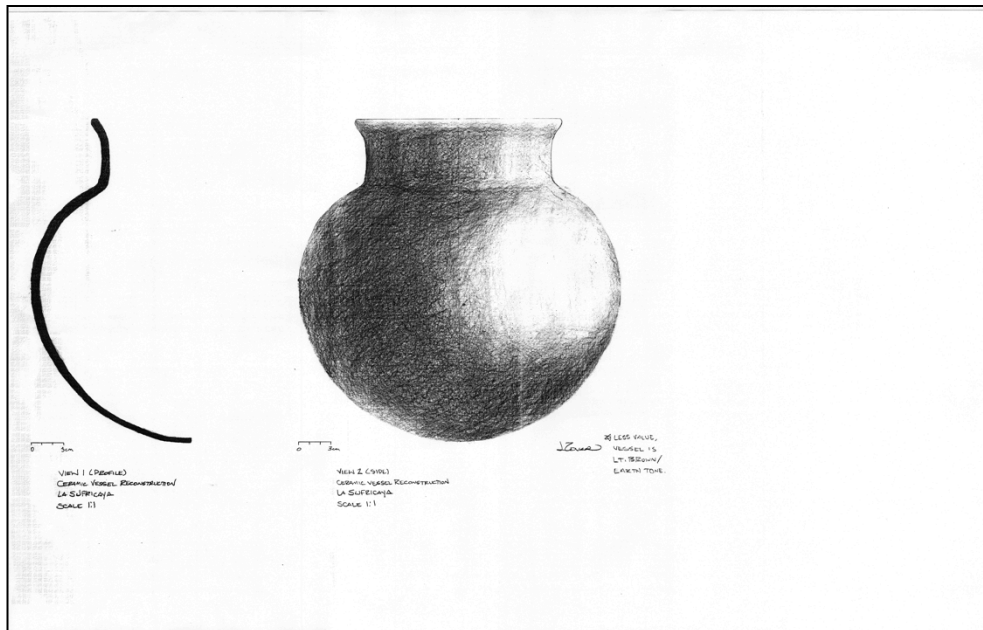


Figure 4.14 Profile of western walls of Structure 1 Rooms 13 and 12 (drawing by the author).



**Figure 4.15** Photo of termination cache placed in the floor of Structure 1 Room 13 prior to in-filling of the structure (photo by the author)



**Figure 4.16** Drawing of vessel placed in termination cache of Structure 1 Room 13 (drawing by J. Zovar)



**Figure 4.17** Bench of Structure 1 Room 12 constructed in front of sealed northern doorway of Room 13 (photo by the author)



**Figure 4.18** Cord holders flanking southeast doorway of Structure 1 Room 3B (photo by the author)

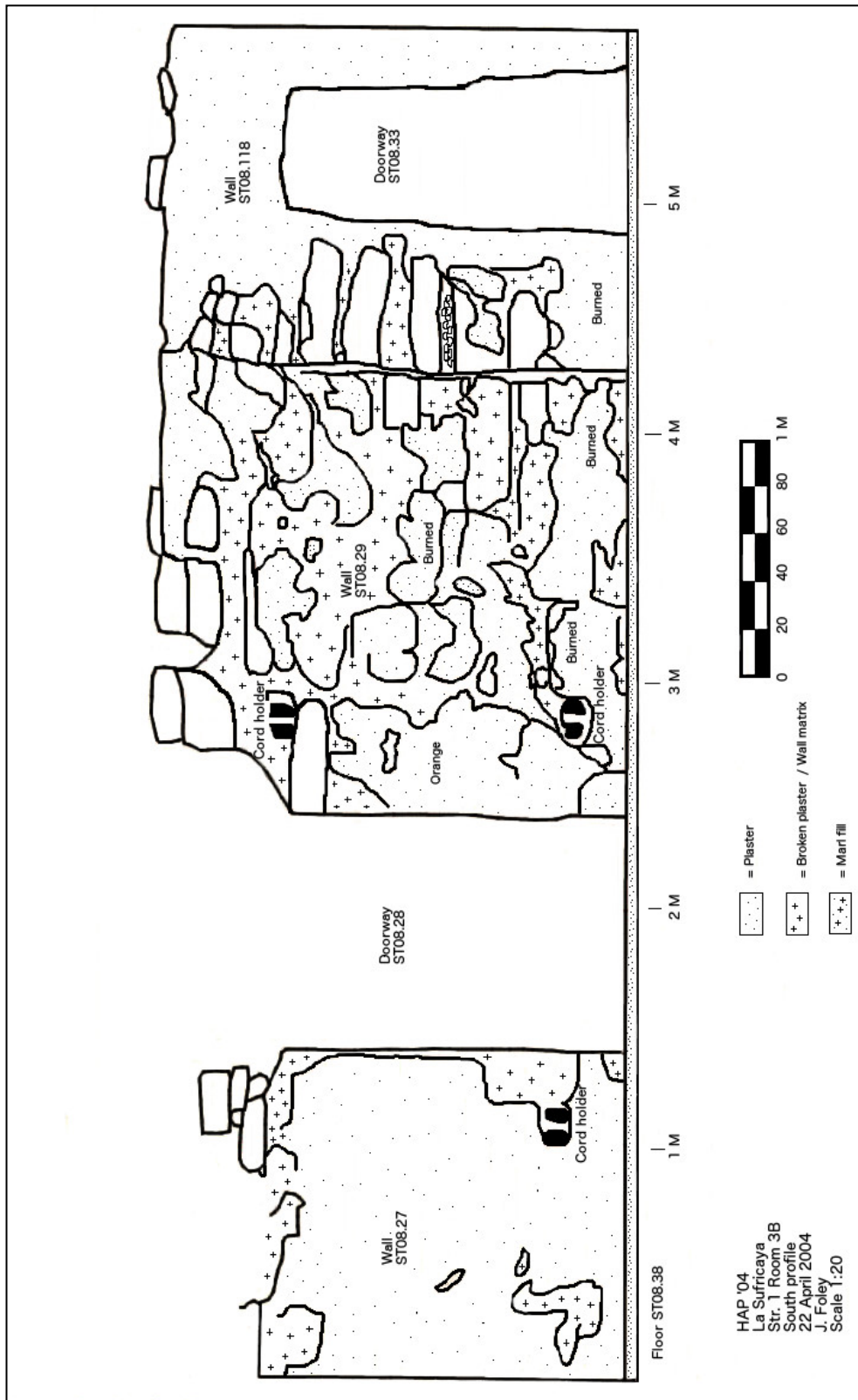


Figure 4.19 Profile of southern wall of Structure 1 Room 3B (drawing by the author)

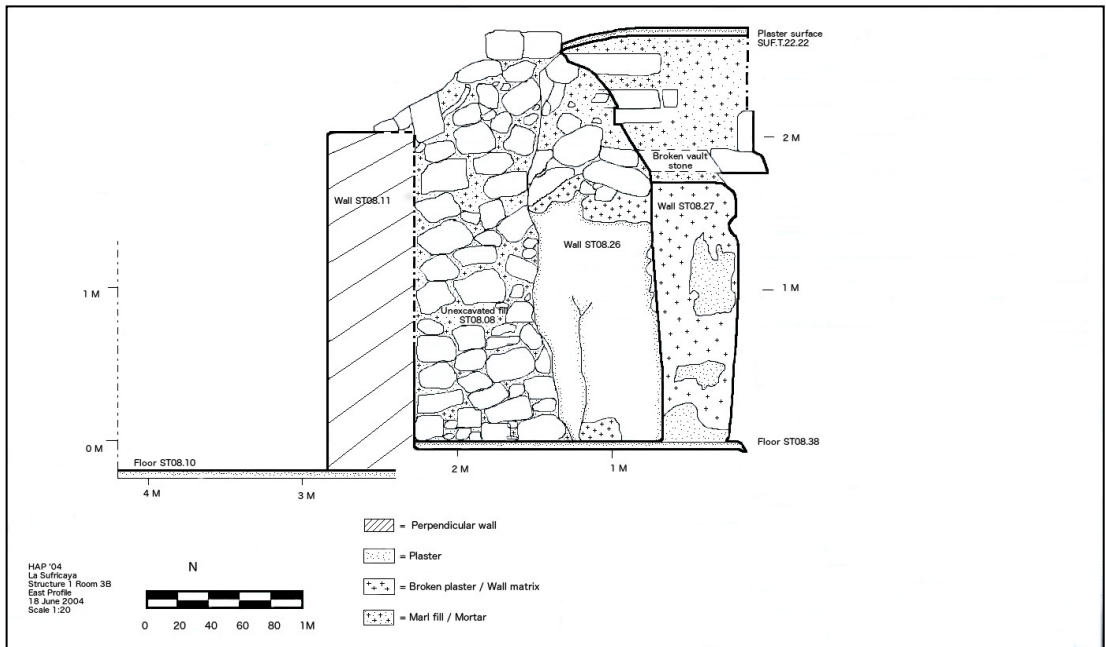


Figure 4.20 Profile of eastern wall of Structure 1 Room 3B (drawing by the author)



Figure 4.21 Remnant of vault of Structure 1 Room 3B (photo by the author)





**Figure 4.22 Western view of Structure 1 Room 3B. Note the remnants of the vaulted roof atop the southern wall.**



**Figure 4.23 Western section of Room 3B. Note the depression in the wall in northwest corner, which is the location of partially sealed doorway (photo by the author)**



**Figure 4.24 Floor of doorway ST08.37 in Room 3B showing the interior floor lipping up to the scarred portion of the floor where blocks used to partially seal the doorway were removed during excavation (photo by the author)**



**Figure 4.25 Interface of Room 1, Room 3A and Room 3B showing that the western wall of Room 3A abuts the northern wall of Room 1 (photo by the author)**



**Figure 4.26 Interface of Room 3A, wall ST17.43, and Room 3B. Note the floor of Room 3A continues seamlessly from the interior of the room to the passage between the two rooms (photo by the author)**



**Figure 4.27 Room 8 showing the exterior wall of Room 3A and the interface with the wall (ST17.43) that enclosing the passage between Rooms 3A and 3B (photo by the author)**



**Figure 4.28 Southern extent of exterior wall of Structure 1 Room 14 showing basal platform (photo by the author)**

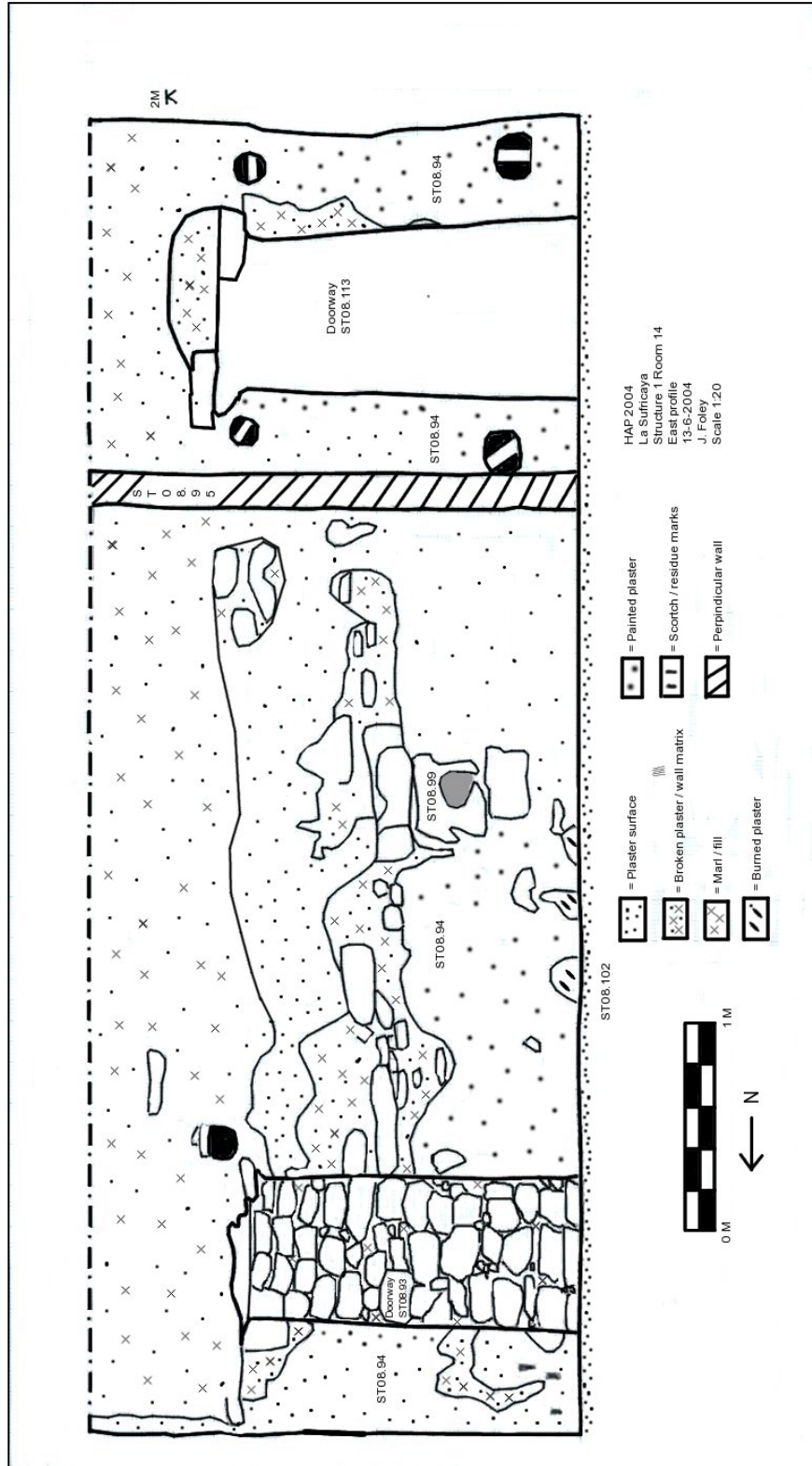


Figure 4.29 Profile of eastern wall of Structure 1 Room 14 (drawing by the author)

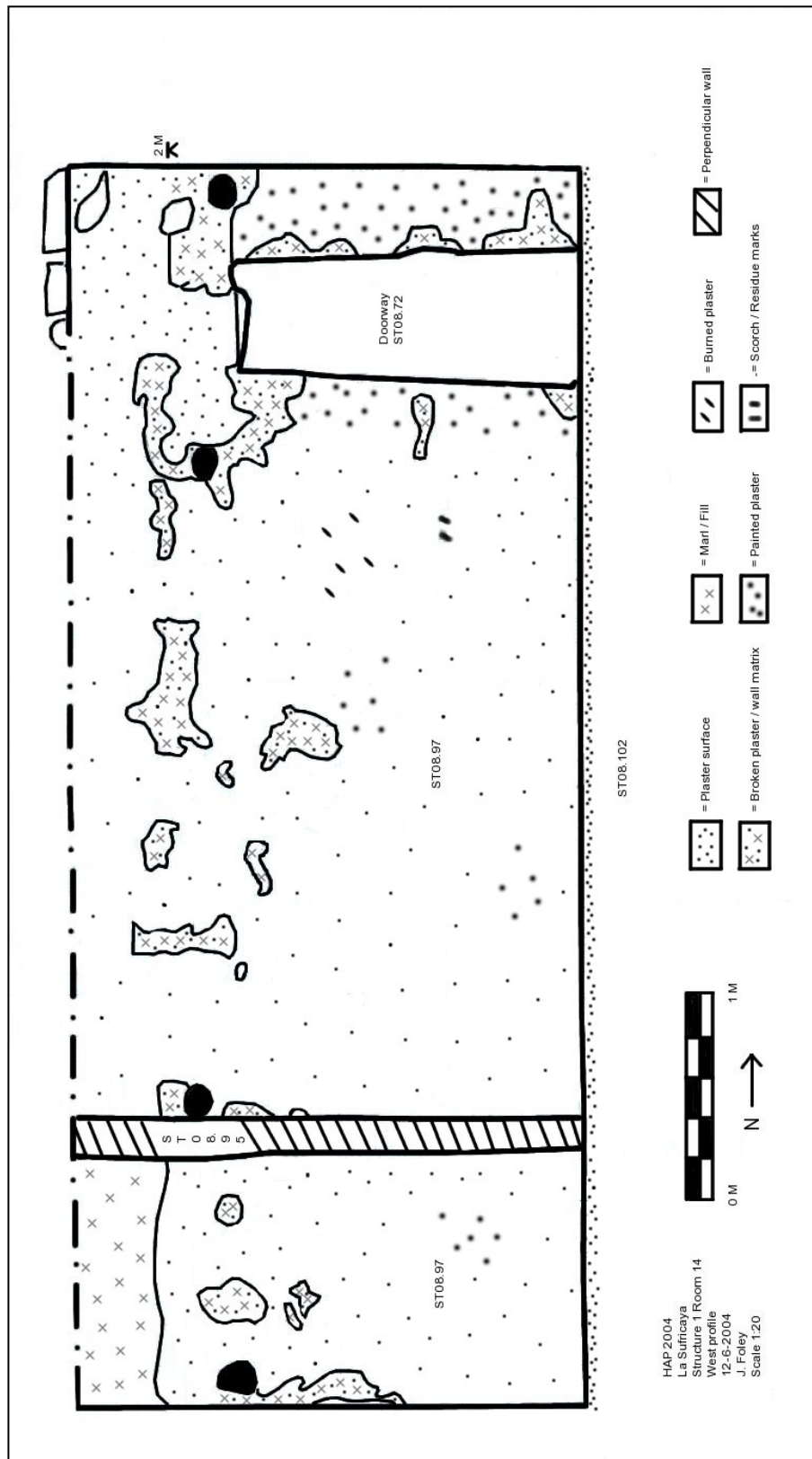


Figure 4.30 Profile of western wall of Structure 1 Room 14 (drawing by the author)



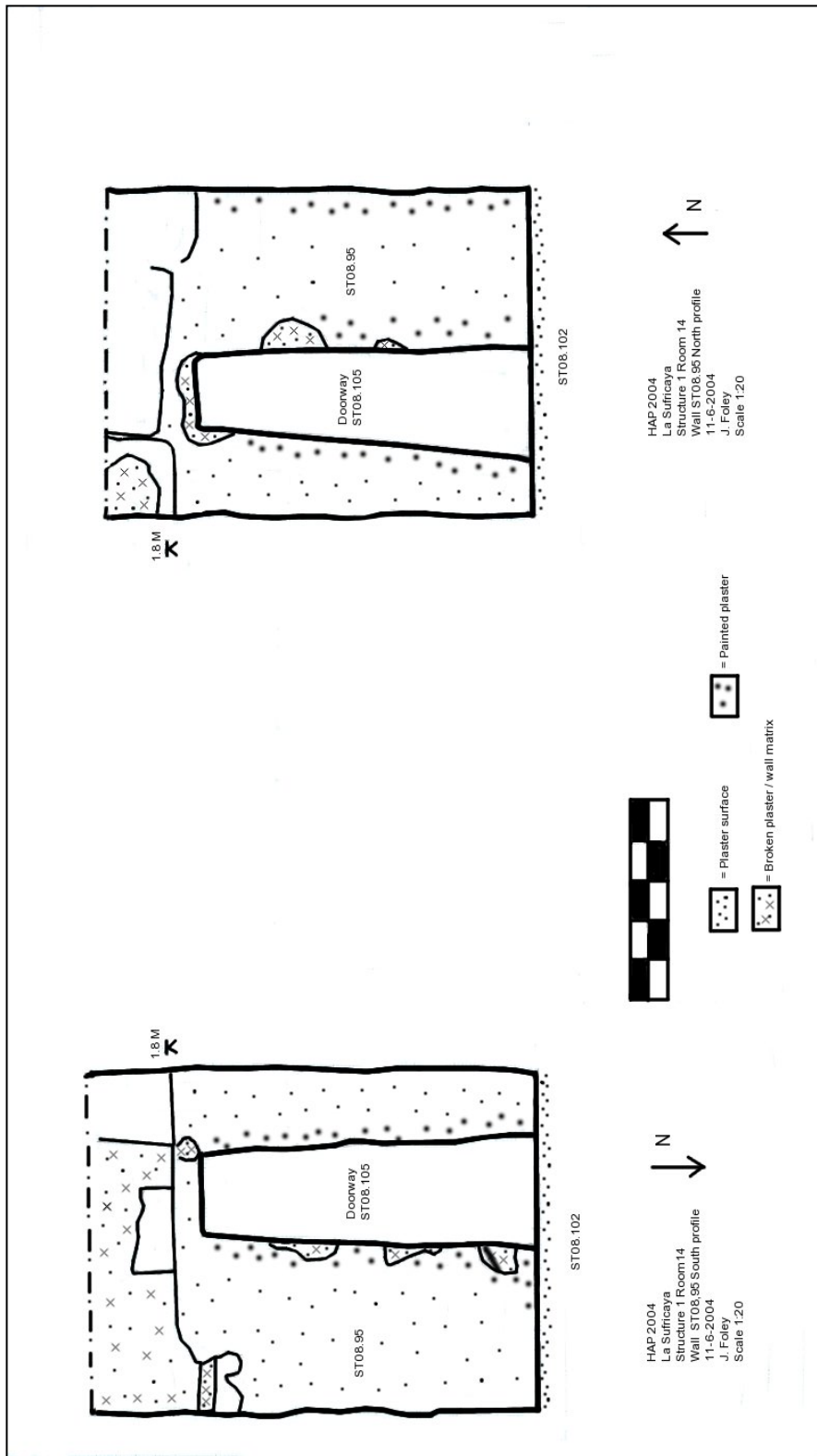


Figure 4.31 North and south profiles of wall forming antechamber in Room 14 (drawing by the author)



**Figure 4.32 Interior of Room 14 showing the wall forming the southern antechamber and the niche in the eastern wall (photo by the author)**

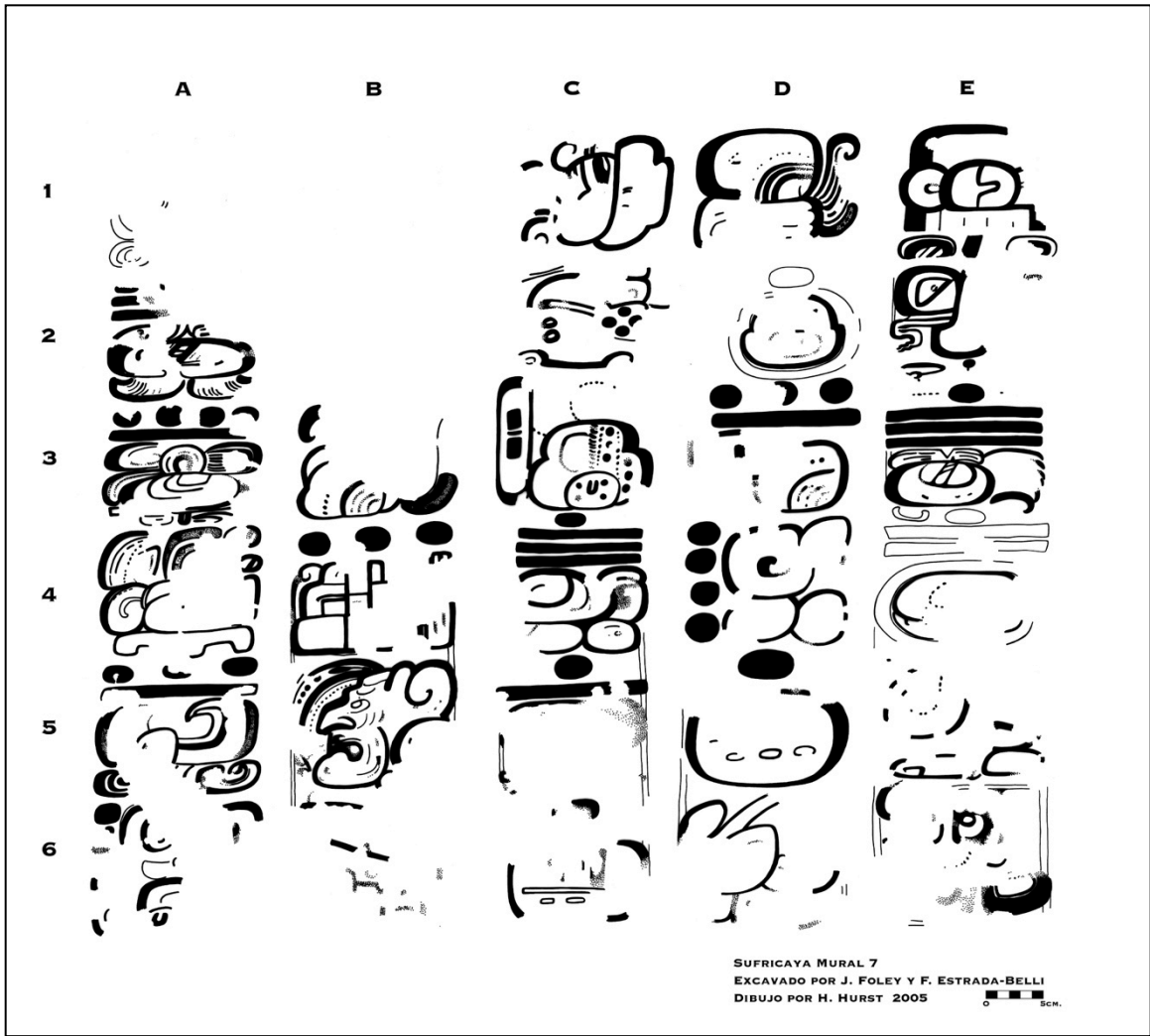


Figure 4.33 Drawing of Mural 7 (drawing by H. Hurst)



Figure 4.34 Photo of Room 11 bench with sloping backrest (photo by the author)

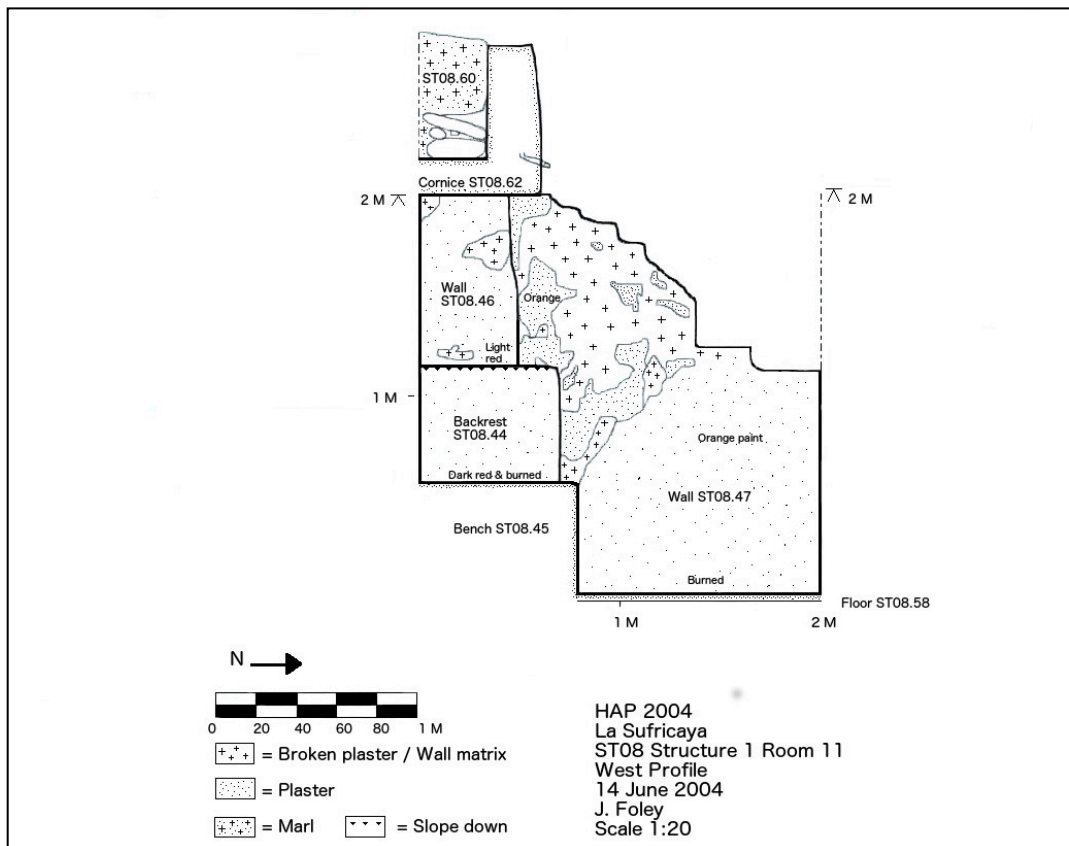
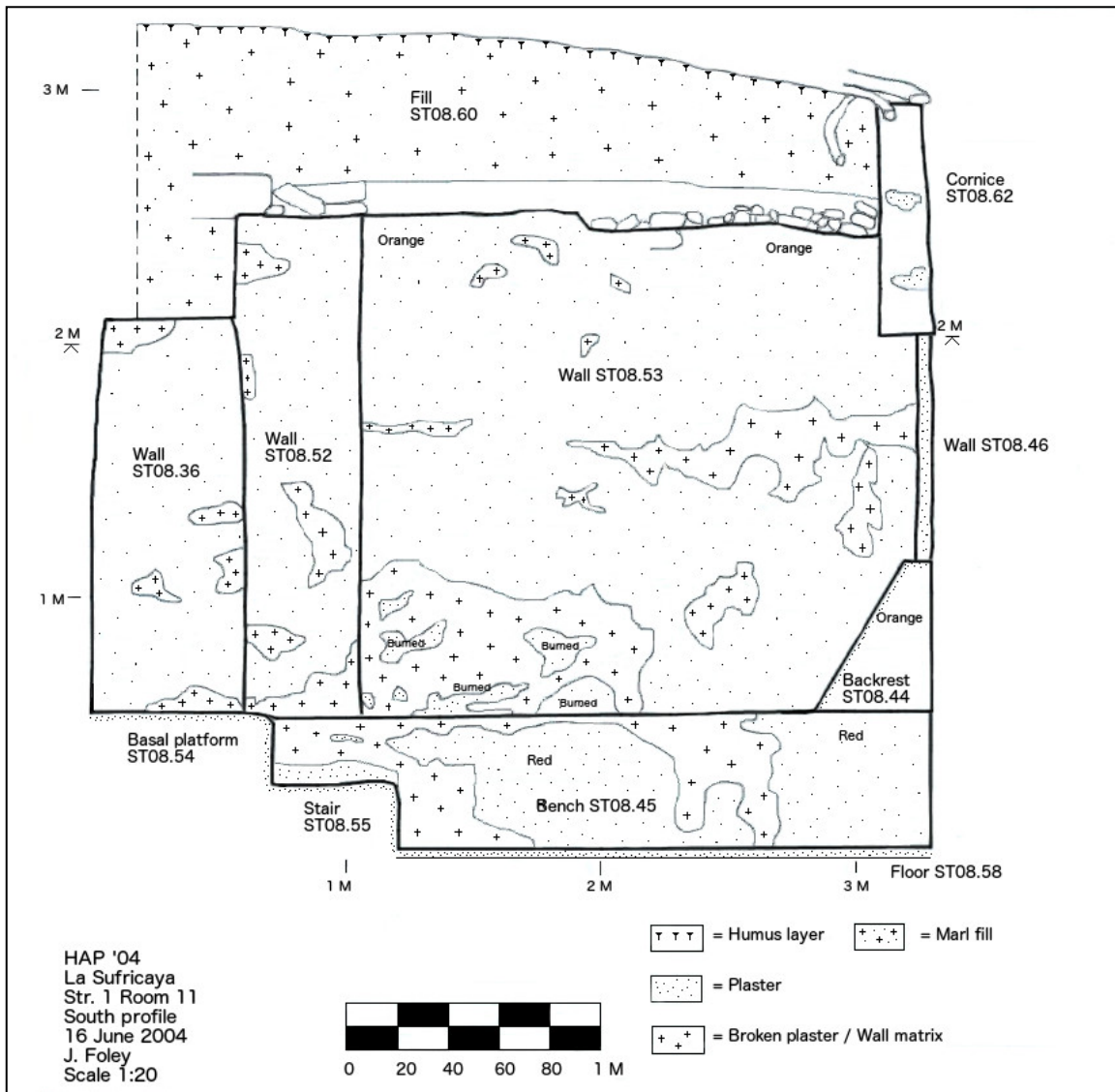


Figure 4.35 Profile of western wall of Structure 1 Room 11 (drawing by the author)



**Figure 4.36 Profile of southern wall of Room 11 (drawing by the author)**

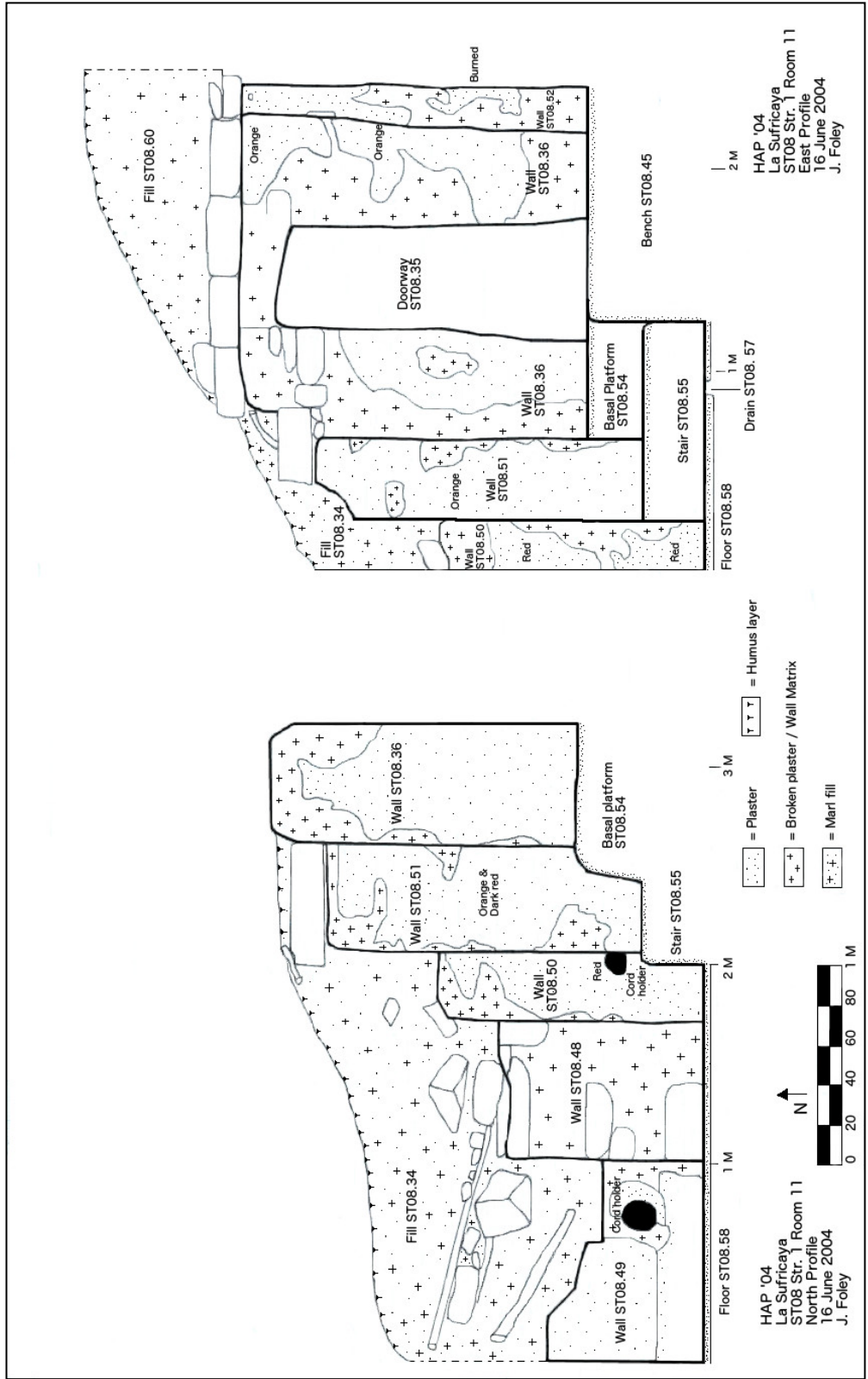
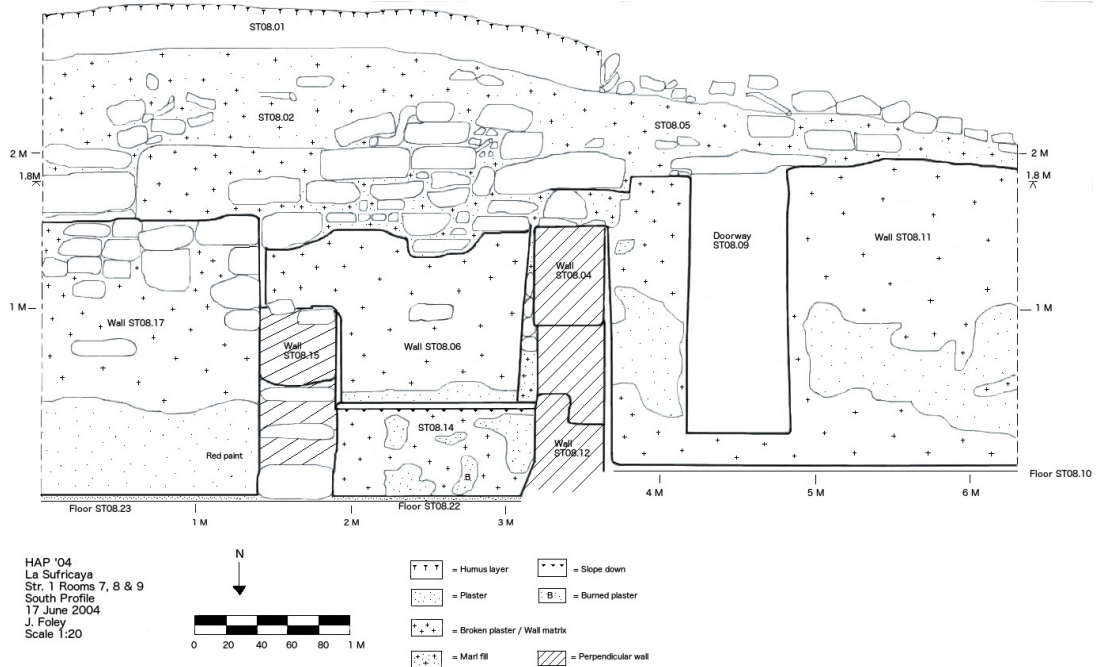


Figure 4.37 Profiles of north and eastern walls of Room 11 (drawing by the author)



a.



b.

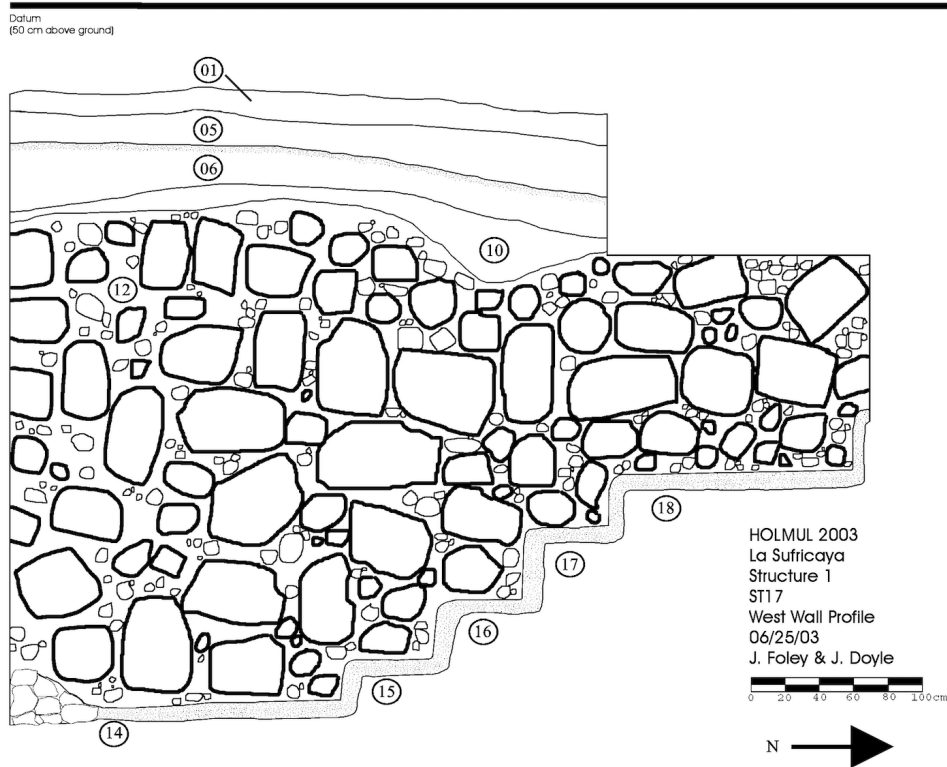
**Figure 4.38 a) Photo of Rooms 7, 8 and 9 (photo by the author) b) southern profile of Rooms 7, 8 and 9 (drawing by the author)**



a.

**Figure 4.39 Staircase in center of Structure 1 leading to Room 4.a) photo (by the author) b) western profile (drawing by J. Foley and J. Doyle)**

b.



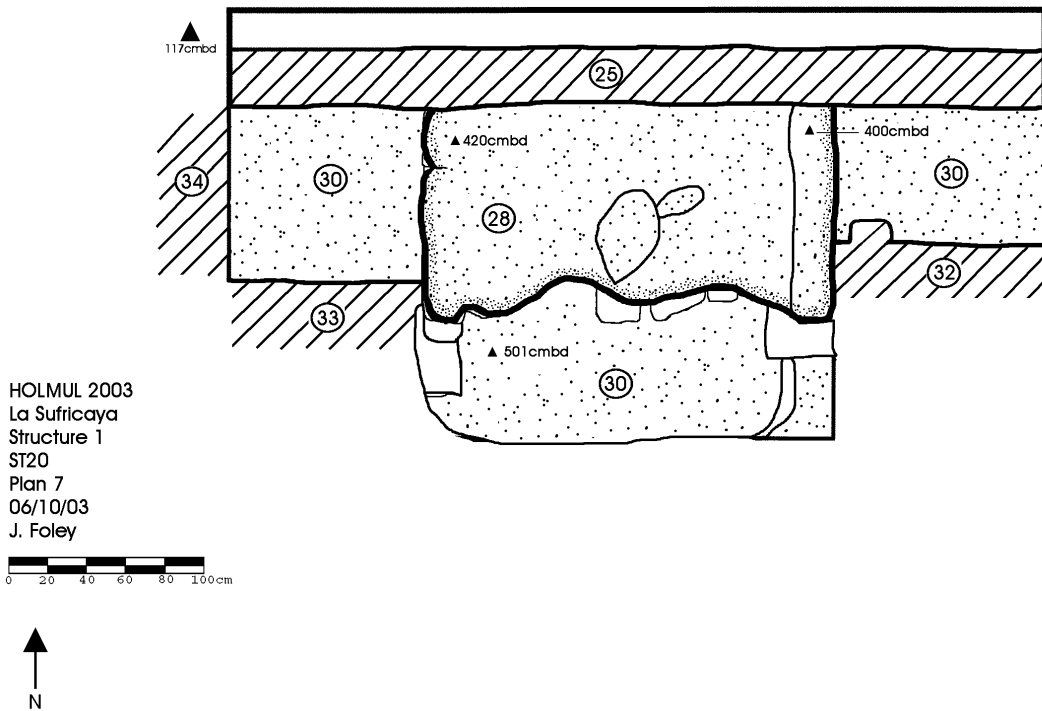




a.

Figure 4.40 Room 4 of Structure 1 a) photo b) plan view (photo and drawing by the author)

b.



a.



b.



**Figure 4.41** *In situ* termination offerings placed during the in-filling of Structure 1 a) half of a Sierra Red basal flange plate placed at the base of the western wall of Room 11 b) small bowl placed at base of southern wall of Room 9 (photos by the author)

a.



b.

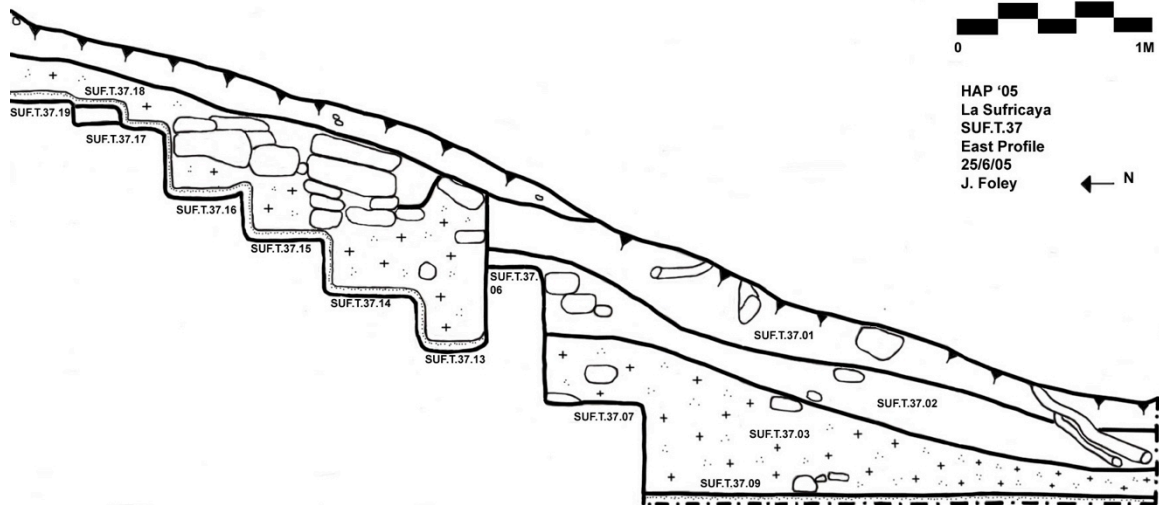


Figure 4.42 Late Classic staircase constructed on top of Structure 1 after it was sealed a) photo (by the author) b) eastern profile (drawing by the author)



Figure 4.43 Foundation walls of Late Classic residence constructed on top of Structure 1 (photo by the author)

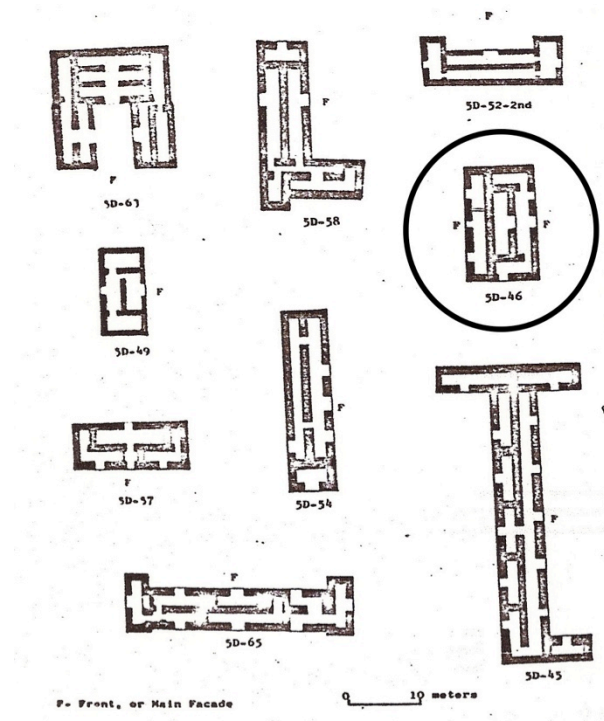


Figure 4.44 Examples of Category 1 tandem present and traverse present floor plans Note the Early Classic Structure 5D-46 (After Harrison 1971 Fig. 17)

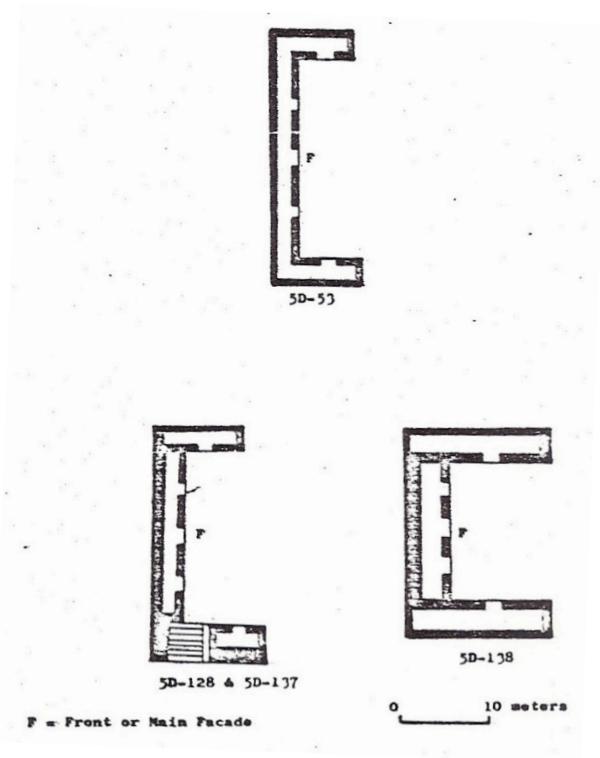


Figure 4.45 Examples of Category 2 tandem present/no transverse floor plans (After Harrison 1971: Fig. 18)

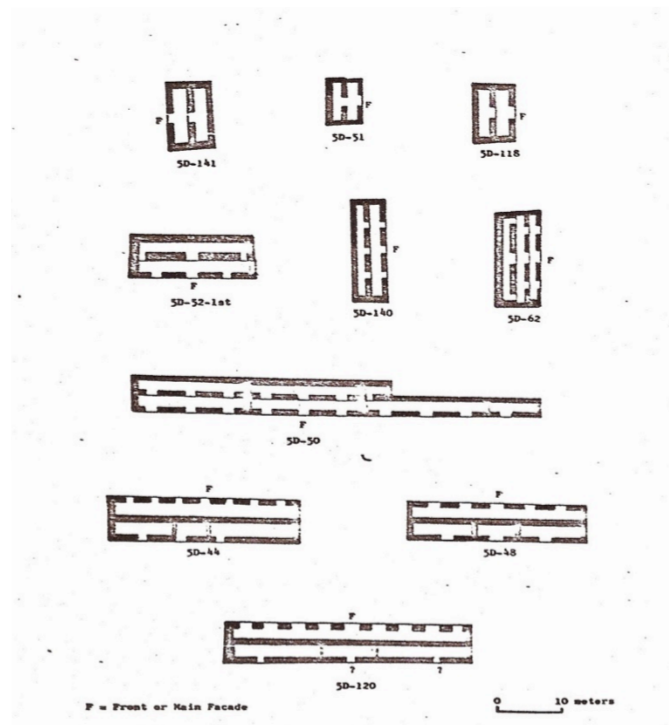


Figure 4.46 Examples of Category 3 no tandem/transverse present floor plans (After Harrison 1971: Fig. 19)

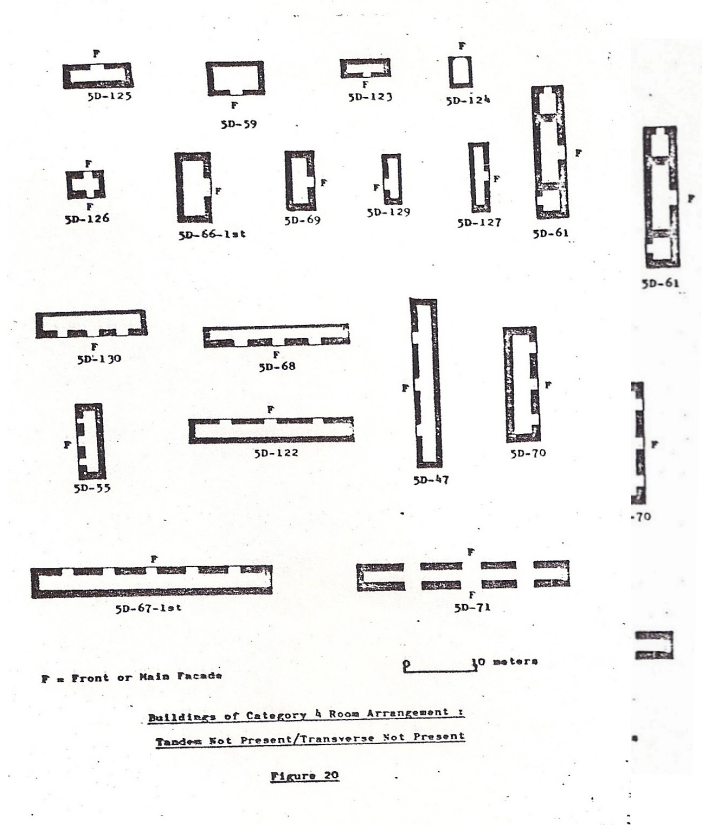


Figure 4.47 Examples of Category 4 no tandem/no transverse floor plans (After Harrison 1971:Fig. 20)

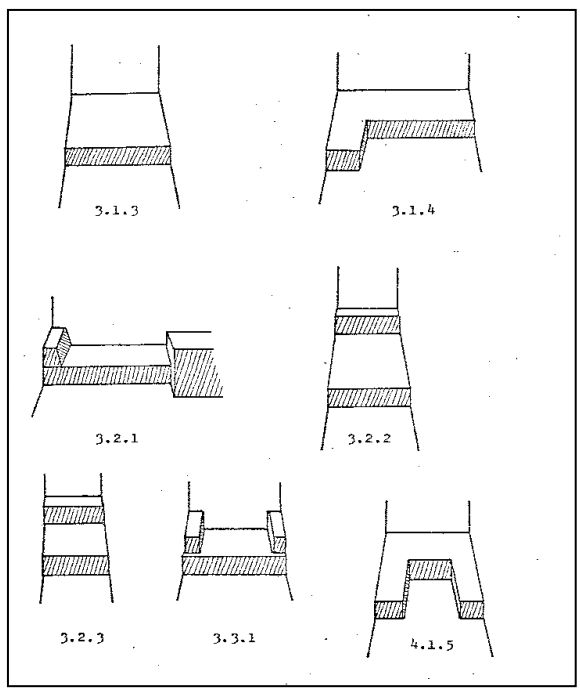
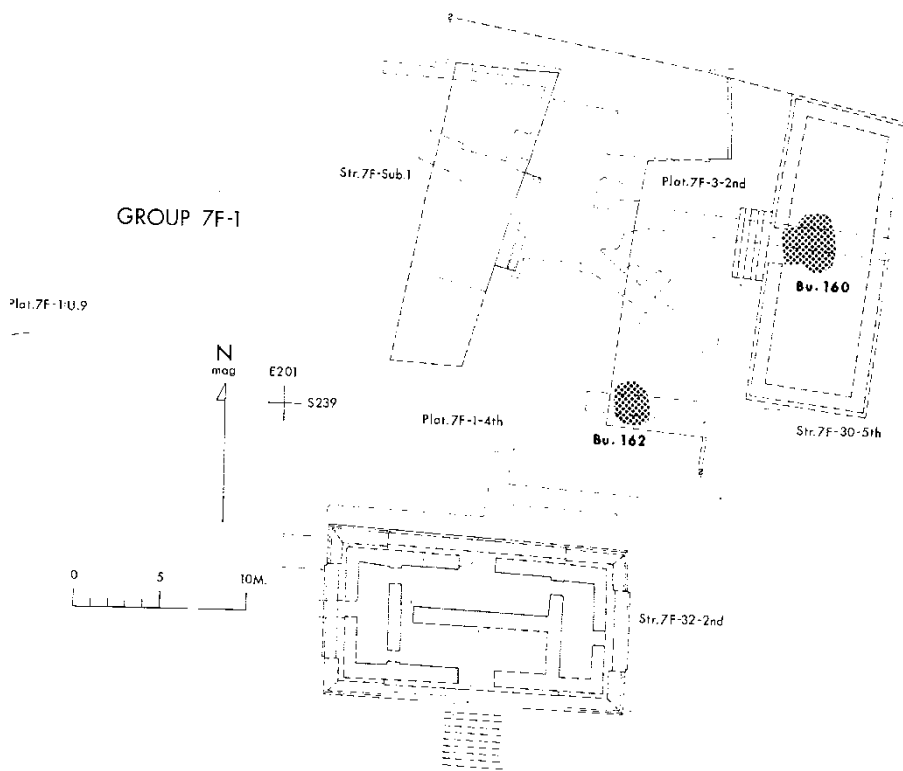
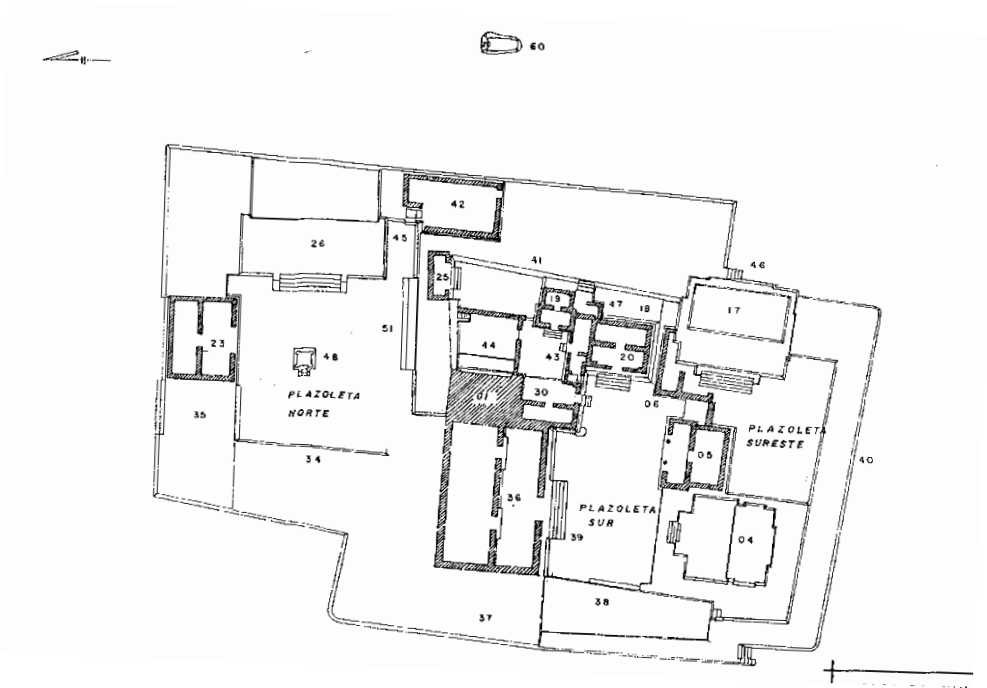


Figure 4.48 Bench types at Tikal. Note the sloping backrest of type 3.2.1 (After Harrison 1971 Fig. 32)

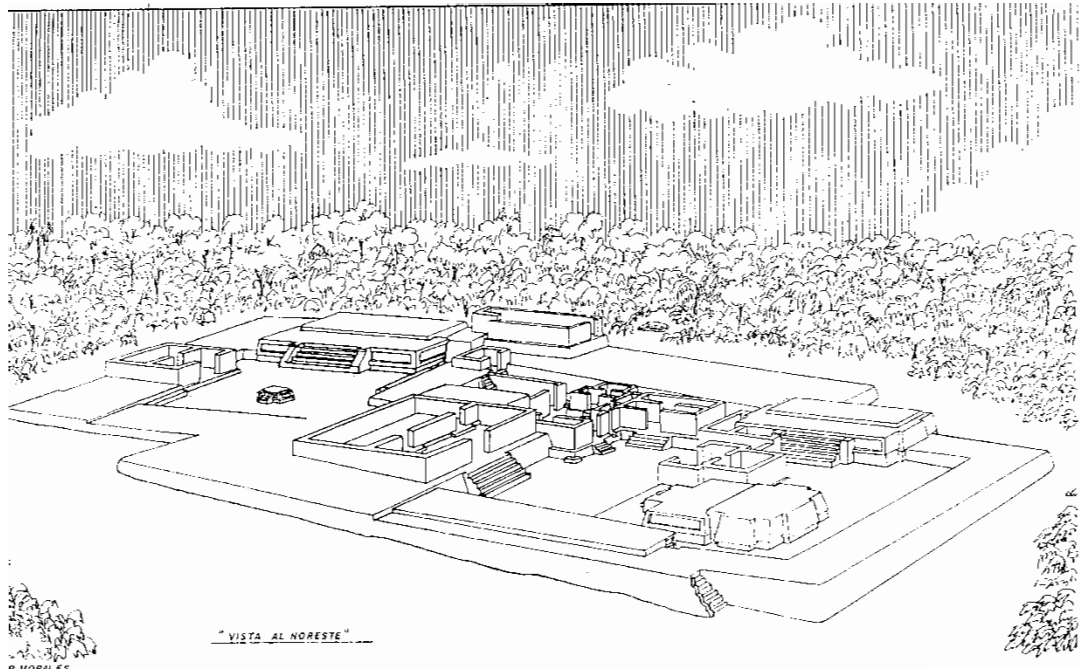


**Figure 4.49 Plan of Tikal Group 7F-1, initial construction phase (After Haviland 1983:Fig. 5.2)**

a.

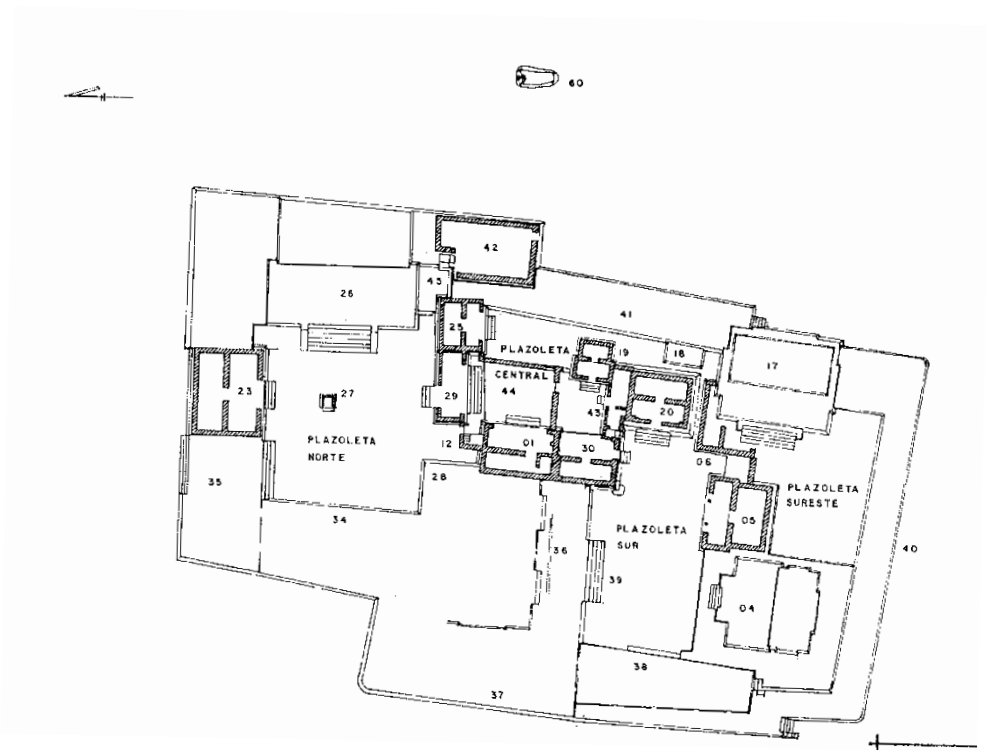


b.

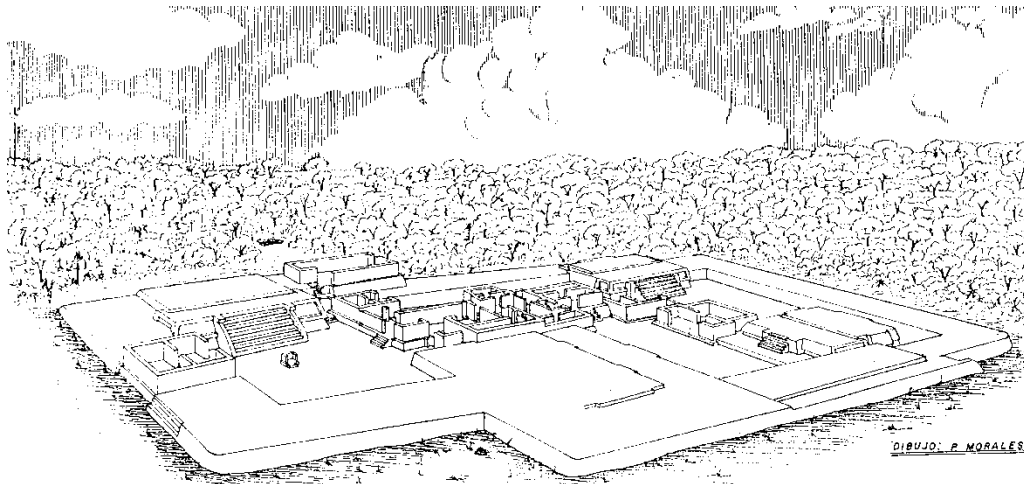


**Figure 4.50 Tikal Group 6C-XVI construction phase 7 circa AD 375 a) plan b) artist's reconstruction drawing (After Laporte 1981: Figs. 16 & 17)**



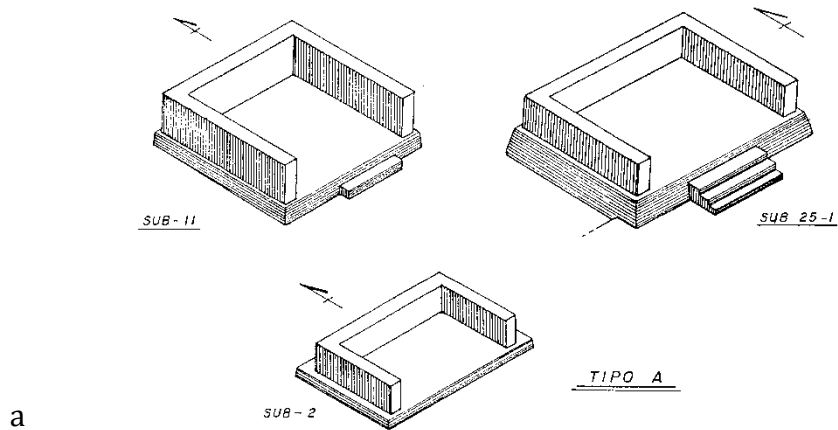


a

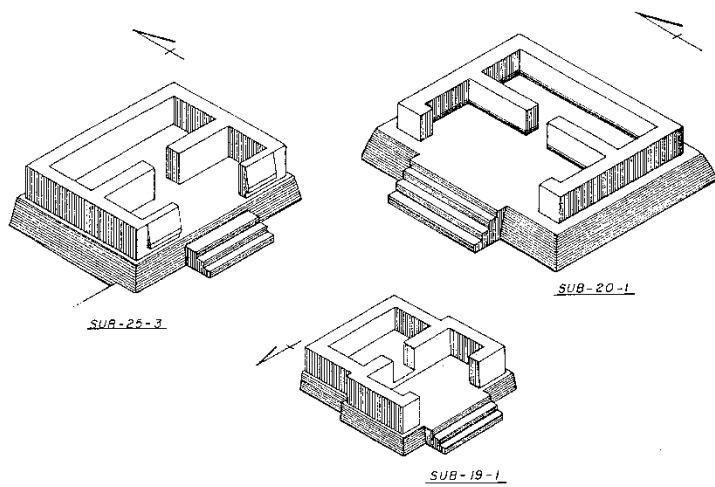


VISTA AL SURESTE

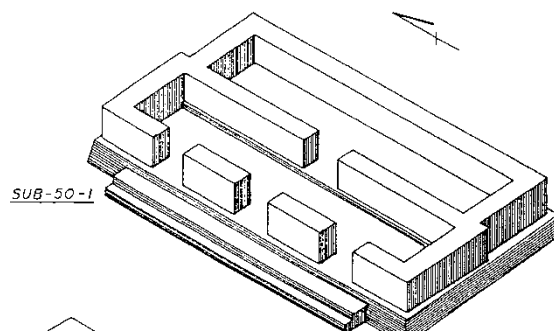
b.  
**Figure 4.51 Tikal Group 6C-XVI construction phase 8 circa AD 380 a) plan b) artist's reconstruction (After Laporte 1981 Figs. 18 & 19)**



a



b



c.

**Figure 4.52 Examples of palace types identified in Group 6C-XVI a) Palace-type A b) Palace Type B-2 and c) Palace type D (After Laporte 1981: Figs. 56, 57 & 61)**

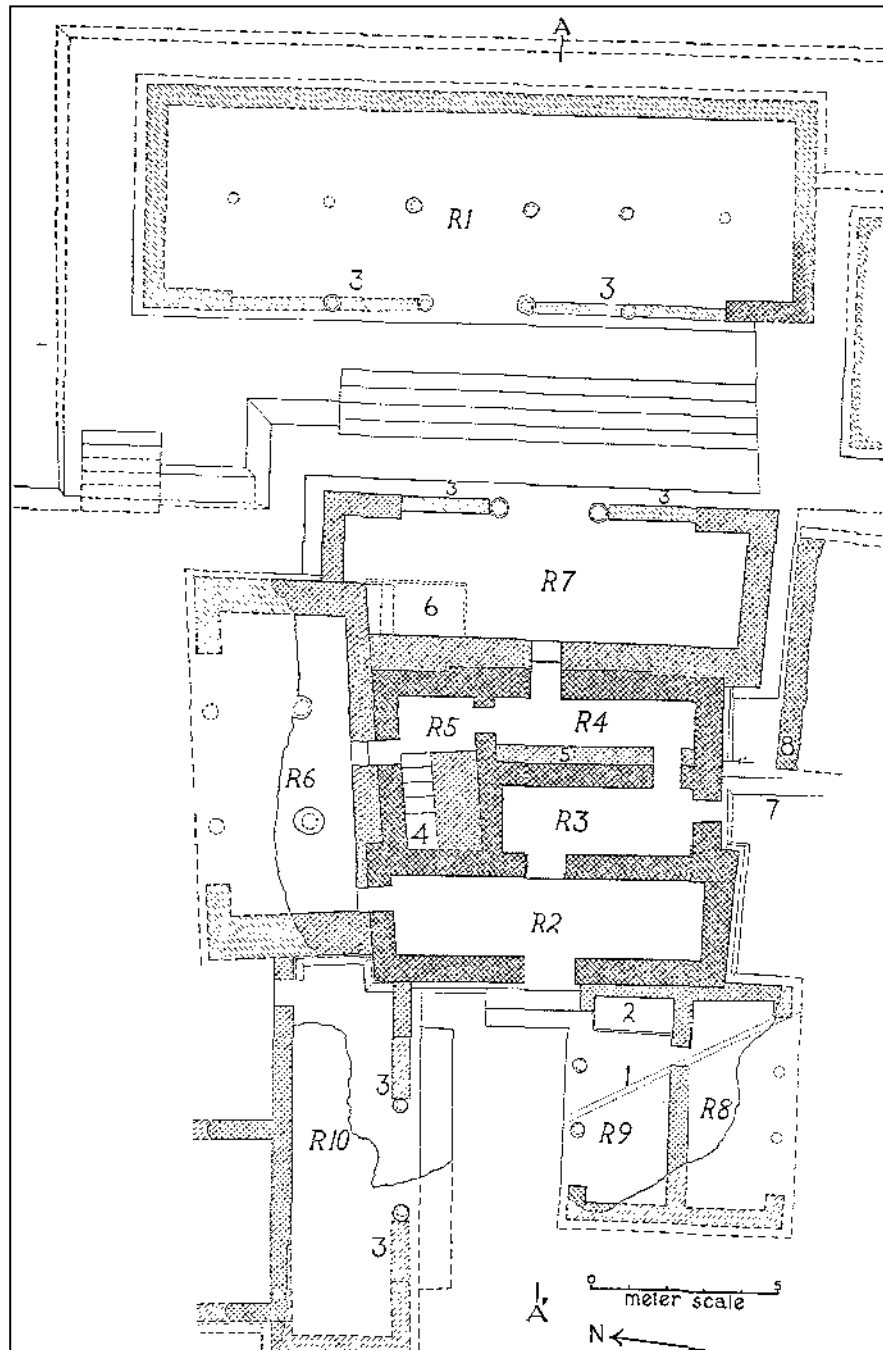
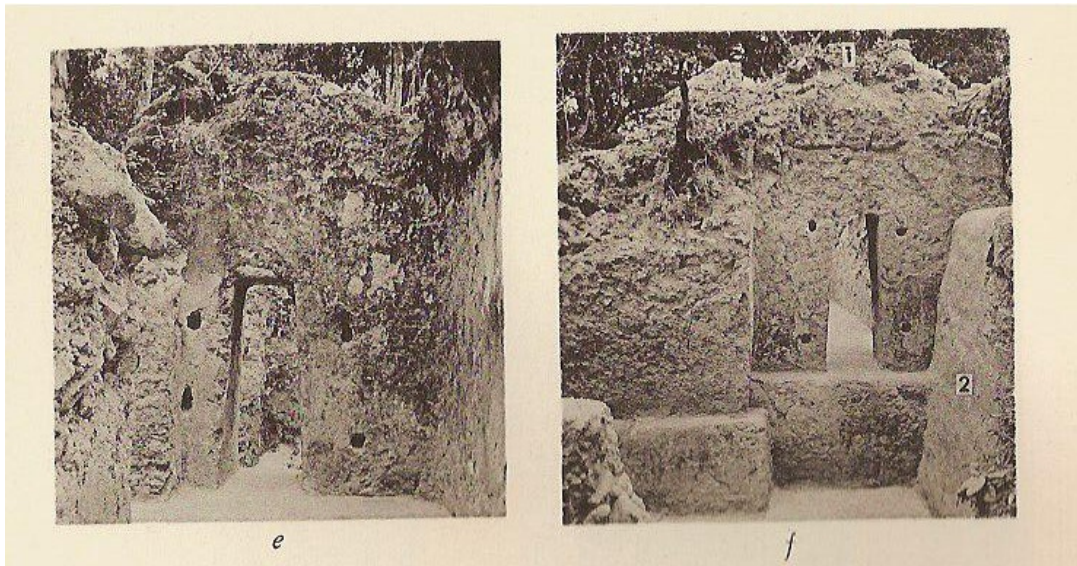


Figure 4.53 Plan of Uaxactún Structure B-XIII. Note Room 7 (R7) and the location of the bench removed in antiquity (6) (After Smith 1950 Fig. 92)



**Figure 4.54** Photo of Uaxactún Structure B-XIII Room 7. Note the niche in the wall and the scarred plaster on the right indicating the bench removed in antiquity, which included a sloping backrest (After Smith 1950 Fig. 42b)



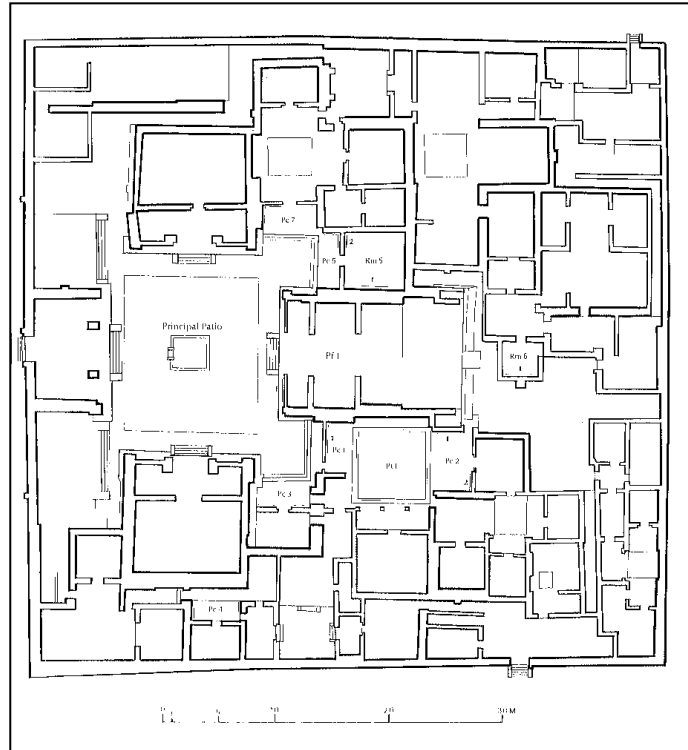
**Figure 4.55** Uaxactún Structure B-XIII Room 3. Note the similarities in the shape of the doorway and construction technique to those of Structure 1 Room 3B (After Smith 1950 Fig. 43e & f)



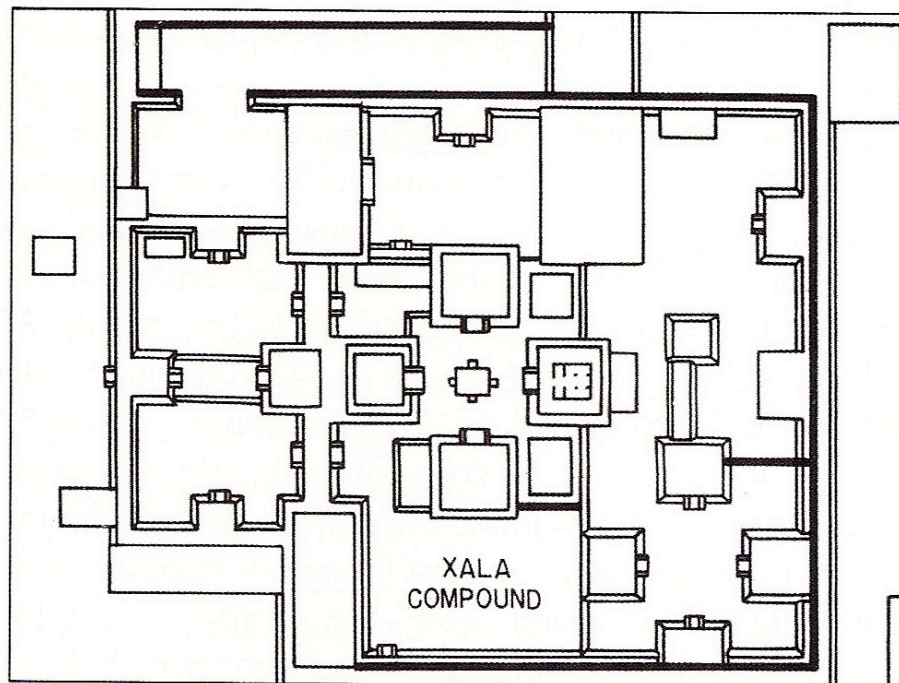
**Figure 4.56** La Sufricaya Structure 1 Room 3B western doorway leading to patio Room 11. Note the shape of the doorway and compare to Uaxactún Structure B-XIII above (photo by the author)



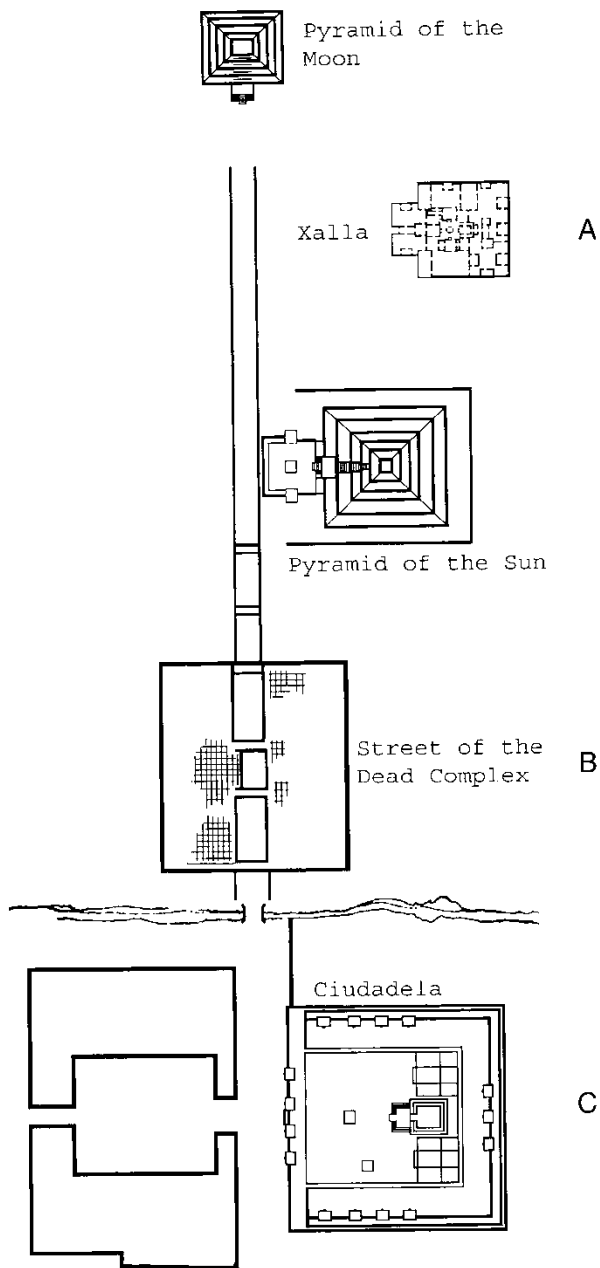
**Figure 4.57** Eastern face of western wall of Structure 1 Room 3B (upper left). Note the shape of the doorway and compare to Uaxactún Structure B-XIII (photo by the author)



**Figure 4.58 Plan of Yayahuala apartment compound at Teotihuacán (After Miller 1973 Plan X)**



**Figure 4.59 Plan of Xalla compound at Teotihuacán (After Millon et al. 1973: Fig 31)**



**Figure 4.60 Simplified plan of Teotihuacán showing the locations of possible palaces including A) Xalla compound B) Street of the Dead Complex and C) the Ciudadela (After Toby Evans 2004: Fig. 4)**

## Chapter V – Ceramic Analysis

### Introduction

The analysis of ceramics from the Holmul region holds a significant place in the history of Mesoamerican scholarship. Merwin and Vaillant (1932) established the first ceramic sequence in the Maya lowlands, which established a foundation for dating sites in the region and future ceramic analyses. Later, Late Classic “Holmul dancer” pottery became the fascinating subject of iconographic analyses (Hellmuth 1982;Looper 2009; Reents 1991). This distinctive pottery, characterized by red-and-orange on cream slip painted with scenes of a male dancer impersonating the maize god, often accompanied by a dwarf or hunchback, was first identified at Holmul though it is found at many sites including Naranjo. Though not produced solely at Holmul, the production and trade of the “Holmul dancer” style pottery in the Holmul region, hints at the position held by the Holmul dynasty in the Late Classic period (Reents 1995). Since these studies, the Holmul sequence has been elaborated and refined, demonstrating an occupation history from the Early Preclassic period through the Terminal Classic (800 BC-AD 900) (Callaghan 2008; Kosakowsky 2001). Furthermore, the Holmul ceramics share modal similarities and common interregional modal differences with Tikal, Uaxactún and Barton Ramie (Callaghan 2008:115).

The following analysis is not as exhaustive or in-depth as recent work but it serves to contribute information to each of the research questions outlined in this



work. First and foremost, the ceramic evidence will shed light on the function of Structure 1 by illustrating what types of activities, (represented by ritual or domestic ceramic vessel forms), were carried out by the inhabitants. Additionally, the ceramic types, varieties and forms found at La Sufricaya reflect the participation of the site inhabitants in local and regional trade and exchange networks as well as ideological systems. Instrument Neutron Activation Analysis (INAA) of the Holmul ceramics, including those of La Sufricaya, reveals intriguing clues about how local lords participated in regional and long-distance tribute and trade systems. The presence of Teotihuacán-style ceramic forms and surface decoration at La Sufricaya demonstrates that the elite inhabitants were somehow involved in the regional sociopolitical events surrounding the Teotihuacán *entrada* of AD 378. A careful analysis of the decorative motifs of these vessels, and a comparison to foreign-style vessels found at other Maya sites, may elucidate the nature and degree of foreign interaction between Teotihuacán and La Sufricaya.

This chapter first presents the developments in Early Classic ceramic assemblages in order to situate La Sufricaya in regional sociopolitical trajectories (See Table 1.1). The La Sufricaya ceramic chronology illustrates the local development of the site and how it diverged from other sites in the Holmul region. A summary of the INAA analysis conducted by Dr. Dorie Reents-Budet and Dr. Ronald Bishop follows, and provides a means of reconstructing political alliances and trade partners of the La Sufricaya and Holmul lords. Finally, the foreign ceramic styles and decorative techniques found at La Sufricaya are compared to those recovered from other Maya sites and Teotihuacán. I suggest that the creation,

display and exchange of Teotihuacán-style ceramics throughout the Maya region and beyond, was a practice of affiliation that united Maya rulers in an imagined regional elite community.

### **Early Classic developments in lowland ceramics**

George Vaillant was the first scholar to define an Early Classic ceramic assemblage, which was based on Raymond Merwin's excavations at Holmul (Vaillant 1927:303-306; Merwin and Vaillant 1932:65-71). As will be discussed in more detail below, the Early Classic assemblage at Holmul was divided into phases named Holmul 1-3, which were based on the funerary assemblages of Building B and Ruin X. Vaillant argued that the Early Classic period at Holmul began around 8.14.0.0.0 and ended around 9.12.0.0.0 (AD 317-672).

The Carnegie Institution excavations at Uaxactún produced the first substantial ceramic evidence of the Early Classic period, which was divided by R.E. Smith into three facets of the Tzakol ceramic complex (Smith 1955). The three facets of the Tzakol phase, Tzakol 1-3, are based on Smith's assessment of the first appearance of certain ceramic traits in the archaeological record. Therefore, Tzakol 1 is defined by the appearance of sharp z-angled bowls, Tzakol 2 is marked by a diversification of polychrome wares and the introduction of basal-flange ring-base and tripod bowls and Tzakol 3 is characterized by the appearance of Teotihuacán Thin Orange ware, cache-type cylindrical tripod vases and new decorative techniques which included plano-relief carving and painted stucco (Smith 1955: 23-24). Tzakol 1 ceramics do not represent a significant portion of the Uaxactún ceramic assemblage and appear to have coexisted with the earlier Chicanel phase.

Lincoln's reassessment of the Uaxactún data led him to suggest that the Tzakol 1 and 2 phases do not actually exist as chronological entities and Tzakol 3 ceramics represent an elite sub-complex rather than a complete ceramic assemblage (Lincoln 1985:75).

At Tikal the Early Classic ceramic assemblage is divided into three phases of the Manik Complex. Manik 1 dates to AD 250-300 and marks the introduction of polychrome ceramics and the Petén Gloss Ware defined by Smith at Uaxactún. Basal flange bowls with scutate lids, sharp z-angle bowls and jars are characteristic forms during this period and the surface decoration of the polychromes is limited to geometric patterns, stepped frets, rows of dots and wavy horizontal lines (Coggins 1975:102-4). Manik 2 dates to AD 300-400 and represents a continuation of Manik I ceramic trends with the addition of black wares and cylinder vessels with lids. Manik 3 is divided into sub-phase Manik 3-A (AD 400-490) and Manik 3-B (AD 490-550). The hallmark of Manik 3-A is the cylinder tripod with lid, slab feet and incised and carved designs while Manik 3-B is marked by discontinued use of the cylinder tripod and a return to the local polychrome tradition (Coggins 1975: 102-8).

The ceramic sequence at Río Azul coincides with trends reported throughout the Petén during the Early Classic period. The Early Classic 1 Sphere includes Triunfo Striated, Aguila Orange, Caribal Red, Dos Arroyos Orange Polychrome, Pucte Brown and Paradero Fluted ceramic groups. Adams notes that the modes are especially heavy with exaggerated basal flanges and there is an overlap between Sierra Red and Aguila Orange modes (Adams 1999:210). The Early Classic 2-3 Spheres consist of a greater variety of ceramic groups including Balanza Black,

Lucha Incised, Urita Gougged-Incised, San Roman Plano-Relief, Buj Incised, San Blas Red on Orange, Mucu Buff Polychrome, Caldero Buff Polychrome and Caal Red Polychrome in addition to the groups from the Early Classic 1 Sphere. Basal flange and ring-base bowls as well as cylinder tripods with slab or nubbin feet are common modes during this period. Balanza Black pot lids, some with anthropomorphic handles become popular. A mortuary sub-complex comprised of flaring sided, ring-based Aguila Orange bowls and cylinder tripods with lids was reserved for royal and elite tombs (Adams 1999:210-211).

James Gifford's work at Barton Ramie (1976) was the first in-depth ceramic analysis to employ the type-variety system in the Maya region, though Gifford worked with Smith to apply the type variety system to the ceramics of Uaxactún (Smith & Gifford 1966). The ceramics from the Early Classic at Barton Ramie indicate interaction with the central Petén and participation in a pan-lowland pottery tradition (Gifford 1976:154). The Hermitage ceramic complex represents the Early Classic period at Barton Ramie and though this complex encompasses similar types to the Petén Tzakol sphere, there are significant differences. Petén gloss ware is prevalent in this complex and includes the Minanha, Dos Hermanos, Balanza, Pucte, Actuncan, Dos Arroyos and Aguila ceramic groups. Minanha Red ceramics are more prevalent than Aguila Orange ceramics, which is a marked difference from the Petén ceramic trend. Cylindrical tripod vases with hollow slab supports are included among the Balanza ceramic group, but at Barton Ramie this group is lacking painted stucco secondary surface decoration, which is a ceramic trait that is prevalent in the Petén (ibid). The utilitarian wares found at Barton

Ramie, Socotz Striated and White Cliff Striated, are the most prevalent ceramic types of the Hermitage complex but are unique to the site and not found in the Tikal and Uaxactún collections (Gifford 1976:191).

Overall, four distinctive trends arise in lowland Maya ceramics during the Early Classic period: glossy surfaces replace the “waxy” surfaces of the Preclassic, an orange slip replaces the red slips of the earlier period, vessel walls become thinner and polychrome decoration becomes widespread. The polychrome decorative motifs typically consist of bands and repetitive geometric patterns. Several new forms are introduced and become distinctive markers of the Early Classic period including ring-based bowls, basal-flange bowls, tripod-supported cylinder vessels and small pitchers. The cylinder tripod vessels are elaborately decorated with polychrome painted, stucco and gouged-incised relief motifs (Sharer 1994: 685-686). These trends are all evident within the Holmul region, but Early Classic ceramics have only been recovered in great quantity from the sites of La Sufricaya and K’o.

While the onset of the Early Classic period represents some changes from the previous Late Preclassic ceramic assemblage, a more dramatic period of change occurred during the late fourth/early fifth century AD, especially at Tikal between the Manik 2 and Manik 3A ceramic phases. Cylindrical tripods with apron covers and round-sided bowls replaced the polychrome sharp z-angle and basal flange bowls and jars with tetrapod supports of Manik 2. Polychrome vessels are less common and painted stucco decoration becomes common (Krejci and Culbert 1995:109).

The scenario in the highlands differs from the lowlands with distinct ceramic traditions, and yet there are some similarities that indicate interaction between the two regions, specifically between Kaminaljuyú and the Petén. At Kaminaljuyú the Early Classic period is represented by the Aurora ceramic phase (200-400 AD). Werthington (1978) characterizes this phase as transitional between the termination of some Formative ware and types and the introduction of Classic period styles. In general, vessels walls and rims are thicker and less attention is paid to surface finish and firing, furthermore, vessels are not highly polished and painted decoration is rare. Vessel forms continue traditions established in the Formative though they are larger. The significant addition to the ceramic repertoire is the ringstand vessel support. The Amatlé 1/Esperanza ceramic phases represent the Middle Classic (400-600 AD) and introduce the Tzakol 2/Manik 3-A trends of the central Petén. Cylinder tripods with lids and slab supports and painted stucco surface decoration are distinctive traits of the Esperanza phase, but these ceramic types are restricted to the elite tombs of Mounds A and B at Kaminaljuyú (Werthington 1978: 132-4).

Ceramic forms, slips and decorative techniques are very much a reflection of ethnic and social identity as well as sociopolitical developments within a site or region. Tracing the development, trends and changes in ceramic assemblages allows scholars to track the movement of people as well as exchange of ideas and technology and reconstruct political alliances and trade networks. The type and quality of ceramics associated with burials and households is also a reflection of wealth and social status. The strategic gifting of fine and rare ceramic vessels

solidified political alliances. Early Classic ceramic assemblages can be used to elucidate the complex social and political changes of the period.

### **The Holmul Ceramic Sequence**

Before outlining the La Sufricaya ceramic sequence, it is necessary to examine the development of the Holmul ceramic sequence, of which the La Sufricaya ceramic assemblage is a part. Raymond Merwin's excavations of Groups I, II and III of Holmul in the early 1900s established the first ceramic sequence of the Maya lowlands, though it was not published until after Merwin's death in 1932. Based on Merwin's excavations and field notes, the sequence as written and described by George Vaillant was comprised of five periods, denominated Holmul I-V, and is most noted for the burial sub-complex of mammiform tetrapod bowls recovered from the tombs of Building B known as "Protoclassic" forms (Merwin and Valliant 1932). Though Vaillant compared the Holmul sequence to known sequences at Uaxactún and the Maya highlands, it was not correlated with the Gregorian calendar, nor did Merwin's excavations reveal the earliest ceramic phases of the Holmul region.

Laura Kosakowsky (2000) refined the Holmul ceramic sequence during the initial field season of the Holmul Archaeological Project and replaced the sequence established by Merwin and Valliant with the sequence used throughout the Petén, which is based on the Tikal and Uaxactún sequences (Smith 1955; Willey, Culbert & Adams 1967; Culbert 1993). This revised sequence was based on a small sample of ceramics recovered from looters' trenches and limited test pit excavations within the Holmul site center conducted during the first field season of the Holmul

Archaeological Project. The sample included ceramics from the Middle Preclassic through the Terminal Classic.

Michael Callaghan (2008) later refined and extended the Holmul ceramic sequence based on excavations carried out at sites throughout the Holmul region, including Cival, Hamontun, K'o, La Sufricaya and Holmul, during seven field seasons. The current ceramic sequence begins in the Early Middle Preclassic period and extends through the Terminal Classic (Table 1.1).

The more extensive ceramic assemblage demonstrates that the people of Holmul enjoyed economic, political and social relationships with sites in the Central Petén, Belize River Valley and northern Belize, and these relationships fluctuated over time. During the Early Middle Preclassic, the K'awil/Early Eb complex shares closest affiliations with Belize River Valley traditions. During the later facet of this period and the Late Middle Preclassic period the Ixim/Late Eb and Yax Te/Mamom ceramic material begins to include modes that were common to the Central Petén, but the Holmul potters still used K'awil period paste recipes. By the Itzamkanak/Chicanel phase of the Late Preclassic period, the ceramics reflect sociopolitical affiliations with the Central Petén. The Wayaab sub-complex of the Terminal Preclassic includes fine wares with modes that are strongly affiliated with the Belize River Valley, northern Belize and the funerary offerings at Central Petén sites. The connections with the Central Petén continue through Ik-Chuach/Tepeu 2 Late Classic phases. These affiliations shift in the Kisim /Tepeu 3 phase, when the ceramics revert to sharing modal similarities with the Belize River Valley, while maintaining some Central Petén influences (Callaghan 2008:117)



Callaghan conducted a more thorough analysis of the ceramics recovered from Building B, Group II by Merwin and found that the Early Classic ceramics of the K'ahk 1 & 2/Tzakol 1& 2 periods reflect participation of the Holmul elites in an exclusive Early Classic political network centered at Tikal, as well as possible earlier connections to Calakmul and Becan (Callaghan 2008:121). In his analysis, Callaghan notes similarities between Vessels 6 and 7 from Holmul Building B and vessels recovered from elite burial contexts at Tikal and Calakmul dating to AD 300-450. Callaghan speculates that these polychrome vessels, along with black incised vessels, were components of a ceramic industry in place before Mexican influence appears in Manik 3-A period at Tikal and throughout the Petén, to a lesser degree (Callaghan 2008:144-146).

### **La Sufricaya Ceramic Sequence**

The La Sufricaya ceramic sequence coincides with the Holmul sequence from the Late Middle Preclassic period through the Terminal Preclassic period (Callaghan 2008). The sequence is built upon ceramic samples recovered from sealed/primary contexts beneath plaza floors as well as construction fill and secondary deposits such as midden material used as rubble fill to bury structures. Based on the ceramic data alone it appears that occupation began at La Sufricaya sometime in the Late Middle Preclassic period (500-350 BC); however, since limited quantities of Yax Te/Mamom ceramics (161 sherds) have been recovered from excavations, it seems likely that La Sufricaya was first inhabited toward the end of the Late Middle Preclassic period. Neither Ixim/Late Eb nor K'awil/Early Eb ceramics from the Early Middle Preclassic period have been recovered from La Sufricaya.

The HAP project ceramicist, Michael G. Callaghan, conducted the analysis of the La Sufricaya ceramics and the summary below is based on his findings. The ceramic types and varieties for each ceramic phase are outlined below and a more detailed discussion of each phase can be found in Callaghan's 2008 analysis.

#### Yax Te/Mamom Late Middle Preclassic Ceramic Complex

The Yax Te/Mamom complex dates from 500 to 350 BC but it is rare in the Holmul region and Callaghan notes that it may have only existed at certain sites (specifically Cival) or that it is not an actual complex but rather a competing production system during this period. Callaghan also notes that certain types and varieties from the Ixim/Late Eb ceramic complex carry over into the Late Middle Preclassic period (Callaghan 2008:301-2).

The Late Middle Preclassic (LMPC) ceramics have only been recovered from contexts within the ceremonial core of the site, with the greatest concentration of sherds recovered from excavation unit ST19, which was located on the eastern slope of Platform 1. A limited number of Late Middle Preclassic sherds have also been recovered from the ball court structures. No whole or partial vessels have been recovered from this ceramic complex and the small sample is limited to sherds (n=161) mixed into construction fill.

Many of the LMPC ceramic types recovered from La Sufricaya are types that carry over from the earlier Ixim/Late Eb complex, which indicates that the inhabitants of La Sufricaya were firmly grounded in local ceramic traditions. The only types that are new to the Yax Te/Mamom complex and found at La Sufricaya are Joventud Red: Joventud Variety and Guitarra Incised: Guitarra Variety. Savanna

Orange is the predominant ceramic type of this complex found at La Sufricaya, and it is found at every site within the Holmul region as well as throughout northeastern Guatemala and the Belize River Valley. This ceramic type has also been found at Uaxactún, Barton Ramie, Altar de Sacrificios and Seibal.

<b>Ceramic Type</b>	<b>Rim sherds</b>	<b>Body sherds</b>	<b>Base sherds</b>	<b>Appendages</b>	<b>Total</b>
Joventud	6	9	0	0	<b>15</b>
Guitarra	6	2	0	0	<b>8</b>
Chunhinta	1	2	0	0	<b>3</b>
Centenario	1	1	0	0	<b>2</b>
Deprecio	1	0	0	0	<b>1</b>
Savanna	13	83	0	0	<b>96</b>
Reforma	5	5	0	0	<b>10</b>
Jocote	0	2	0	0	<b>2</b>
Achiotes	23	0	0	1	<b>24</b>
<b>Total</b>	<b>56</b>	<b>104</b>	<b>0</b>	<b>1</b>	<b>161</b>

**Table 5.1 Late Middle Preclassic ceramic types represented at La Sufricaya.**

Itzamkanak/Chicanel Late Preclassic Ceramic Complex

The Itzamkanak/Chicanel complex dates from 350 BC to AD 250 and at Holmul includes the Wayaab sub-complex of Terminal Preclassic funerary vessels found in Building B. The Itzamkanak ceramics of the Holmul region are part of the Late Preclassic Chicanel ceramic sphere defined by Smith (1955) at Uaxactún. Ceramics from the Itzamkanak ceramic sphere are found at every site within the Holmul region and Callaghan suggests that this distribution is evidence of a population increase during the Late Preclassic period (Callaghan 2008:315).

At La Sufricaya, Iztamkanak/Chicanel ceramics (n=2,030) are found in more contexts than the earlier Ixim/Late Eb ceramics, but the largest quantities are still confined to the ceremonial core of the site. In addition to the same contexts of the earlier phase (Platform 1 and the ball court structures), Itzamkanak/Chicanel ceramics are also found in the rubble fill used to bury Structure 1, construction fill of Structure 54 on the northwest corner of the plaza, and the construction fill of

Structure 3. The inhabitants of La Sufricaya incorporated refuse from earlier occupation periods when constructing Early Classic buildings.

A substantial quantity (n=150) of Late Preclassic ceramics was recovered from construction fill and midden material in residential group 16. The final phase of occupation within this residential group dates to the Late Classic period, but the occupants used refuse from earlier phases of occupation to construct their homes. The earliest layers of the midden located adjacent to the residential group contained Late Preclassic ceramics, which indicates that occupation of the residential group began during this period.

Sierra Red ceramic types replace the earlier Savanna Orange types during the Late Preclassic, a trend that is evident at La Sufricaya as well as throughout the Petén and Western Belize. In fact, Sierra Red is the predominant ceramic type at La Sufricaya during this period. Sierra Red ceramics are found in a wide variety of forms and the paste color varies between sites, leading Callaghan to speculate that different production units may have been operating simultaneously in the Holmul region (Callaghan 2008: 321). The entire Itzamkanak/Chicanel sample consists of 4,005 sherds, including weathered and Variegated sherds<sup>15</sup>. One partial vessel (Small Find # STP.01.04.02.01) from this period was recovered at La Sufricaya, and it is a Sierra Red: Sierra Variety pitcher with incurving sides, a spout and flat base (see Callaghan 2008 Figure H.28). It was excavated from a midden deposit on the western side of Platform 1.

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<sup>15</sup> Callaghan classifies sherds that cannot be positively identified as Laguna Verde, Accordien or Lechugal types into a temporary category denominated "Variegated" (Callaghan 2008: 336).

<b>Ceramic type: Variety</b>	<b>Rim sherds</b>	<b>Body sherds</b>	<b>Base sherds</b>	<b>Appendages</b>	<b>Total</b>
Sierra Red: Sierra	358	883	45	3	<b>1,289</b>
Laguna Verde Incised: Laguna	9	3	1	0	<b>13</b>
Laguna Verde Incised: Groove-Incised	17	1	0	0	<b>18</b>
Altamira Fluted: Variety Unspec.	0	4	0	0	<b>4</b>
Flor Cream: Variety Unspec.	1	7	0	0	<b>8</b>
Accordien Incised	1	0	0	0	<b>1</b>
Polvero Black: Variety Unspec.	69	211	6	10	<b>296</b>
Lechugal Incised: Variety Unspec.	2	1	0	0	<b>3</b>
Achiotes Unslipped:	67	137	0	13	<b>217</b>
Sapote Striated: Variety Unspec.	106	0	0	3	<b>109</b>
Variegated	13	58	1	0	<b>72</b>
<b>Totals</b>	<b>643</b>	<b>1,305</b>	<b>53</b>	<b>29</b>	<b>2,030</b>

**Table 5.2 Late Preclassic ceramic types represented at La Sufricaya**

### K'ahk 1-3/Tzakol 1-3 Early Classic Ceramic complex

The K'ahk 1-3 ceramic complexes fit within the Tzakol complex of the Early Classic period defined by Smith (1955) at Uaxactún and found throughout the central Maya lowlands. Callaghan notes that the K'ahk 1-3 complexes are not fully defined in the Holmul region and, upon further analysis, they may be better defined as distinct sub-complexes based on the introduction and replacement of types and modes of fine ware while the utilitarian ware remained constant.

The K'ahk 1 (AD 250-350) complex represents a distinct shift from the previous Itzamkanak complex as new paste recipes and forms were introduced. The K'ahk 1/Tzakol 1 ceramics share form and surface modes with the Tzakol 1 ceramics from Uaxactún. New forms were introduced such as bowls with flaring walls, z-angle and basal flanges as well as ring and annular base bowls. An orange, glossy slip, polychrome painting and gouge-incised decorative motifs on Balanza ceramics became more prevalent during this period and there appears to be some overlap with Sierra Red ceramics during the K'ahk 1 phase throughout the Holmul

region. In general, the K'ahk 1 sample from the Holmul region is biased toward serving ware recovered from elite contexts such as burials and monumental construction; no utilitarian wares from this complex have been recovered. The inclusion of Actuncan Orange polychrome vessels in the Holmul K'ahk 1 complex may be evidence of elite participation in a distribution network during the beginning of the Early Classic period as defined by Walker et al. (2006) (Callaghan 2008:361-7).

The K'ahk 2/Tzakol 2 complex (AD 350-450) is most similar to Tzakol 2 at Uaxactún and Manik 2 at Tikal, yet it represents major production changes in the ceramic assemblage as forms from the preceding phase diminish and new forms were introduced. Some of the new forms include bowls and jars with “gutter” spouts, lidded vessels and larger basal flange bowls. Orange slip is still the predominant mode of decoration for monochrome serving ware in this phased. Polychrome painting becomes more complex and volcanic tempered pastes are introduced to the assemblage. Lucha Incised black ware becomes more frequent and could be part of another distinct distribution network. A new type, Caldero Buff Polychrome is also introduced with the K'ahk 2 complex. Callaghan believes the Tzakol 2 sphere represents local innovation and evolution before the Teotihuacán-style forms and surface decorations are introduced in the following Tzakol 3 sphere (Callaghan 2008: 364-365).

The K'ahk 3/Tzakol 3 complex (AD 450-600) is contemporaneous with the Tzakol 3 complex at Uaxactún and the Manik 3 complex at Tikal, which date to a period after the Teotihuacán *entrada* event of AD 378. Within the Holmul region the

K'ahk 3 complex represents yet another shift in production modes with the most dramatic change evident in the paste and forms. The ceramic assemblage of this phase is tempered with volcanic tuff and sometimes mica. Some forms from the K'ahk 2 sphere disappear, such as the bowls with thick, flaring walls and tall annular bases. Round-sided bowls and jars with short vertical necks and cylinder vessels with supports become more frequent. Decorative techniques also change, with slips that are generally thinner and flakey and gouge incision and fine line incision becoming extremely popular on black forms. Another significant difference between this phase and the two preceding phases is the inclusion of a complete set of utilitarian ware, consisting of storage and cooking jars, in the sample. The majority of the K'ahk 3 sample was recovered from La Sufricaya and K'o (Callaghan 2008: 365-367).

K'ahk 1-3 ceramics comprise the bulk of the sample from La Sufricaya (n=18,379) with the greatest number of sherds from the Aguila Orange, Triunfo Striated and Balanza Black types. K'ahk 1-3/Tzakol 1-3 ceramics have been recovered from almost every excavation unit and looters' trench throughout the site. Several types are exclusively found at La Sufricaya, including Urita Gouged-Incised, Unnamed Unslipped censerware and Positas Modeled: Variety Unspecified (See Callaghan 2008 Figures 5.36-5.38). Cylinder vessels with vertical walls, some of which include the "screw head" or "coffee bean" appliqués, represent Urita Gouged-Incised. Unnamed Unslipped censer ware resembles Candelario Appliqué at Uaxactún (Smith 1955) and a specific form, the corncob censer, has been found at both Uaxactún and Teotihuacán and will be discussed in more detail below. The

Positas Modeled ware is extremely rare in the lowlands and consists of small modeled effigy figures decorated with black slip and cross-hatching. The type has been found at Uaxactún and Tikal, and Callaghan suggests its presence at La Sufricaya could indicate an important trade or ritual relationship between Holmul/La Sufricaya and these sites (Callaghan 2008:388).

<b>Ceramic Type</b>	<b>Rim sherds</b>	<b>Body sherds</b>	<b>Base sherds</b>	<b>Appendages</b>	<b>Total</b>
Actuncan	3	0	0	0	<b>3</b>
Boleto	3	0	0	0	<b>3</b>
Aguila Orange	601	2988	184	7	<b>3780</b>
Pita Incised	54	69	7	0	<b>130</b>
Nitan	72	5	3	0	<b>80</b>
Aguila & Buff	32	43	10	1	<b>86</b>
Aguila & Buff Incised	4	5	0	0	<b>8</b>
Dos Hermanos	3	11	0	0	<b>14</b>
Dos Arroyos	30	41	9	1	<b>81</b>
Caldero	11	21	1	0	<b>33</b>
Balanza Black	217	1143	49	9	<b>1418</b>
Lucha Incised	77	85	10	0	<b>172</b>
Uritas	6	20	1	0	<b>27</b>
Positas	0	9	0	0	<b>9</b>
Balanza Fluted	1	4	0	0	<b>5</b>
Mount Maloney	1	0	0	0	<b>1</b>
Brown Matte	11	56	0	0	<b>67</b>
Quintal	258	1719	5	3	<b>1985</b>
Triunfo Striated	33	1880	38	0	<b>1951</b>
Censerware	58	114	1	3	<b>176</b>
Unclassified weathered	412	7887	40	11	<b>8350</b>
<b>Totals</b>	<b>1888</b>	<b>16098</b>	<b>358</b>	<b>35</b>	<b>18379</b>

**Table 5.3 K'ahk 1-3/Tzakol 1-3 ceramic types represented at La Sufricaya**

Chak/Tepeu 1 and Ik-Chuah/Tepeu 2 Late Classic Ceramic Complex

The Chak/Tepeu 1 ceramic complex (AD 550-650) represents a shift in production mode from the K'ahk 3 phase. The complex is characterized by a shift in serving ware away from the Aguila, Balanza and Doss Arroyos types of the K'ahk complexes. Very distinctive forms and surface decorations include open plates with smaller basal flanges, convex bases and tripod supports and tall bowls with barrel-shaped sides. Out-curving neck forms are additions to the utilitarian ware during



this phase. A significant departure in surface decoration also occurs during this phase as the orange slip of the Aguila group is replaced by the red slip of the Tinaja group. Additionally, the black slip monochrome tradition nearly disappears. Polychrome painting becomes more frequent and complex. There is some continuity from the K'ahk 3/Tzakol 3 phase in terms of the temper used in pastes. Volcanic temper continues to be used for serving vessels and crystalline calcite is used for utilitarian vessels (Callaghan 2008:422-424).

The Ik-Chuah/Tepeu 2 complex (AD 650-830) exhibits strong continuity with the preceding complex regarding the types of temper used in serving ware and utilitarian ware, the popularity of red slip and the frequency of open plates with tripod supports. The forms of polychrome painted ceramics become more diverse but the glyphic elements of the decorative design are not executed as skillfully as in the previous phase. This complex also represents the introduction of the Cabrito Cream polychrome tradition (Callaghan 2008: 424-425).

Ceramics from these complexes (n=868) have been found in surface contexts within the ceremonial core, post-abandonment occupation of Structure 1 and in construction fill of the residential groups. No Late Classic ceramics have been found in the rubble fill used to seal Structure 1, which indicates that the use of the structure was terminated in the preceding Early Classic period. The bulk of Late Classic ceramics at La Sufricaya is comprised of Tinaja Red, which replaces the Aguila Orange of the Early Classic.

<b>Ceramic Type</b>	<b>Rim sherds</b>	<b>Body sherds</b>	<b>Base sherds</b>	<b>Appendages</b>	<b>Total</b>
Tinaja Red	104	580	26	3	<b>713</b>
Chinaja A	19	6	0	0	<b>25</b>
Saxche Orange Polychr.	4	4	0	0	<b>8</b>
Cambio Unslipped	99	6	0	0	<b>105</b>
Encanto Striated	1	12	0	0	<b>13</b>
Zacatel Cream Polychr.	2	2	0	0	<b>4</b>
<b>Totals</b>	<b>229</b>	<b>610</b>	<b>26</b>	<b>3</b>	<b>868</b>

**Table 5.4 Chak/Tepeu 1 and Ik-Chuah/Tepeu 2 ceramic types represented at La Sufricaya**

Kisim/Tepeu 3 Terminal Classic Ceramic complex

The Kisim complex (AD 830-950) is similar to the Tepeu 3 complex at Uaxactún and the Eznab complex at Tikal. For the first time in the Holmul ceramic chronology, the ceramics from this complex represent a full assemblage consisting of serving ware, utilitarian ware and foreign imports. The most common form of serving ware within the Kisim complex is the open plate with tripod supports, while out-curving neck jars of the Cambio group dominate the utilitarian wares. The Tinaja utilitarian ware increases in frequency and diversity of forms while polychrome decoration becomes less common (Callaghan 2008: 448-450).

The Kisim ceramics recovered from La Sufricaya and reviewed by Callaghan are limited to surface collections and do not reflect the general trends of the complex. A wider variety of Kisim ceramics were recovered from excavations in the residential groups during the 2002 and 2003 field seasons of the Holmul Archaeological Project, but they were not included in this analysis.

<b>Ceramic Type:Variety</b>	<b>Rim sherds</b>	<b>Body sherds</b>	<b>Base sherds</b>	<b>Appendages</b>	<b>Total</b>
Chinaja B	19	1	0	0	<b>20</b>
Cameron	18	15	4	0	<b>37</b>
Miseria	1	0	0	0	<b>1</b>
Chaquiste	6	4	0	0	<b>10</b>
<b>Totals</b>	<b>44</b>	<b>20</b>	<b>4</b>	<b>0</b>	<b>68</b>

**Table 5.5 A portion of Kisim/Tepeu 3 ceramic types represented at La Sufricaya**

## **Summary of La Sufricaya ceramic chronology**

The ceramic chronology of La Sufricaya traces the occupation of the site from the Late Middle Preclassic period when a limited population first inhabited the area. The population increased during the Late Preclassic, and the midden material from this period was incorporated into the construction fill of the structures in the ceremonial core of the site. At least one residential group, Group 16, appears to have been inhabited during this time. It is likely that more of the residential groups surrounding the plaza were inhabited as well and the residents provided the labor to build the plaza and Platform 1.

The population of the site reached its apogee during the Early Classic period. The ceramics from the midden of Structure 1, which was later used to fill-in and bury the complex, include serving, utilitarian and ceremonial wares and forms. The variety of wares indicates that domestic food preparation and consumption took place within the complex, and the censer ware and effigy figurines may reflect religious or ritual performance. These rituals may have been centered in the elite household and a reflection of domestic religion rather than rituals carried out in the public arena. During this period, the ceramic assemblage follows the trends of central Petén and indicates that the people of La Sufricaya participated in exchange networks with Tikal and Uaxactún. Teotihuacán-style ceramic forms (the corn cob censer) and surface decoration (the trispiral motif and cacao bean appliqué) suggest that the lords of La Sufricaya participated in an imagined community, or exchange network, during the later part of the Early Classic period that was centered on Teotihuacán ideology.

The elite residents abandoned Structure 1 during the later part of the Early Classic period (circa AD 450) and Structure 1 was buried and sealed. The resurfaced mound of Structure 1 formed by the plaster seal continued to serve residential and ceremonial functions for people whose fortunes were far less than the Early Classic founders and residents. The decreased residential population of the Chak/Tepeu 1 and Ik-Chuah/Tepeu 2 Late Classic phases reverted to local ceramic traditions with no trace of the foreign styles used in the K'ahk 3/Tzakol 3 phase. During the Terminal Classic Kisim/Tepeu 3 phase the bulk of the population of the site inhabited the residential groups surrounding the ceremonial core.

### **Holmul region INAA analysis**

Instrumental Neutron Activation Analysis (INAA) of the chemical signatures of the pastes used in the manufacture of La Sufricaya and Holmul ceramics has aided in reconstructing the exchange networks in which the elites of the region participated, which in turn contributes to a more complete understanding of the sociopolitical history of the Holmul region. In 2004 Dr. Francisco Estrada Belli, Director of the Holmul Archaeological Project, submitted ceramic samples to Dr. Ronald Bishop (Department of Anthropology at the Smithsonian National Museum of Natural History) and Dr. Dorie Reents-Budet (Museum of Fine Arts, Boston) from La Sufricaya, as well as sites throughout the Holmul region, for INAA analysis, which was completed by Dr. Bishop at Smithsonian National Museum of Natural History.

Instrumental Neutron Activation Analysis (INAA) determines the trace elements (the transitional elements and rare earths) that comprise a vessel's ceramic paste. Ceramic "paste" refers to the clay or mixture of clay and natural

materials that were used to create the ceramic vessel. These trace elements function as the unique “chemical fingerprint” of the specific mixture of clay resources and tempering materials used in the ceramics of particular areas, workshops and even individual ceramists. Reents-Budet and Bishop compare paste compositional patterns to those of ceramic samples excavated from known sites, and a match between them is indicative of the location where the vessel was made. In this way, a pottery style may be attributed to a specific region and even to an archaeological site (Reents-Budet et al. 2010:3).

The Holmul region samples were compared to chemical signatures of previously sampled ceramics from Tikal, Naranjo and other lowland sites in order to understand the sociopolitical connections of the sites within the Holmul region through ceramic trade and exchange. The findings of their analysis were summarized in an unpublished report from 2007 and elucidated through personal communication between the author and Dr. Reents-Budet in 2013-2014. The analysis categorizes the sampled ceramics into seven groups based on the similarity of chemical composition. The samples were taken from polychrome decorated ceramics as well as some of the Teotihuacán-style forms recovered at La Sufricaya, including the so-called “bleeding heart” vessel (See Appendix 1).

Based on the chemical analyses of 567 sherds and vessels, the authors of the study conclude that the people of the Holmul region enjoyed relative independence in the Northeastern Petén but engaged in two-way interaction with neighboring sites like Naranjo, Buenavista, Baking Pot, Barton Ramie, Caracol, Yaxhá, Nakúm, Tikal and Uaxactún. This interaction is demonstrated by the recovery of pottery

manufactured in Holmul from these sites. The nature of this interaction cannot be ascertained through the ceramics alone, however. The Holmul ceramics may have made their way to neighboring sites through trade, as gifts given to solidify marriage or political alliances, or even as tribute to higher-ranking lords. It is interesting to note that ceramics from these neighboring sites have not been recovered from excavations within the Holmul region, but that could be a problem of sampling, or a consequence of looting in the area. The perspective from the current sample suggests that the Holmul elite were giving gifts of ceramics rather than receiving them, which is probably not an accurate reflection of the sociopolitical ranking of sites in the Eastern Petén. The INAA analysis also demonstrates that the ceramic workshops within the Holmul region maintained paste recipes and temper procurement areas over periods of time and little to no outside influence from other sites in the Maya lowlands or elsewhere in Mesoamerica is evident in the chemical signatures of the pastes.

The chemical composition of the samples in the HG4 La Sufricaya group indicates that Early Classic potters used a different paste recipe or exploited different clay and/or temper procurement areas than Late Classic<sup>16</sup> potters in the Holmul region (Reents-Budet et al. 2007:4). One sample from the group is a red on cream cylinder vase recovered from the site of Naranjo (Sample # NR0032). This finding suggests that pottery made at La Sufricaya was gifted to or exchanged with elites at Naranjo. The exchange of ceramic vessels, as well as the reference to a lord named Aj Wojsal on La Sufricaya Stela 5 in AD 422, (the namesake of a Naranjo

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<sup>16</sup> The majority of samples from the Holmul region were recovered from Late Classic contexts, while the La Sufricaya samples spanned the Early to Late Classic periods.

ruler who ascended to the throne in AD 546), lends further support to the time depth of the relationship between the La Sufricaya/Holmul and Naranjo dynasties.

### **Tikal and Teotihuacán INAA analysis**

A subsequent INAA study has provided evidence of an intriguing link between Tikal/Mundo Perdido and Teotihuacan during the Classic period (Reents-Budet pers. comm. 2013). The analysis of ceramic vessels from Mundo Perdido and the Plaza of Siete Templos at Tikal identified a group of ceramic vessels recovered from burial and ritual contexts, denominated Group F, made with pastes that are a chemical match to 2 ceramic sherds recovered from the Merchant's Barrio at Teotihuacan (see Table 5.6). These ceramics were likely produced by a workshop of full-time craft specialists who created vessels for an elite audience, perhaps working under a type of aristocratic patronage (Reents-Budet et al. 2008:3).

Group F includes Early and Late Classic samples, an indication that craft specialists maintained continuity in paste recipes for over 300 years. This finding could be interpreted as fundamental conservatism in ceramic production in some elite workshops with artists following sacred or proprietary paste traditions rather than experimentation. During this time span craft specialists did not change paste recipes although they did make changes in form and decoration (painting and iconography). This practice reflects changes in the function of the ceramics as well as their use in social contexts, along with changes in local politics, economy and ideology (Reents-Budet et al. 2008:6).

One vessel within Group F was recovered from burial PNT-174 in Group 6C-XVI of the Mundo Perdido complex at Tikal. The Early Classic (AD 350-378) burial

of an adult male, an adolescent and a young child (0-3 years old) included myriad stone, shell, jade, obsidian and ceramic offerings (Laporte 1989: 173-180). The Balanza Black dish has painted stucco decoration that includes animal figures, described by Laporte (1989) as jaguars, wearing what appear to be feathered headdresses (Figure 5.2). These figures are very similar to the murals in the Atetelco and Tetitla compounds at Teotihuacán, which depict jaguars wearing feathered headdresses. The excavators of burial PNT-174 suspected the vessel was imported to Tikal, possibly from Teotihuacán, because of the foreign-style iconography of the surface decoration (Laporte 1989; Laporte and Fialko 1995). The recent research by Reents-Budet et al., however, has identified this vessel with Group F and a product of an elite workshop associated with Mundo Perdido and the Siete Templos group (Reents-Budet et al. 2008).

Several small cylinder vessels (MS1631, MS1632, MS1636, MS1637, MS1639) dating to the Late Classic Imix period recovered from a cache in Structure 5D-87, the Temple of the Skulls, of Mundo Perdido are also among the Group F ceramics. These cylinder vessels were included in an elaborate cache (Escondite 4), placed within a vaulted chamber within Structure 5D-87 (Laporte 2002; Laporte and Fialko 1995:84-86). Eight vessels from a similar cache associated with Structure 5D-97 in the Plaza de los Siete Templos are also included in Group F (Gómez 2008). The offerings included in Ofrenda 3 are so similar to the offering for Structure 5D-87 in Mundo Perdido that Reents-Budet et al. suggest that the same people carried out the dedicatory rituals and placement of both caches.



Reents-Budet et al. caution that their analysis cannot distinguish the number of workshops in operation, their location within Tikal or their specific inter-relationships. This analysis only indicates a strong ceramic tradition shared among the workshops that is normally associated with face-to-face contact, cooperation and production for similar, if not equal audiences (Reents-Budet et al. 2008:9).

An earlier INAA study conducted by Sarah Clayton (2005) at Teotihuacán analyzed the Maya ceramics recovered at Teotihuacán and revealed that several Maya polities in the central Petén traded or exchanged ceramics with the central Mexican city. In the study, 121 Maya-style ceramic sherds recovered from excavations at Teotihuacán were subjected to INAA analysis. The sherds were recovered from contexts dating from the Late Preclassic through the Late Classic periods, with the majority dating to the Early Classic period, which indicates that interaction between Teotihuacán and the Maya continued for at least 500 years but was most intense during the Early Classic (Clayton 2005:442). The results indicate that all of the sherds came from vessels that were made in the Maya region and imported to Teotihuacán, rather than locally made vessels in the Maya style. While the INAA analysis indicates that vessels made at several different Maya cities were imported, the most enduring and intensive relationship appears to have been between Tikal and Teotihuacán and possibly other cities in the central Petén (Clayton 2005:428).

Slightly more than half ( $n = 61$ ) of the sherds included in the study were collected from the Merchant's Barrio, an apartment compound that may have been home to an enclave of foreigners from the Gulf Coast or the Maya lowlands (Rattray

1987). The most prevalent Maya ceramic type in the study is Dos Arroyos Orange Polychrome, which is found throughout the central Petén and Copán during the Early Classic, but is not very common at La Sufricaya. Twenty percent of the sherds included in the sample (n = 22) were sourced to the central Petén and 8 percent of the overall sample (n = 8) were attributed to Tikal specifically (Clayton 2005:438).

Two sherds (sample numbers 602 and 608) were found to be compositionally similar to vessels recovered from the Mundo Perdido complex at Tikal<sup>17</sup>. Specimen 602 is a monochrome black sherd from the base of a cylindrical vessel (whether or not it is a tripod vase is unknown) and dates to the Early Classic period. Specimen 608 has a poorly preserved slip that is fire-clouded reddish-orange to tan in color and dates to the late Early Classic or early Late Classic period (the form of the vessel is not described). These two samples are compositionally similar to the Late Classic cache vessels MS1629, MS1631, MS1632, MS1636, MS1637 and MS1639 from Mundo Perdido (see Clayton Table 3, p. 440 for details). Independent INAA testing conducted by Dr. Ronald bishop in 2013 confirmed the match between Teotihuacan sample 602 and 608 and Group F ceramics from Mundo Perdido/Siete Templos (Reents-Budet personal communication 2013). The data suggests that these vessels were produced by workshops(s) associated with the elites of Mundo Perdido at Tikal.

Furthermore, Clayton's study identified three samples (MSC329, 355 and 356) from the royal Early Classic Hunal and Margarita tomb assemblages at Copan that share compositional similarities with sample 602 from Teotihuacán. The

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<sup>17</sup> Clayton incorrectly associates these vessels with the Early Classic tombs of Mundo Perdido. According to Reents-Budet et al. they are the Late Classic cache vessels from Structure 5D-87.

individual laid to rest in the Hunal tomb has been identified as the dynastic founder K'inich Yax K'uk Mo' and bioarchaeological evidence demonstrates that he spent his early adult years in the Petén (Buikstra et al. 2004). The elderly female interred in the Margarita tomb may have been his wife, who was likely born and raised in Copán. The ceramics from the Hunal tomb assemblage also included five Teotihuacán-style vessels, which were identified through INAA analysis as products of central Mexico (Sharer 2003). The Maya-style ceramics were analyzed by Reents-Budet et al. (2003) and identified as products of Tikal, based on stylistic and compositional data.

Sample MSC329 was taken from Vessel 14 from the Margarita tomb, which is a basal-flange polychrome dish decorated with a painted geometric design. Reents-Budet et al. recognized that the paste composition of the dish is similar to vessels from the Mundo Perdido assemblage as well as the sampled vessel and lid from the Hunal tomb and suggest that it was made at a workshop near Tikal (Reents-Budet et al. 2004:177-8). Sample MSC355 was taken from Lid 4 of Vessel 2, which is an unusual composite-silhouette tripod dish and the lid includes a modeled turtle knob. Sample MSC356 was taken from Lid 3 of Vessel 19 from the Hunal tomb, which is decorated with elaborately carved, red, painted cartouches and volutes in a typical Early Classic Petén style (Reents-Budet et al. 2004:173). According to Reents-Budet, the Copán samples are not significant matches to Group F ceramics from Mundo Perdido/Siete Templos, but may be generally attributed to Tikal (pers. comm. 2013). Clayton attributes the production of these vessels to an elite workshop at Tikal, prompting her to speculate that the Teotihuacán-styles vessels recovered

from the Hunal tomb arrived at Copán by way of exchange with or gifts from Tikal elites rather than through direct interaction with Teotihuacán (Clayton 2005:439).

While it is disappointing that the INAA analysis did not reveal any direct contact between La Sufricaya and Teotihuacán or Tikal, additional INAA analysis of the Holmul region ceramics may reveal connections with these and other sites.

There is clear evidence from the INAA analysis of ceramics from Copán and Teotihuacán of direct contact between these sites and Tikal/Mundo Perdido. The appearance of ceramics produced at Mundo Perdido in the Merchant's Barrio of Teotihuacán may reflect a trade partnership that served as a conduit for the exchange of ideology, technology and people between central Mexico and the Maya Lowlands. The ceramics found within the royal tombs at Copán, however, could be viewed as materials employed in a practice of affiliation that signifies participation in the elite interregional imagined community. The Mundo Perdido/Siete Templos workshop produced ceramics for elite patrons who then exchanged and gifted the vessels to political allies. At Copán, the ceramics were prominently included in royal funerary assemblages that reflected the political ties of the ruler K'inich Yax K'uk Mo'.

INAA Sample No.	Site	Context	Time Period	Compositional match	Source
MS1482	Mundo Perdido,	Cache 24	Early Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
MS1483	Mundo Perdido	Burial PNT-174, Group 6C-XVI	Early Classic	Group F	Reents-Budet et al. 2008
MS1631	Mundo Perdido,	Str. 5D-87, Cache 4	Late Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
MS1632	Mundo Perdido,	Str. 5D-87, Cache 4	Late Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
MS1636	Mundo Perdido,	Str. 5D-87, Cache 4	Late Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
MS1637	Mundo Perdido,	Str. 5D-87, Cache 4	Late Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
MS1639	Mundo Perdido,	Str. 5D-87, Cache 4	Late Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Reents-Budet et al. 2008
LP0336	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0337	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0338	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0329	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0334	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0340	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0341	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
LP0342	Siete Templos	Str. 5D-97, Offering 3	Late Classic	Group F	Reents-Budet et al. 2008
Teo602	Teotihuacán	Merchant's Barrio	Early Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Clayton 2005; Reents-Budet, pers. comm. 2013
Teo608	Teotihuacán	Merchant's Barrio	Early Classic	Group F of Mundo Perdido/Siete Templos at Tikal	Clayton 2005; Reents-Budet, pers. comm. 2013
MSC329	Copán	Margarita tomb	Early Classic	Teo602/Tikal	Clayton 2005; Reents-Budet, pers.comm. 2013
MSC355	Copán	Hunal tomb	Early Classic	Teo602/Tikal	Clayton 2005; Reents-Budet, pers.comm. 2013
MSC356	Copán	Hunal tomb	Early Classic	Teo602/Tikal	Clayton 2005; Reents-Budet, pers.comm. 2013

**Table 5.6 Summary of INAA analyses**

## The Teotihuacán Ceramic Assemblage

The Teotihuacán ceramic assemblage begins with the Cuanalan and Patlachique phases (150-1BC) but the phase relevant to this study is the Early Xolalpan phase (A.D. 350-450), which Rattray describes as a period of change and innovation in the local Teotihuacán ceramic tradition as the city developed important external relationships throughout Mesoamerica. Vast quantities of ceramics were imported to the city during this period, which indicates an exchange system between Teotihuacán, Southern Puebla and the Gulf Coast regions, among others. Several wares and forms reach their peak frequency and distribution during the Xolalpan phase including Thin Orange, Granular ware *amphoras* and *almenas* imported from the Morelos-Guerreo region, *candeleros* and cylindrical tripod vases (Rattray 2001:203). Fine Maya wares were also imported to the city during this phase. The following summary focuses on forms and decorative modes that have also been found in the Maya region.

Thin Orange ware is associated with Teotihuacán and regarded by scholars as an indication of interaction with the city when it is found outside of Central Mexico, but it was not produced at Teotihuacán. The ware was manufactured in Puebla near Tepexi de Rodríguez and imported in large quantities to Teotihuacán where it was then distributed throughout Mesoamerica (Rattray 2001:203).

Cylindrical tripod vases are one of the most characteristic forms of Teotihuacán ceramics outside of central Mexico and are regarded as evidence of contact with the city when found at other sites. Although the form probably originated in the Gulf Coast region, it has been a hallmark of Teotihuacán culture

from the Late Tlamimilolpa (AD 300-350) to Metepec (AD 500-600) periods. The use of cylindrical tripods reached maximum expression and elaboration during the Xolalpan phase when they were made in plano-relief, decorated with anthropomorphic and symbolic designs. The vessels have been recovered from burials in the Xolalpan, Tetitla, Zacuala Palace, Zacuala Patios, Yayahuala, La Ventilla A and B apartment compounds as well as in household refuse (ibid.). During the Early Xolalpan phase the exteriors and interiors of cylindrical vases were polished to a high luster and included hollow slab supports. Due to traces of red pigment, Rattray suspects that the majority of vases were coated with post-fire paint (Rattray 2001:217).

Thus far, vessels with stucco painting have only been recovered from deposits that post-date the Tlamimilolpa period (after AD 250) though Rattray cautions that the antiquity of this decorative technique has not been established. Since the decorative technique was used in the Valleys of Mexico and Oaxaca during earlier phases (First Intermediate Period and Monte Alban II), and has been recovered from Mamom phase contexts at Uaxactún, Rattray suggests that the technique was used during earlier periods at Teotihuacán as well. The earliest appearance of the technique at Teotihuacán is on imported Gulf Coast Lustrous ware vases and Rattray suggests the decoration was applied in order to renovate highly prized vessels (Rattray 2001:117).

Beginning with the Early Xolalpan phase different styles of stucco painting are discernable. Three variants of the “al seco” stucco painting technique have been defined, all of which are applied to a dry lime plaster undercoat. When using

Variant “A” the artist first draws an outline of the designs, and then applies the colors. In Variant “B”, the colors are applied in several coats and a medium is used to bind the pigments. Variant “C” employs a binder to strengthen the adherence between the layers of the paint and clay. The distinction between Variant “C” and the other techniques is that clay is used to coat the vase rather than stucco (Rattray 2001:119). This decorative mode was applied to jars, bowls and vases during the Tlamimilolpa and Early Xolalpan phases and was not reserved for cylindrical vases.

*Candeleros* are ceremonial forms that become more common during the Early Xolalpan phase. *Candeleros* are made of Course Matte Ware and feature one or two chambers, which may have been used to hold incense for burning. There are reports of the Aztecs using *candeleros* to hold blood, which was then absorbed by strips of paper and burned with copal incense on the altars of temples (Linné 2003:113-114).

### **Teotihuacán Ceramic Styles in the Maya Region**

Teotihuacán-style ceramics attributed to Teotihuacán have been recovered from many sites and follow some general trends. Cylindrical vases with tripod supports and painted stucco decoration are most common and are usually found in elite burial contexts. Thin Orange ware has also been found, though this import is very rare in the Maya region. It is important to note that the foreign-style ceramics have been recovered from contexts that post-date the Teotihuacán *entrada* of AD 378 by approximately 40-50 years, which indicates that though the decorative motifs and iconography may have been introduced to the Maya region in the late 4<sup>th</sup> century, they were not integrated into ceramic assemblages until the 5<sup>th</sup> century.



The following is a brief summary of the vessels and decorative motifs that have signaled interaction with Teotihuacán. The finds of some sites are better documented than others and this overview reflects that bias by focusing on the ceramics from Tikal.

### **Tikal ceramics**

Culbert (2003) notes that two periods of profound, yet gradual, change occurred during the Tikal ceramic sequence: the first occurred during the transition from the Late Preclassic period to the Early Classic period and the second during the transition from the Early to the Late Classic period. These changes involved monochrome domestic types as well as decorated serving ware and were echoed throughout the Maya lowlands. While the changes to domestic ceramics may not be influenced by political events, the changes to decorated elite serving ware were probably greatly influenced by political events of the time. Culbert cites the change in elite burial ware between the Manik 2 and Manik 3 complexes as an example of the impact of politics on ceramics. During this time period, burial practices in the North Acropolis transitioned away from including polychrome vessels in elite burials to the use of black and gouged-incised decorated vessels and cylindrical tripods. Scholars have suggested that this change in the ceramic complex was tied to the events surrounding the Teotihuacán *entrada* in AD 378 (Culbert 2003: 80).

Coggins (1975) and Laporte et al. (1992) have proposed that the Manik 3 (AD 378-550) ceramic phase be divided into two sub-complexes, based on differences in the associated rituals and contexts of the ceramics from this period, which they believe are linked to sociopolitical changes in the Tikal region. This period is also

associated with the use of cylindrical tripod vases with lids and painted stucco decoration. This ceramic form, however, is restricted to funerary and ritual contexts (Laporte et al. 1992: 66). Under the revised schema the Manik 3-A sub-complex dates to AD 378-480 and the Manik 3-B sub-complex dates to AD 480-550.

Based on excavations in the Mundo Perdido complex, Laporte and his colleagues note that during the Manik 3-A sub-complex caches generally included few ceramic vessels, but Aguila Orange ceramics dominated the few offerings, while a slightly wider variety of vessel types were included in funerary assemblages. The Manik 3-A burial offerings consisted of Aguila Orange vases (45%), Balanza Black (28%) Lucha Incised (10%), Caldero Buff Polychrome (10%), Urita Gouged-Incised (3%), and Pucté Brown (3%), with a strong preference for monochrome vessels. The complete absence of painted stucco secondary decoration is a notable difference in this sub-phase. The vessel forms are predominated by annular base bowls, tripod plates and cylindrical tripods followed by dishes, bowls and plates (Laporte et al. 1992:66).

During the Manik 3-B sub-complex the contents of ritual caches continued the trends of the Manik 3-A phase, though ceramics become more abundant and still generally consist of Aguila Orange vessels. With the exception of burial PNT-174, the funerary offerings of this sub-complex continue the tradition established in the Manik 3-A period, including the same ceramic types but with a predominance of black pastes. Tripod plates are still common items in funerary assemblages, but bowls with annular bases and cylindrical tripods are less frequent. Dishes

practically disappear from the funerary assemblages and are replaced by less elaborate forms like bowls and plates (ibid).

### Decorative motifs

Culbert notes that the “coffee bean eyes” appliqué is a relatively rare form of decoration at Tikal, though remnants of a vessel with this type of decoration were included in Problematical Deposit 74, 22 and 50. This deposit was located 500 meters west of the Great Plaza and was notable for the quantities of well-preserved Manik ceramics including decorated cylindrical tripods and apron covers (Culbert 1993:Figure 134g). This appliqué adorns a vessel included in Problematical Deposit 50 where it appears in a double row at the base (Culbert 1993: Figure 128b).

Painted stucco was used to decorate vessels in the Maya region prior to the Early Classic period, one such vessel was found in Burial 167 (which dates to the Late Preclassic period according to Sharer & Traxler 2006) at Tikal, but the decorative motifs included geometric or logographic designs and was used to adorn monochrome or Usulután vessels. In the Early Classic, the painted stucco vessels depicted human figures, logographic devices and inscriptions. Coggins points to manuscripts as the likely inspiration for the painted stucco artists since they were made in the similar fashion (Coggins 1975:112-13).

### Foreign iconography

Vessels decorated with Teotihuacán-style iconography have mainly been recovered from Manik-phase dynastic and elite burials in the North Acropolis and Mundo Perdido as well as the ritual contexts of Problematical Deposits found throughout the site. Burial 10 (AD 404-6), which has since been identified as the

resting place of *Yax Nuun Ayiin I* contained rich funerary offerings that included several vessels decorated with Central Mexican iconography that the excavators assumed were imported to Tikal from Kaminaljuyú and Central Mexico (Coggins 1975; Culbert 1993).

Three stuccoed and painted round-sided, ring-stand bowls of an unnamed red-incised type (Culbert 1993) all have Teotihuacán-style iconography. All three have punctate and wavy line decoration as well. Two of the bowls have domed lids with bird-effigy knobs while the third does not have a lid.

#### Vessel 12C-517/35

Culbert (1993) describes this vessel as an unnamed tan punctuated type, round-side dish with ring-base that is decorated with painted stucco that covers the punctated and incised decoration (Figure 5.3). Four human figures adorn the exterior; two are profile busts while the other two are frontal heads. The two frontal heads wear feathered headdresses, Tlaloc goggles and nose pendants that have three elements hanging from a central bar. One of the figures wears a jaguar headdress while the other figure wears a headdress containing Central Mexican symbols like the Kan Cross and chalchihuitls, both of which are symbolic of water. The two profile busts wear headdresses, feathered capes and nose pendants. They both carry round shields with a central element that Coggins describes as a “Tlaloc eye” and have speech scrolls emanating from their mouths. One of the figures wears Tlaloc goggles and also carries an atlatl while the other wears a beaded turban with quetzal bird headdress.

Vessel 12C-489a, b/35

This vessel is an unnamed red-incised type, round-side bowl with ring base with painted stucco over the punctated and incised decoration (Figure 5.4). Its lid is an unnamed buff type, round-side cover with effigy bird handle (Culbert 1993:Figs.15 a-d). Two frontal figures with arms raised, the left hand is clenched in a fist while the right hand holds a cloth sash, and bent at the elbows are painted on the lid. They both wear feathered headdresses, ear flares and noseplaques with three hanging elements similar to the figures painted on vessel 12C-517/35. Coggins suggests that round elements in the headdresses could be balls of raw cotton. The exterior of the bowl is painted with two frontal figures as well, though these are poorly preserved. Both figures wear Tlaloc goggles, feathered headdresses and the same noseplaque with hanging elements. Both hold feathered panaches in each hand. A Mexican year sign is visible in one of the headdresses and this figure also wears a pecten shell necklace.

Vessel 12C-546a,b/35

This vessel is best preserved of the three and is described by Culbert as an unnamed buff type, round-side dish with ring base with an unnamed buff type round-side cover with effigy handle. This dish does not have the incised (and punctated) decoration of the other two (Culbert 1993:Figs. 16a-c). Two frontal figures adorn the lid and are separated by stylized feathered Ahau medallions with a trilobe element dangling from them (Figure 5.5). Each of the figures wears a headdress with the upper jaw of an animal that Coggins identifies as a jaguar but appears to have scales like serpent or caiman. One of the figures wears Tlaloc

goggles and noseplaque and holds cloth sashes in its hands. The other has black lines painted on its face with an open mouth that exposes its upper and lower teeth and holds feathered panaches in both hands. Two frontal figures, without arms, are also painted on the exterior of the vessel and these figures are also separated by logographic devices comprised of Maya Ahau faces surmounted by green feather headdresses with dangling elements below that resembles the Tlaloc nose pendant. Both figures wear Tlaloc goggles and a nose pendant that Coggins describes as the cursive version of the Tlaloc pendant. These figures wear Maya-style quincunx earflares and bird headdresses (Coggins 1975: 173-6).

These vessels are all Maya forms, but the images recall possible depictions of Teotihuacán rulers identified by Schele (1999) and Headrick (2007) that appear in mural and monumental art. The Tlaloc eye rings, Great Goddess fanged noseplaque and staffs or bundles of material held in the hands are all features of the iconography of rulership at Teotihuacán. It may not be a coincidence that these images of Teotihuacán rulers appear on pottery placed in the tomb of Yax Nuun Ayiin, since he ascended to the throne at Tikal in AD 379 after the *entrada* event and he is depicted on Stelae 4, 18 and 31 in Mexican attire. Though we now know *Yax Nuun Ayiin I* was not from Teotihuacán, his monuments and funerary offerings make allusions to the central Mexican city as the source of legitimacy for his reign.

#### Vessel 12K 236a, b/22

This is a cylinder tripod vessel with painted stucco included in Burial 48 (which Coggins, 1975, identified as the tomb of Siyah Chan K'awiil II dating to AD 456) that is adorned with butterfly symbolism typical of Teotihuacán. Culbert

describes the lid as a Positas Modeled apron cover with effigy handle and stucco decoration. The vessel is an undetermined black type, cylindrical tripod: hourglass variety with painted stucco decoration (Culbert 1993: Fig. 30 b). The lid is decorated with a repetitive design of three components including a feathered hook or scroll-shaped form that represents the butterfly proboscis and a vertical band of eyes with a fringed edge that symbolizes the a butterfly wing. Coggins suggests that the overlapping elements in between the proboscis and wing represent the chrysalis of the Monarch butterfly (Coggins 1975:194-5). The walls of the vessel are decorated with three skulls that are separated by six-pointed flowers or starfish (Figure 5.6). The skulls are edged by a red and green feather border, which is painted in the Mexican feather convention. Multi-lobed elements emanate from the mouth, below a row of teeth, which usually represents liquid and is probably blood in this case. Coggins notes that skulls are rare in both Teotihuacán and Maya iconography and suggests that this imagery was imported from the Puebla-Veracruz area via Kaminaljuyú. In any case, the skulls represent death while the butterfly imagery is symbolic of resurrection and metamorphosis, which are appropriate themes for funerary art (Coggins 1975:195-6).

#### Vessel 10E-52/2

Culbert describes this vessel as an unnamed incised type, cylindrical tripod: hour-glass variety. The vessel was badly burned, making it impossible to determine whether the slip was originally black or orange. The dimensions, 32.3 cm in diameter, and slab feet of the vessel are similar to vessels at Teotihuacán (Culbert 1993:128a). The incised plano-relief decoration is a continuous scene that depicts a

delegation of six figures wearing Central Mexican costumes approaching a Mayaoid figure standing on the stairs of a temple constructed in the talud-tablero architectural style (Figure 5.7). The delegation appears to be leaving a temple built in the typical talud-tablero style of Teotihuacán while two seated figures, with knees bent up to their chins, watch them depart. Four of the delegation members carry three-pointed spears and three of them carry atlatls. The first two men wear feathered headdresses with circular elements in the front while the third man wears a headdress with Tlaloc goggles. Floating cylinder tripod vessels with knobs on the lids precedes the two figures at the rear of the procession. These two men do not carry weapons of any sort and wear a different type of headdress that consists of four tassels, identified by Millon as the Tassel Headdress (C. Millon 1988). A temple surmounting a pyramid with radial staircases, along with a long-haired man and a staff-shield element separate the two temple-pyramids that represent the origin and destination of the delegation. Coggins suggests the delegation is leaving Teotihuacán and arriving at Kaminaljuyú, which was the only known site with both Maya and Teotihuacán-style architecture (Coggins 1975: 179-181).

These vessels incorporate foreign decorative motifs and local forms but became more widespread almost 50 years after the *entrada* event of AD 378, which indicates that these styles were not introduced through conquest by a foreign culture that introduced cultural forms through dominance, but rather these foreign elements were gradually integrated into the Maya repertoire for a specific purpose. Cylindrical vases and painted stucco decoration were not foreign to the Maya ceramic assemblage but the combination of the vessel form, slab foot supports,



painted stucco and Teotihuacán iconography resulted in an innovative style. These vessels conveyed specific messages to the rulers and elites who created, exchanged and received them, and ownership served as a practice of affiliation with an imagined regional elite community of Maya rulers who based their legitimate right to rule on connections to Teotihuacán.

### **Discussion of Local and Teotihuacán Ceramic Styles at La Sufricaya**

While the majority of the ceramic assemblage from La Sufricaya coincides with local and regional ceramic development in the Maya lowlands, several foreign vessel forms and decorative motifs were incorporated into the K'ahk 3 phase. A comparison of the use of these foreign styles at Teotihuacán and at other Maya sites provides information about the degree and nature of interaction between the La Sufricaya elites and central Mexico.

#### **Forms**

Two buckets with vertical walls and everted rims, one Lucha Incised and one Aguila Orange, are unusual forms recovered at La Sufricaya. One of the vessels has hollow tripod supports but the base configuration of the other is unknown. This form has no antecedents at La Sufricaya or Holmul and is not found at other sites in the central Petén or at Teotihuacán. The form appears to be a local innovation in serving ware or ritual ware.

The so-called “Bleeding Heart vessel” is one of these rare forms and it is incised with a repetitive tri-spiral motif pierced with flint or obsidian knives and droplets of blood below (Figure 5.8). The tri-spiral symbol is well-known at Teotihuacán where it is found incised on vessels and painted in murals (Figure 5.9).

The tri-spiral has been interpreted as a cross-section of the human heart (Langley 1986: 298; Séjourné 1956, 1959; von Winning 1987(ii): Figs 5a-e), and as a motif that relates to heart sacrifice. The motif on the La Sufricaya vessel is uncannily similar to murals painted in Sector I of the La Ventilla *barrio* at Teotihuacán in the Plaza de los Chalchihuites, which consist of the tri-spiral motif pierced with knives (Figure 5.10). This compound is located 600 meters southwest of the Ciudadela (Mercado and Martínez 1995). The murals were discovered during salvage operations carried out by Mexican archaeologists. While the murals have been described, very little contextual and interpretive information is available.

The tri-spiral decorative motif has not been found in the ceramic assemblages of other Maya sites thus far. Furthermore, it does not fit the pattern of foreign decorative motifs found on Maya vessels, which usually involve Tlaloc and Great Goddess imagery, processions of priests or warriors and images of the tassel headdress. This distinction implies that the La Sufricaya or Holmul artisan who created the vessel had intimate knowledge of its meaning at Teotihuacán. Additionally, the presence of the motif at La Sufricaya suggests that the nature of interaction between Teotihuacán and La Sufricaya varied from the traditional models based on the expansion of trade networks or political take-over. Alternatively, the Maya artist may have simply used the motif because the design was aesthetically pleasing and the meaning of the motif at Teotihuacán may have been unknown to him.

Another unusual form found at La Sufricaya is the “corn cob censer” made of Unnamed Unslipped censer ware (Figure 5.11). The chimney cone of the censer is

decorated with thumb impressions that resemble a corncob. Callaghan notes that this type and form has been recovered from Uaxactún and Teotihuacán. At Teotihuacán it has been recovered in Early Xolalpan (AD 350-450) contexts in the Oaxaca Barrio as well as Late Xolalpan contexts. At Teotihuacán these *incensarios* were often deposited as votive offerings during founding or renovations of apartment compounds and temples. A corncob censer was also included in a head burial dating to the Early Xolalpan phase in the Oaxaca Barrio (Rattray 2001: 206-207, Figures 100, 134 and 135).

### **Decorative motifs**

Several fragments of cylinder vessels recovered from La Sufricaya were decorated with a band of circular appliqués at the base (Figure 5.12). This decorative motif has been called “screw heads,” “coffee beans” and “cacao beans” by Maya scholars. At Teotihuacán this decorative mode is used as early as the Late Tlamimilolpa (AD 300-400) phase on a tripod cylinder vase recovered from a burial in the La Ventilla *barrio* (Rattray 2001: Figure 87). Teotihuacán scholars refer to this decoration as “split disks”. Similar designs are painted in murals of the Great Compound where jaguars are depicted standing on top of “Sectioned circles,” which have also been described as “broken eggs” by scholars (Figure 5.13). A vessel from Teotihuacán may provide confirmation of the meaning of these decorative appliqués. A cylinder tripod vessel with a Xolalpan style <sup>18</sup> relief carving on the walls of the vessel depicts a person collecting cacao pods (Angulo Villaseñor 1996:124). The base of the vessel is decorated with a single band of the appliqués,

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<sup>18</sup> Angulo does not provide any information regarding the provenience of this vessel. Presumably, it is a looted vessel and the date cannot be confirmed.

which, when viewed within the context of the carved scene on the vessel appear to be cacao beans (Figure 5.14).

The foreign influence in La Sufricaya ceramics appears to have been limited to surface decoration on local ceramic forms. Teotihuacán forms have not been found at the site, and the cylinder tripod, though often identified as a foreign form, has antecedents in the local and regional ceramic assemblages.

## **Conclusion**

This analysis of the La Sufricaya ceramic assemblage, coupled with a comparison to Teotihuacán ceramic forms and decorative modes and foreign styles found in the Maya region provides some insight into the sociopolitical history of La Sufricaya. The assemblage reflects local and regional developmental trends within the Holmul region and the Maya lowlands. The vessel forms recovered from Structure 1 include utilitarian ware for domestic food production, elite serving ware and ceremonial forms likely used in household rituals.

The INAA analysis indicates that an Early Classic workshop at La Sufricaya operated independently from Holmul workshops and that the elites of La Sufricaya gifted or exchanged ceramics with Naranjo. Further analysis of the Holmul/La Sufricaya samples and comparison with other sites may elucidate sociopolitical interaction in the form of ceramic exchange. Stylistic evidence, in the form of the Positas modeled effigy fragment and corncob censer fragment implies interaction between La Sufricaya and Tikal, Uaxactún and Teotihuacan or participation by La Sufricaya elites in regional practices of affiliation centered on ritual behavior.

The similarities in the iconography of the La Sufricaya “bleeding heart” vessel, the Balanza black bowl from Tikal burial PNT-174 at Mundo Perdido and the Atetelco and Tetitla murals at Teotihuacán suggest that an artist from the Holmul region had first or second-hand knowledge of Teotihuacán art and used that knowledge to create elite serving vessels.

Rather than replicating Teotihuacán ceramic technology, the foreign styles in the Maya region combine local forms with iconography from Teotihuacán mural and ceramic art. Although cylindrical vessels at Teotihuacán incorporated some of this iconography, in general the decorative motifs were more abstract. The cylindrical tripod vessels decorated with painted stucco, which scholars refer to as markers of Teotihuacán identity, were not in widespread use during the Early Xolalpan phase in central Mexico.

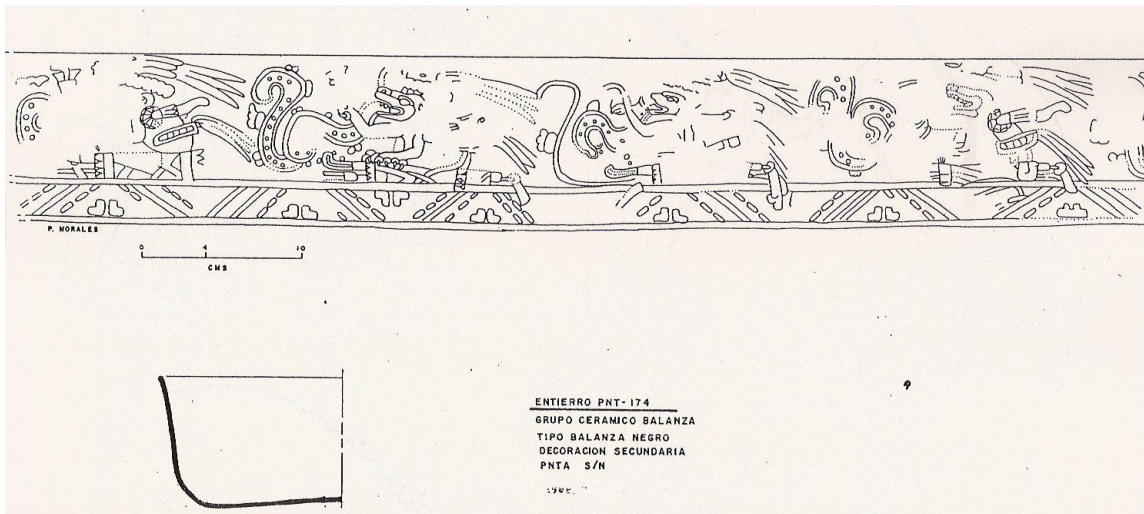
Thus, it appears that the vessels were not introduced to the Maya area by a colonizing force of Teotihuacanos who imposed their technology and ideology on the local populace. Rather, these vessels represent conscious choices made Maya rulers and artisans, who selected elements of Teotihuacán ideology to incorporate into innovative designs that conveyed a significant message to a selective audience. The Teotihuacán iconography may have been introduced to the Maya elite during the 4<sup>th</sup> century, perhaps in the form of codices brought by foreign emissaries as Coggins (1975) suggests, but we must also consider that the members of the subsequent generation may have traveled to Teotihuacán on pilgrimage or as an apprenticeship of sorts to receive symbols of rulership and legitimize their authority. If this were the case, these future Maya rulers, and the members of their

entourages, would have viewed the murals on which many of the designs are based firsthand.

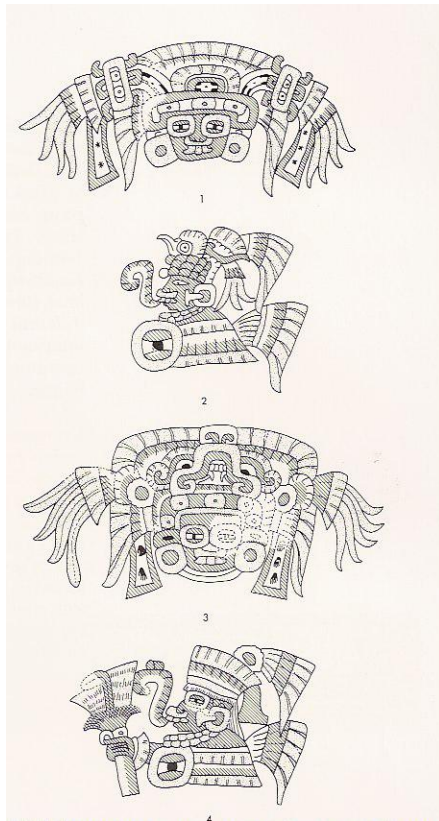
The production, exchange and inclusion of these vessels in elite tombs of the 5<sup>th</sup> century represent practices of affiliation carried out by members of an imagined regional elite community of rulers who were allied by their connection to Teotihuacán, whether it was real or conjured. Based on INAA analysis, vessels recovered from Teotihuacán, Uaxactún and Copán can be traced back to Tikal and Mundo Perdido, suggesting the lords of Tikal played an integral and perhaps founding role in the imagined regional elite community. Future excavations and INAA analysis may reveal more members of this imagined community and trace the exchange networks between Maya rulers.



**Figure 5.1 Positas Modeled: Variety Unspecified effigy fragment recovered from Structure 1 (Photo by the author)**



**Figure 5.2 Drawing of Balanza Black vessel recovered from Tikal burial PNT-174 decorated with jaguars wearing feathered headdresses (After Laporte 1989: Fig. 75)**

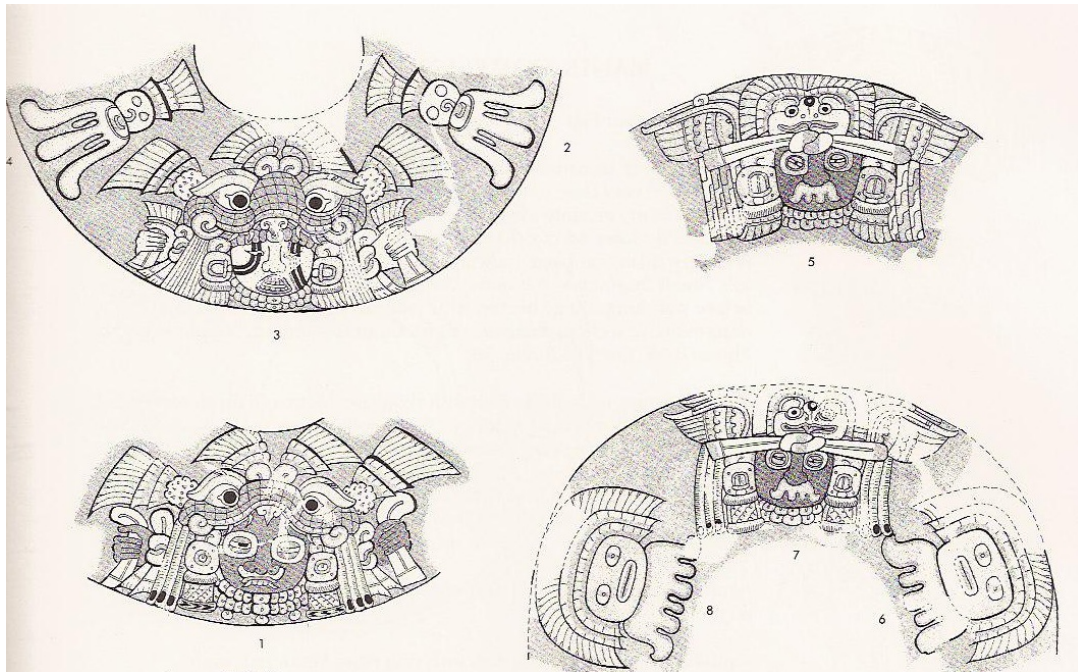


**Figure 5.3 Drawing of Teotihuacán-style figures on vessel 12C-517/35 from Tikal Burial 10 (After Culbert 1993: Fig. 17)**

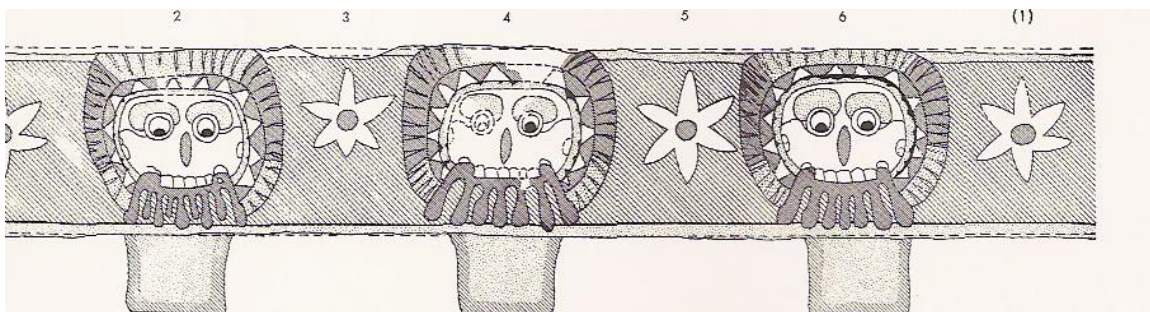


**Figure 5.4 Detail drawing of Teotihuacán-style figure on vessel 12C-489a, b/35 from Tikal Burial 10 (After Culbert 1993: Fig. 15)**





**Figure 5.5 Drawing of Teotihuacán-style figures on vessel 12C-546a,b/35 from Tikal Burial 10 (After Culbert 1993: Fig. 16)**



**Figure 5.6 Drawing of vessel 12K 236a,b/22 decorated with painted stucco and Teotihuacán-style iconography from Tikal Burial 48 (After Culbert 1993: Fig. 30)**

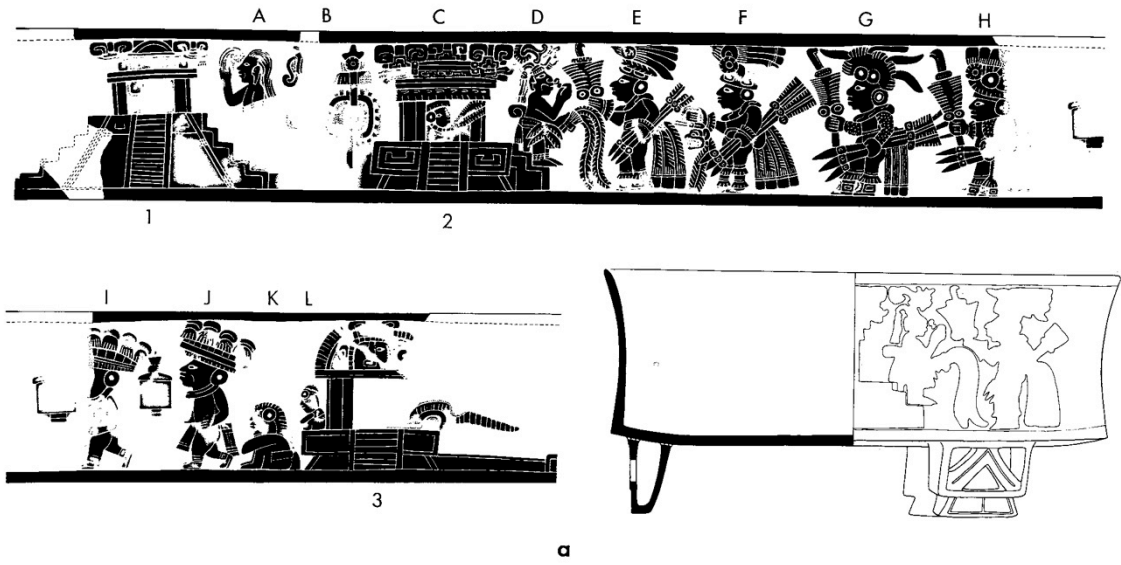


Figure 5.7 Drawing of vessel 10E-52/2 from Tikal Problematic Deposit 50 (After Culbert 1993: Fig. 128)

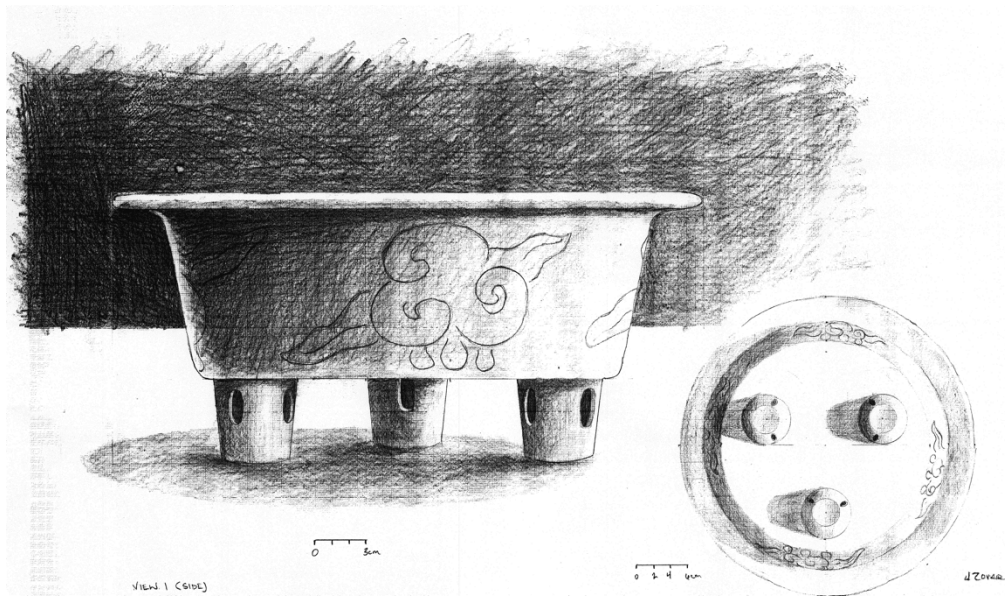
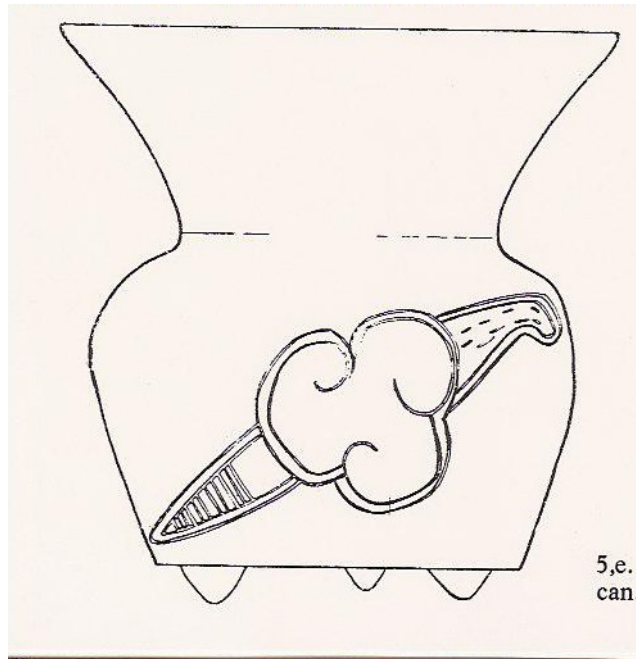
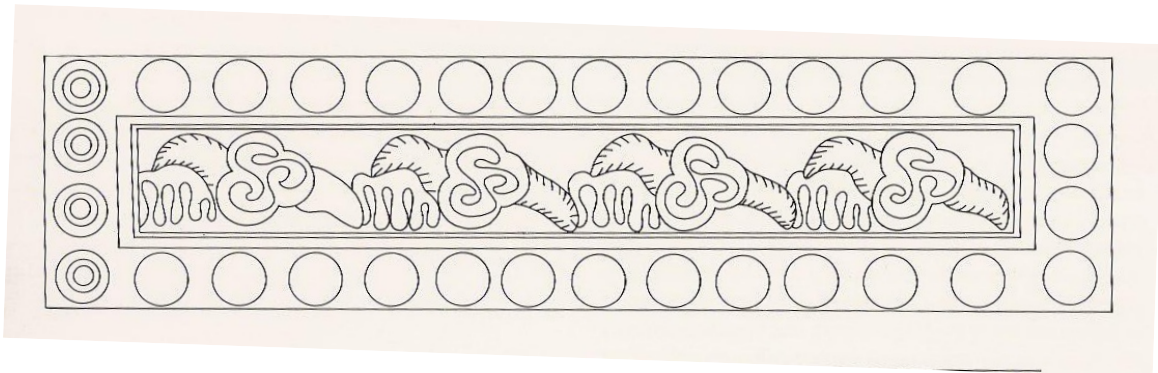


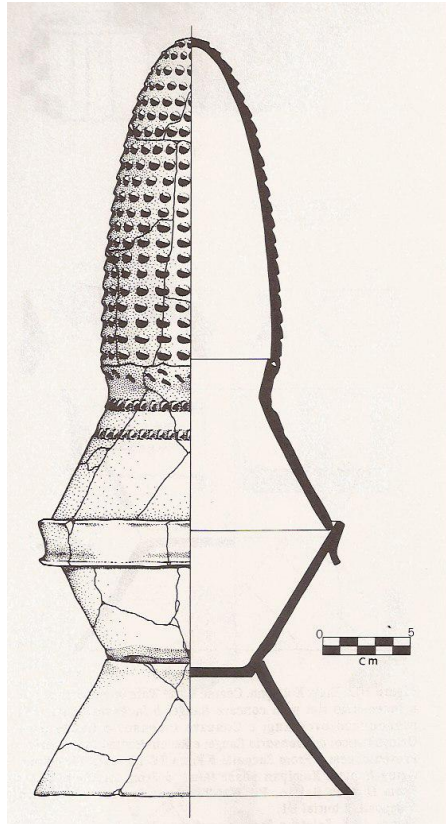
Figure 5.8 Drawing of Lucha Incised vessel decorated with Teotihuacán tri-spiral motif recovered from La Sufricaya Structure 1 (Drawing by Joel Zovar)



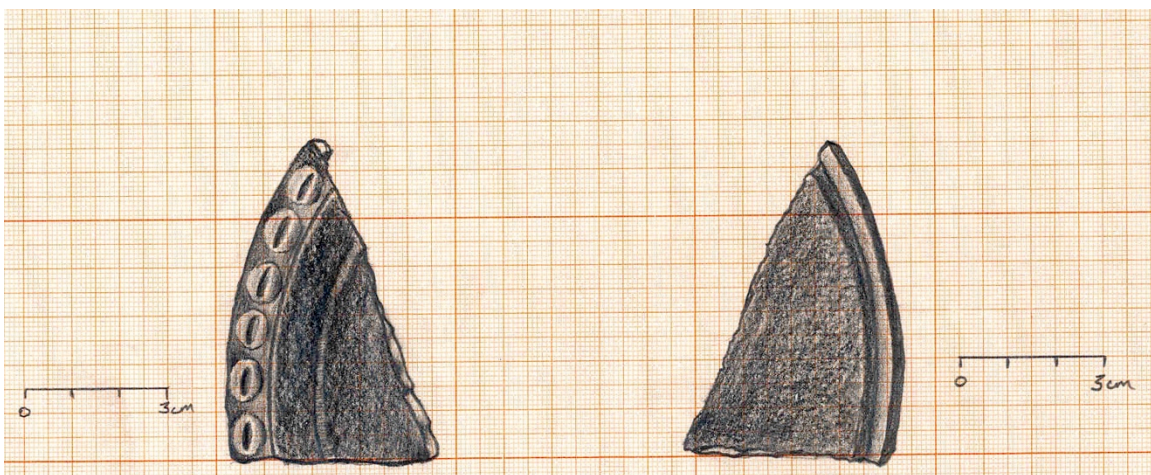
**Figure 5.9 Drawing of Teotihuacán vessel decorated with the tri-spiral motif pierced by a knife (After von Winning 1987 Fig 5,e)**



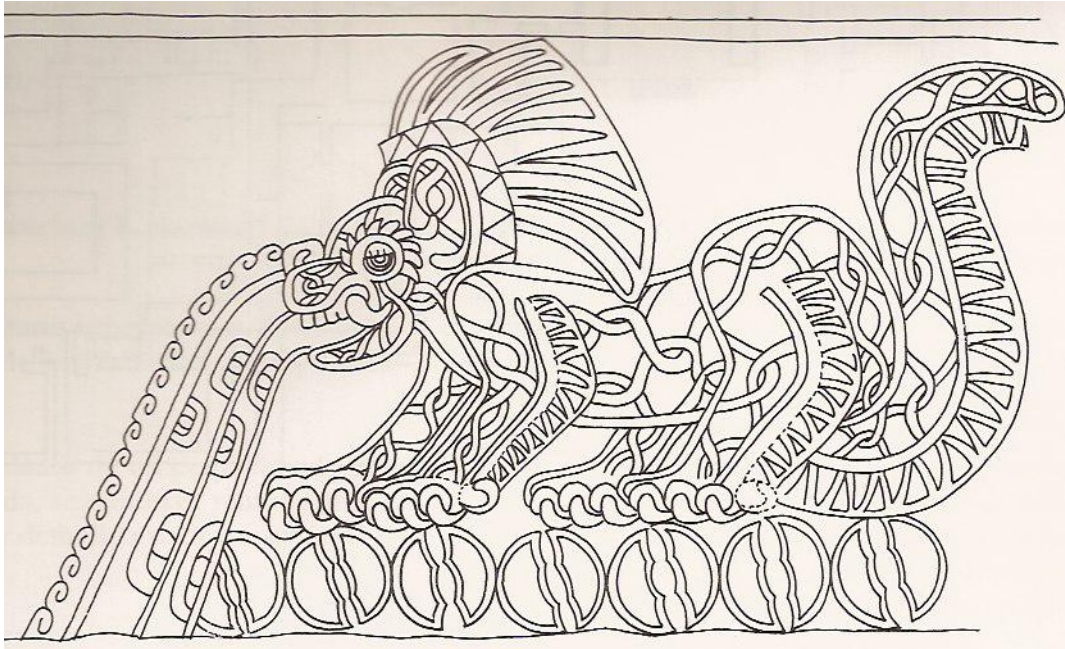
**Figure 5.10 Drawing of mural with tri-spiral pierced with knives and drops of blood located in the Plaza de los Chalchihuites, La Ventilla, Teotihuacán (After Mercado and Martínez 1995 Fig. 17.10)**



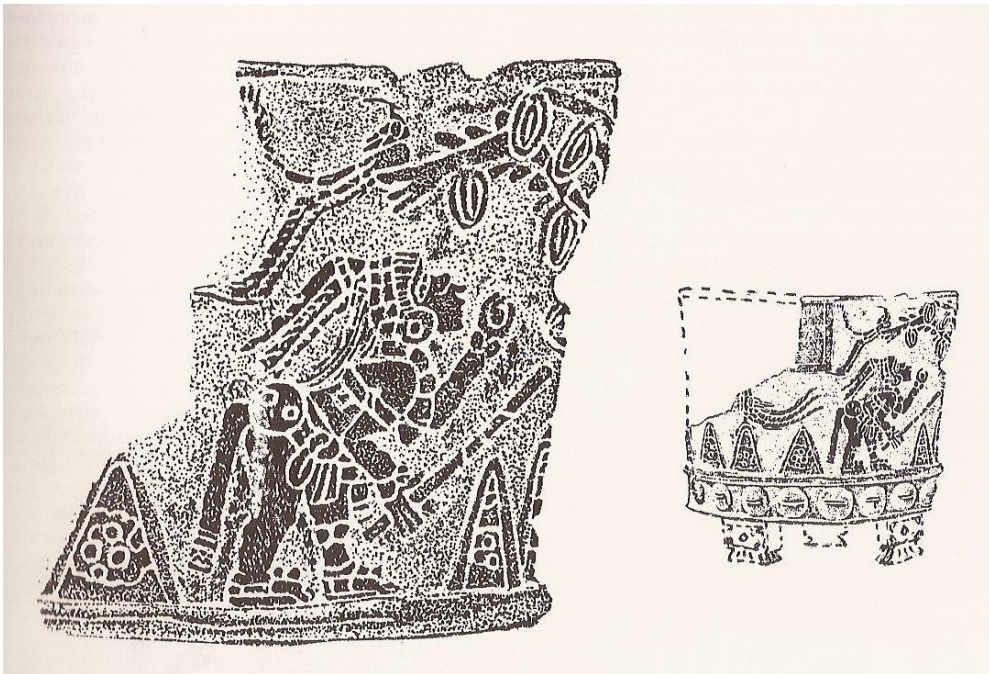
**Figure 5.11 Teotihuacán Coarse Matte Ware “corn cob” Incensario (After Rattray 2001 Fig. 100)**



**Figure 5.12 Drawing of vessel lid fragment decorated with cacao pod appliques recovered from Structure 1 at La Sufricaya (Drawing by Joel Zovar)**



**Figure 5.13** Drawing of mural from the Great Compound at Teotihuacán depicting a jaguar standing on top of “sectioned circles” (After Cabrera 1995 Fig. 2.2)



**Figure 5.14** Vessel depicting the harvesting of cacao decorated with cacao bean appliqué around the base (After Angulo 1995 Fig. 3.31)

## Chapter VI - Lithic Analysis

### Introduction

The creation and use of stone tools was a defining moment in human evolution and it is no wonder that lithic analysis is an integral component of archaeological research. With the most durable class of artifacts as its focus, lithic analysis can shed light on many facets of ancient cultures. The procurement of source material can be used to reconstruct trade networks and economic systems while elucidating the relative status of a site and its people based on access to rare or exotic materials. The production methods shed light on craft specialization and social organization. The forms of stone tools and assemblage variability can provide information about human activity and even group or ethnic identity. Use-wear and residue analysis of tool edges can even be used to reconstruct ancient diet and subsistence (Odell 2004).

This chapter presents an overview of lithic analyses carried out in Mesoamerica and how they have informed scholars about various realms of ancient life – from daily practices to long-distance trade and social organization. Many of these studies have focused on obsidian tools and trade, which is a reflection of the ubiquity of this technology throughout Mesoamerica, and an overview of the uses and social significance of obsidian follows the summary of lithic analyses.

The remainder of the chapter is dedicated to the lithic assemblage from La Sufricaya and how this evidence contributes to the research goals of this work. My analysis follows the general trend of lithic analyses in Mesoamerica by

concentrating on the obsidian data because it comprises the largest percentage, in quantity, of lithic technology and has been studied more thoroughly than other materials from the excavations. An important component of the lithic assemblage is the Pachuca obsidian imported from Central Mexico, and this analysis includes a comparison of how this trade item was used at La Sufricaya and other sites in the Petén during the Early Classic period, as well as at Teotihuacán itself. Ultimately this analysis will contribute to an understanding of the types of activities that took place within Structure 1, participation by the La Sufricaya lords in regional and long-distance trade networks, the degree and nature of interaction with Teotihuacán, and the use of Pachuca obsidian as a medium of the Early Classic imagined community of Petén rulers.

### **Lithic Analyses in Mesoamerica**

Ricketson's (1937) brief analysis of stone artifacts from Uaxactún opened the door to Mesoamerican lithic studies and was followed by Kidder's (1947) monograph of the lithic artifacts from the site. Kidder's work introduced archaeologists to the possibilities of lithic analysis and set the standard for the next thirty years. Scholars continued to follow Kidder's typological approach based primarily on sorting artifacts into utilitarian or ceremonial categories until the 1970s when Sheets (1972, 1975) introduced Don Crabtree's behavioral model in his analysis of the manufacture of prismatic blades at the Bustamante site. The behavioral approach aims to understand the manufacture process of stone tools, often through replication experiments.

During the 1960s and 70s new technology introduced provenance studies as scholars rushed to identify obsidian sources through neutron activation analysis (NAA) and X-ray fluorescence (XRF) (Clark 2003:32). These provenance studies allowed scholars to source artifacts excavated at distant sites and reconstruct trade networks.

During this same period studies also focused on functional analyses that elucidate how tools were used through use-wear and residue analysis (Fowler 1991:6-7).

Quantitative studies of cutting edge to mass ratios have also been used to understand access to raw material and participation in trade networks. A clear pattern has emerged in that mean blade widths decrease as a function of distance from the obsidian source (Rovner 1975). Interpreting this pattern has been problematic though and is tempered by the fact that blades will narrow as the core is exhausted (Clark 2003:38).

Lithic analysis has also been used to understand craft specialization, though this line of investigation has been hampered by the paucity of archaeologically defined workshops. The site of Colha has produced the most clear-cut evidence for craft specialization in the form of chert bi-face workshops (Fowler 1991:4-6; Hester and Shafer 1991).

Moving forward, Sheets suggests that scholars should look for both patterns and differences in lithic systems. The patterns of similarities shed light on consistencies, shared ways to produce implements, common traditions, and intersite communication while the differences represent local solutions to local problems and provide information on differential access to raw material and how



that access can affect lithic production as well as how independent or attached specialists operated in society (Sheets 2003:13).

### **Obsidian in Mesoamerica**

The bulk of lithic analyses have centered on obsidian stone tools and how people procured this invaluable and vital resource, especially in areas like the Maya lowlands where it is not found locally. Obsidian is an igneous rock that is valued all over the world for its characteristic of producing and holding a sharp edge. Technically, it is silicon dioxide ( $\text{SiO}_2$ ) and is produced from lava flows that cool so quickly that crystals do not have time to form in the rock, which results in the glassy quality of the material. Obsidian is formed as the result of lava flows during the end of the volcanic cycles and is typically found in association with domes in the form of nodules, massive layers between other volcanic rocks or as exposed flows (Kovacevich 2006:272-3). Rather than fracturing on a natural fracture plane, like crystalline rock, obsidian fractures conchoidally resulting in a predictable fracture plane that is relatively easy to work with and form into tools.

The color of obsidian is determined by the oxidation of various minerals within the rock. The typical black color results from the presence of magnetite in the rock while the presence of iron produces a green hue. Other physical characteristics of obsidian can include banding, which is the result of the lava flow folding as it moves, particulate inclusions and air bubbles. All of these descriptive attributes are usually particular to geographical regions-such as the green obsidian from the Pachuca source at Sierra de las Navajas-which makes it possible for specialists to visually source obsidian artifacts. Several obsidian sources were

utilized in Mesoamerican prehistory throughout Mexico and in the Guatemalan highlands (Figure 6.1). The most important obsidian sources for the ancient Maya were Ixtepeque, San Martin Jilotepeque and El Chayal in Guatemala and the Pachuca source in Central Mexico, though the relative importance of these sources shifted throughout time.

Obsidian became widely used in the Maya lowlands during the Middle Preclassic period (1300-400 BC) and most of it was supplied by the San Martin Jilotepeque source located northwest of modern day Guatemala City. The El Chayal source controlled by Kaminaljuyú replaced San Martin Jilotepeque during the Late Preclassic period (400 BC-AD100) as the major supplier of obsidian to the lowlands and continued to do so through the Terminal Classic period; Ixtepeque obsidian also gained in popularity during this period (Hammond 1994:231-3). Pachuca obsidian from Mexico was first introduced to the Maya lowlands during the Late Preclassic period, but appears in limited quantities at Tikal and in a single cache from Altun Ha (Moholy-Nagy 1975; Pendergast 1971). One difference between the obsidian trade networks is that the Guatemalan obsidian appears to have been imported to the Maya lowlands in the form of polyhedral cores that were then reduced into blades on-site while obsidian from the Pachuca source was imported as pre-fabricated blades (Nelson & Clark 1998; Moholy-Nagy 1975)

#### Social and symbolic significance of obsidian

Every culture in Mesoamerica used obsidian to produce a wide array of tools for every-day use and ritual purposes. The most common tool found archaeologically is the prismatic blade, which could be considered the Swiss Army

Knife of the ancient world. The prismatic blades, characterized by two cutting edges, were used for a variety of purposes such as shaving, blood-letting, cutting or slicing soft materials and could even be inserted into wooden clubs to form weapons such as the Aztec *macana* or the Teotihuacan *macuahuitl*. However the blades were not very durable and broke easily, which required frequent replacement (Clark 1989:311-14).

Obsidian flakes could be used as scrapers to tan hides and cut vegetation while blades could also be formed into awls with a pointed end. Obsidian could also be made into mirrors for ritual and household use and obsidian “sequins” were likely inlaid as eyes for statues, figurines and masks. Another less practical use for obsidian, among the Aztec at least, was punishment. Prisoners or people who had committed some offense were reported to be kept in cages lined with sharp obsidian chips, which they had to walk and sleep upon (Clark 1989:300). Obsidian blades, knives and eccentrics were also used as ritual offerings in caches and burials.

Aside from the obvious material significance, the obsidian industry played a pivotal role in social, economic and political organization. Obsidian procurement and production necessitated specialized roles for quarrying, mining, trading and tool manufacture. Controlling access to obsidian sources contributed to the fortunes and power of cities such as Teotihuacan (Santley 1983; Spence 1981), Copan (Ayonama 2001) and Kaminaljuyú (Braswell 2003). The demand for obsidian throughout Mesoamerica, but especially the Maya lowlands where it is a non-local resource, extended trade networks and political alliances.

As a crucial material for daily and ritual life, obsidian played a complex role in pre-Columbian Mesoamerican culture and served as a “bridge between symbolic and physical realities” (Saunders 2001:222). Obsidian, much like jade, was a material that had both material and symbolic value. Unlike jade, however, obsidian was available to most of the population rather than being restricted to elite consumption. Much of what we know of the symbolic meaning of obsidian in pre-Columbian Mesoamerica comes from Aztec and Spanish sources and some Maya ethnohistoric studies.

As a product of volcanoes or “smoking mountains,” obsidian was associated with sacred places that were home to ancestors and spirits and that generated weather. In Maya languages and mythology obsidian is associated with lightning strikes and in modern Chol the term for obsidian blades is *u kach Lac Mam*, which translates as “the fingernails of the Lightning Bolt” (Schele and Freidel 1990:463).

The Aztec pantheon included obsidian manifested as the supreme deity *Tezcatlipoca*, whose name meant “Lord of the Smoking Mirror” and was the patron god of Aztec royalty. *Tezcatlipoca* carried obsidian “smoking mirrors” which he used for divination and symbolized rulership and power. Among the Aztec and the Quiché Maya obsidian was associated with the Underworld where different realms posed trials like the obsidian mountain, obsidian-bladed winds and the house of obsidian knives (Clark 1989:300).

Obsidian represented cultural image as much as specialized technology (Saunders 2001). Just as obsidian is a defining shared trait of Mesoamerican cultures for modern scholars, certain types of obsidian and tools may have been

iconic of particular ethnic groups and geographical areas of ancient Mesoamerica. Saunders argues that obsidian possessed polysemic qualities in the multi-sensorial worldview of Mesoamerican peoples based on the shimmer and iridescence of its appearance, the natural and symbolic meanings associated with its distinct geographical origin, the political and economic relationships created by procurement strategies and the technological choices deemed appropriate to shape it into a tool (Saunders 2001:223).

“Obsidian’s peerless utility in a world without metal tools, together with its occurrence at particular geological locations, generated an enduring Mesoamerican aesthetic which saw the controllers of obsidian sources and the makers of obsidian blades connected to cosmic forces. This in turn endowed subsequent acts of obsidian use with potency and significance, whether in acts of sacrifice and bloodletting, or in producing a regional web of exchange networks throughout Mesoamerican prehistory. From this perspective, obsidian can be considered unique in its capacity to create social relationships and, stimulate symbolic connections between materiality and culture across Mesoamerica (Saunders 2001:223-4).

Since obsidian is not a local resource in the Maya lowlands, it is quite significant that this essentially foreign material became an integral component of domestic and spiritual life in the lowlands. It is no wonder that obsidian came to have such complex meanings throughout Mesoamerica.

### **The La Sufricaya Lithic Assemblage**

A large portion of the lithic artifact assemblage recovered from La Sufricaya consists of items that were disposed of in the Early Classic midden associated with Structure 1. This midden material was later used to fill in the rooms of the complex

before it was buried and terminated. The rest of the assemblage was recovered from fill contexts associated with other Early Classic phase construction within the ceremonial core of the site. Unfortunately, no lithic artifacts were recovered from primary Early Classic contexts such as household floors, caches or burials. A handful of artifacts were recovered from primary Late Classic contexts, but they are not germane to the research questions of this study and will not be discussed in this chapter though they are included in the Appendix. Therefore, the limited sample discussed below represents secondary deposition.

The assemblage consists of obsidian flakes, scrapers, prismatic blades and blade segments, bifaces, core fragments and a small sample of *mano* and *metate* fragments and specialized tools like bark beaters and cylinder seals. Several chert biface fragments were also recovered, and Hruby remarked that some of the chert appeared to have been imported from Colha in northern Belize. Since I am not a lithic specialist, this summary relies on the technical analysis of Hruby et al. (2007).

Analysis of the obsidian, chert and ground-stone artifacts recovered from La Sufricaya will contribute answers to each of the research goals of this study. At the most basic level classifying the lithic artifacts into utilitarian or ceremonial types will aid in identifying the activities that were carried out by the inhabitants of La Sufricaya and will address the question of the function of the structure and the site. Identifying non-local obsidian resources will elucidate the trade networks in which the La Sufricaya elite participated and their roles in regional sociopolitical development.

Comparing the mean blade width of obsidian prismatic blades from La Sufricaya to the mean width of blades from other sites will elucidate the degree of access La Sufricaya lords had to obsidian sources and their participation in trade networks. This statistic could also help determine whether La Sufricaya had direct access to the Pachuca source through foreign trade networks or not.

The presence of obsidian imported from Central Mexico indicates that La Sufricaya interacted directly with Teotihuacán emissaries or participated in an imagined community of ruling elite. One key to understanding this distinction is to determine whether the tools made from Pachuca obsidian correspond with local assemblages or if foreign technology was made and used at La Sufricaya. If the tools made of Pachuca obsidian follow local traditions then it would appear that the La Sufricayans were merely using an exotic resource to suit their needs, but the use of that exotic resource demonstrated their link to the imagined community, and by extension Teotihuacán. The use, and manufacture, of foreign lithic types, on the other hand, could indicate that La Sufricayans had a more intimate knowledge of foreign technology through direct contact with Teotihuacán – either through trade or political contacts.

Alternatively, the types of Pachuca tools used at La Sufricaya might shed light on the affect of foreign interaction on Maya identity. The continued use of local technology made of a foreign resource could represent heterodoxy and the persistence of Maya habitus and identity. Amazingly, all of this information can be gleaned from artifacts that are generally only a few centimeters long and as light as a feather.

## Obsidian artifacts

Zachary Hruby analyzed the obsidian artifacts recovered from La Sufricaya were during the 2005 laboratory season in Antigua, Guatemala (Hruby et al. 2007). During this preliminary analysis, Hruby and his colleagues examined the entire obsidian assemblages excavated thus far from Holmul, Cival and La Sufricaya as well as a sample of chert bi-faces and jade celts from Holmul and Cival respectively. This analysis laid the groundwork for future in-depth analyses but did not include lithic material excavated in the 2007 field season. The obsidian assemblage from La Sufricaya is comprised of 373 artifacts, most of which were recovered from Early Classic contexts (see Appendices B, C and D).

The excavations at La Sufricaya produced the greatest quantity of obsidian artifacts among the sites in the Holmul domain (Tables 6.1 and 6.2). Hruby conducted a visual sourcing analysis of the obsidian artifacts based on his experience with the obsidian artifacts from Piedra Negras. Some scholars have questioned the reliability of visual sourcing but Braswell et al. (2000) have demonstrated the accuracy of experienced specialists. Future chemical assay analysis is recommended, however, to confirm the preliminary visual analysis.

<b>Obsidian source</b>	<b>La Sufricaya</b>	<b>Holmul</b>	<b>Cival</b>	<b>Ko'</b>
Zaragoza	2	0	0	0
Ucareo	2	3	0	1
San Martin Jil.	5	5	32	1
Pachuca	34	0	0	0
Ixtepeque	3	9	1	1
El Chayal	295	192	112	20
Total	341	209	145	23

**Table 6.1 Percentage of obsidian recovered from sites within the Holmul region attributed to various Mesoamerican sources (After Hruby et al. 2007 Table 1**



<b>Obsidian source</b>	<b>La Sufricaya</b>	<b>Holmul</b>	<b>Cival</b>	<b>Ko'</b>
Zaragoza	1	0	0	0
Ucareo	1	1	0	4
San Martin Jil.	2	2	22	4
Pachuca	8	0	0	0
Ixtepeque	2	4	4	4
El Chayal	87	91	91	91

**Table 6.2 Artifact counts per obsidian source from sites within the Holmul region (Field seasons 2000-2005) (After Hruby et al. 2007 Table 2)**

The highest percentage (87%) of artifacts from the 2005 sample were sourced by Hruby et al. to the El Chayal source while 8% of the artifacts are from the Pachuca source. The addition of obsidian from the 2007 field season excavation reduces the percentage of Pachuca obsidian slightly to 7% (n=35) because the overall quantity of obsidian increased. Obsidian from the Guatemalan sources of San Martín Jilotepeque and Ixtepeque were identified as well as material from the Mexican sources of Zaragoza and Ucareo, though in much smaller quantities.

The obsidian from La Sufricaya indicates some divergent practices from the rest of the Holmul domain. The Holmul Archaeological Project excavations have not produced Pachuca obsidian at any other site within the Holmul domain, though Santley (1983) refers to a Pachuca obsidian blade recovered by Raymond Merwin during his excavations in Building B at Holmul. La Sufricaya is the only site to possess Zaragoza obsidian, though Ucareo obsidian was identified in the Ko' Lechugal and Holmul samples. The dominance of El Chayal obsidian at La Sufricaya, however, corresponds to regional exchange patterns and indicates that La Sufricaya

and the Holmul domain participated in the trade network operated by Tikal (Ford et al. 1997; Fowler et al. 1989; Hammond 1994; Moholy-Nagy et al. 1984; Rice et al. 1985; Santley 1983). Based on the lower percentage of fine versus smoky obsidian from El Chayal, Hruby et al. suggest that the people of La Sufricaya received their obsidian from the La Joya area of the El Chayal source (Hruby et al. 2005: 3-4).

Prismatic blade segments comprise the bulk of the lithic assemblage, approximately 91% of the sample (n=339). Other forms include a single sequin, assorted flakes and debitage, bi-faces and core fragments. Hruby et al. identified 3 transverse parallel pressure flakes of Pachuca obsidian as well as a single distal rejuvenation blade made of Pachuca obsidian. This scant evidence suggests that *atlatl* dart points may have been manufactured at La Sufricaya and that Pachuca cores may have been reduced on-site, but a greater sample is required to confirm these activities. No Pachuca cores have been recovered in excavations, but Moholy-Nagy (1999) reports the absence of Pachuca cores at Tikal even though other evidence indicates Central Mexican obsidian was worked at the site, and therefore, the lack of a particular line evidence does not necessarily mean that Pachuca tools were not produced at the site.

Some of the prismatic blades, made of both Guatemalan and Mexican obsidian, had been retouched, indicating that people at La Sufricaya could have worked the obsidian and reused dulled blades, perhaps. Examples of retouching include notched blade fragments (Figure 6.2).

Overall, the obsidian artifacts represent utilitarian activities rather than ritual or ceremonial use. With the exception of the sequin, the obsidian assemblage

was probably used for food preparation, personal hygiene and possibly bloodletting. Use-wear and/or residue analysis could confirm these conclusions. The inhabitants of La Sufricaya probably used obsidian in ritual activities as well, such as depositing blades or eccentrics in caches and burials, but intentional removal of caches from Structure 1 and the looting of the elite tombs have erased any evidence of this behavior.

### **Pachuca Obsidian in the Maya region**

While the use of Pachuca obsidian became more widespread in the Early Classic period, it was introduced to the Maya lowlands as early as the Late Preclassic period. The internal structure of Pachuca obsidian, which was procured from Cerro de las Navajas region, is very pure with few inclusions that results in a clear and high quality obsidian. The excellent quality of the material and the social significance of the color green may have contributed to the exotic and elite status of Pachuca obsidian. The color green was regarded as a royal color because it is the color of quetzal feathers and jade, which are materials that were reserved for the rulers (Sharer 1994:726).

Spence (1981) argues that the procurement, transport and distribution of Pachuca obsidian were controlled by the Teotihuacán state. Pachuca obsidian was procured from four different sites in the Navajas region, and then transported to Teotihuacán through a state-organized conduit, where it was collected and redistributed to workshops in the city. The Teotihuacán state maintained tight control of the Pachuca obsidian and prevented it from being distributed outside of area to rival workshops in the Valley of Mexico and beyond (Spence 1981: 777-779).

Therefore, unlike some of the other markers of Teotihuacán identity that appear in the Maya lowlands during the Early Classic period and could have been imitated or introduced by other means, Pachuca obsidian represents a more direct connection to central Mexico as its presence in the Maya lowlands required approval from and cooperation with the Teotihuacán state.

During the Early Classic period, Pachuca obsidian was used at sites ranging from Tikal and Uaxactún and other Petén sites, Altun Ha in Belize, Kaminaljuyú in the highlands, and Copan in the hinterlands. The greatest quantities of Pachuca obsidian have been recovered from Tikal and Kaminaljuyú, which indicates that these sites were the primary distribution points along the trade route from Central Mexico (Nelson & Clark 1998: 317). Santley (1983) and Spence (1996) have detailed the presence of Pachuca obsidian in the Maya Lowlands and Highlands. While Pachuca obsidian has been found at more than 25 sites throughout the Maya region, this comparison focuses on sites that have produced significant amount of green obsidian artifacts from Early Classic contexts.

### Tikal

Pachuca obsidian was used from the Early Late Preclassic through the Terminal Classic period at Tikal, primarily for point-knives (bifacial projectile points or knives) as well as prismatic blades. Rare forms include eccentrics and other forms that are similar to those used at Teotihuacán during the Protoclassic and Classic periods (Moholy-Nagy 1989:381). The use of Pachuca obsidian peaked during the Early Classic and included the maximum array of artifact types, including

sequins and eccentrics, while the artifact types used during later periods were restricted to prismatic blades and thin bifaces (Moholy-Nagy 1999).

Moholy-Nagy suspects that the ceremonial and non-indigenous forms of the Pachuca obsidian artifacts were imported as finished products but small exterior blades (n=3), flakes (n=12) and core fragments (n=4 (Moholy-Nagy 1989), n=10 (Moholy-Nagy 2003) or n=12 (Moholy-Nagy 1999)) suggest that some Pachuca prismatic blades were manufactured at Tikal. The remnants of Pachuca blade production (cores and flake debitage) is very scant when the number of Pachuca blades (1,105 for all time periods), is considered and Moholy-Nagy believes this is because Pachuca obsidian was imported in a more finished form than the Guatemalan obsidian polyhedral cores and probably required limited preparation in order to create blades, which resulted in very little waste debitage (Moholy-Nagy 1999: 304).

Moholy-Nagy reports that 30% of the thin bi-faces recovered at Tikal were made of Pachuca obsidian and were probably imported as finished products (Moholy-Nagy 2003:29). Some other unusual forms made of green obsidian include a single macroblade measuring 12.4 cm, which was recovered from problematical deposit PD 273. This unique artifact has been dated to the Early Classic period; it was struck from a large polyhedral core and the heavy use-wear indicates it may have been used to cut or scrape hard substances. An unusually large scraper measuring 6.8 cm long was also made of green obsidian and retouched on all edges. A broad prismatic blade segment measuring 2.5 cm wide was made of Pachuca obsidian while another was made of Zaragoza obsidian (Moholy-Nagy 2003:30-1).

Throughout all periods, the highest percentage of Mexican obsidian (11%) was recovered from contexts that were not associated with any structure group, and most of these contexts were special deposits designated as “burial-like problematical deposits” that date to the Early Classic period (Moholy-Nagy 1999:307). A number of these problematical deposits included human remains associated with Teotihuacán-style ceramics and artifacts. These artifacts included nine Pachuca eccentrics and an unclassified artifact (Figure 6.3). Some of the eccentrics are identical to forms found at Teotihuacán, including a dog, flaked spine, a fine blade midsection, the tail end of a feathered serpent and a sequin. These eccentrics were recovered from contexts dating from the Early Classic through the Late and Terminal Classic periods (Moholy-Nagy 2003:71).

Over 70% (n=441) of the Pachuca obsidian (n=551) was recovered from general excavations of surface, construction fill, midden and mixed contexts, which demonstrates that, in general, the Pachuca obsidian was used for utilitarian purposes. With the exception of a few pieces recovered from problematic burials with Teotihuacán connections, Central Mexican obsidian was found in utilitarian contexts while the Guatemalan obsidian was used in ceremonial contexts like caches and burials. Moholy-Nagy concludes “the Tikal Maya appear to have regarded Mexican obsidian artifacts as tools and did not care to take them out of circulation by placing them in special deposits” (Moholy-Nagy 1989:381).

Obsidian from six other Central Mexican sources was used at Tikal in addition to the Pachuca source at Cerro de las Navajas. Obsidian from the Zaragoza (Puebla), Otumba (Mexico), Ucareo (Michoacán), Tulancingo (Hidalgo), Paredón

(Hidalgo) and, possibly, Zinapécuaro (Michoacán) sources was imported during the Early and Late Classic periods (Moholy-Nagy 1999, 2003). The Tulancingo and Paredón sources may have been controlled by Teotihuacán, but the others were not (Spence 1966). The presence of obsidian from these additional sources indicates that Teotihuacán was not the only Central Mexican exchange partner with Tikal, but there is no doubt that it was probably the most significant foreign influence, and that interaction between the Maya Lowlands and Central Mexico was maintained throughout time.

Moholy-Nagy concludes that people of all socioeconomic levels had access to Mexican obsidian and that Pachuca obsidian in particular was not regarded with any special distinction because the Mexican obsidian was recovered from various contexts associated with all kinds of structures ranging from the range structures of the ruling elite to the small structure groups of the commoners (Moholy-Nagy 1999:307).

While her conclusion may be valid when the use of Mexican obsidian is viewed over the entire time span of occupation, it seems that a more valid conclusion is that access to Mexican obsidians changed over time. Mexican obsidians are restricted to elite and ceremonial contexts during the Late Preclassic and Early Classic periods but are found in all contexts during later periods. This pattern would suggest that the elite controlled access to the rare obsidians when they first became available, but that over time the materials became regarded as every-day utilitarian tools. This conclusion is also supported by the change in artifact types made of Mexican obsidian over time, with the use of ceremonial

artifacts during the earlier periods while the types were limited to utilitarian tools in later periods.

It is clear from the prolific amounts of Pachuca and other Mexican obsidians recovered from Tikal that the site was a major distribution center of imported materials. The pattern of Early Classic use of Pachuca obsidian in elite utilitarian contexts coincides with what has been seen at La Sufricaya, but the Tikal elite were also using Pachuca obsidian for ceremonial and ritual purposes, as can be seen in the problematical deposits. Perhaps the special regard the Tikal elite held for the Pachuca obsidian established the trend of considering it to be prestigious material among the elite of sites that also participated in the imagined community.

### Kaminaljuyú

Scholars have recognized that Kaminaljuyú played a crucial role in cross-cultural interaction with Teotihuacán since excavations conducted by the Carnegie Institution in the 1930s revealed foreign-style architecture, ceramics and obsidian artifacts at the site (Kidder et al. 1946). Pachuca obsidian has only been found in tombs located in Mounds A and B. These burials date to the Early Classic Esperanza ceramic phase at Kaminaljuyú. The Pachuca artifact assemblage consists of a bifacial laurel-leaf knife and two prismatic blades included in Tomb A-I of Mound A, six blades and 23 perforated sequins in Tomb A-II, 38 sequins from Tomb A-IV, seven bifacial stemmed points from Tomb A-V and eight complete and one partial stemmed points in Tomb B-1 of Mound B (Kidder et al. 1946). Spence identifies the stemmed points from Tomb A-V as Stemmed B types from Teotihuacán (Figure 6.4).



There is no evidence that Pachuca obsidian was worked at Kaminaljuyú. The artifact types recovered, as well as the contexts in which they were found, are all of a ceremonial nature. Spence (1996) and Braswell (2003) suggest that these green obsidian artifacts were given as gifts to express a personal relationship. While Spence thinks that the relationship was between Teotihuacanos and a local ruler, Braswell suggests that the gifts of obsidian actually reflect bonds between Maya elites (Braswell 2003: 112).

### Copan

The people of the Copan Valley primarily used obsidian from the Ixtepeque source, located 80 km away in the Guatemalan highlands, throughout the occupation history of the site from the Early Preclassic through the Early Postclassic periods. Obsidian from the Pachuca source was introduced to the region during the Early Classic period and a total of 74 pieces of Pachuca obsidian were recovered from Early Classic contexts in the urban core of Copan (Aoyama 1999).

Prismatic blade segments account for 95% (n=71) of the Pachuca artifacts while 2 bifacial points and 1 small flake comprise the rest of the collection. Aoyama believes that the bifacial points and prismatic blades were imported as finished forms and the flake is the result of maintenance or refurbishing a blade (Aoyama 1999: 101). The highest percentage of Pachuca obsidian was recovered in association with the Yax structure (Structure 10-L 26), which was constructed by the dynastic founder Yax K'uk Mo' at the beginning of the Early Classic period. Aoyama posits that Yax K'uk Mo' brought Pachuca obsidian to the Copán Valley as finished products through the process of elite interaction, presumably with rulers of

Petén sites. Aoyama further speculates that *Yax K'uk Mo'* enjoyed such access to Pachuca obsidian because he was actually from Teotihuacán or another site that had strong and possible direct ties to the Central Mexican site, like Tikal or Kaminaljuyú. Alternatively, *Yax K'uk Mo'* could have been a local Copanec who used Teotihuacán-style obsidian artifacts to legitimate his authority and political power (Aoyama 1999:105). Recent strontium isotope analyses have demonstrated that the individual buried in the Hunal tomb, and believed to be *Yax K'uk Mo'*, spent his early childhood and young adulthood in the Petén before he became ruler of Copán (Sharer 2003:152).

Aoyama concludes that the restricted spatial distribution of Pachuca obsidian during the Early Classic period (limited primarily to the Principal Group at Copán) indicates that green obsidian was used as an elite utilitarian commodity. The limited use-wear analysis of 18 prismatic Pachuca blades supports this conclusion. The analysis demonstrated that all of the blades were used for mundane tasks like cutting meat or hides, scraping hides, cutting or sawing wood or other plants, whittling wood or other plants, grooving wood or other plants and cutting or sawing unidentified material (Aoyama 1999:105-7).

The use of Pachuca obsidian at Copán during the Early Classic period appears to coincide with the patterns evident at Tikal and La Sufricaya in that it was restricted to elite utilitarian use.

### **Altun Ha**

Altun Ha has produced some one of the most unusual and intriguing examples of the use of Pachuca obsidian in the Maya region. A post-interment cache

above Tomb F-8/1 included 258 Pachuca obsidian artifacts. The cache also included smashed Teotihuacán-style ceramics, local Maya ceramics, shell and jade beads. Included among the obsidian artifacts were 245 eccentrics and 13 bifacially worked and stemmed points (Pendergast 1971). The cache was initially dated to Ch'en ceramic phase (AD 200-275) by (Pendergast 1971), but subsequent excavations in the region have revealed more information about the Floral Park ceramic sequence, and Pring (1977) suggests the ceramics included in the cache date to the beginning of the Early Classic period. It is interesting to note that the tomb, which was of an older adult male, did not include any Teotihuacán-style offerings. The tomb was capped by a layer of 8,100 chert flakes, which is a hallmark of Early Classic Maya tombs (including the looted tomb at La Sufricaya), lending further credence to Pring's reassessment of the date of the cache.

Spence identified most of the bifacial points as the Stemmed A type made at Teotihuacán (Figure 6.5). The humanoid, serpentine/lizard, needle and bipointed eccentrics are also similar to types found at Teotihuacán (Spence 1996:29-30). The artifacts in the cache were probably imported as finished products rather than created locally.

Spence (1996) posits that the cache represents a close relationship between the ruler buried in tomb F-8/1 and Teotihuacán because some of the artifact types included in the cache are types that were also included in Miccoatli/Early Tlamimilolpa-phase cache offerings at Teotihuacán that were associated with contexts of state ritual during the period AD 150-250. Spence also offered a less-likely suggestion that the man was actually from Teotihuacán, but recent oxygen-

isotope analysis of the remains has demonstrated that he was a local inhabitant of Altun Ha (White et al. 2001). Spence and Pendergast agree that the cache was created and interred with the intent of honoring the deceased ruler rather than signifying an alliance between the polity of Altun Ha and Teotihuacán.

The Altun Ha cache is clearly an isolated event in the history of the site, given the lack of Pachuca obsidian in later time periods, and is further evidence that Pachuca obsidian was used in elite contexts during the Early Classic period. The timing of the dedication of the cache after the ruler's death indicates that it was specifically created to honor him and could signal his participation in the Tikal imagined community. The rulers of Altun Ha became wealthy in later periods by participating in the trade network dominated by Tikal, and this Early Classic offering may signify the beginning of this beneficial relationship.

### Uaxactún

Although the Uaxactún excavation reports note the presence of green obsidian artifacts, Kidder (1947) does not provide great detail and one can assume that scholars did not regard their inclusion in the artifact assemblage as significant at the time. The only contextual information about any of the artifacts concern two laurel-leaf points associated with Tzakol 3 ceramic phase contexts. One of the points was included in Cist 13 of pyramid E-VII platform, which was a typical structural dedicatory cache, along with 77 chert flakes, a chert laurel-leaf point, five chert eccentrics and several ceramic vessels (Ricketson & Ricketson 1937). The other point was included in Cache B-1 of structure B-XI, which may have been a mortuary structure. The cache also included two chert laurel-leaf points and a

flaring bowl in the local style (Kidder 1957; Smith 1950). Spence speculates that the Pachuca points were included in the caches mainly because of their resemblance to the locally made chert points that were also included in the offerings (Spence 1996: 29).

### Rio Azul

In general, obsidian is a rare item at Río Azul and Adams suggests that it was imported as finished blades (Adams 1999: 217). However, a limited amount of Pachuca obsidian artifacts have been recovered from Río Azul. Most of the Pachuca obsidian was recovered from the tombs of lords who ruled the site after it was conquered by Tikal in AD 385. The burial offerings of Tomb 1 (the ruler), Tombs 19 and 23 (his possible Teotihuacano advisors) and Tomb 25 (a royal woman) included prismatic blades and bifaces. The tomb of the royal woman was placed in a structure of *talud-tablero* architecture and included a single prismatic blade as well as Teotihuacán-style ceramic vessels. A complete green obsidian blade as well as a green obsidian blade fragment were recovered from Tomb 5, which was a vaulted tomb covered by three layers of 5-10 cm-thick chert debitage located beneath structure C-VII and dates to the Early Classic period (Hall 1984). Some prismatic blades were also recovered from the fill of two residential structures.

### **The Teotihuacán obsidian industry**

Pachuca obsidian was mined from the Sierra de las Navajas source, which covers an area of 250km<sup>2</sup>. The deposits were formed during four episodes of lava flow stemming from pyroclastic eruptions and a sector collapse of the volcano,

which produced a volcanic avalanche. The obsidian from the flows varies in quality and color. The clear-green obsidian known as Pachuca comes from the Las Minas flows, which have been mined for thousands of years since the Paleo-Indian period. The loose, blocky deposits were relatively easy to exploit through open pit mines (Ponomarenko 2004). The area is located 50 km northeast of Teotihuacán, and the Pachuca obsidian seems to have been preferred for state taxation and long-distance trade and reserved for manufacturing prismatic blades. Obsidian from the Otumba source, which was only 16 km away from Teotihuacán, was used for local consumption and the production of bi-faces and scrapers (Spence and Parsons 1972; Clark 1979).

Pachuca obsidian was used in the lithic assemblage at Teotihuacán as early as the Tzacualli phase (AD 0-150), but it only accounts for 30% of the blade assemblage while Otumba grey obsidian was more widely used for blades and other tool types. In the Miccoatlí period 60% of the blades were made with green obsidian, but it was not used for any other types. During the end of the Miccoatlí period and throughout the Tlamimilopla (AD 200-450) phase, Pachuca obsidian became very popular and was used to make 84% of the blades and a minor proportion of knives, points and scrapers. Spence attributes this rise in Pachuca exploitation to a greater abundance of the material resulting from increased local demand and long-distance trade with the Maya region (Spence 1967).

Spence (1981) has identified a three-tiered system of obsidian production at Teotihuacán based on local, regional and precinct workshops. Local workshops were located outside of the city center and produced the full range of artifacts from

the obsidian industry for the local populace. Regional workshops were located adjacent to public structures in the central zone of Teotihuacán and produced mainly blades and bi-faces, which indicates a high level of specialization. Spence speculates that these workshops produced tools for the urban residents of Teotihuacán as well as for export to the wider population of central Mexico. The precinct workshops were located within the precincts of The Moon Pyramid and the Great Compound and specialized in producing bifacial blanks and points of grey obsidian. Spence suggests that these workshops were dedicated to tool production regulated by the state (Spence 1981:771-774).

The general picture of the Pachuca obsidian industry at Teotihuacán during the Early Classic period includes the striking expansion in the number of workshops, most of which produced core-blades. Spence attributes the expansion to a state-controlled procurement system that ensured a steady and generous supply of raw material. The state also maintained peaceful control of the region so that workshop products could be distributed effectively, stifled the development of rival production systems and expanded the demand for Pachuca obsidian through political expansion in Mexico and beyond (Spence 1981:783).

### **Mean blade width**

Since Rovner's (1975) study of obsidian trade at Dzibilchaltún, Río Bec and Mayapán, scholars have used the mean blade width to compare relative obsidian trade intensity at Maya sites. Rovner's study demonstrated that the mean blade width decreases with distance from obsidian sources because blade makers at sites that were more distant from obsidian sources had reduced access to obsidian cores,

so therefore, they were more economical with the scarce resource and exhausted cores in order to produce more, and narrower, blades. The mean blade width is a readily available measurement that is easy to obtain from the collection of many sites and makes a useful tool for comparison.

I calculated the mean blade width of obsidian from Early Classic contexts at La Sufricaya in order to compare it to other sites in the region and determine access to obsidian (Table 6.3). The mean width of all prismatic blades is 0.68 cm (with a range of 0.2 cm to 1.8 cm), which corresponds to the distance-decay model. We can also compare the mean blade width of Pachuca obsidian to the mean blade width of Guatemalan obsidian to determine which type of obsidian was more readily available at the site. At La Sufricaya the mean width of Pachuca prismatic blades is 0.8 cm (Standard Deviation is 0.15 cm), while the mean width of all blades made of grey obsidian is 0.56 cm (Standard Deviation is 0.28 cm). My preliminary analysis implies that the La Sufricayans may have had greater access to Pachuca obsidian than other types of obsidian. It could also indicate, however, that the elite residents of Structure 1 had greater access to the material than other people at the site.

Site	La Sufricaya	Tikal	Copan	Kaminaljuyú	Ko'
Grey	0.56 cm	1.18 cm	1.58 cm	2.0 cm	1.87 cm
Pachuca	0.80 cm	1.03 cm	N/A	0.90 cm	N/A

**Table 6.3 Comparison of mean widths of obsidian blades in the Maya region**

The mean width of prismatic blades and segments can be compared between sites to shed light on access to obsidian and participation in trade networks. The



mean width of blades reported from K'o Lechugal, another site in the Holmul domain, is 1.08 cm during the Late Preclassic to Early Classic periods (Tomasich 2009:316). While Pachuca obsidian has not been recovered from K'o, this statistic is significant because it implies that the inhabitants of K'o had greater access to obsidian than their neighbors at La Sufricaya. The absence of Pachuca obsidian also indicates that the K'o Lechugal elite did not participate in the same trade or alliance networks with Tikal as the elite of La Sufricaya even though they lived within 3 km of each other. The mean width of obsidian from Cival and Holmul itself has not been calculated.

Comparing the mean blade width of Pachuca obsidian within the Maya region reflects the degree of access each site had to the resource. Moholy-Nagy notes a mean width of 1.18 cm for a sample of 318 blades at Tikal while Pachuca blades are slightly smaller with a mean width of 1.03 (n=56) and range from 0.5-1.03 cm (Moholy-Nagy 2003:33). At Kaminaljuyú the mean width of blades made from local El Chayal obsidian ranged from 1-4 cm while the Pachuca obsidian blades ranged from 0.9 to 1.8 cm (Kidder, Jennings and Shook 1946:136). At Copan, Aoyama records a mean width of 1.58 cm for all obsidian blades from Early Classic contexts inside the Principal Group and a mean width of 1.38 cm for Early Classic contexts outside the Principal Group. The mean width of Pachuca blades, however, is not readily available from the published data (Aoyama 1999:95).

Based on the mean blade width of Pachuca obsidian it would appear that Tikal had the greatest access to the material and may have distributed the obsidian to other sites. It is important to remember that the Pachuca obsidian at Copan dates

to the later part of the Early Classic period while it was used at La Sufricaya and Tikal earlier, circa AD 378-400, and even earlier at Tikal. The mean width of blades from Teotihuacán is not readily available but presumably it would be a larger than the Maya mean.

## **Discussion and conclusion**

While further study is required for an in-depth analysis of the lithic industry at La Sufricaya and the Holmul domain, several preliminary conclusions can be drawn. The limited assemblage recovered from La Sufricaya represents several categories of human behavior and can be used to interpret the function of La Sufricaya Structure 1 through the activities carried out by its inhabitants. Tools that were used to carry out domestic, administrative and ceremonial functions are present among the stone tool assemblage. The *mano* and *metate* fragments indicate that food preparation took place in or near Structure 1, which implies a residential or perhaps ritual feasting function for the structure. The bark beater and cylinder scrolls indicate that paper was processed and decorated within Structure 1, which implies an administrative function. The prismatic blades and chert bifaces represent domestic and subsistence activities such as food preparation, processing of wood, plant and animal products, perhaps construction and hunting. Alternatively, the prismatic blades could have been used for bloodletting, and would, therefore, represent ritual and ceremonial behavior at the household level. The projectile point bifaces could represent subsistence activities like hunting, or ritual practices like warfare.

Finally, the absence of ritual caches and eccentric obsidian and chert artifacts could be interpreted as an absence of ritual and ceremonial behavior at La Sufricaya, but in reality, it is probably a problem in excavation sampling and looting. The entire midden of Structure 1 has not been located, and presumably only a portion of it was used to fill the building upon its termination. The midden could contain additional artifact types. It is apparent that several cache offerings were removed from Structure 1 in antiquity before it was abandoned and these caches could very well have contained lithic artifacts. Additionally, the looted tombs in Structures 2 and 3 could have also contained lithic artifacts, and there is no way of knowing what type of invaluable evidence has been lost.

The presence of imported obsidian at La Sufricaya indicates that the inhabitants participated in regional trade networks during the Early Classic period. Obsidian was imported from the highlands of Guatemala as well as Mexico while chert was imported from northern Belize. These trade networks were dominated by Tikal and are another indication of the link between Tikal and the lords of La Sufricaya. Further excavation and analysis within the Holmul site center and the rest of the domain could shed light on whether La Sufricaya participated directly in these trade networks or received imported goods through markets or other redistribution tactics overseen by Holmul. Very little is known about the Early Classic phase of Holmul itself and future excavations could reveal intriguing information regarding the importation of Pachuca obsidian and other exotic goods.

The presence of Pachuca obsidian at La Sufricaya, and the near absence of the imported resource at other sites within the Holmul domain, indicates that the lords

of La Sufricaya enjoyed singular status within the domain and likely maintained connections to the new dynasty at Tikal that rose to power during the *Entrada* event. The use of Pachuca obsidian was restricted to elite utilitarian activities, which indicates that although the obsidian may have been regarded as a special commodity because of its unique color (green being associated with royalty), the material was not so precious that it was reserved for ceremonial and ritual purposes only. The use of Pachuca at La Sufricaya is similar to Tikal, Copan and other sites where it has been recovered in more than singular ritual cache contexts. This could indicate that the amount of Pachuca obsidian that was available to the La Sufricaya elite was sufficient enough to justify its frequent and utilitarian use rather than saving it for special occasions. This pattern of use differs greatly from that found at sites like Kaminaljuyú, Uaxactún, Río Azul and Altun Ha where Pachuca obsidian is restricted to cache or burial contexts and was probably received as a gift from Teotihuacán or another Maya site.

Since the mean blade width of Pachuca obsidian at Tikal is greater than any other Maya site, it would seem that Pachuca arrived in the lowlands by way of Tikal, which may have redistributed it through market exchange or perhaps to allies who participated in an imagined community. It is possible that Pachuca was delivered directly to La Sufricaya by Teotihuacán emissaries, who may have also instructed the local lords in central Mexican lithic technology, if the pressure flakes and distal rejuvenation blade are indeed evidence of foreign technology production at the site, but if this foreign interaction did take place, it did not have a lasting impact on Maya

identity at La Sufricaya. The obsidian assemblage is comprised of Maya technology, which in turn reflects Maya practices of *habitus*.

In sum, this brief overview and initial analysis provides a foundation for more-in-depth analysis of the lithic assemblage from La Sufricaya and the Holmul domain. A more complete analysis could shed light on a number of questions regarding sociopolitical development in the area.

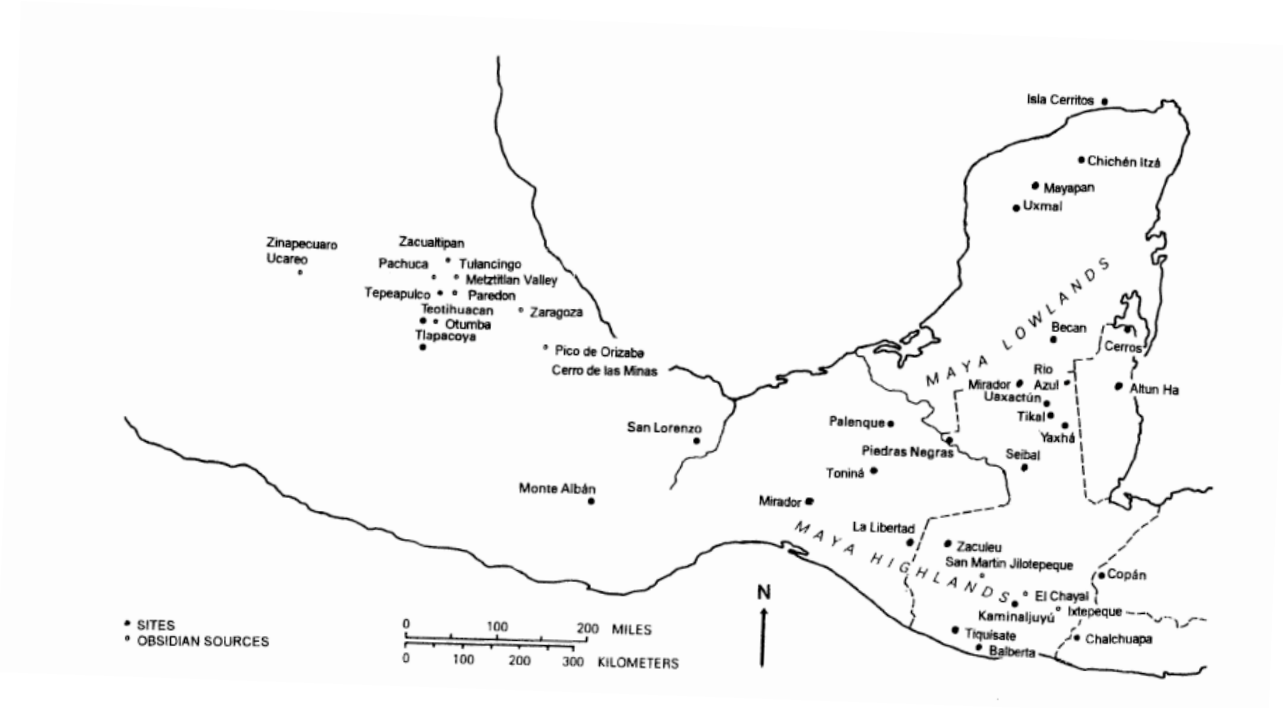
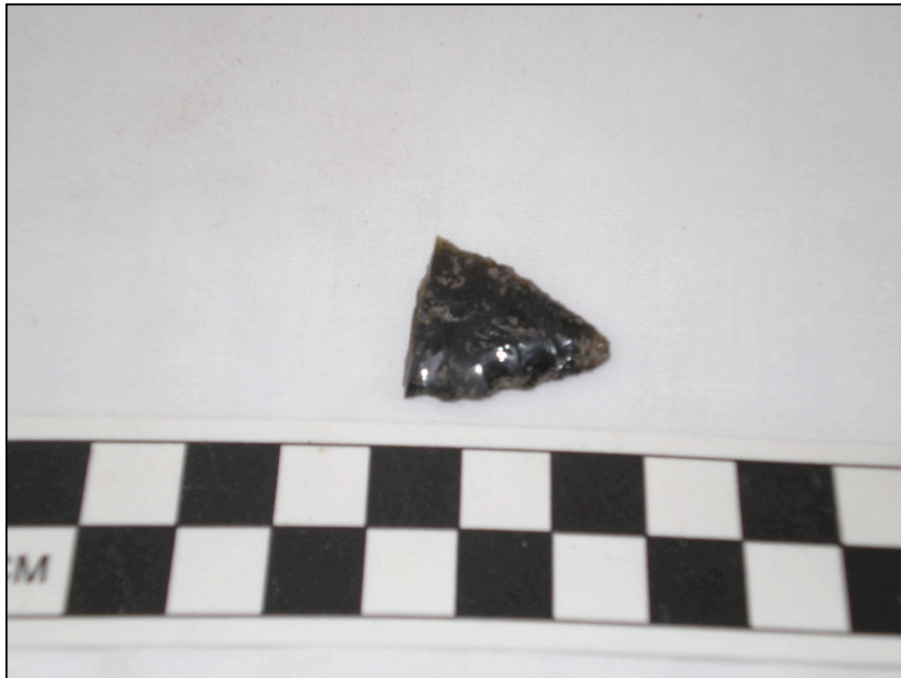


Figure 6.1 Map of Mesoamerican sites and obsidian sources (After Moholy-Nagy 1999 Fig. 1)



**Figure 6.2 Notched obsidian blade fragment recovered from La Sufricaya Structure 1  
(Photo by the author)**



**Figure 6.3 Pachuca obsidian point fragment recovered from La Sufricaya Structure 1  
(Photo by the author)**



Figure 6.4 Obsidian sequin recovered from plaza excavations at La Sufricaya (Photo by the author)

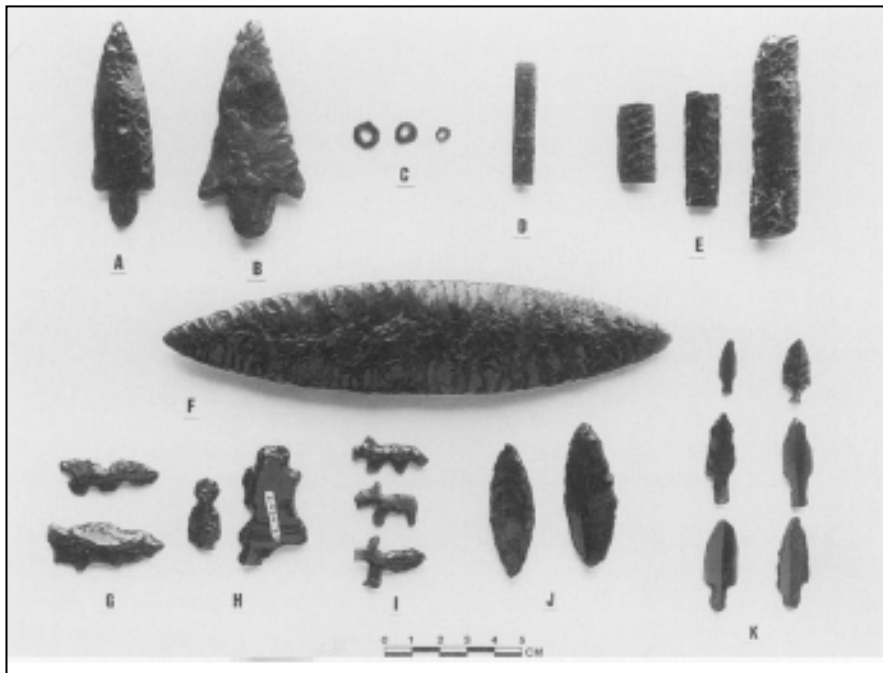


Figure 6.5 Obsidian artifacts from Teotihuacán. Stemmed types A and B have been recovered from Maya sites (After Spence 1996 Fig. 2)

## Chapter VII - The Murals of La Sufricaya

### Introduction

The murals of Structure 1 at La Sufricaya are rare examples of Early Classic art and provide fascinating details about courtly life of the period, not only from the depictions of the ruling elite, but the abstract messages and meanings we can glean from the existence and creation of the murals themselves. Mural art from this period is rarely discovered *in situ* because the Maya usually destroyed earlier phases of structures when renovating. Furthermore, the La Sufricaya murals depict the largest known assembly of Teotihuacán emissaries or warriors outside of central Mexico. The thrill of discovering these murals, however, is tempered by the damage wreaked upon them by looters and time as well as the relatively poor skill of the artist. All of these factors make interpreting the scenes depicted in the murals challenging. Since most of the pivotal scenes and text are missing, any interpretations of the murals must remain tentative and open to revision.

This chapter focuses on the murals of Room 1 (Murals 1-3, 6, 6-North and 8)<sup>19</sup>, which reflect Early Classic Maya artistic traditions and represent a departure from Late Preclassic mural art, which is characterized by a calligraphic style and mythohistoric themes (Hurst 2009). The La Sufricaya murals appear to be historic in nature and were likely designed as a tool for legitimizing authority. While the murals in Structure 1 are integral to understanding the political and dynastic history

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<sup>19</sup> The La Sufricaya murals have been reported in detail in annual field project excavation reports available online <http://www.bu.edu/holmul/>.



of the Holmul region they are also important for understanding the development of Mesoamerican art, since they incorporate many artistic conventions, themes and formats that became pan-Mesoamerican artistic traits in the Late Classic period.

Murals 7 and 9 have been discussed in detail elsewhere (Estrada-Belli et al. 2005, 2009) and will only be discussed in terms of their significance in interpreting the function of Structure 1 (Chapter 4) and the role of La Sufricaya lords in the Early Classic regional elite imagined community (Chapter 9). Murals 4 and 5 (Tomasich and Estrada-Belli 2004) are too poorly preserved to attempt a detailed analysis and will only be discussed in respect to the overall program of murals.

My aim in this chapter is three-fold: first, to interpret the scenes depicted in the murals, as well as the significance of the overarching message of the program of murals within Structure 1, in order to understand the sociopolitical history of La Sufricaya. A corollary of this goal is the identification of the ethnic identities of the personages portrayed in the murals. Second, through a comparison of other examples of depictions of Teotihuacanos created by Maya and Teotihuacano artists, I attempt to discern whether or not the La Sufricaya artists<sup>20</sup> had direct contact with foreign emissaries and thereby created a record of a historic event or if they had indirect contact with Teotihuacán and used Maya ethnic stereotypes of Teotihuacanos to recount the 11 Eb event at Tikal in mythic proportions. These works of art, which include stelae, murals and ceramic vessels, provide insight into how the Maya perceived themselves and others.

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<sup>20</sup> My analysis is based on the assumption that the artist or artists who created the La Sufricaya murals were ethnically Maya. In her recent analysis of the murals, Heather Hurst (2009) argued that several artists created the murals and that one of them may have been a Teotihuacano.

Finally, I argue that the La Sufricaya murals are an addition to a limited corpus of Early Classic art that depicts confrontations with foreigners that represent a manifestation of the break in doxic knowledge the Maya experienced during cross-cultural contact with emissaries from Teotihuacán. This corpus represents a significant turning point in ancient Maya art that introduces records of historical events that served political goals. In the case of the La Sufricaya murals, the artists and the elite patrons that commissioned them aimed to connect the site with an imagined regional elite community based on connections to Teotihuacán.

### **Description, analysis and reading order of the murals**

As I have established in Chapter III, Room 1 is a c-shaped room with an open portico to the south and a doorway set west of center in the northern wall (Figure 7.1). This room likely served as a public reception area or possibly a throne room. All three walls of the room are covered with murals, as is the doorjamb of the entrance in the northern wall. Murals 1 and 2 are painted on the north wall of the room directly across from the portico entrance. Mural 6 is painted on the western wall and Mural 6-North is painted on a section of the north wall that abuts the western wall. Technically Mural 6-North is also located on the northern wall but the doorway separates it from Mural 1. Mural 3 is located on the eastern wall and was also damaged by looters. In the following sections, I provide detailed descriptions and analyses of the murals, which will proceed in the order in which they were discovered and subsequently denominated. A suggested reading order follows, which is based on interpretations of both Maya and Teotihuacán mural programs

and does not necessarily coincide with the numbering system ascribed to the La Sufricaya murals.

### Mural 1

My analysis of the Room 1 murals centers on Murals 1 and 2 (Figure 7.2) because they are the focal point of the room, but this focus is also a reflection of their perceived archaeological significance. Mural 1 consists of a grid formed by red frames with standing male figures inside, who may be Maya lords, while Mural 2 is comprised of rows of seated male figures who appear to be Teotihuacán soldiers.

The murals are painted on the northern wall of Structure 1 sub-1, which extends east to west and measures 1.90 m high and 3.55 m long. The murals extend from the floor level to the top of the wall and are framed by a thick red and orange band. Murals 1 and 2 are actually segments of a single mural rather than individual works, based on the red and orange bands that frame both segments rather than dividing them into separate panels. The thin red lines that delineate the square grid of Mural 1 and the rectangular grid of Mural 2 are separated by a 10 cm gap, which may indicate that the murals depict two distinct scenes rather than a continuous tableau.

Red bands are used as borders in murals at Uaxactún (mural from Structure B-XIII), Tikal (the “Ballplayers Mural” in Group 6C-XVI), Rio Azul (Tombs 1 and 12) and Xelhá (Group B, Structure 86) in Quintana Roo during the Early Classic period and this may have been a regional painting style in the lowlands. Teotihuacán-style iconography and artifacts have been excavated from some of these sites, however, and the use of red bands in mural art may have been another stylistic trait the Maya

borrowed from Central Mexico. Red bands also bordered murals at Teotihuacán during this time period, but an important distinction is that the borders usually contained geometric shapes, shells and other designs (Lombardo de Ruiz 1995a, 1995b).

The western portion of the frame at the bottom of the mural is blackened; it is unclear whether this is the result of burning activity or if the mural is actually painted black. Mural 1 is damaged by a 1-meter wide looters' cut that bisects the mural and may have destroyed the central, and perhaps pivotal, scene of the mural. The mural depicts individuals standing in squares formed by red grid lines. Each square measures approximately 30 cm by 30 cm and if the missing and poorly preserved segments of the mural are reconstructed with these measurements, Mural 1 may have once consisted of 8 rows of 13 squares, with a total of 104 squares containing individual figures, or portraits. The male figures have yellow, red and black skin, which could be an artistic convention of distinguishing ethnic identity or social role and rank, as in the Central Mexican Codices and the Tepantitla murals at Teotihuacán (Boone 2000; Angulo 1996).

The red grid in Mural 1 has been compared to the Plaza de los Glifos in the La Ventilla apartment compound at Teotihuacán and identified as an example of foreign influence at La Sufricaya (Wagner 2004). This convention, however, may have local antecedents. Thin red lines are included in Early Classic Maya murals, specifically the Uaxactún Structure B-XIII mural, to create registers and delineate the ground line in scenes. The Late Classic murals in Structure 1 at Bonampak also incorporate red bands and lines to define registers and ground lines (Miller 1985).

While the grids at La Ventilla and La Sufricaya may have served similar purposes, perhaps to indicate the locations of important lords during ceremonial events as some scholars suggest, it is also important to note the differences. First and foremost, the grid in La Ventilla is painted on the ground and is not a mural (Figure 7.3). Also, the squares contain glyphs, which may be names, but they are not portraits of individual lords, as the La Sufricaya mural may be. Furthermore, Cabrera Castro (1996) dates the Plaza de los Glifos to AD 450, which postdates the HAP reconstruction of the construction and occupation of Structure 1. I suggest a more pragmatic explanation of the grids in the La Sufricaya murals, which is that it served as a guide and enabled the artist(s) to paint the figures in straight lines and level positions.

Each of the figures in Mural 1 appears to be facing east with his legs slightly spread at the knee and feet shown in profile. This stance is typical of Early Classic stone monuments and mural art at Uaxactún and Tikal (Figure 7.4) (Clancy 1999, Lombardo de Ruiz 1995b, Proskouriakoff 1950). The stance is not restricted to the Maya area, though, and is also used at Teotihuacán, specifically in the Tetitla murals of roughly the same time period.

Lamentably, portions of only 15 of the possible 104 figures are visible today, but the elements of their headdresses and attire that are visible suggest that they are elite lords (refer to Figure 7.2). Beginning with column A and row 5 it is possible to discern that this figure has black skin and wears a red loincloth or possibly a short skirt. He also wears red garters with white fringe and an indistinguishable headdress with red ornamentation. A ceremonial object with a

red handle and yellow body is in front of him; presumably, the lord is holding this object, though his hand is not visible on the handle. The figure below in square A6 is mostly obscured but he has red skin and may hold a shield or staff in front of him<sup>21</sup>, which is decorated in yellow and red. The only visible elements of the figure in square A7 are a red band that is likely a component of his headdress and some angled yellow objects that could be feathers adorning the spear or staff he holds before him.

The only remaining figures in column B are visible in squares B5, B6 and B7 and the details of their costumes are sparse. In square B5 the man's yellow legs, a red band of his loincloth or skirt and a red anklet are visible. Black legs and the red hem of a loincloth or short skirt are the only remnants of the figure in square B6. In square B7, the red band of a headdress and a yellow circular ornament can still be discerned. The circular ornament may be the top of a spear or staff.

Picking up with column J, the only remaining details are found in the lower right corner of square JA, where a cluster of red feathers, or perhaps cloth, gathered at the top by a round ornament is visible. This decorative element may be attached to the end of a spear or staff. The yellow legs and hand of the figure in square K1 are visible. This lord holds a red-handled object and wears a loincloth with a red hem.

In column L, we can still discern the headdress worn by the figure in square L2, which features a red cap with panache of yellow feathers protruding from the back. Below, in square L6 we can see the yellow legs of a lord who wears red anklets that include straps that wrap around his feet.

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<sup>21</sup> Heather Hurst's reconstruction shows this object as a vessel with supports, see Hurst 2009: Fig. 46c.

In column M2, we again see the red-capped headdress with panache of yellow feathers. The yellow forehead of the lord may be visible below the red cap. The yellow legs and red hem are the only remaining features of lord depicted in square M6.

Mural 1 most likely depicts an assemblage of Maya, and perhaps foreign, lords. While the red frames may indicate the position of each lord at a ceremony or event, they might also serve as ancient picture frames, which could have been an artistic convention to place emphasis on the identity and role of each lord portrayed in the mural.

### Mural 2

Mural 2 consists of 7 rectangular registers that are approximately 80 cm wide and vary in height (Figure 7.5). The top and bottom registers are taller than the middle five, which contain seated warriors and are relatively uniform in dimension. The visible portions of the top register appear to depict a figure standing on top of white circles with red centers. The figure is painted in a slightly larger scale than the seated warriors in the lower registers, which could indicate the standing figure held a superior social class or role than the other individuals represented in the mural. If the white and red circles were meant to serve as a ground line, this convention could indicate that the scene depicted above took place in another realm, or simply not on the same ground level as the registers below. The circles may in fact represent serpent scales, indicating that the figures in the top register are standing on a serpent, similar to the North Wall mural of San Bartolo

(Saturno 2009) and in some murals at Teotihuacan (Annabeth Headrick personal communication 2017).

The frames of the lower registers are thicker than the frame of squares in Mural 1 and also have a yellow center. The significance of the different frames is not readily apparent but may be a choice made by the artist to convey differences in social standing, location or roles of the figures represented in the murals. The middle five registers probably each contained five seated figures, as is evident in row 6. The bottom register is badly preserved and the only details that can be discerned appear to be red and yellow abstract shapes resembling mountains. Unfortunately, it is impossible to interpret the fragment of the bottom register.

Two seated individuals with yellow skin are visible in row 2. These men sit with their knees raised and bent in front of their torsos with their feet flat on the ground. They wear red headdresses with red and white feathers protruding from the back. They also wear red anklets with a strap that wraps around the foot and a red belt or back mirror with plumes of red feathers streaming from the back. Black bands, which could be body paint, extend across their calves and thighs and they hold a cluster of three darts with black tips, perhaps made of obsidian, standing on end before them. The costumes and weapons of these warriors resemble depictions of Teotihuacan warriors in murals at Teotihuacan and in Maya art such as the vessel from Tikal Problematic Deposit 50 that depicts foreigners arriving to a Maya site.

Row 3 contains two full figures and the lower half of a third. These men, seated in the same position as the men in row 2 and also clutching a bundle of darts, appear to have multi-colored skin. Their faces are yellow with bands of red paint,



their arms are yellow but their legs are black. They wear headdresses, one black and the other red, with 2-3 white feathers protruding from the top as well as red anklets and a black back mirror with red feathers streaming from it.

Four more seated men with yellow skin appear in row 4. Very few details of their bodies are visible but at least one of the men wears red anklets. They all carry bundles of three darts and wear a red headdress with white and black concentric circles on the front. Some of the men have white feathers protruding from the crown and red feathers gathered by and yellow band extending from the back.

Portions of all five figures are still visible in row 5. These men are seated in the same bent-knee position and they have black skin except for the upper portion of their faces, which are yellow. Their jaws could be painted red or their headdresses could include a red chinstrap; this detail is unclear. They all wear black headdresses with concentric white and black circles on the fronts, black “spikes” extending from the crown and top, and red feathers protruding from the back. The figures all wear red anklets and belt with a circular back ornament, perhaps a back mirror, with a red cloth or trailing from it. Unlike the rest of the men in Mural 2, these men do not hold bundles of darts. Instead, they hold an object with a yellow shaft a black element that could be the spur of an *atlatl*. The three figures in row 6 are nearly identical to the men in row 4 except that the skin of their lower bodies is black while their faces are yellow and red.

In contrast to the individual figures of Mural 1, the groups of seated men are not personally identified and may have played a less important role in the events. Their seated position implies their inactive roles and may identify them as mere

witnesses to the events that were once depicted in row 1 of Mural 2, and perhaps in the central portion of Mural 1. The weapons they carry suggest that they are soldiers or perhaps guards who accompanied a foreign emissary. The differences in skin color, however, suggest that the artist depicted the different ranks or orders of warriors in attendance. It is tempting to speculate that these murals may have documented the installation of a ruler on the throne, under the watchful eyes of foreign guards, but the mural is too fragmentary to make conclusive interpretations.

### Mural 3

Mural 3 is painted on the eastern wall of Room 1, which extends north-south for 1.60 m and measures 1.90 m in height (Figure 7.6). Looters also caused severe damage to this mural when they tunneled into the room, leaving a large cut in the wall that is 1 meter wide and extends to the top of the wall. Red and orange bands border the entire composition; a portion of the bottom border is blackened, which again may be black paint or evidence of burning activity.

The mural is laid out in a manner very similar to Murals 1 and 2 with rectangles and squares framed by red lines that contain human figures. Three rectangular registers at the top of the mural may contain a procession of lords while the lower 3 rows of 4 boxes contain individual standing lords. It is possible that the three rectangular registers at the top of the mural were also divided into squares and the vertical lines have simply faded. The top three registers are approximately 20 cm high and the intact portions extend for approximately 50 cm. The squares of the lower rows are approximately 20 cm wide and 30 cm tall. Presuming that the layout continued the width of the wall, Mural 3 may have originally been composed

of 3 rows of 8 squares that framed individuals surmounted by 3 rows of processional figures. Based on an approximate spacing of frames and figures within the upper three registers, a conservative estimate reconstructs the mural with representations of 51 lords. Only 6 of the figures are still visible, but more details of the costumes of these remaining figures are visible than those of the individuals depicted in Mural 1.

The only visible figure in row 1 has red skin and wears a yellow loincloth that trails down the front and back; the strip of cloth could actually be a tail. In row 2 a red-skinned man stands with his arm bent at the elbow and raised in front of him with his hand extended, palm facing upwards. Benson (1973) suggests that variations of this gesture are related to bloodletting or the presentation of an offering. This man wears a yellow headdress consisting of a band that encircles his head and a chinstrap. Two partial figures can be seen in row 3, both men have red skin and wear white loincloths that trail down the front and/or back. The first figure holds panache of yellow feathers out in front of his torso. Very few details of the figure in the fourth row at position B4 have survived except the color of his skin. His torso appears to be red while his legs are yellow. The figure below, in position B5, has yellow legs, wears a red belt and holds a red-handled object with a yellow, circular body in his hand.

This handled object, which is also held by lords in squares A5 and K1 of Mural 1, is most likely a ritual object such as an offering bag. Offering bags are known from Early Classic monuments at Tikal and other sites in the Petén. Bags first appear on Early Classic monuments at Tikal (Stela 20) and Yaxha (circa AD

435) and on early Late Classic monuments (circa AD 600) at Naranjo, Calakmul and Motul de San Jose (Browder 1991; Proskouriakoff 1950:). Bags are more common in Late Classic sculpture from sites in the Usumacinta region, especially at Piedras Negras where they appear in a variety of scenes including niche, warrior and captive and scattering scenes. In Maya art, the bags are made of a loop that is large enough to hold or wear around the wrist. These items usually have square or rectangular bodies with a decorated top and a long fringed or decorated end.

In Maya art, men are usually depicted carrying the bags and though they may have had many functions, the only depicted use is to hold substances like seeds or incense that can be scattered during ritual offerings. Piedras Negras Stela 40 (AD 746) depicts the Ruler 4 performing a scattering ritual with a bag in his hand (Figure 7.7). The mural from the Tetila compound (Tlamimilolpa phase, AD 250-400) at Teotihuacán depicts a priest carrying a similar handled bag in one hand and an offering including shells in the other (C. Miller 1973, see Figure 7.8). It may be possible that the bags and affiliated ritual practices were introduced to the Maya during contact with Teotihuacán during the Early Classic or it was a pan-Mesoamerican ritual practice that was first depicted in art at Teotihuacán.

Mural 3 may be a continuation of the individual portraits in Mural 1. If so, it sheds light on the details of the upper bodies that are missing from Mural 1. The standing lords in Mural 3 hold ritual objects and use hand gestures that could represent the act of bloodletting or the presentation of an object as an offering. This mural could also depict a procession or rituals associated with rites of accession.

## Mural 6

Mural 6 is painted on the western wall of Room 1, which extends north-south for 1.50 m and measures 1.70 m in height. The mural was discovered during my excavations in 2003 and was untouched by looters. Sadly, this fact does not mean the mural is in a better state of preservation than the murals that were damaged by looters. Mural 6 is divided into upper and lower registers. It is nearly impossible to discern most of the figures in the composition, so only the most visible elements will be discussed here.

The upper register of the mural consists of four, possibly five, male figures standing in a row (Figure 7.9). This mural may actually be composed of red-framed squares as well, but the red lines are only visible in some areas and therefore the layout is ambiguous. These lords are red-skinned and they all wear elaborate headdresses. The northernmost figure wears a headdress with a white crest and a yellow knot at the base of his neck; the headdress also appears to include a yellow chin-strap. This lord wears a loincloth with an elaborate knot in the back and perhaps a tail. His right arm is raised and bent at the elbow and he may have a pipe or whistle in his open palm, which he holds up to his mouth. Alternatively, this lord could be holding an implement for bloodletting up to his tongue. The second lord wears a headdress that resembles a fish with yellow feathers protruding from the back and a yellow cape. The details of the costumes worn by the other lords are impossible to discern.

Because this mural is so poorly preserved there are several possible interpretations. One possibility is that, like the Bonampak murals, the figures with

elaborate headdresses are participants in a king-naming ceremony. Some of these figures appear to wear fantastical headdresses and costumes, much like the extravagant celebratory procession of people dressed as various types of animals in the lower register of the mural in Room 1 of Structure 1 at Bonampak (M. Miller 1986). These scenes could also represent the beginning of the journey depicted in mural 6-North, and the figures could be the companions of the lord who climbs the temple. Alternatively, this mural could contain additional portraits of lords in red frames. If this is the case, the details of the Mural 6 costumes are an indication of how much detail is really missing from the portraits in Mural 1.

#### Mural 6-North

Mural 6-North is better preserved, and perhaps the most captivating component of the program (Figure 7.10). The scene painted in the mural has been interpreted as an historic event relating to rites of accession and an early example of Mesoamerican cartography (Estrada-Belli and Hurst 2011). The mural is painted on the northern wall, which actually forms a doorjamb for an entryway in the northern wall of Room 1. The wall extends east-west for 0.73 m and measures 1.65 m in height. Like Murals 1-3, thick orange and red bands border this mural.

The mural is comprised of three vertical scenes that may proceed from bottom to top. In the bottom register, a supernatural figure sits on a stool beneath a thatched-roof structure atop a basal platform. The protuberance from his forehead, inhuman proportions of the nose and mouth and a large, claw-like hand suggest this figure as a supernatural and perhaps as God K, who was associated with rulers.

A trail of footprints defines the ground line of the middle register and forms a path that continues into the upper register. The trail of footprints linking the middle and top registers is not commonly found in Maya art of this period. In later periods, footprints become a pan-Mesoamerican artistic convention for representing travel or movement (as in the Mixtec codices and the Piedras Negras stelae), but during the Early Classic period they are most commonly found in Teotihuacán murals where they are used in the borders and in the main panels. There is an important distinction between the footprints depicted at La Sufricaya and Teotihuacán in that at Teotihuacán footprints are often painted in a rigid and orderly grid while at La Sufricaya the footprints meander in an organic way along a path (Annabeth Headrick, personal communication 2017). The La Sufricaya footprints are made using a “figure eight” while at Teotihuacán and in the Mixtec codices they resemble the number “7”. While the footprints are similar to an artistic convention used in central Mexico, the technique is a distinct trait of the La Sufricaya artist.

A contingent of four lords stands on the path in the middle register. They are wearing headdresses and loincloths that wrap around their waists and tie in the back. The two visible headdresses are simple and do not include feathers like those of the figures in Mural 1. The headdress worn by the first man on the left consists of a pointed angular element on the top with a band that appears to tie at the back of his head. This headdress is similar to the turban style headdresses worn by the lords in the Early Classic mural from Uaxactún Structure B-XIII (Figure 7.11). The second lord from the right appears to wear a mask, though the details are not clear. The kneeling lord on the far right wears his hair in a long plait with the end loose.

In general, the posturing of these lords is typical of Maya art and they are rendered in relatively natural proportions, which is a hallmark of the Maya artistic style. These lords may be traveling companions of the protagonist in the upper register, or participants in a ritual that was performed during the journey. The kneeling lord appears to hold out an offering to the lord in front of him. Though the details are indecipherable, perhaps he presents an offering in exchange for safe passage to the temple (and city) depicted in the top register.

The trail of footprints leads up into the top register where a lord climbs the stairs of a temple with red-framed *talud* architecture. The lord climbing the temple is painted in a larger scale than the rest of the men in the mural and his torso is rotated in three-quarter view, in order to occupy more of space in the painted scene, which indicates that he is the primary subject of mural. In Classic period Maya vase painting, Maya artists highlighted the most important person in a scene by depicting him or her frontally, or in a way that occupied the most visual space in the scene (Reents-Budet 1994). As in sculptural art, Maya artists often combined the frontal and profile view of the torso so that the head, legs and feet are depicted in profile while the shoulders and torso are rotated to the front. This artistic convention enabled the artist to depict the central figure in an active role in the scene since the rotated torso allowed the artists to paint the arms in symbolic gestures (Reents-Budet 1994).

The man turns his head to look back over his shoulder in an unnatural pose, which could signal his intention to return on the path he just traveled. He wears a headband that sits low on his brow and may have a rounded decorative element in



the center, which gives the impression that he is wearing a diadem. He may also be wearing a circular ear flare in his left ear. He wears a simple skirt with a scalloped or fringed hem. This style of skirt, denominated “unpatterned straight skirt” by Browder was worn throughout the Petén during the Early Classic (Browder 1991:240). The lord also appears to be holding a curved staff in his right hand.

Another lord is seated on a bench atop the pyramid in the top register. The pyramid is decorated with outset *tableros* decorated with red squares, but there are no corresponding *taluds*, which would place the building, and therefore the destination of the journey, in Teotihuacán. The lord seated on top of the pyramid wears an anklet, a fringed or feather wristlet and a loincloth with a circular element that could be a back mirror. His headdress is made of a fan of feathers in the back. The details of his face are not visible but he appears to have antennae protruding from his forehead. These protuberances could be attached to the front of his headdress or they could be an indication that this figure is also a supernatural.

The three scenes of mural 6-North may relate the origin myth of the La Sufricaya or Holmul dynasty. As Stuart (2000) argues, the dynastic histories of many sites in the Petén are related to intrusions from the highlands and provide the basis for pan-Mesoamerican origin myths that claim descent or power from a distant place, followed by journeys with stops along the way and the arrival at a new place where a new dynasty is established. Stuart argues that for the Maya, the origin of the power to rule was a distant Tollan located to the west, which may have been Teotihuacán itself (Stuart 2000: 501-3).

The location of this mural on the western side of Room 1 may not be a coincidence, since it may depict the journey taken by a local ruler to the mythical Tollan, located in the west, in order to receive the symbols of kingship. The footprints in the middle register proceed to the west, which indicates the cardinal direction of the Tollan.

Mural 6-North has been compared to the *lienzos* of Postclassic Mexico (Hurst 2009; Wagner 2004). *Lienzos* and *tiras* from Oaxaca and Puebla are painted sheets and rolls that depict the history of a polity. While they are related to the genealogical histories of the Mixtec codices they are distinctive because they are less biographical and depict fewer historical people and events than the codices. The *lienzos* and *tiras* depict the mythic past and foundation of a dynasty, the lines of successively inheriting rulers and the territory, with established geographical limits, of the polity. These pictorial histories follow a *res gestae* (from the Roman “deeds done”) structure that proceeds from event to event irrespective of time and place. The artists of the *lienzos* and *tiras* intended for them to be viewed in their entirety, rather than the folded codices, which were read page-by-page and guided by registers that defined the progression of events across the page (Boone 2000).

*Tiras* depict the mythic founding of a polity, which may begin in the deep past with the first emergence of supernaturals. The foundation story can also include pilgrimages (depicted by trails of footprints) and the performance of sacred rites. The foundation can also begin in the more recent past with the founder receiving the emblems of office and right to rule. The foundation story is followed by marriage pairs or ruler lists that trace the successive rulers of the polity. *Lienzos*

include both of these themes but ground them in a map of the territory. Indigenous peoples created these documents to protect the land of the community and establish a right to the territory that could be presented to the Spanish court. As such, the *lienzos* name features of the landscape and demarcate the boundaries of the territory in a map. (Boone 2000: 125-128).

The Selden roll is a 15<sup>th</sup> century manuscript from the Coixtlahuaca Valley that contains a foundation narrative which concentrates on bringing cult and rulership symbols to the polity followed by the performance foundation rituals. In this *tira*, four priests travel to the location of the polity and carry cult objects to be used in the foundation rituals. These objects include a cult bundle, staff, incense pouch, herbs, shield, spear, fire-drilling board, a long-handled incense pan and a conch trumpet (Figure 7.12). The foundation rituals include setting the cult bundle on a platform, drilling fire and placing the staff in the ground (Boone 2000: 154-6).

While there are visual and thematic similarities between Mural 6-North and the Colonial period *lienzos* and *tiras* from central and southern Mexico, it would be inaccurate to identify the La Sufricaya mural as a *lienzo*. *Lienzos* include three integral thematic components: the foundation story, ruler list and territorial boundaries. Mural 6-North only depicts a foundation story of a lineage, the subsequent rulers are not included and no details of the landscape and territory of the polity are depicted. Mural 6-North does, however, share characteristics of the foundation story narrated in the Selden Roll. The four figures, possibly priests, in the middle register carry ritual or cult objects and perform rituals during a journey to a distant polity where the protagonist receives the symbol of rulership.

Furthermore, *lienzos* were created with a specific purpose: to define and protect the land rights of indigenous peoples during the Colonial period. Rather than a precursor to Colonial period manuscripts, Mural 6-North should be considered an early example of a pan-Mesoamerican rulership practice that is legitimized by retrieving specific implements, in this case a torch, and performing rituals.

### Mural 8

Mural 8 is painted on the inner doorjamb to the north of mural 6-North. The jamb is very narrow and extends north-south for 0.56 m and is 1.60 m tall. The mural consists of more seated warriors within red frames that form rectangular registers (Figure 7.13). The warriors are seated upon low stools and some of them appear to hold spears in front of them. These figures, although they appear to be similar to those depicted in Mural 2, are executed in a different style, and their costumes are slightly different.

The first figure on the left is too damaged to make out many details, except for the wide belt or hip-cloth he wears and the feathers that project from the back of his headdress. The second figure from the left has black skin and wears a red hip-cloth knotted in the back, a red anklet and an ear flare. His headdress consists of a rectangular cap with a quincunx in the center and a plume of feathers streaming from the back. The projection of the feathers in this headdress resembles the headdress worn by the foreign lord in the mural from Uaxactún Structure B-XIII (see Figure 7.11). Very few details of the third figure remain except for the feathers of his headdress, his hip-cloth and the stool he sits upon. The fourth figure wears a different headdress that resembles the shape of the Late Classic Maya “drum major”

headdress, but this headdress includes two concentric circles. This figure also wears an ear flare, red hip-cloth and red anklet.

The artistic style and differences in costume could be explained by the possibility that this mural is a later addition to the program. A different artist may have painted Mural 8 after the doorway to Room 3 was cut into the north wall in order to replace a destroyed panel that may have once flanked Mural 1 in symmetrical placement to Mural 2. This speculation is based on the odd placement of the mural on a door-jamb and the almost haphazard placement of the figures within the frame. The figures float upward in the frame rather than resting on a straight line, which could reflect the lack of planning and guiding frames that were employed in Murals 1 and 2 (see Hurst 2009:Fig. 104).

### **Reading order and interpretation of the program**

The murals on the north wall of Room 1 are the focal point of the room. The lord of La Sufricaya would likely have sat upon a mat or bench made of perishable materials with his back to Murals 1 and 2. His visitors would have been confronted with the imposing sight of over 100 lords behind him. Given the tight confines of Room 1, the figures on the murals may very well have outnumbered the visitors to La Sufricaya. As visitors faced the lord of La Sufricaya, they would observe the scenes behind him from left-to-right, west-to-east beginning with the journey taken to Tollan to receive the symbols or tools of rulership and the performance of proscribed rituals along the way in Mural 6-North. Murals 1 and 2 depict various local and foreign lords who served as witnesses to the accession of the lord who completed the journey recounted in Mural 6-North. Murals 3 and 6 may depict

processions that were part of the accession rituals as well as additional witnesses to the event and can be read in interchangeable order.

The murals serve as an historical document that depicts the trials, rituals and symbols performed and acquired by the lord of La Sufricaya in order to establish his right to rule. The figures depicted in the murals bear witness to his authority but also serve as proxy military support since La Sufricaya was founded outside of the Holmul site center and perhaps without the support of the royal dynasty. The program of murals is a powerful political statement that would make any visiting lord think twice about questioning the legitimacy or authority of the lord of La Sufricaya.

### **Ethnic identity and ascription in the La Sufricaya murals**

While the subject matter of the murals certainly focuses on dynastic history and ritual behavior, ethnic identity is an underlying subject as well. The costumes and regalia of the lords and warriors depicted in the murals may broadcast markers of ethnic identity, as does the artistic style in which the murals are rendered.

Ethnic identities often arise out of historical circumstances that involve interaction or competition with other groups. Interaction with a foreign ethnic group gives rise to self-awareness, or a break in doxic knowledge, when the previously subconscious dispositions of the *habitus* of a group of people become consciously recognized. These dispositions may become ethnic emblems, recognized as practices or elements of material culture that distinguish one ethnic group from another, through self-ascription or ethnic ascription by another group of people. Ethnic emblems can be claimed by a group though self-ascription or

ascribed to one ethnic group by a members of an outside group. In turn, ethnic emblems are depicted in art created by members and non-members of the group. The artistic style of a culture can become emblematic as well, and this is certainly true of Mesoamerican cultures, which had distinctive ways of depicting themselves and the world around them. Pasztory (1984, 1993) identified several ethnic styles of art that were emblematic of Classic period cultures and were recognized by other groups, which also served to maintain ethnic boundaries.

Artistic style can be appropriated or imitated by other groups, as Nagao (1989) argues in the case of the Cacaxtla murals of Central Mexico that are painted in the Maya artistic style. Although the murals suggest that ethnically Maya people lived at Cacaxtla, the archaeological evidence does not support the original interpretations that the site was founded by or inhabited by Maya. Nagao's study serves as a cautionary tale for scholars who are tempted to make a direct correlation between artistic style and the presence of ethnic groups.

The Maya artistic style is characterized by naturalism, especially in relation to the human form. Maya artists developed ways to depict the human form in life-like ways by using techniques such as foreshortening, overlapping and three-dimensionality. The human body is represented in long and narrow proportions (Miller 1999). Classic Maya art is also humanistic in that it depicts people in action and their clothing and adornments are rendered in exquisite detail, which artistic traits that highlight individual identity. The Teotihuacán artistic style, on the other hand, is characterized by two-dimensionality, visual juxtaposition, abstraction and repetition (C. Millon 1973). Humans are depicted in profile with squat, angular,

unnatural proportions with very few personal details that relate to personal identity. The Teotihuacán artistic style could be a reflection of the collective leadership of the site and the societal emphasis on the collective state interest rather than the individual, whereas the Maya created art that emphasized the importance and exploits of individuals (Headrick 2007, 2017). The two artistic styles, and cultures, are almost exact opposites of one another.

### **Identifying ethnic affiliation through costume**

Ethnic identity becomes unconsciously embodied by individuals and is exhibited by the clothes they wear, the style of body adornment (hairstyles, jewelry, tattoos) and even posture. The materials used in clothing, costume and weaponry are a reflection of worldview through the resources, both foreign and local, that people attach significance to and choose to adorn themselves with. While the Maya and Teotihuacanos had access to similar resources, they did not use the same materials in their dress, accouterments or weapons. This point is evident in the La Sufricaya murals and other representations of foreigners in the Petén created during the Early Classic period. Although it is impossible to firmly identify the personages in the murals, it is possible to tease out aspects of ethnic identity by comparing the surviving elements of costume and weaponry to other representations in Maya and Teotihuacán art.

The seated warriors in Mural 2 exhibit several obvious central Mexican ethnic markers of identity, which are also depicted on the Tikal PD 50 vessel (Figure 7.14). These emblems include the clusters of three darts held by the warriors,



feathers trailing behind from their loincloths and the “Tlaloc goggles”<sup>22</sup> in the headdresses. In fact, many of these details are strikingly similar to the figures on the vessel PD 50 vessel that one wonders if the La Sufricaya artist painted the same delegation of visitors. The three darts in both representations have circles, perhaps tufts of cotton at the base of the darts and feathers at the end of the darts. The La Sufricaya warriors also wear anklets and wristlets similar to Figures E, F and G on the PD 50 vessel.

The black headdresses worn by the warriors in row 5 are very similar to the balloon headdress worn by Figure G on the PD 50 vessel: both are rounded at the top, have feathers protruding from the front and back, and include the “Tlaloc goggles”. A final ethnic emblem of the seated warriors is their posture – they all sit with their knees bent in front of them, just as Figure K does on the PD 50 vessel. Figure K has been interpreted by scholars to be someone watching the delegation depart from their homeland, since he sits in front of a talud-tablero style temple. In Classic period art the Maya usually depict themselves seated with their legs folded in front, in a crossed-leg position, while central Mexican groups depict people seated with their knees bent in front of them.

Furthermore, these figures are rendered in slightly unnatural proportions – their torsos are hunched over their bent knees, their necks are not visible and their heads appear to simply sit on top of their torsos. Their eyes are painted forward on the face, almost directly above the nose rather than set back in the head. In general,

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<sup>22</sup> A more neutral term for this adornment, which consists of concentric circles made of unknown material, used by Teotihuacán scholars is “roundel”.

they are rendered in a style that is more similar to the central Mexican artistic and corporal style than the Maya style.

### **Comparison of Teotihuacanos in Maya art**

Among the corpus of Maya art that depicts foreigners, the predominant medium is carved stone or painted ceramic. There are only two known examples of foreigners in mural art-including the La Sufricaya murals--which are the only surviving example of this medium. Each medium reflects a distinct purpose and message. Many of the carved stone monuments (Tikal St. 31, Uaxactún St. 5, Waká St. 15) are public proclamations that reference Sihyaj K'ahk' and the 11 Eb event. Others merely depict a male figure dressed in Teotihuacán style costume (Tikal St. 32, Tres Islas St. 1, 2 & 3, Waká St. 16, Yaxha St. 11). The frontal view of these figures recalls the artistic convention of frontally depicting deities at Teotihuacán (Kubler 1967). Most of the ceramics are decorated with Tlaloc imagery or depict Teotihuacán priests and warriors and were for personal use as gifts and burial offerings. The vessel from Tikal PD 50 is an exception because it, like the Uaxactún and La Sufricaya murals, depicts a moment of interaction and is a historical record.

There are some consistencies in the elements of Teotihuacano costume throughout all three mediums. For instance, Teotihuacán warriors wear fringed garters (Uaxactún Mural, PD 50 vessel, Tikal Stela 31, and possibly the La Sufricaya murals). Another common costume element is a cascade of 3-4 tails or feathers that fall from the back of the belt/hipcloth/loincloth worn by Teotihuacanos. This costume element is evident on Uaxactún Stela 5, Tikal Stela 31, Tikal PD 50 vessel

and the La Sufricaya murals, particularly in the two black-colored figures in the second row of Mural 2.

The weaponry carried by the Teotihuacán warriors is also consistently depicted, such as the *atlatl* with two loops for the fingers (Uaxactún mural, PD 50 vessel, Tikal Stela 31, Uaxactún Stela 5); furthermore, the Teotihuacán *atlatls* appear to be decorated with feathers that flare from the sides. The warriors in La Sufricaya Mural 2 as well as these other examples from Maya art also carry bundles of three darts that have circular adornments at the base of the dart and feathers at the base of the shaft, which mirrors almost exactly how these weapons are depicted in Teotihuacán murals in the Atetelco apartment compound (Figure 7.15).

The greatest variety in Maya depictions of Teotihuacanos is evident in the headdresses worn by Teotihuacán emissaries, which may be a reflection of the social class, rank or office of the visitors as well as an indication of the nature of cross-cultural interaction. Feathers and Tlaloc goggles are prominent features of Teotihuacán headdresses. Some of the headdresses feature fans of feathers extending from the top and sides while others are comprised of a bunch of feathers protruding from the back of the head. A common trait is the “balloon” or “puff” headdress as worn by Sihyaj K’ahk’ on Uaxactún Stela 5 and possibly Figure G in Tikal PD 50 vessel and the warriors in row 5 of La Sufricaya Mural 2.

Some of these headdresses are also represented in Teotihuacán mural art and figurines. The tassel headdress, distinguished by a row of feathered tassels hanging from panels with a plaque decorated with circular objects beneath them, appears in both murals and figurines (Figure 7.16), as well as in Maya art (Yaxha

Stela11, Tikal PD 50 vessel). These images form the basis for Clara Millon's model of cross-cultural interaction involving emissaries of Teotihuacán who wear the tassel headdress. Millon's seminal article proposed a model for Teotihuacán state expansion through the deployment of men of a certain social or political position, identified by the tassel headdress, who acted on behalf of the Teotihuacán state in distant regions (Millon 1973:305).

Headdresses that include "Tlaloc goggles" or roundels are also common in the art of Teotihuacán. The figurines recovered from Linné's excavations conducted in 1932 include replicas of Teotihuacanos wearing an array of headdresses. The variety in elaboration and adornment suggest that these figurines represent a broad spectrum of Teotihuacán society. The figurines include representations of the tassel headdress, headdresses that include "Tlaloc goggles" and simpler headdresses that may have been worn by people of lower social rank (Figures 7.17 and 7.18). The simple headdresses consist of a headpiece that may be a turban with roundels on the band covering the forehead. This type of headdress is similar to those worn by the seated warriors in La Sufricaya Mural 2. The man kneeling in the bottom left area of the "Ofrendas" mural in the Temple of Agriculture at Teotihuacán wears headdress could be a model for the headdresses worn by the seated figures in row 5 of Mural 2 as well as figure G on the vessel from Tikal PD 50 (Figure 7.19). The cap of this headdress is in the shape of an animal head. The snout of the animal protrudes from the front, several feathers stand out from the top and a plume of feathers streams from the back. The man wearing the headdress also wears two circular adornments on his forehead, which could be roundels or Tlaloc goggles.

Based on this comparison of Teotihuacán costume depicted in Maya and Teotihuacán art, it seems that the Maya are accurately portraying emissaries from Teotihuacán. Furthermore, the La Sufricaya murals may depict Teotihuacanos of lower social rank, distinguished by different skin color, costume and scale, who accompanied the emissaries as guards or hunters, just as the tassel headdress emissaries were accompanied by spear-wielding figures with Tlaloc goggle headdresses on the Tikal vase from Problematic Deposit 50. Therefore, it seems plausible that the artist of La Sufricaya had some direct contact with Teotihuacán emissaries, either at La Sufricaya or other sites in the Petén. It is important to note that Teotihuacanos wearing the tassel headdress do not appear in the La Sufricaya murals. This fact may be attributed to the loss and poor preservation of portions of the murals, but the absence of the tassel headdress could indicate that Millon's (1973) widely accepted model of Maya-Teotihuacán interaction does not apply to cross-cultural contact at La Sufricaya.

### **Scenes of confrontation and Maya doxic knowledge**

Several pieces of public art dating from the Early Classic period depict people of different cultures in the same scene. Monte Alban Monument 9, the Estela Lisa, the Bazán Slab, Tikal Stela 31, the incised vessel from Tikal Problematic Deposit 50, the mural from Uaxactún Structure B-XIII and now La Sufricaya Murals 1 and 2 are all part of a unique corpus of art. These scenes of encounters between people of different cultures are intriguing not only for the clues they provide regarding cross-cultural interaction and historic developments, but also because they illustrate how the Maya perceived themselves and Teotihuacanos in juxtaposition.

Coggins argues that Teotihuacán introduced the importance of depicting actual events to the Maya (Coggins 1976: 183). While it seems true that this Early Classic innovation in Maya art breaks with the themes of Preclassic art centered on mythology and cosmological order. Though the murals from San Bartolo combine mythology and history, these Early Classic monuments depict specific moments in time, and we have to ask why the Maya decided to incorporate this genre into their artistic repertoire. I suggest that the Maya rulers of the central Petén used this medium to build and solidify an imagined regional elite community based on connections to Teotihuacán. This corpus of Early Classic art consists of not very subtle political statements and records of the historic events that united a group of Maya rulers and bolstered their claims to power. This imagined regional elite community at once set the participating rulers apart from their subjects and elite peers, but also established ties between sites that superseded local identities and provided the basis for new practices of rulership. By emphasizing historic events, specifically interactions with Teotihuacanos that the general populace may have been aware of, Maya rulers proclaimed their legitimacy through connections to current events rather than the mythological past. This is in contrast to Preclassic rulers that drew their legitimacy from mythology and depicting themselves as deities.

This corpus of art is perhaps most significant because it depicts the break in doxic knowledge as different groups of people interact and the formation of ethnic identity as they recognize the elements and dispositions that comprise their own identity and those of the other group. In these works of art we learn how and what

the Maya came to recognize as essential elements of their ethnic identity that set them apart from Teotihuacán and vice versa. Furthermore, the ways in which members of the outside group are depicted may reflect how people grappled with breaks in doxic knowledge during periods of cross-cultural interaction. In general, breaks in doxic knowledge can result in orthodoxy, when a group of people refuses to accept other ways of life and beliefs, or heterodoxy, the acceptance and perhaps inclusion of other beliefs. The art created during periods of interaction reflects the outcome of breaks in doxic knowledge. Art that portrays other groups through derogatory stereotypes may indicate a sense of orthodoxy whereas art that portrays other groups accurately and neutrally may result from heterodoxy.

For example, the ancient Egyptians created state art that depicted ethnic stereotypes of Nubians, Asiatics and Libyans (Figure 7.19). The art created by the Egyptian state, depicted the people of these ethnic groups in stereotypes that reflected Egyptian orthodoxy, the public rejection of Nubian, Asiatic and Libyan beliefs, resulting in art that portrayed these groups as inferior and uncivilized (Smith 2003: 21-29). People of other ethnic groups are depicted with the most salient features of ethnic differences, such as dark skin, curly hair and facial hair, which the Egyptians considered barbaric.

The Aztec codices delineate various ethnic identities by physical features and costume. The Aztec distinguished themselves from the Chichimecs, whom the Aztec regarded as “uncivilized”, in their pictorial histories by depicting the “barbaric” way of life of their enemies: the bows and arrows they carried, clothes made of animal hides and unkempt hair. In contrast, the “civilized” Aztecs used swords and spear

throwers, wore clothing made of cotton, and kept their hair neatly coifed (Boone 2000b: 46). Like ancient Egyptian state art, the negative stereotypes in Aztec art reflect orthodoxy and the rejection of the beliefs of other ethnic groups.

Maya art from the Early Classic period of interaction with Teotihuacán differs from this trend. The Teotihuacán foreigners are not disparaged or depicted as inhuman in Maya art. One might argue that this is because the Maya were the conquered, not the conquerors, but in this situation but we cannot know that for sure. The Maya art may reflect the resulting heterodoxy that enabled the Maya to accept certain Teotihuacano beliefs and practices such as the god Tlaloc and the new use of *atlats* in war.

I contend that the art from this period, particularly scenes that depict both Maya and Teotihuacanos, can be considered a visual representation of breaks in doxic knowledge that occurred during periods of culture contact. Much of the monumental art from the preceding Late Preclassic period is related to Maya cosmology and the place of rulers at the center of the cosmos. In the Early Classic scenes of confrontation, Maya artists produced visual representations of heterodoxy resulting from contact with Teotihuacán in which the Maya became aware of other forms of ideology and cultural practices.

## **Conclusion**

The murals within Room 1 at La Sufricaya provide crucial details of the political history of the site and its role within the Holmul region. Even though the full details of the murals cannot be ascertained, a reasonable interpretation is that they document historic events from the Early Classic period, specifically the period



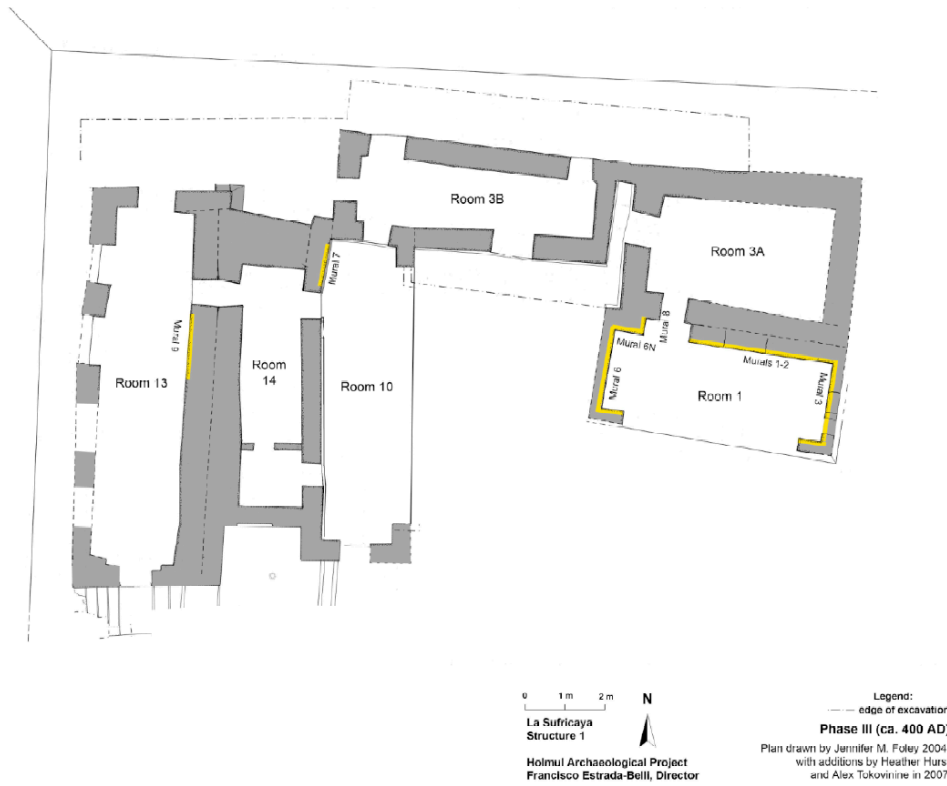
of interaction with Teotihuacán circa AD 378. While the complete message of the murals remains frustratingly incomplete due to their poor state of preservation, it seems reasonable to suggest that they depict local Maya and foreign lords attending an accession ceremony and the associated rituals performed by the rising ruler.

The La Sufricaya murals are a significant archaeological find not only because they are a rare historical record from the Early Classic period, but also because they contain the earliest known imagery of the Maya rulers traveling to Tollan in order to legitimize their power. Mural 6-North depicts a lord on pilgrimage to obtain symbols of authority from a distant land. Four priests accompany him, performing rituals and carrying sacred objects. Many of the lords in Murals 1 and 3 hold handled objects that may be bags used for scattering rituals. These are all elements of accession stories recounted by the Maya, Mixtec and Aztec that span the Early Classic period through the Post-Classic period.

The appearance of foreign warriors in the La Sufricaya murals implies that some degree of cross-cultural interaction occurred at the site. In some ways, these foreigners resemble depictions of Teotihuacanos created by other Maya artists, but the costumes of the La Sufricaya warriors include some very specific details that are only known from art at Teotihuacán itself. These images suggest that the La Sufricaya artist (or artists) had intimate knowledge of Teotihuacán warriors and perhaps created portraits based on first-hand observation. By extension, it would seem that the lord of La Sufricaya who constructed Structure 1 and commissioned the murals had some direct contact with Teotihuacán and/or its emissaries.

As one of the first acts in the founding of La Sufricaya, the new lord of the site commissioned a program of murals that served as a public recounting of his journey to Tollan in order to receive symbols of office, the rituals he performed along the way and the powerful local and foreign dignitaries who witnessed his installation on the throne of La Sufricaya. There was no need for an oral recounting of his deeds and political legitimacy since his visitors were confronted with the vibrant murals and imposing figures of lords and warriors when they entered Room 1 to greet the lord of La Sufricaya. The lord of La Sufricaya likely sat on a perishable mat or throne with his back to the north wall, the Teotihuacano warriors behind him as a reminder of the foreign military support he enjoyed.

Finally, the murals should be included in a limited corpus of Early Classic art that depicts scenes of historical encounters between people of different ethnic groups. While Coggins originally interpreted this corpus as a new theme of art introduced to the Maya by Teotihuacán, I elaborate on that point by suggesting that these works of art were created in conjunction with the formation of an imagined elite regional community that united Maya rulers across the central Petén and provided a new claim to legitimacy for Maya rulers. This corpus of art served as a public or tangible reminder, and a practice of affiliation, of the alliance formed through the imagined regional elite community for its members and marks the introduction of powerful, historic political statements in Maya art.



**Figure 7.1 Plan of La Sufricaya Structure 1 with location of murals (updated plan by H. Hurst)**

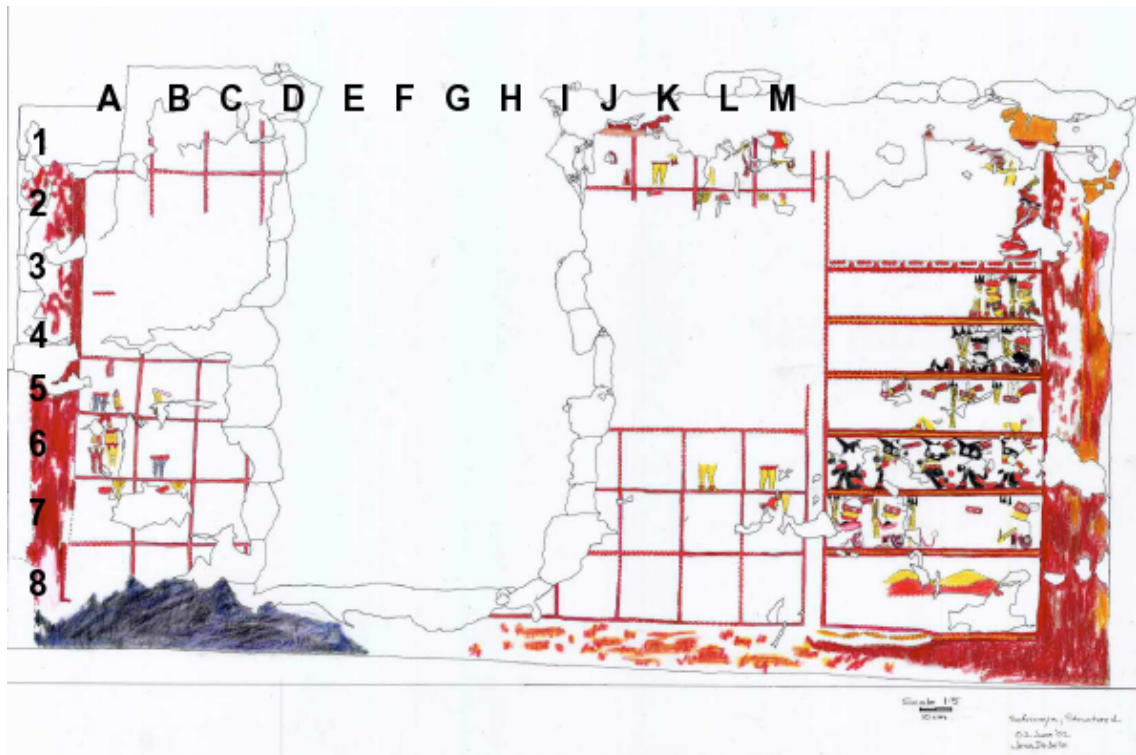
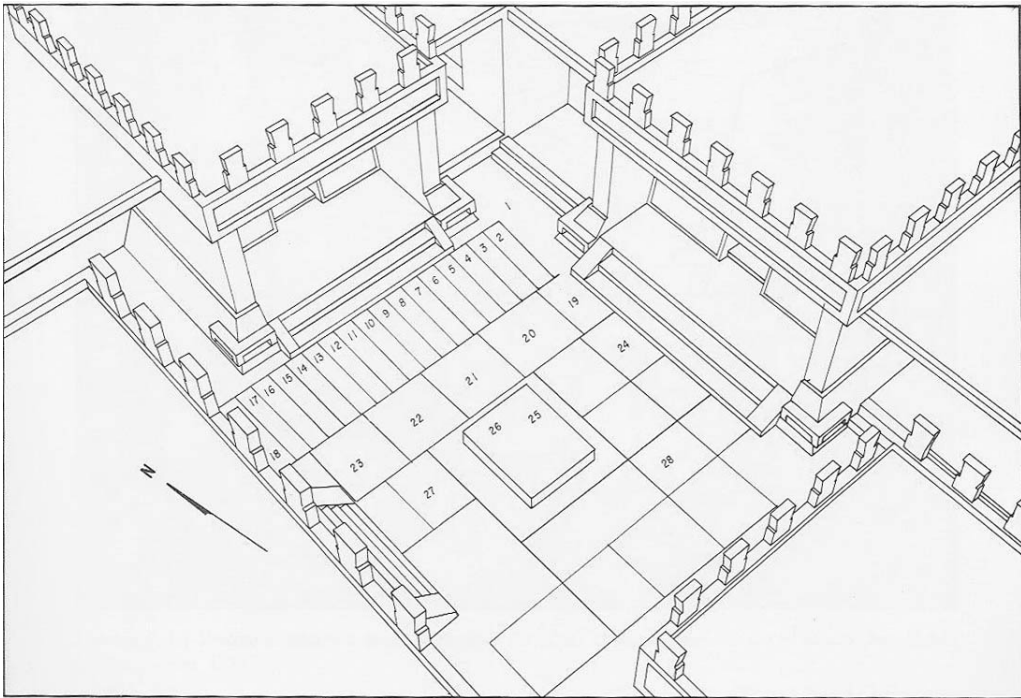
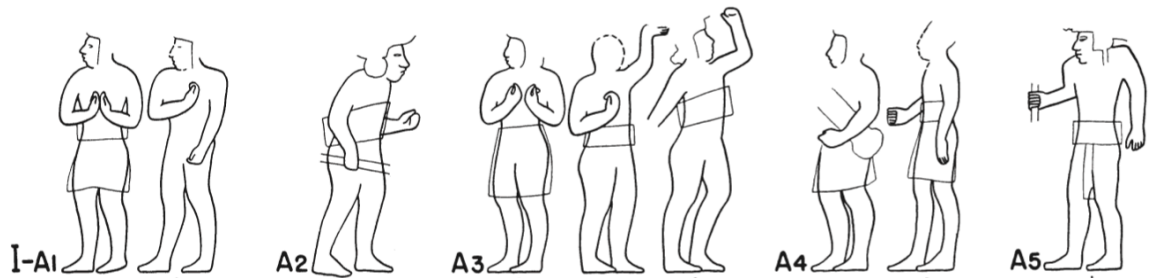


Figure 7.2 Reconstruction of Murals 1 and 2 (Drawing by Jenna DeJulio with additions by the author).



**Figure 7.3 Drawing of Plaza de los Glifos, La Ventilla, Teotihuacán (After Cabrero Castro 1995)**



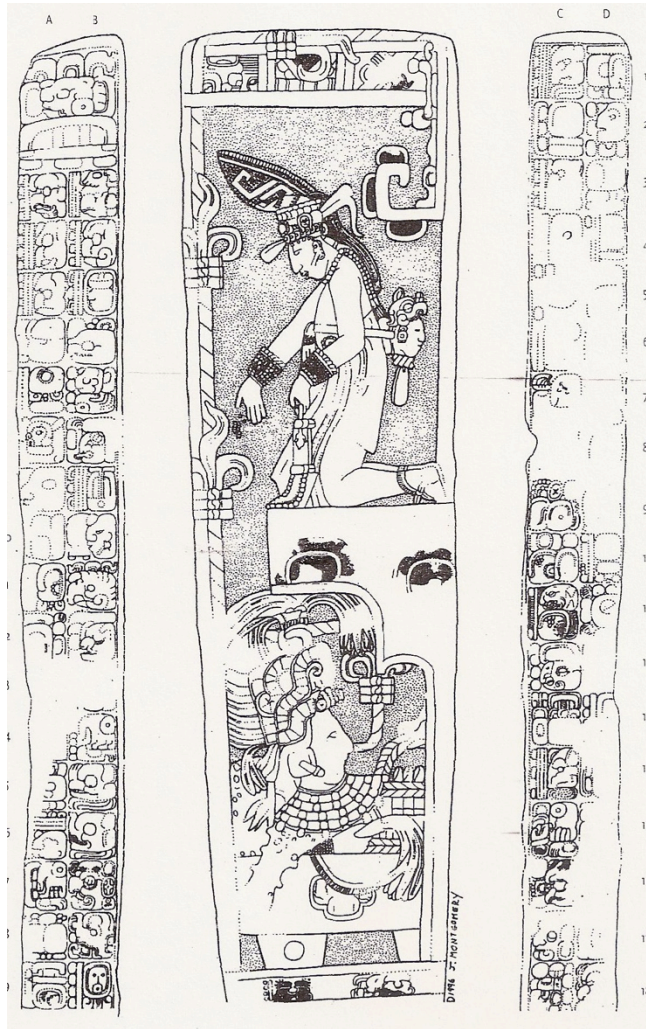
**Figure 7.4 Comparison of stances from Early Classic Maya monuments (After Proskouriakoff 1950: Fig. 7)**



Figure 7.5 Detail of La Sufricaya Mural 2, rows 2-6 (Drawing by Jena DeJulio)

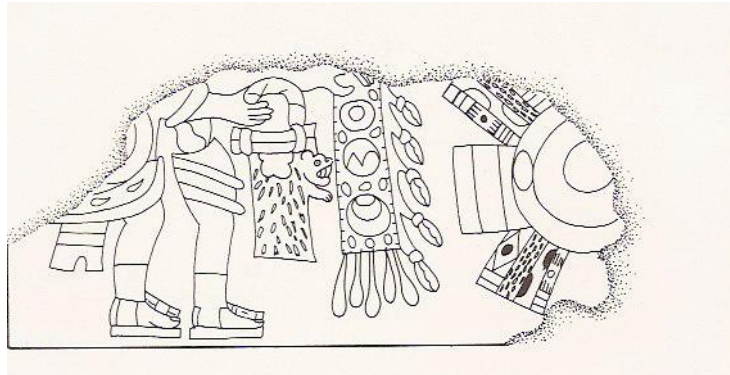


**Figure 7.6 Detail of Mural 3 (Drawing by Jena DeJulio)**



**Figure 7.7 Piedras Negras Stela 40 depicting ruler performing a scattering ritual and holding a ceremonial bag (After Clancy 2009: Fig. 6.7)**





**Figure 7.8** Fragment of mural from Tetitla compound depicting a priest holding a ceremonial bag and performing a scattering ritual (After Miller 1973)



**Figure 7.9** Detail of Mural 6 depicting costumed processional figures (Photo by the author)

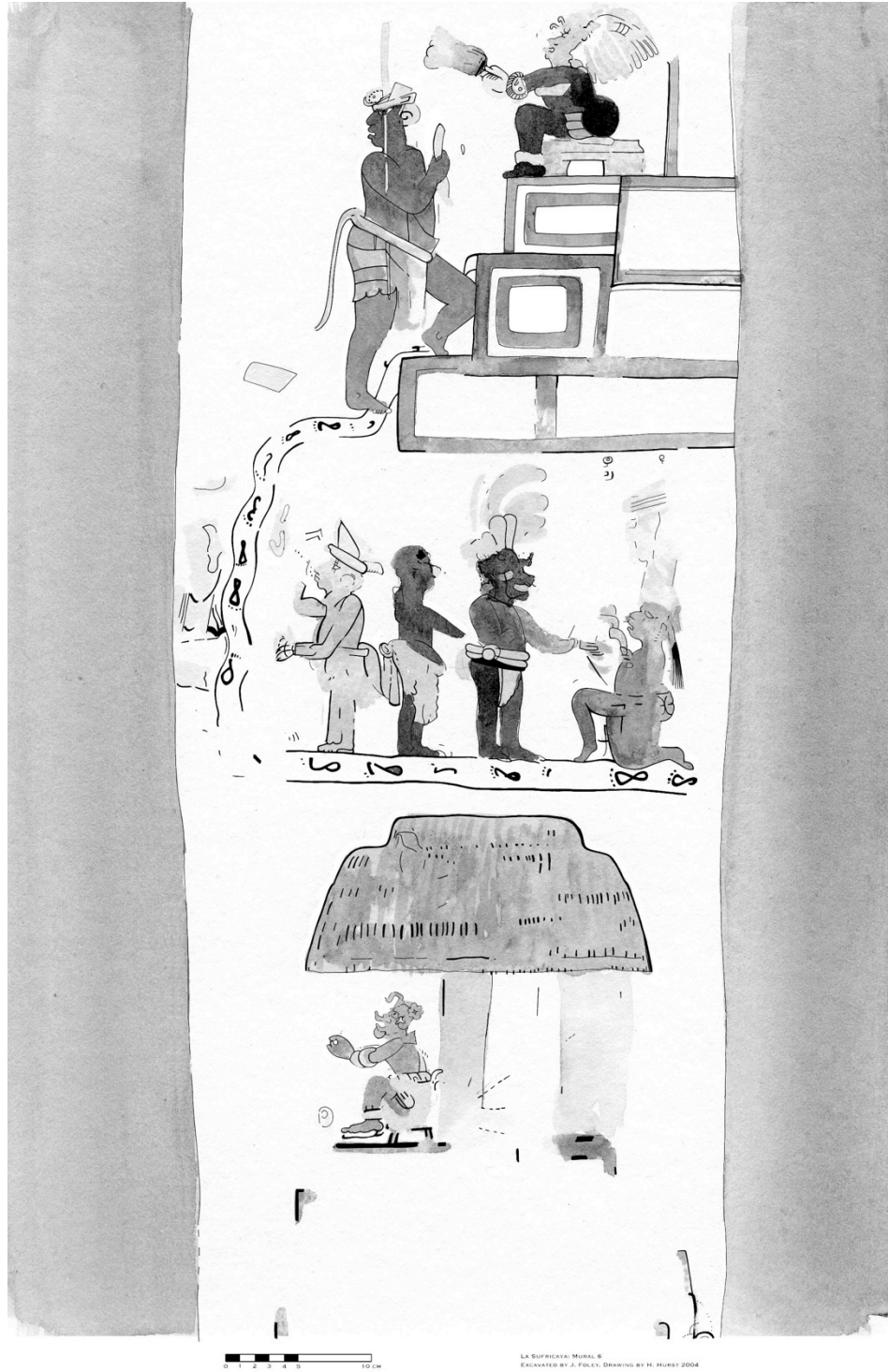
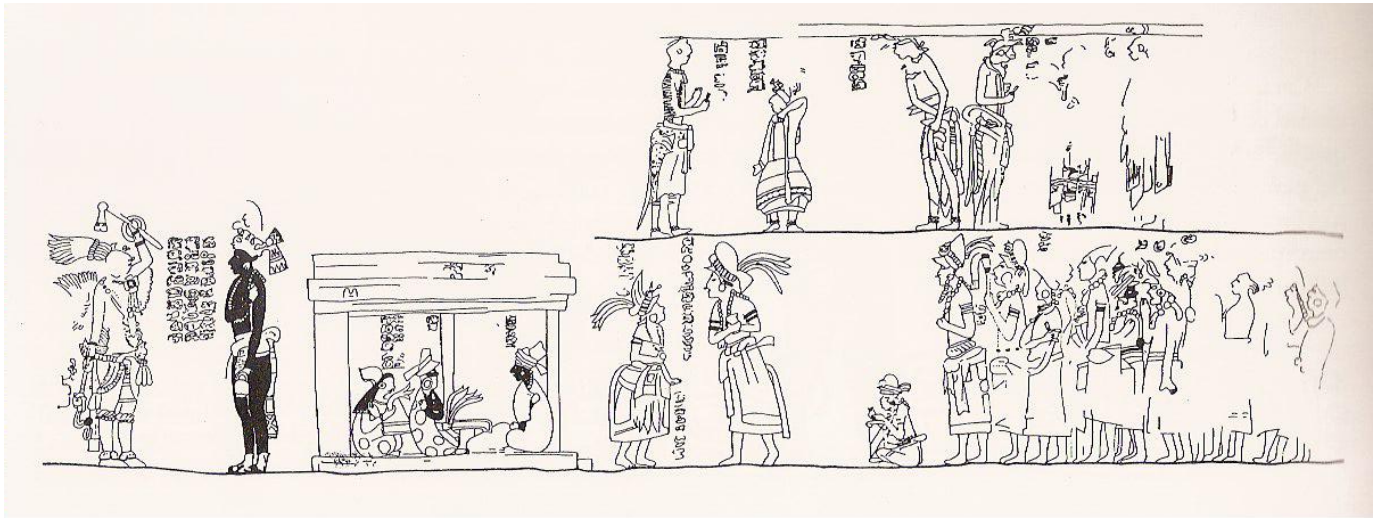
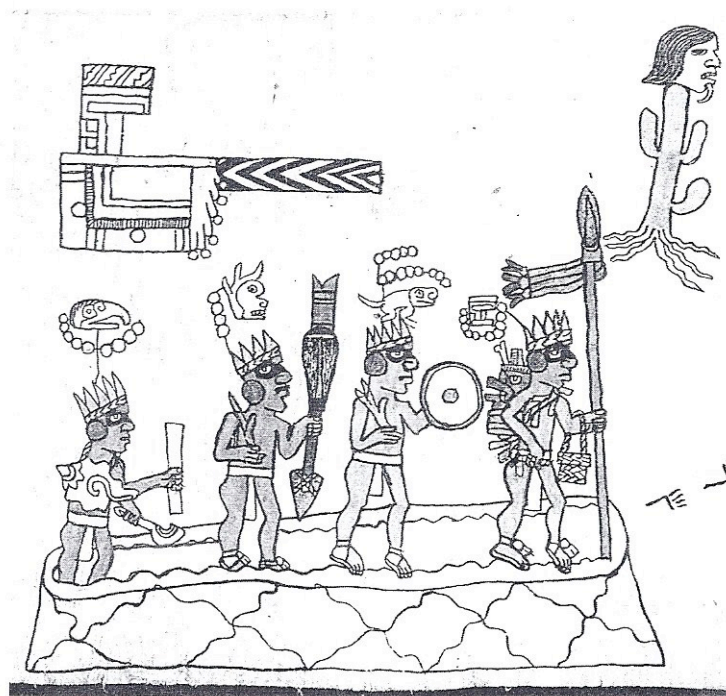


Figure 7.10 Reconstruction of Mural 6-North (Painting by Heather Hurst)



**Figure 7.11 Drawing of mural from Uaxactún Structure B-XIII (After Smith 1950: Fig. 46)**



**Figure 7.12 Detail of Selden Roll depicting four priests carrying symbols of rulership (After Boone 2000 Fig. 99)**

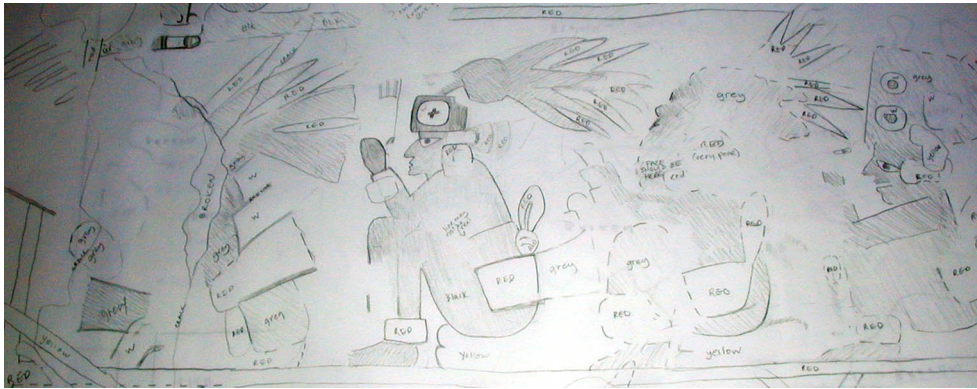


Figure 7.13 Detail of Mural 8 depicting seated figures wearing Teotihuacán style attire (Field drawing by Heather Hurst)

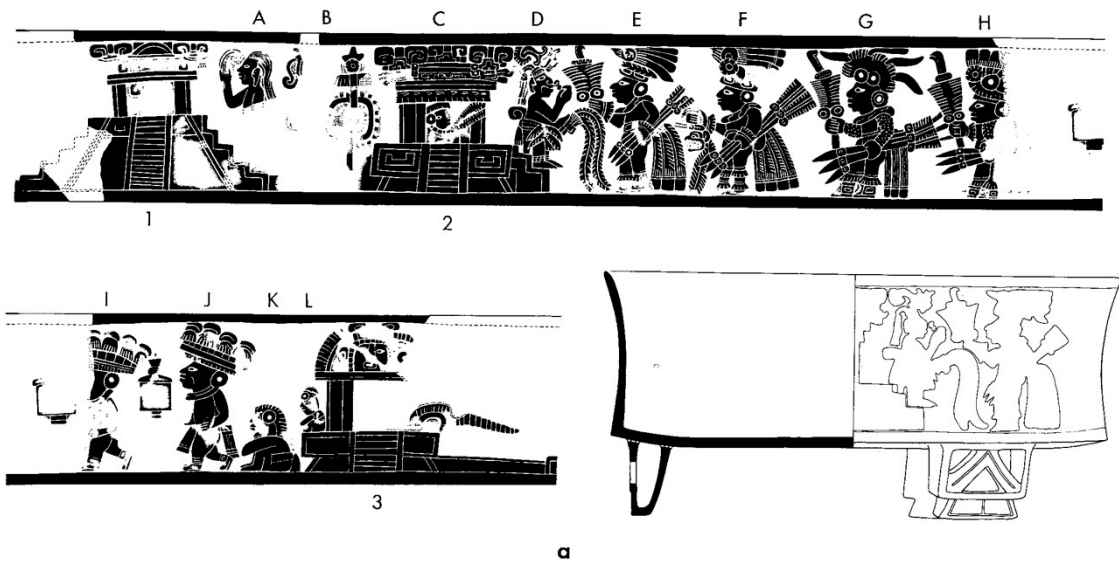
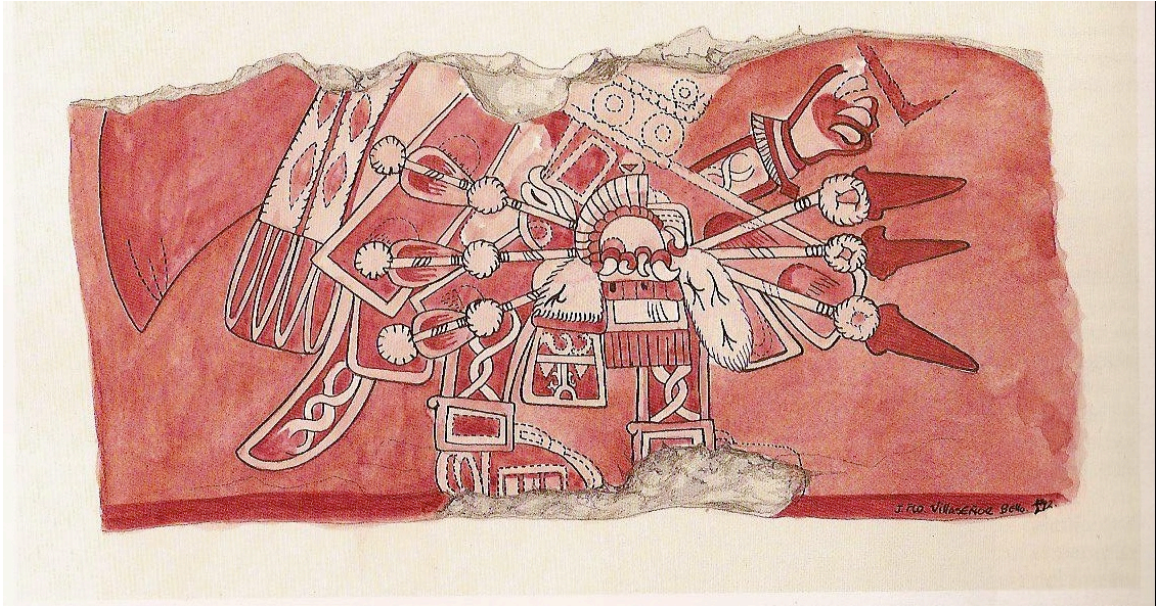


Figure 7.14 Drawing of vessel from Tikal Problematic Deposit 50 (After Culbert 1993: Fig. 128)



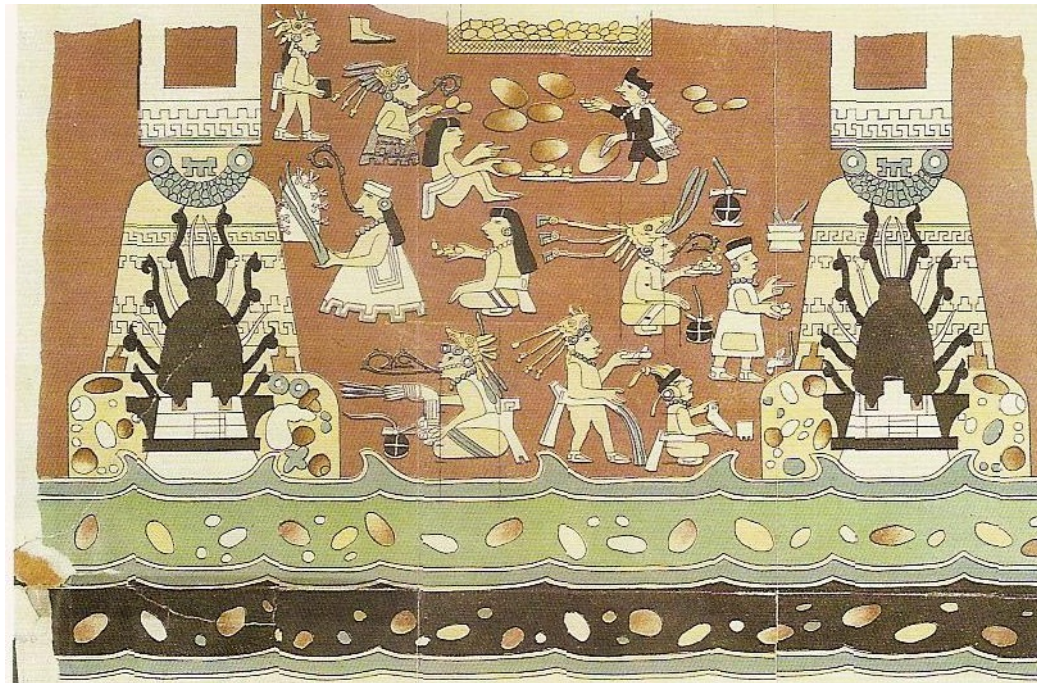
**Figure 7.15** Fragment of mural from Teotihuacán Atetelco apartment compound depicting a warrior carrying a bundle of darts (After Cabrera Castro 1995: Fig. 54)



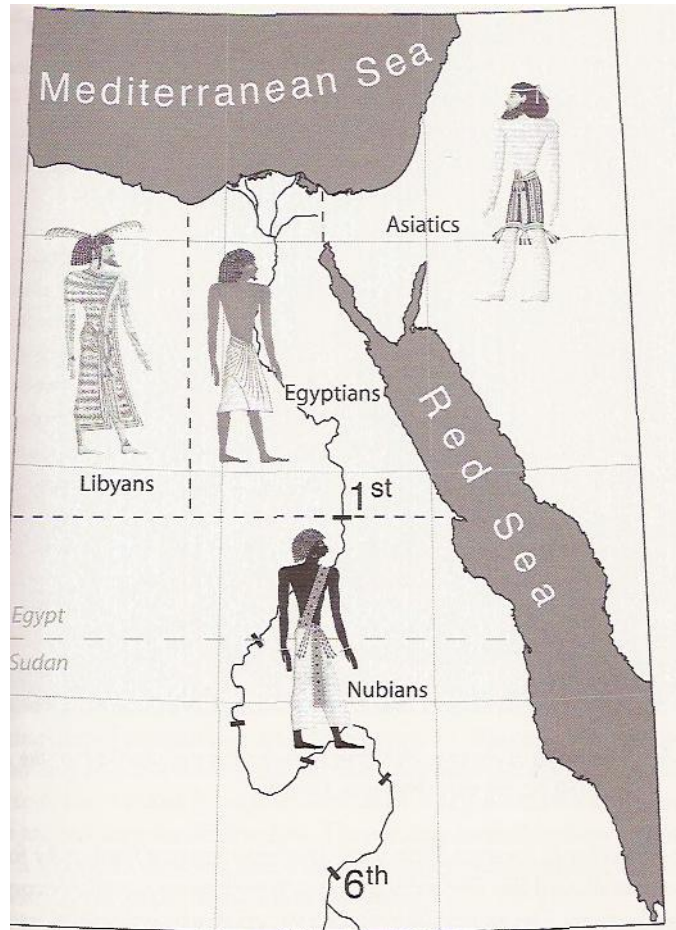
**Figure 7.16** Fragment of figurine from Teotihuacán wearing the tassel headdress (After Scott 2001: Plate 142)



**Figure 7.17 Assortment of figurine fragments from Teotihuacán wearing headdresses with roundels or “Tlaloc goggles” (After Scott 2001: Plate 29)**



**Figure 7.18** Detail of the “Ofrendas” mural from the Temple of Agriculture at Teotihuacán. Note the headdress worn by the man kneeling on bottom left (After de la Fuente 1995: Plate 5)



**Figure 7.19** Map from the Tomb of Seti I in the Valley of the Kings depicting Egyptian ethnic stereotypes of Asiatics, Libyans and Nubians (After Smith 2003: Fig. 2.2).



## **Chapter VIII - Discussion of theoretical framework for understanding Early Classic cross-cultural interaction**

### **Introduction**

The foregoing analyses of the archaeological evidence from La Sufricaya has illustrated that the architecture, ceramics, obsidian technology and mural art produced by the elite residents of the site coincides with regional patterns in the Maya lowlands. This material is a reflection of Maya *habitus* and *doxa* and clearly indicates that La Sufricaya was not inhabited by a colony of Teotihuacanos. An important caveat, however, is that the La Sufricaya elites may have had some contact with people from Teotihuacán, or even had experience with the city itself. The degree of contact between La Sufricaya and Teotihuacán remains ambiguous but this study has examined the social contexts in which interaction occurred and proposes a new theoretical framework for understanding the impact of cross-cultural interaction between the Maya and Teotihuacán.

This chapter provides a discussion of the proposed framework, which is centered on viewing the problem of Maya-Teotihuacán interaction through the concept of ethnic identity formed through *habitus* and *doxa*. This framework provides a basis for understanding how contact with Teotihuacán precipitated a break in Maya doxic knowledge that gave rise to Maya self-consciousness. This self-consciousness brought about an awareness of Maya ethnic identity in opposition to Teotihuacán identity and also allowed pre-existing Maya sociopolitical tensions to rise to the surface. This framework also analyses strategies employed by Maya

rulers to cope with, and take advantage of, the Early Classic period of cross-cultural interaction and break in doxic knowledge.

The following discussion includes a comparison to archaeological case studies of cross-cultural interaction that employ a similar framework to analyze ethnicity in ancient Roman colonies in Britain (Jones 1997) and an ancient Egyptian colony in Nubia (Smith 2003). While the nature of culture contact in these case studies is based on conquest and colonization, which is not the case in Maya-Teotihuacán interaction, they demonstrate two important points that have been neglected in previous studies of the Maya-Teotihuacán problem: first, that it is important to examine the contexts in which foreign styles were used in order to understand the impact of culture contact and second, that people developed strategies to maintain their own ethnic identities while negotiating new social identities that permitted cross-cultural interaction.

This issue of cross-cultural interaction between the Maya and Teotihuacán was much more dynamic than many previous studies have considered. While the elites of some Maya sites may have had direct contact with Teotihuacán and its emissaries, most sites in the Petén have limited evidence of interaction that is confined to elite and royal contexts. Instead of interpreting this material as the path of Teotihuacán conquest or influence, I suggest that this evidence be viewed as symbols of an alliance network centered around an imagined elite regional community (Yaeger 2000) that was established through practices of affiliation involving the exchange, gifting and display of culture material that was emblematic of Teotihuacán as well as public art that references the events of AD 378 at Tikal.

The Early Classic imagined regional elite community of the Petén served to distinguish the members from the elites of other rising polities and solidified trade and alliance networks stemming from Tikal, which was probably backed by Teotihuacán or its powerful emissary, Sihyaj K'ahk'. While there is evidence of interaction between Tikal and most of the other participants in the imagined community, there is less evidence that the other members were in contact with each other, outside of regional trade networks. The members of the imagined community based their right to rule on foreign symbols and rites of accession derived from Teotihuacán.

### ***Habitus, doxa* and identity transformation**

It is important to remember that *habitus*, as the concept is outlined by Bourdieu (1977), does not equate to ethnic identity. Rather, the shared dispositions of *habitus* subconsciously structures how people perceive the world and act within it, resulting in patterns of behavior that are shared by members of a group. In turn, the shared *habitus* gives rise to *doxa*, which masks social inequities or tensions because people feel a subconscious connection to other members of the group and perceive the state of affairs to be a natural part of the social or world order. The *habitus* and *doxa* contribute to the subconscious or primordial aspects of ethnic identity, but ethnic identity cannot be formed in a vacuum, it is relational and therefore is only fully expressed in opposition to other groups (Comaroff and Comaroff 1992).

During periods of contact with outside groups, people begin to recognize that their cultural practices are arbitrary and that there are other ways to make and

decorate a pot, honor gods or govern a polity. This newfound self-consciousness gives rise to heterodoxy, when other cultural practices and ideologies are appreciated and perhaps incorporated, or orthodoxy, which is a denial of the validity of other beliefs and practices (Bourdieu 1977). States of heterodoxy may result in the adoption of other beliefs and practices or forms of material culture associated with other ethnic groups. In contrast, states of orthodoxy result in the maintenance of strict ethnic boundaries and ethnic styles in the material culture. Cross-cultural interaction gives rise to self-consciousness that leads to the expression of ethnic symbols or emblems, as well as social tensions. The liminal space between conscious and unconscious is generative and contributes to the transformation of ethnic identity as well as the emergence of new social identities (Comaroff and Comaroff 1991). Therefore, ethnic identity “is a product of the intersection of similarities and differences in people’s *habitus* and the conditions characterizing any given historical situation” in which cross-cultural interaction occurs, resulting in breaks in doxic knowledge (Jones 1997:126).

The dispositions of *habitus* are manifest in the material culture of any group of people, giving rise to “ethnic styles” that archaeologists can identify in the material record. Archaeologists have generally assumed that ethnic styles in the material culture can be used to document and interpret cross-cultural interaction. The problem is that style has many meanings, not all of which are immediately gleaned from archaeological contexts. The presence of outside ethnic styles does not necessarily reflect the presence of foreigners, nor does it provide a clear indication of the degree and nature of cross-cultural interaction (Jones 1997:126). Instead,

many scholars have emphasized the importance of examining the social contexts in which ethnic styles are manipulated in order to create and reproduce ethnic and social identities (Janusek 2002; Jones 1997; Smith 2001).

Jones' (1997) re-examination of the "Romanization" of settlements in Britain illustrates the flaws in equating ethnic style with the degree and nature of cross-cultural interaction. Scholars traditionally interpreted the presence of Roman-style material culture, such as Gallo-Belgic pottery as evidence of local acculturation to Roman ideology and culture. Jones examined the social contexts in which Roman artifacts were discovered and argues that the Roman styles were appropriated and subverted in various contexts as demonstrations of a localized identity. Furthermore, the appropriation of "Roman-style" material culture by the people of Britain varied between and within socio-cultural groups in order to express identity and transform pre-existing hierarchical social relations (Jones 1997:135).

Similarly, Janusek's analysis of Tiwanaku-style pottery in residential compounds of Andean urban settlements found that the production and use of distinct Tiwanaku-style ceramic vessels expressed a local appropriation of Tiwanaku state material culture that solidified local identity and reproduced social boundaries (Janusek 2002:54).

Smith's study of an ancient Egyptian colony in Nubia examines the distinction between state messages of ethnic identity and the ways in which Nubians and Egyptians negotiated ethnic and social identities in the colonial frontier (Smith 2003). Smith found that Egyptian state messages regarding ethnic boundaries were subverted at the local, frontier level in order to permit cross-cultural interaction. In

particular, Egyptian state material culture and identity dominated public social contexts while Nubian identity was maintained and expressed in private, domestic spheres (Smith 2003:206).

These case studies illustrate strategies for coping with breaks in doxic knowledge that alleviates cultural crises brought about by heterodoxy and pre-existing sociopolitical problems. Dynamic and comprehensive studies of cross-cultural interaction identify the social contexts in which foreign styles appear in order to examine the ways in which the material culture was used to transform existing local social relations and form new social identities. These studies also demonstrate how classes of material culture, namely foreign-style pottery, signify transformations in local identity rather than the presence of foreigners.

### **Imagined Community and the Problem of Maya-Teotihuacán Interaction**

According to Anderson's (1983) framework, nations are imagined communities that were fostered by print capitalism. Books and other media printed in the vernacular language, rather than exclusive script languages like Latin, enabled people from various communities, speaking different dialects, to understand one another and a common discourse emerged. These imagined communities of people who could not interact on an everyday, face-to-face basis are instead based on the mental image people have of their affinity with others.

Although Maya polities never became united as a single nation, elements of Anderson's model can be applied to the Early Classic period in order to understand the spread of Teotihuacán iconography and artifacts throughout the Petén after AD 378 and the subsequent retrospective monuments erected a generation later.

Rather than a national imagined community based on script and media that was accessible to every member of society, this Early Classic imagined community united lords across the region through the exchange and display of Teotihuacán-style materials and iconography. Membership in the imagined community may have been limited to the rulers of less than ten sites in the Petén, and whether initiated by diplomatic visits or coercion, it united these lords and allowed them to proclaim their right to rule based on foreign symbols of power.

The media of the Early Classic imagined community includes Teotihuacán-style ceramics, iconography, Pachuca obsidian, *talud-tablero* architecture and public monuments that reference the 11 Eb event or portray rulers in foreign regalia. The creation and display of these emblems of Teotihuacán identity served as practices of affiliation that united the members of the imagined regional community (Yaeger 2000). The presence of all forms of media may not have been required and in fact is rarely found at most of the sites, except for Tikal, but the greater variety of media at a particular site could have indicated that the lord played a larger role in the imagined community or was more politically connected to other sites.

Some classes of artifacts were probably stronger markers of membership in the imagined community than others. Public monuments and *talud-tablero* architecture were visible markers that broadcast membership to subjects and elite alike. Furthermore, these markers required the lord to commission the works and mobilize a workforce, which was a reflection of his power and authority. Displaying specialized Teotihuacán iconography may have also a strong marker of membership since the lord who commissioned the piece and/or the artist that produced it must

have learned of the images through first-hand interaction with foreigners or through Maya lords intimately connected to central Mexico. Cylinder tripod vessels with painted stucco and Teotihuacán iconography were likely created for private use in the households of the lords and also included in ritual and mortuary offerings. These objects would only have been seen by the local elite and visiting dignitaries, which is exactly the audience that required proof of legitimacy. Pachuca obsidian blades were used at some sites in elite residential contexts. While Pachuca obsidian may not have been reserved solely for use by the *ajaw*, everyone in his household might have been reminded of his connection to the imagined community, and by extension Teotihuacán, as they used the blades. However, blades were also included in ritual caches and mortuary offerings at other sites, which implies that for some lords they were significant markers of membership. Lords from other sites, such as Altun Ha, received offerings of Pachuca eccentrics or points that were made using Teotihuacán technology, and these gifts were probably significant and served to honor the recipient.

The following discussion provides a rough chronological outline of the evidence and practices of affiliation that identify each site as a member of the imagined regional elite community and hypothetical reconstructions of the sociopolitical circumstances that necessitated or required membership.

### Tikal

Tikal has the most evidence of long-standing direct contact with Teotihuacán and may have been the locus of the imagined regional elite community. Evidence of trade with central Mexico, in the form of Pachuca obsidian, cylinder tripod vessels



and Thin Orange ware dates as far back as Late Preclassic period. *Talud-tablero* architecture was incorporated into the Mundo Perdido complex as early as AD 250-300, though this construction may reflect participation in a regional stylistic horizon rather than direct contact with Teotihuacán (Laporte 2003: 294). It is evident that Tikal rulers, including the deposed king Chak Tok Ich'aak I, were in contact with many regions of Mesoamerica, including central Mexico, well before the Teotihuacán *entrada* of AD 378.

The highest frequency of foreign-style artifacts and iconography among all Petén sites has been found at Tikal. It is likely that the rulers of the site controlled the re-distribution of imported Pachuca obsidian, since Pachuca cores have been recovered at the site and the Pachuca blades found at Tikal have the widest mean length of Maya sites, which indicates that the Tikaleños had more access to the resource than people of other sites. Interaction between Teotihuacán and Tikal likely began as a reciprocal trade partnership that brought people, Pachuca obsidian, ceramics and iconography from central Mexico to the Petén. The dynamic shifted in AD 378 when the Tikal dynastic line was interrupted, either by foreign intrusion or a local faction backed by Teotihuacán, and emblems of Teotihuacán identity such as painted stucco cylinder tripod vessels took on new meanings, and Teotihuacán iconography was incorporated into public art.

Stela 4 is the earliest monument from Tikal that portrays a Maya ruler in foreign regalia. Yax Nuun Ayiin I is depicted on the front of the monument wearing a Teotihuacán-style headdress and the text on its back commemorates his accession in AD 379 (Miller 1999; Stuart 2000). When Yax Nuun Ayiin I died sometime

between AD 404-406, he was interred in a tomb (Burial 10), along with sacrificial victims and rich offerings that included Pachuca obsidian and several vessels with Teotihuacán decorative motifs and iconography. These vessels, many of which may have been imported, represent the first known example of the practice of affiliation involving the gifting of Teotihuacán-style ceramics and their use in funerary contexts.

Stela 32, depicting a Teotihuacán warrior, and Problematic Deposit 50, which includes the vessel depicting Teotihuacán emissaries, were also created at some time spanning the reigns of Yax Nuun Ayiin I and his son, Sihyaj Chan K'awiil I (see Figure 3.9) Precise dates are not available for the erection of the monument or the burial of the Problematic Deposit, but they likely date to the late facet of the Early Classic period AD 400-600 (Coggins 1975; Moholy-Nagy 1962).

Sihyaj Chan K'awiil II ascended to the throne of Tikal in AD 411 after his father's death and continued the practice of displaying Teotihuacán iconography in public art. Stela 31, which he erected in AD 455, depicts his father dressed as a Teotihuacán warrior and recalls the arrival of Sihyaj K'ahk' in AD 378 (Coggins 1975; Stuart 2000) (see Figure 3.7). Upon Sihyaj Chan K'awiil II's death in AD 456, Pachuca obsidian and Teotihuacán style ceramic vessels were deposited in his royal tomb, continuing the use of foreign-style ceramics in funerary contexts.

This pattern was evident in the Mundo Perdido complex, especially in residential groups 6C-XVI and 6D-V, where Pachuca obsidian and Teotihuacán-style ceramics were included in elite residential middens, burials and Problematic Deposits (Laporte 1989, Laporte and Fialko 1995). At least one piece of public art

signaled the affiliation of elite Mundo Perdido residents with the imagined regional elite community. The Tikal Ballcourt Marker, or “Marcador,” which may date to AD 416 and references Sihyaj K’ahk’ and the AD 378 11 Eb arrival date, was recovered from Group 6C-XVI as well (Laporte and Fialko 1995; Stuart 2000).

Contact between Teotihuacán and Tikal may have spanned several centuries and the reigns of several kings, yet for approximately 100 years during the Early Classic period (379-460 AD), markers of Teotihuacán identity and references to the 378 AD event were used in funerary contexts and public art for political purposes that drew allusions between the Maya rulers and other elite members of society and Teotihuacán. These practices established a pattern emulated by rulers from other Maya sites.

### Uaxactún

The political fate of the Uaxactún rulers was intertwined with that of Tikal throughout the history of the site. This point is abundantly clear in the Early Classic when the only contemporary references to the 11 Eb date at Tikal are found at Uaxactún. Stela 5, which may date to A.D 378, was erected in a royal residential complex and depicts a central Mexican warrior, perhaps Sihyaj K’ahk’, on the front and includes the 11 Eb date and the Tikal emblem glyph in the text on the back (Schele and Freidel 1990; Valdés and Fahsen 1993)(see Figure 3.14). This monument was presumably erected by the Uaxactún king who ruled at the same time as Chak Tok Ich’aak I and/or Yax Nuun Ayiin I and has been interpreted as a record of Sihyaj K’ahk’s arrival at Tikal (Stuart 2000).

A later monument, Stela 4, appears to have been erected by Sihyaj K’ahk’

himself in AD 396 and placed next to Stela 5 (Valdés and Fahsen 1993). This monument is poorly preserved and does not provide many details, but its presence at Uaxactún 8 years after the *entrada* events at Tikal may signify Sihyaj K'ahk's support of the Uaxactún ruler in the Early Classic Petén alliance network.

Another piece of public art, the mural in the throne room of Structure B-XIII, is an extraordinary example of the practices of affiliation carried out by the Uaxactún rulers in order to signify their participation in the imagined elite regional community (see Figure 7.11). The mural, which was painted on the wall behind a bench in an open portico room, depicts a Maya lord greeting a central Mexican warrior. The gesture of the Maya lord, one arm crossed over his chest, may signify fealty, or at the very least a peaceful greeting between equals. Like the La Sufricaya murals, the lord of Uaxactún created a public statement of his legitimacy to rule that was related to interaction with Teotihuacan.

The royal tombs of the ruler who witnessed the 11 Eb *entrada* at Tikal and his successors included Pachuca obsidian and Tzakol 3 ceramics, some of which were decorated with Teotihuacán-style motifs and iconography. The earliest tomb, Burial A29, is associated with the ruler who was a contemporary of Yax Nuun Ayiin I at Tikal and ruled circa AD 400, though the date of his death is not known (Valdés 1989). Without precise dates for the Uaxactún royal tomb, it is impossible to discern whether the practice of including Teotihuacán-style materials in royal tombs, originated at Tikal or Uaxactún, but the shared traits indicate that the rulers of both sites were in close contact and used similar strategies to proclaim their legitimacy and power.

A retrospective monument, Stela 22, served as a final practice of affiliation carried out by Uaxactún rulers. This monument dates to AD 495-504 and recalls the 11 Eb date. The stela was placed above the last of the Tzakol 3 royal tombs in Structure A-V and likely identifies the final member of the Uaxactún dynasty to participate in the imagined regional elite community.

### La Sufricaya/Holmul

The practices of affiliation evident at La Sufricaya include public art referencing Sihyaj K'ahk' and the 11 Eb events as well as depictions of central Mexicans. Mural 7 from Structure 1 at La Sufricaya was painted in AD 379, and recalls the events and political figures of AD 378 (see Figure 4.33). Like Uaxactún Stela 5, it is one of the few contemporary references to the sociopolitical upheaval at Tikal, and the La Sufricaya lord appears to have aligned himself with Sihyaj K'ahk' and the new dynasty at Tikal, in a similar strategy to that of the Uaxactún ruler who commissioned Stela 5. La Sufricaya Stela 6 is also roughly contemporaneous, dating to the period between AD 377-387, and the text may include the name glyph of Sihyaj K'ahk' (Grube 2003). The murals of Room 1, similar to the Uaxactún mural, imply that the La Sufricaya lords bore witness to, or participated in the 11 Eb event at Tikal, or were visited by the same delegation of Teotihuacanos (see Figures 7.2, 7.5, 7.6, 7.9 and 7.10). In either case, the event held sufficient sociopolitical weight to inspire a La Sufricaya lord to record the event in a public display.

The looted tombs prevent us from ever knowing if the La Sufricaya lords used funerary offerings including Pachuca obsidian and Teotihuacán-style ceramics to broadcast their membership in the regional elite community. Remnants of

Teotihuacán-style ceramics recovered from the midden material associated with Structure 1 indicate that the La Sufricaya lords used these vessels in their household, where they would have been on display during feasts and meetings with visiting dignitaries, and would have served as reminders to the inhabitants and visitors of the connection between Teotihuacán, Tikal and the other members sites in the Petén imagined regional elite community.

The La Sufricaya lords used public art to broadcast their affiliation with the Petén regional elite imagined community, but also employed Pachuca obsidian and Teotihuacán-style ceramics in their household to recall their membership on a private scale. While material evidence tying the La Sufricaya lords to many of the other member sites of the imagined regional elite community has not yet been recovered, INAA analysis of the ceramics from the Holmul region illustrates connections with sites throughout the Petén. The public art used as a practice of affiliation, especially the murals of Room 1, at La Sufricaya also suggests close ties to the Uaxactún dynasty.

### Río Azul

Drastic transformations took place in Río Azul region during the Early Classic 2 period of the site (AD 360-550) and began around AD 385. Three carved stone altars dating to this period depict rulers of the Río Azul zone naked and bound (see Figures 3.16 and 3.17). Stela 1, which includes a hieroglyphic text naming a Río Azul ruler, Sak Balam, and possibly Sihyaj K'ahk', was erected seven years later in AD 392 (see Figure 3.16). These monuments have been interpreted as evidence for the conquest of the Río Azul region by Tikal (Adams 1999).

Royal tombs from the fifth century provide further support of the connection between Tikal and Río Azul. Tomb 1 belonging to Governor X contained painted murals of hieroglyphic texts, which detailed the ruler's birth in AD 417 and his lineage, which included his father Sihyaj Chan K'awiil II and grandfather, Yax Nun Ayiin, of Tikal. Adams (1990) places Governor X's death around AD 460 based on radiocarbon dates, stratigraphy and ceramic evidence. The burial goods associated with Tombs 19 and 23 contained lidded Balanza Black cylindrical tripod vessels, which Adams describes as Teotihuacán-style pottery and Pachuca obsidian blades. The woman buried in Tomb 25 was also accompanied by offerings of Pachuca obsidian and Teotihuacán-style ceramic vessels. The royal palace of Governor X (C-46 Complex) contained Teotihuacán-style pottery and a Teotihuacán style cremation burial (Eaton and Farrior 1989).

Adams reconstructs the history of Río Azul as inextricably linked to the political and economic fortunes of Tikal. The site is located along a crucial riverine trade route linking the Petén with the Yucatan peninsula, and cacao was likely produced in the region or shipped along the river trade route. Furthermore, Río Azul is strategically situated in "buffer zone" between the regional states of Tikal and Calakmul. From about AD 350 onward, this "no man's land" was only occupied by small farmsteads and housemounds. Adams argues that Tikal established Río Azul as an outpost to guard its economic interests and to provide political protection against the Calakmul state (Adams 1999: 42-44).

It is important to note that the founding through conquest and development of Río Azul took place after the 11 Eb event of AD 378. If Adams' interpretation of the

altars holds true, it would seem that the Río Azul elites were not willing participants in the alliance network developed by Tikal in the Early Classic period. Instead, 14 years after the *entrada* at Tikal, Sihyaj K'ahk' and Tikal supplanted the local political structure during a political maneuver to gain control of a strategic area of the Petén. While the identity of the interregnum ruler is lost, a subsequent ruler, Governor X, appears to have been the son of Sihyaj Chan K'awiil II of Tikal, suggesting a likely dynastic change at Río Azul. The status of this ruler, as well as other members of the Río Azul elite, was expressed through the offerings included in his tomb. These offerings, including Pachuca obsidian and cylindrical tripod vessels, represent practices of affiliation with Tikal and the imagined regional elite community based on connections to Teotihuacan.

#### El Peru/Waka'

Even though Sihyaj K'ahk' apparently arrived at El Peru/Waka' on the way to Tikal in AD 378, the practices of affiliation of the imagined regional elite community found at Waka' post-date the arrival of the foreign lord by 37 years. Stela 15, a retrospective monument erected in AD 415, recounts the meeting between the Waka' ruler K'inich Balam and Sihyaj K'ahk' eight days before Sihyaj K'ahk' arrived at Tikal in 378 AD (Freidel et al. 2007)(see Figure 3.18). This monument can be considered a practice of affiliation carried out by K'inich Balam's successor in order to recall the importance of his ancestor's connection to Sihyaj K'ahk' and to Teotihuacán, thereby signaling his status as a member in the imagined regional elite community.

Stela 16, which may also include 11 Eb references and is possibly a portrait of



Sihyaj K'ahk', was dedicated in AD 456, 78 years after the arrival date (see Figure 3.19). These monuments, though they recall the *entrada* events were not contemporary records of the political history. Aside from some pieces of Pachuca obsidian recovered from Early Classic contexts, there are no other significant lines of evidence that tie the El Peru/Waka' rulers to the imagined regional elite community and so, at least for now, it seems they were peripheral members in the alliance network. This scenario is borne out by the later alliance Waka' rulers enjoyed with Calakmul, a site that competed with Tikal for control of the region in the Late Classic period.

### Copan

K'inich Yax K'uk' Mo founded a new dynasty at Copan in AD 426, 48 years after the *entrada* at Tikal. During the Early Classic period K'inich Yax K'uk Mo' constructed a new palace that incorporated *talud-tablero* architecture, and his tomb (Hunal) as well as that of his wife (Margarita) was filled with rich mortuary offerings that included Teotihuacán-style ceramics made in the Maya region, Thin Orange ware vessels imported from Teotihuacán and Pachuca obsidian (Bell 2001; Price et al. 2010, Reents-Budet et al. 2004; Sharer et al. 1999, 2005). K'inich Yax K'uk' Mo's political strategy was so successful that 350 years after his death, the allusions he drew between himself and central Mexico were still remembered by the 16<sup>th</sup> ruler of Copan who created Altar Q, which depicts K'inich Yax K'uk Mo' dressed in a Teotihuacán warrior costume (see Figure 3.12).

While the Teotihuacán-style architecture, ceramics, regalia and Pachuca obsidian associated with his reign initially led scholars to surmise that K'inich Yax

K'uk' Mo was a foreigner from central Mexico, the current understanding of the presence of these foreign styles at Copan is that they were purposely used by the king to associate himself with the power and prestige of Teotihuacán. Any connections between Copan and Teotihuacán were probably mediated by Tikal (Sharer et al. 1999). The isotopic analysis of the skeletal remains believed to be those of K'inich Yax K'uk' Mo' indicate that he spent his childhood in the central Maya lowlands (Buikstra et al. 2004) and Stuart has recently proposed that a place name associated with his title indicates that he was originally from Caracol (Stuart 2007). While there is no evidence that Caracol lords incorporated Teotihuacán styles into their symbols and rituals of authority, K'inich Yax K'uk' Mo' would certainly have been aware of the imagined regional elite community through exchange networks and could have adapted this political strategy to enable his ascendance to the Copan throne<sup>23</sup>.

## **Summary**

It is difficult to pinpoint the development of the imagined regional elite community because of the lack of precise dates for many of the royal tombs and public monuments that may be considered practices of affiliation. Scholars tend to conflate the early and late facets of the Early Classic period in discussions of the problem of Maya-Teotihuacán interaction, which gives a false impression of the pervasiveness of Teotihuacán influence in the Maya region. It is important to distinguish between the first and second generations of Maya rulers who were

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<sup>23</sup> A recently discovered cremation burial at Caracol that includes Pachca obsidian objects dates to 250-350 AD and suggests the site had contact with Teotihuacan (Chase and Chase 2011).

associated with Teotihuacán-style material in order to determine the degree and nature of contact between their sites and Teotihuacán. In many cases, the foreign styles recovered from the archaeological record may not have resulted from direct contact with central Mexico, but rather a political alliance based on allusions to Teotihuacán. Most of the monuments referring to Sihyaj K'ahk' or the 11 Eb date are retrospective rather than contemporary historical accounts: therefore, the second generation of members in the regional elite community relied heavily on public art to signify alliances. The La Sufricaya data demonstrates that the portable Teotihuacán-style artifacts, such as Pachuca obsidian and cylindrical tripod vessels may have been used as private reminders of membership in the imagined community.

While this discussion has highlighted sites that have similar archaeological correlates of practices of affiliation, it is possible that many more sites participated in the imagined regional elite community. Stelae at Bejucal (Stela 1) and Yaxha (Stela 11) which mention Sihyaj K'ahk' and depict a Teotihuacán warrior respectively, likely served as practices of affiliation as well. Pachuca obsidian and *talud-tablero* architecture has been discovered in Early Classic contexts at Nakum (Koszkul et al. 2006), which is located near Yaxha, and may also reflect membership in the alliance network.

Recent epigraphic evidence may lend support to the model proposed here. Stuart (2011) has highlighted a reference to “28 provinces” in the hieroglyphic text of Tikal Stela 31 and wonders if this passage refers to a group of nobles who bear witness to important ritual ceremonies. A passage in the text describes how Yax

Nuun Ayiin I received the “burden” of the “28 provinces” and that it was overseen by Sihyaj K’ahk’. The interpretation of this passage is that Yax Nuun Ayiin I took possession (or became the head of) of a larger geopolitical structure or entity located within the central Petén (Stuart 2011:6). Perhaps the “28 provinces” were established through participation in an imagined regional elite community that was initiated by Tikal, overseen by Sihyaj K’ahk’ and based on allusions to Teotihuacán. It is important to remember that Tikal Stela 31 is a retrospective monument, and while it describes the “28 provinces” as though the political structure was already in existence during the accession of Yax Nuun Ayiin I, this may not have actually been the case. The relatively limited imagined community outlined here could have later expanded to include 28 provinces or lords from 28 sites, or we may not have archaeologically identified the other locations yet due to limitations in research and sampling.

## **Conclusion**

The Early Classic, especially the early facet (AD 250-350), was a period of flux in Maya civilization. The period is characterized by the abandonment of Late Preclassic practices (architectural configurations and construction technique, calligraphic mural art, and ceramic forms), population shifts, and the rise of new polities, resulting in competition among rulers for control of resources and trade networks. Perhaps due to the Late Preclassic collapse of sites like El Mirador, Nakbe and Cival in the Holmul region, Maya rulers required new ways to define rulership and legitimize their power. The arrival of Sihyaj K’ahk’ and/or Teotihuacanos at Tikal in AD 378 precipitated a shift in Maya *doxa* related to the rights of rulership.

The Late Preclassic kings based their power on their connection to cosmological forces and as a living impersonation of the Maize God, but some Early Classic kings drew their power from mythohistorical connections to Teotihuacán and foreign accession rituals and symbols of power. While the Tikal ruler Yax N'uun Ayiin may have established a new dynasty with the aid of Teotihuacán intervention, the rulers of other sites who erected monuments commemorating the 11 Eb 15 Mac event probably did not have direct contact with Teotihuacán and instead created a mythohistorical link to Teotihuacán by engaging in accession rituals involving pilgrimages to Teotihuacán or rites carried out at a *wi'te'naah*, which has central Mexican origins, in order to legitimize their own right to rule.

These rulers in the Petén, including K'inich Ajaw Yax K'uk Mo of Copan who was born in the region, developed a strategy to cope with the break in doxic knowledge created by cross-cultural interaction with Teotihuacán by creating an imagined regional elite community that served a local purpose of addressing rising sociopolitical tensions by solidifying alliances and revolutionizing the root of royal authority. This imagined regional elite community served to counteract rising competition from growing polities and perhaps a sense of disillusionment in the populace stemming from the Late Preclassic collapse. This Early Classic transformation of the office of Maya kings had a lasting impact on Maya elite culture.

## Chapter IX - Conclusions

### Introduction

The preceding analysis of the archaeological material from La Sufricaya has addressed several research goals. The primary goal of this work is to understand the function of Structure 1 and by extension, the role of the La Sufricaya elite residents in the sociopolitical history of the Holmul region. The second goal centers on determining the degree (direct vs. indirect) and nature of interaction between the La Sufricaya elites and Teotihuacán. Finally, this study aimed to understand the impact cross-cultural interaction might have had on Maya ethnic identity. I have argued that interaction with Teotihuacán during the Early Classic period precipitated breaks in Maya doxic knowledge. The resulting sense of heterodoxy gave rise to self-consciousness that permitted the adoption of certain elements of Teotihuacán ideology and prestige items by Maya rulers. In turn, the self-consciousness led to a formation of an imagined regional elite community, based on practices of affiliation that drew associations between the members and Teotihuacán. This imagined regional elite community served to solidify strategic political alliances, perhaps in response to increasing factional competition in the Maya lowlands during the middle facet of the Early Classic period (AD 350-450).

This work has employed the analysis of the archaeological material recovered from La Sufricaya, particularly architectural, ceramic, obsidian and iconography in order to address these questions. These lines of evidence elucidate

the types of activities carried out by the residents of Structure 1 at La Sufricaya, which clarifies the function of the structure. By extension, the function of Structure 1, along with the possession of foreign prestige items and esoteric knowledge, is a reflection of the relative status of the La Sufricaya residents and their role in the sociopolitical history of the Holmul region. These materials are also reflections of Maya *habitus* and *doxa* and, are used to define Maya ethnic identity versus Teotihuacán identity, thereby assessing the degree of cross-cultural interaction. The evidence is also used to determine the social contexts in which cross-cultural interaction occurred, thereby assessing the nature of interaction. Finally, these lines of evidence revealed connections between the La Sufricaya elites and other Maya sites with evidence of Teotihuacán interaction and signaled their participation in an imagined regional elite community based on affiliations with Teotihuacán that legitimized their authority.

This work has tremendous significance for understanding the dynamic circumstances surrounding cross-cultural interaction between the Maya and Teotihuacán. The mural art from La Sufricaya not only records historic moments, but it has also provided one of the only known contemporary references to the events at Tikal in AD 378. Furthermore, the art includes portraiture of central Mexicans and details about the social contexts in which interaction occurred. Some of the material and iconographic evidence found at La Sufricaya has not been recovered from other Maya sites, which may indicate direct contact with Teotihuacán or its emissaries.

This study also has broader significance for archaeological studies of culture contact in Mesoamerica and beyond. My analysis of the problem of cross-cultural interaction between the Maya and Teotihuacán, as viewed from La Sufricaya, engages a theoretical framework employed in archaeological studies of other ancient cultures, notably Rome and Egypt, but provides a case study for culture contact that is not based solely on colonization. Ultimately, I hope that this study has provided a more dynamic model of Mesoamerican interaction.

### **Summary of occupation at La Sufricaya**

Based on the ceramic chronology of the Holmul region and at La Sufricaya, it appears that human occupation of the site may have begun in the early part of the Early Classic period circa AD 250-300. The evidence of this occupation stems from ceramic material of this period recovered from the construction fill of Group 1 in the ceremonial precinct and material recovered from beneath an Early Classic period floor in residential Group 16 adjacent to the ceremonial precinct. This limited evidence suggests that the initial occupation was probably not substantial and may have consisted of a few residential groups.

The construction of the platform terrace of the ceremonial precinct may have begun sometime between AD 300-350, culminating in the construction of Structure 1 in AD 350. It is difficult to provide a precise time frame because of the lack of substantiating radiocarbon dates and the dearth of knowledge about the population of the site during this period. A substantial population could have supplied a labor force that might have quickly established the ceremonial precinct in a few years,



while it is conceivable that a limited population and labor force would have completed the project over the course of a decade or more.

While the material evidence only provides a general time frame for the construction and occupation of La Sufricaya, the hieroglyphic texts highlight some important dates in the lives of the people who founded and lived at the site. The text of Mural 7 provides a firm date for a dedication event carried out at La Sufricaya, perhaps even the dedication of Structure 1 upon its completion, on January 16, 379. While it probably did not take 30 years to construct Structure 1, the renovations of the complex took place over a period of time and this dedication event likely coincided with the ultimate phase of construction. This suggests that the Structure 1 complex and ceremonial precinct were used and inhabited for some time before the dedication event and the references to Tikal and Sihyaj K'ahk' were inscribed on the wall of Room 14. Therefore, the founding of the site may not have been directly related to the *entrada* events at Tikal in AD 378, but rather for purposes that were significant for the local population.

Two of the stelae at La Sufricaya provide dates for the occupation of the site. Stela 6 includes a partial long count date that falls sometime between AD 377 and AD 387. This monument may also include the name glyph of Sihyaj K'ahk', so it is probably contemporary with Mural 7. Stela 5 provides the latest date known from the site, AD 422, as well as the name of a local lord, Aj Wosal. A precise date for the termination and abandonment of Structure 1 is not known, but the ceramic material included in the rubble fill used to bury the complex indicates that the complex was no longer in use by AD 450.

It seems that the ceremonial precinct of La Sufricaya was constructed and inhabited in a relatively short time frame of no more than 100 years from AD 350 to AD 450. This time span corresponds to at least two generations of the lineage or elite family that resided in Structure 1. The founder of the site may have been the protagonist of Mural 7 who held the rank *Chak-tok-wayaab'* and was somehow associated with the 11 Eb events at Tikal in AD 378. This man may have been buried in the looted tomb of Structure 2, which is the only other monumental construction inside the ceremonial precinct. Upon his death, the surviving members of his family continued to reside at La Sufricaya, but they did not use Structure 1 for ritual and administrative purposes, which is evident in the way they gradually sealed off access to Room 1 (including Murals 1, 2 and 3) and Mural 7. These renovations within Structure 1 imply that the founder's affiliations with Teotihuacán and Tikal may have been less significant to the subsequent generation of the lineage.

It is plausible that Stela 2, which was dedicated some time between AD 377 and 387 was erected by the founder and could even mark his death in AD 387. If this was indeed the case and *Chak-tok-wayaab'* was between 20 and 30 years old when La Sufricaya was founded, he would have been between 57 and 67 years old at his death. On the other hand, Stela 5 may record the death of the founder in AD 422, making him 72 years old when he died. It is impossible to know if Stela 5 recorded the death of the founder in AD 422 or the accession or death of Aj Wosol, who may have been a lord from the second generation of the lineage. It seems more likely that Stela 5 is associated with the second lord of La Sufricaya, who was probably

buried in the looted tomb of Structure 3, located outside of the ceremonial precinct. The surviving members of his family terminated and abandoned Structure 1 when he died, perhaps moving back to the Holmul site center.

A small population may have continued living at La Sufricaya in some of the residential groups that surround the ceremonial precinct after Structure 1 was abandoned by the elite residents, but the diminished population did not renovate any of the structures within the ceremonial precinct, and it does not appear that this area of the site was used again until the Late Classic period (550-830 AD). Sometime around 600 AD a group of people re-inhabited the surface of Structure 1, but did not re-open the sealed architecture of the complex. Instead, they built modest homes comprised of low stone walls and perishable roofs, on top of Structure 1 and in the plaza of Platform 1 to the south of Structure 1. Many of the residential groups surrounding the ceremonial precinct of La Sufricaya were also inhabited during this time period, and while these people placed offerings near some of the stelae, there is no evidence that they carried out public ritual or administrative activities on the scale of the Early Classic occupation.

### **The function of Structure 1 and the role of La Sufricaya in the Holmul region**

The architecture of Structure 1, along with the ceramic and obsidian artifacts recovered from the fill used to bury it, have been used to reconstruct the activities conducted by its residents and to interpret the function of the complex. This evidence also provides insight into the relative wealth, status and power of the elites who lived in Structure 1 and hints at their role within the sociopolitical structure of the Holmul region. The presence of hieroglyphic texts alone suggests that the elites

of La Sufricaya possessed a certain degree of power, especially in light of the dearth of contemporary texts at Holmul, and the *chak-tok-wayaab'* title suggests a connection between La Sufricaya and Holmul. References to the title have been uncovered in Group II and III at Holmul and it seems the ruling lineage of Holmul carried this title (Estrada-Belli et al. 2009; Estrada-Belli and Tokovinine 2016).

The primary function of the Structure 1 complex appears to have been as a palace. The layout of the complex, as well as the architectural features that provide privacy and restrict access, such as cord holders, windows, dividing walls and the bench in Structure 1 Sub-11, support this interpretation. The tandem and transverse room configurations of the complex fit the pattern of elite residential complexes identified by Harrison at Tikal (1981), and found throughout the Maya region.

The ceramic and lithic material recovered from the fill used to bury the complex, which presumably was re-deposited material from a midden associated with Structure 1 while it was in use, included stone tools and ceramic forms used in the preparation and storage of food, such as *manos* and *metates* used to grind corn, large serving dishes and water storage vessels. While accurate percentages of utilitarian versus fine ware are not available at this time, the initial impression is that the greater proportion of the ceramic forms fall into the category of elite utilitarian ware rather than fine ware used for ritual activities. The obsidian material provides substantiating evidence in the form of prismatic blades that could have been used for a variety of utilitarian or residential activities including food procurement, preparation, personal grooming and processing of animal hides. No

ritual forms of obsidian objects, such as eccentrics, have been recovered from La Sufricaya.

While the overwhelming majority of the fill material appears to be utilitarian in nature, several lines of evidence do suggest that the elite residents performed household and public rituals at La Sufricaya. The evidence for household rituals includes *incensario* fragments recovered from the fill, including a “corn cob” censer similar to those found at Uaxactún and Teotihuacán, the niche in the wall of Room 14 which could have held an *incensario* and allowed smoke to exit and the dedicatory caches that were placed during the construction of the complex.

Certain components of Structure 1 suggest that public rituals were performed at the complex, especially within Room 1 because it was a relatively public space. There is no substantiating material evidence that could provide insight to what these rituals may have entailed. The ball court at La Sufricaya by its very nature implies public ritual performance. The various monuments were also probably erected during dedication events or period-ending events that likely involved public rituals as well.

Administrative activities are more difficult to discern because they do not necessarily have correlates in the archaeological record. Architectural components of administrative functions include large, open rooms containing stone benches that may have been used as thrones and for public audiences, and non-descript rooms with limited access points that could have been used for storing tribute. Within Structure 1, Rooms 1 and 3 may have served these purposes respectively. While

Room 1 does not contain a stone bench, it is possible it once contained a perishable bench.

An administrative function is a defining characteristic that distinguishes palaces from elite residences. While the evidence for administrative activities is not substantial, this deficit is partly due to our lack of knowledge about how Maya lords governed and their duties, as well as the fact that those activities probably did not leave a mark on the archaeological record. The murals throughout the complex, especially within Room 1, indicate that the lord of La Sufricaya received visitors or carried out rituals in this room, which are some of the primary duties of Maya rulers. While the administrative function of Structure 1 can only be tentatively identified, it is clear that the complex served as an elite residence and that public rituals were performed within the complex and the ceremonial precinct of La Sufricaya. It seems that the ritual, and perhaps administrative, function of Structure 1 was more significant during the early occupation phase of the complex, when Room 1 was in use. During subsequent phases, the complex was used primarily as a residence, which is evident from the renovations that gradually blocked access to Room 1 and restricted access to other parts of the complex as well as afforded privacy in the rooms.

These activities in conjunction with the monumental architecture, carved and dated monuments, ball court and funerary temples are all elements of Maya elite and royal culture and alludes to the relative wealth, power and status of the La Sufricayans. A detailed discussion of the distinction and indicators of wealth, power and status is beyond the scope of this work and could comprise a completely

different analysis of the La Sufricaya material, but the monumental architecture required sufficient authority to mobilize a labor force. The presence of hieroglyphic texts, painted and molded stucco architectural adornments and carved monuments indicates that skilled artisans lived at the site and worked under the patronage of the La Sufricaya elite. The presence of foreign prestige goods such as Pachuca obsidian and cylindrical tripod vessels suggests that the La Sufricaya elite were engaged in regional trade networks and possessed enough wealth and status to trade for these items or to receive them as gifts.

All of this evidence contributes to an understanding of the role La Sufricaya and its inhabitants played in the sociopolitical history of the Holmul region. Unlike some of the other sites in the region, it appears that La Sufricaya may not have been truly independent of Holmul. The *chak-tok-wayaab'* glyph links La Sufricaya to the Holmul dynasty, where the title was used in the early facet Early Classic and Late Classic periods (Estrada-Belli et al. 2006, 2009). None of the other sites have produced glyphic references or other material evidence that indicate such direct ties to Holmul. Why then, was La Sufricaya established so far outside the Holmul center? A working hypothesis of the role and function of La Sufricaya is that it served as an Early Classic palace for the Holmul dynasty (Estrada Belli et al. 2009). New palaces and elite residential groups were established at many sites in the Early Classic, such as Group B at Uaxactún, and Groups 7F-1 and 6C-XVI at Tikal and a new acropolis at Copan. These groups were established when a new ruler or dynasty came to power and in some cases, were constructed near earlier dynastic groups. Group B at Uaxactún likely served as a palace, given its proximity to the preceding locus of

power and the site center, and evidence of residential, ritual and administrative activities, but the groups at Tikal were elite residential groups with little evidence of ritual or administrative functions.

La Sufricaya does not fit the pattern seen elsewhere in the Petén because it appears to be a mid-level center established outside the immediate purview of the Holmul dynasty that served residential, ritual and administrative functions. It is located slightly too far outside the site center to be a palace of the Holmul ruling dynasty because the ruler would not have been able to easily oversee the happenings in the site center while installed at La Sufricaya. A plausible hypothesis is that a dissenting faction of the Holmul elite, perhaps backed by Tikal and/or Teotihuacán, founded La Sufricaya as a challenge to the authority of the Holmul dynasty. This hypothesis explains the glyphic references to Tikal and *Sihyaj K'ahk'* as well as the Teotihuacán iconography, Pachuca obsidian and foreign-style ceramic forms and decorative techniques, none of which have been found elsewhere in the Holmul region. This faction may have been led by a man who held the *chak-tok-wayaab'* title and whose political gamble was relatively short-lived since his descendants abandoned La Sufricaya roughly 100 years later.

An alternative hypothesis is that La Sufricaya served as an Early Classic site of accession rituals for the Holmul dynasty. The earliest phases of occupation centered on Room 1, which could have served as a *wit-e-naah* during accession rituals. The priest who carried the title *chak-tok-wayaab'* may have been instrumental in the performance of these rituals and established a residence at the site, perhaps in order to create social distance between the site of the sacred rituals



and dynastic life in the Holmul center. In this scenario, La Sufricaya provided a specialized function for the Holmul dynasty rather than existing as a politically and economically independent center. This hypothesis explains the presence of the murals in Room 1 that appear to depict accession events and rituals associated with Teotihuacán. Mural 5, which depicts a scaffold sacrifice, was created during a later occupation phase probably associated with the second lineage head, and represents a shift in thinking regarding legitimacy and accession rituals.

The exact role of La Sufricaya, as well as many other questions, including what influenced the choice in location for the site and why it was abandoned, may not be fully answered until more is known about the site and about Holmul. The looted tombs in Structures 2 and 3 probably would have provided hieroglyphic and other material evidence linking La Sufricaya to Holmul or other Petén sites. The extent of the Early Classic population at La Sufricaya, and at Holmul, is relatively unknown because very few excavations have been carried out within residential groups. Therefore, it is impossible to determine whether the people of La Sufricaya lived in relative rural isolation outside of Holmul, or if they lived in the bustling suburbs of the center. The size of the population that would have sustained the La Sufricaya elite, providing labor, food, clothing and other goods for the residents of Structure 1, is also unknown. The Early Classic occupation and dynastic history of Holmul is also unknown. It is entirely possible that an Early Classic palace is located in an unexplored sector of Holmul, in which case the current understanding of La Sufricaya as an Early Classic palace of the Holmul dynasty (Estrada Belli et al. 2009)

would have to be revised. It seems that even after more than a decade of research, we have only scratched the surface of the history of the Holmul region.

### **The degree and nature of Teotihuacán influence at La Sufricaya**

While there is still a great deal to be learned about cross-cultural interaction between the Maya and Teotihuacán, it is clear that the nature of interaction changed over time and the degree (direct or indirect) of contact varied from one Maya site to another. At La Sufricaya some lines of evidence suggest that the elite residents of Structure 1 may have had direct contact with Teotihuacán or its emissaries in the Maya region, but that the nature of interaction was limited to elite contexts associated with accession rituals. Exhausted cores of Pachuca obsidian, which would be proof that the La Sufricayans were producing their own blades, have not been recovered from excavations but two small pressure flakes have been found, leading to the suggestion that Teotihuacán lithic technology was produced at La Sufricaya (Hruby et al. 2006). The images of Teotihuacán soldiers in Murals 2 and 8 contain specific details of clothing and regalia, some of which are depicted elsewhere in Maya and Teotihuacán mural and sculptural art, but others are only found in Teotihuacán figurines. Similarly, specific forms of Teotihuacán iconography (the bleeding heart motif and jaguars wearing feathered headdresses) were used to decorate a ceramic vessel found at La Sufricaya and a vessel produced in the Holmul region found in an elite burial in Group 6C-XVI in the Mundo Perdido group at Tikal. Fragments of a ceramic form, the “corn cob” censer, which is a Teotihuacán ritual form, were also recovered from the fill of Structure 1. The only other known example of this type of censer in the Maya region was found at

Uaxactún. All of this evidence suggests that artists, and perhaps the elite lord(s) who commissioned the tools, artwork and ceramics, at La Sufricaya had first-hand knowledge of Teotihuacán people, rituals and ideology. It is impossible to know, however, if these artists were Maya who had perhaps traveled to central Mexico or learned from Teotihuacán emissaries visiting the Maya region or actual Teotihuacanos living at La Sufricaya.

Other evidence from La Sufricaya is similar to the widespread pattern of the appearance of Teotihuacán-style ceramics and iconography found throughout the Petén and suggests the cross-cultural contact was indirect and may have been mediated by other sites, such as Tikal or Uaxactún. Fragments of cylindrical tripod vessels with slab supports and cacao bean appliqués found at La Sufricaya were manufactured using local pastes and slips and are similar to vessels found at other Petén sites. The absence of Pachuca cores implies that blades made of central Mexican obsidian were imported to La Sufricaya, perhaps through Tikal where cores have been found. The layout of Room 1 and the theme of Murals 1 and 2 are remarkably similar to Structure B at Uaxactún, suggesting that La Sufricaya elites of these sites were in contact with the rulers of Uaxactún. The glyphic references to *Sihyaj K'ahk'* and the AD 378 arrival date at Tikal also suggest that the La Sufricaya lords participated in, or at least had knowledge of, the political events at Tikal. Furthermore, the costumes of the Teotihuacán emissaries depicted in the La Sufricaya murals resemble those on the vessel recovered from Problematic Deposit 50 at Tikal, which could mean that the La Sufricaya elites witnessed the same event or the same Teotihuacano emissaries visited La Sufricaya.

While the degree of contact between La Sufricaya and Teotihuacán is inconclusive, the nature of interaction is clearly confined to elite contexts especially those related to rulership and accession rituals. Teotihuacán-style artifacts and iconography have not been found in residential contexts or in any other location in the Holmul region other than La Sufricaya. The distinction between the evidence of cross-cultural interaction at La Sufricaya and the evidence from other Maya sites is that the ceramic and lithic material was recovered from a re-deposited midden comprised of refuse from Structure 1, whereas at many other sites, Teotihuacán-style ceramics and Pachuca obsidian are typically found in elite burials and ritual contexts such as caches and Problematic Deposits (at Tikal).

The La Sufricaya data suggest that foreign style ceramics and Pachuca obsidian were used in the elite household of Structure 1. The ceramics may have been reserved for serving ware during feasts, but the obsidian was used just like all other types of obsidian, though it may have been considered a more high-end brand, so-to-speak. This revelation underscores the variability in cross-cultural contact and the importance of evaluating the evidence on a site-by-site basis and examining the social contexts in which Teotihuacán-related material is found in order to fully understand the problem of Maya-Teotihuacán interaction.

In terms of Marcus' models for cross-cultural interaction, the data from La Sufricaya suggest that interaction with Teotihuacán was mediated by another site, most likely Tikal, but we must allow for the possibility that the La Sufricaya elite had some direct contact with Teotihuacán or its emissaries. While Marcus' descriptive models can be useful for comparison, models can hinder understanding when

scholars try to pigeonhole data for the sake of categorizing data. Future research may generate new and more complex models.

### **Cross-cultural interaction, Maya identity and imagined community**

I have argued for re-conceptualizing the problem of Maya-Teotihuacán interaction in the Petén during the Early Classic period in terms of how culture contact affected Maya ethnic and social identities. Cross-cultural interaction gave rise to self-consciousness, permitting the recognition or expression of pre-existing Maya social tensions as well as acceptance of other ideologies, or heterodoxy. Interaction with Teotihuacán, either at Tikal or other sites, through visits from *Sihyaj K'ahk'* and other central Mexican emissaries precipitated the adoption of certain elements of Teotihuacán ideology and iconography, as well as foreign prestige items by a relatively small group of Maya rulers. This heterodoxy was limited to the elite sphere of Maya society, particularly in terms of legitimizing authority. While a break in elite Maya doxa occurred, the Maya *habitus* that governed society and formed the basis of Maya ethnic identity was left mainly intact.

This approach takes into consideration that material culture generates and signifies ethnic identity but the meaning of ethnic styles can vary in different social contexts. I have argued that the social contexts in which Teotihuacán ethnic markers of identity (Pachuca obsidian, *talud-tablero* architecture, cylindrical tripod vessels decorated with painted stucco and iconography) found in the Maya area do not necessarily reflect direct interaction with the central Mexican site, but rather the participation of Maya rulers in an imagined regional elite community. These Maya rulers seized an opportunity during the period of cross-cultural interaction to forge

new social identities based on foreign associations, build alliances, and distinguish themselves from other Maya rulers. This imagined regional elite community was based on practices of affiliation such as displaying Teotihuacán iconography and hieroglyphic texts commemorating the AD 378 arrival event of Sihyaj K'ahk' to Tikal, as well as exchanging Teotihuacán-style ceramics, Pachuca obsidian and constructing *talud-tablero* architecture.

The architecture, art and material evidence from La Sufricaya suggests the elite residents were full-fledged participants in this imagined community. The practices of affiliation evident at La Sufricaya include retrospective references in Mural 7 and on Stela 2 to Sihyaj K'ahk' and the events of AD 378 at Tikal, images of Teotihuacanos in Murals 3 and 8 that allude to foreign contacts and sources of power, Pachuca obsidian, cylindrical tripod vessels and Teotihuacán iconography. The Pachuca obsidian may have been received as a gift or trade item from Tikal.

The architecture of Structure 1, especially Room 1, is remarkably similar to Uaxactún Structure B-XIII in both layout and the interior murals depicting foreign lords, which suggests emulation and reflects an important tie between the two sites. Corncob censers, which are a Teotihuacán ceramic form, have also been found at both La Sufricaya and Uaxactún. These Teotihuacán styles are rare in the Maya region and may indicate that the elites of Uaxactún and La Sufricaya shared unique practices of affiliation that did not include Maya rulers of other sites. Overall, the various lines of evidence indicate that the La Sufricaya lords enjoyed political and trade alliances with Tikal and Uaxactún. Many of the other participants in the

imagined regional elite community also maintained ties to Tikal, such as Yaxha, Rio Azul and Copan, which identifies the Tikal elites as the likely instigators.

### **The significance of La Sufricaya**

La Sufricaya represents one of the few known examples of undisturbed Early Classic monumental construction and provides insight into the sociopolitical development of the Petén during this crucial period in ancient Maya history. Archaeologists have uncovered a wealth of evidence from the Preclassic and Late Classic periods, yet the Early Classic period remains elusive, mainly because the construction phases were buried under later construction. The Early Classic represents a departure from Terminal Preclassic artistic, architectural and ceramic practices. New ideas concerning the legitimacy of rulers emerge during this time period, with less emphasis on cosmological references, and a growing importance of foreign associations with Teotihuacán, militarism and incorporating the central Mexican deity *Tlaloc* into the Maya pantheon of gods. This transition is particularly evident in the Holmul region where monumental construction with stucco masks depicting celestial and zoomorphic deities have been found at the Preclassic site of Cival and the Late Middle Preclassic phase of Building B at Holmul (Estrada Belli 2010) and a Late Preclassic elite tomb uncovered at K'o included a ceramic censer with the Late Middle Preclassic (circa 350 B.C.), Jester God headband and diadem, a symbol of authority based on iconography of the Olmec Maize God (Tomasic 2009).

The Early Classic appears to have been a period of continued factional competition, evident in the founding of La Sufricaya, the prominence of the Mundo Perdido group at Tikal and allegiances forged across the Petén that I have argued

were solidified by participation in an imagined regional elite community based on Teotihuacán affiliations and symbolism. The data from La Sufricaya, and the connections to other Petén sites, has elucidated the sociopolitical maneuvers of rulers during this critical stage of Maya history.

Mural 7 is one of the few contemporary references to Sihyaj K'ahk' and the 378 AD events at Tikal. The presence of this text at a mid-level site that did not have prior political ties to Tikal underscores the significance of the event and the players in political developments in the Petén. The ceramic and obsidian evidence from La Sufricaya illustrates that Teotihuacán-style materials were used in elite households and not reserved for burials. While these practices are also evident at the elite residential groups 6C-XVI and 6D-V of Mundo Perdido, the majority of evidence from the Early Classic has been confined to royal tombs and elite burials. This finding may be a problem of sampling, however, and future investigations may reveal the more widespread, elite use of foreign styles.

This study of La Sufricaya and the problem of Maya-Teotihuacán interaction also highlight some of the flaws in our understanding of the past. As archeologists we work with material remains, therefore, the focus of many studies has been the identification of foreign styles in the Maya region rather than reconstructing the sociopolitical contexts in which culture contact occurred and elucidating the strategies individuals employed in order to take advantage of the situations of interaction. The approach undertaken in this study attempts to move the problem of Maya-Teotihuacán interaction into a theoretical realm that enables comparisons to instances of culture contact among other ancient cultures.



These same material remains can obscure the nature and degree of interaction due to problems in archaeological sampling that place an emphasis on certain contexts, such as elite burials and hieroglyphic texts, over others. Comparing this evidence across sites is difficult because most of the evidence is based on ceramic sequences that are site-specific and not fully defined. Furthermore, the trajectory of Maya-Teotihuacán interaction has also been misunderstood because scholars tend to conflate Early Classic events that occurred over a span of almost 100 years, or two human generations. Finally, the materials that we as scholars find significant may not have been meaningful for the ancient Maya. For instance, the main lines of evidence for cross-cultural interaction at La Sufricaya, Pachuca obsidian and Teotihuacán-style ceramics like the vessel with the “bleeding heart motif”, were discarded as trash by the residents of Structure 1 rather than included in cache offerings, burials or used as heirlooms.

### **Concluding remarks**

The foregoing analysis of the evidence from six field seasons of archaeological research at La Sufricaya has attempted to understand the complex sociopolitical history of the Holmul region and the Petén during the Early Classic while reconstructing the lived experience of the people who founded and lived at the site. While a great deal of information can be gleaned from the architecture, ceramics, lithics and art these people left behind, the personal and political motives that led to the construction of La Sufricaya may never be fully understood by modern scholars.

I have endeavored to attain a more holistic understanding of La Sufricaya and the problem of cross-cultural interaction between the Maya and Teotihuacán by analyzing multiple lines of evidence, examining the sociopolitical context of cross-cultural interaction and employing a theoretical framework based on ethnic identity and imagined community. Only future research within the Holmul region, Maya lowlands, and at Teotihuacán will assess the validity of this approach. At the very least, this study brings the problem of Maya-Teotihuacán interaction into the realm of theoretical discussion that enables comparison to other instances of culture contact and the strategies ancient peoples employed to define their ethnic and social identities and distinguish themselves from outside groups.

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## Appendix A – La Sufricaya ceramic samples submitted for INAA

Sample Number	Excavation Unit/ Feature	Context Number or Small Find Number	Context	Time period	Ceramic type	Description
MSH234	Structure 113		Looters' trench	Late Classic	Zacatel Cream Polychrome	
MSH300	Structure 113		Looters' backdirt	Late Classic		Fragment of whole vessel
MSH301	Structure 113		Looters' backdirt	Late Classic	Figural painted Polychrome	Fragment of whole vessel
MSH302	Structure 110, Group 6		Looters' backdirt	Late Classic	black	
MSH306	Structure 113		Looters' backdirt	Late Classic		
MSH307	Structure 113		Looters' backdirt	Late Classic		
MSH308	Structure 113		Looters' backdirt	Late Classic	Polychrome	
MSH309	Structure 113		Looters' backdirt	Late Classic	Polychrome	
MSH310	ST5.09, Structure 1	ST5.09.02.01	Mural	Early Classic	Urita Gouged- incised	Teo pottery fragment
MSH311	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH312	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH313	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH314	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH315	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH316	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH317	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH318	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH319	Structure 138		Looters' trench	Late Classic	Polychrome	

<b>MSH320</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH321</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH322</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH323</b>	Structure. 113	Looters' trench	Late Classic	Polychrome
<b>MSH325</b>	Structure 113	Looters' trench	Late Classic	Polychrome
<b>MSH326</b>	Structure 113	Looters' trench	Late Classic	Polychrome
<b>MSH327</b>	Structure 113	Looters' trench	Late Classic	Polychrome
<b>MSH328</b>	Structure 113	Looters' trench	Late Classic	Polychrome
<b>MSH329</b>	N6500, E5740, Surface	Looters' trench	Late Classic	Polychrome
<b>MSH330</b>	N6500, E5740, Surface	Looters' trench	Late Classic	
<b>MSH331</b>	N6500, E5740, Surface	Looters' trench	Late Classic	
<b>MSH332</b>	N6500, E5740, Surface	Looters' trench	Late Classic	
<b>MSH333</b>	N6500, E5740, Surface	Looters' trench	Late Classic	
<b>MSH334</b>	N6500, E5740, Surface	Looters' trench	Late Classic	
<b>MSH337</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH338</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH339</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH340</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH341</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH342</b>	Structure 138	Looters' trench	Late Classic	Polychrome
<b>MSH343</b>	Structure 110	Looters' trench 2	Late Classic	Polychrome
<b>MSH344</b>	Structure 110	Looters' trench 2	Late Classic	Polychrome
<b>MSH345</b>	Structure 110	Looters' trench 2	Late Classic	Polychrome
<b>MSH346</b>	Structure 110	Looters' trench 2	Late Classic	Cabrito?
<b>MSH347</b>	Structure 110	Looters' trench 2	Late Classic	Polychrome

MSH348	Structure 110		Looters' trench 2	Late Classic	Polychrome	
MSH349	Structure 110		Looters' trench 2	Late Classic	Polychrome	
MSH350	Structure 110		Looters' trench 2	Late Classic	Orange on cream	
MSH351	Structure 110		Looters' trench 2	Late Classic	Cabrillo?	
MSH352	Structure 138		Looters' trench	Late Classic	Polychrome	Fe lumps in drilling
MSH353	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH354	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH355	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH356	Structure 138		Looters' trench	Late Classic	Polychrome	
MSH357	Structure 113		Looters' trench	Late Classic	Polychrome	cf. MSH301
MSH358	Structure 110		Looters' trench 2	Late Classic	Polychrome	
MSH372	SLT05, Structure 1	SLT05.29	Looters' trench in Room 1	Tzakol		Cacao bean applique lid
MSH374	SLT05, Structure 1	SLT05.28.01.01	Looters' trench in Room 1	Early Classic	Aguila Orange	
MSH375	SLT1W, Structure 2		Looters' trench	Early Classic		Lid or cache vessel
MSH376	SLT05, Structure 1	SLT05.26.01	Looters' trench in Room 1	Early Classic		
MSH377	SLT06, Structure 1	SLT06.03.01.01	Looters' trench in Room 2	Early Classic		
MSH378	ST07, Structure 1	ST07.03.01.02/03	Room 1, Structure 1	Late Classic		
MSH379	ST07, Structure 1	ST07.03.01.02/03	Room 1, Structure 1	Late Classic		
MSH380	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH381	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH382	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH383	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH384	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH384	ST11, Structure 110	ST11.06.01.05	Structure 110 Burial	Late Classic		
MSH389	ST11, Structure 110	ST11.10.02.01	Structure 110, Group 6	Late Classic	Tinaja Red	Tetrapod vessel
MSH390	ST07, Structure 1	ST07.03.03.01.08	Room 1, Structure 1			Lid of vessel
MSH391	SLT05, Structure 1	SLT5.27.01.01	Looters' trench in Room 1	Early Classic?		
MSH392	ST07, Structure 1	ST07.03.01.4	Room 1, Structure 1			

<b>MSH393</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	cache vessel
<b>MSH394</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	
<b>MSH395</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	
<b>MSH396</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	
<b>MSH397</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	
<b>MSH398</b>	ST07, Structure 1	ST07.04	Room 1, Structure 1	Early Classic	
<b>MSH399</b>	ST07, Structure 1	ST07.03.01.09.11	Room 1, Structure 1	Early Classic	
<b>MSH400</b>	ST07, Structure 1	ST07.03.01.09.11	Room 1, Structure 1	Early Classic	
<b>MSH401</b>	ST07, Structure 1	ST07.03.01.09.11	Room 1, Structure 1	Early Classic	
<b>MSH402</b>	SLT06, Structure 1	SLT06.01	Looters' trench in Room 2		
<b>MSH403</b>	SLT06, Structure 1	SLT06.01	Looters' trench in Room 2		
<b>MSH404</b>	SLT06, Structure 1	SLT06.01	Looters' trench in Room 2		
<b>MSH405</b>	SLT06, Structure 1	SLT06.01	Looters' trench in Room 2		
<b>MSH406</b>	SLT06, Structure 1	SLT06.01	Looters' trench in Room 2		
<b>MSH407</b>	SLT01, Structure 2	SLT01.01.01	Looters' trench, Structure 2		
<b>MSH408</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH409</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH410</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH411</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH412</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH413</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH414</b>	SLT05, Structure 1	SLT05.25	Looters' trench in Room 1		
<b>MSH446</b>	ST12	ST12.04.01			
<b>MSH447</b>	ST12	ST12.04.01			
<b>MSH467</b>	ST07, Structure 1	ST07.03	Room 1, Structure 1		
<b>MSH468</b>	SLT01, Structure 2	SLT01	Looters' trench, Structure 2		
<b>MSH469</b>	SLT01, Structure 2	SLT01	Looters' trench, Structure 2		

<b>MSH506</b>	SUF.T.23, Structure 148	SUF.T.23.53	Structure 148, Group 1
<b>MSH507</b>	ST08, Structure 1	ST08.80.01.01	Room 13, Structure 1
<b>MSH508</b>	ST08, Structure 1	ST08.80.01.01	Room 13, Structure 1
<b>MSH509</b>	ST08, Structure 1	ST08.55.01.03	Room 13, Structure 1
<b>MSH510</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH511</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH512</b>	ST08, Structure 1	ST08.55.01.02	Room 13, Structure 1
<b>MSH513</b>	ST08, Structure 1	ST08.55.01.02	Room 13, Structure 1
<b>MSH514</b>	ST07, Structure 1	ST07.07.01	Room 1, Structure 1
<b>MSH515</b>	ST07, Structure 1	ST07.07.01	Room 1, Structure 1
<b>MSH516</b>	ST08, Structure 1	ST08.08.01	Room 1B, Structure 1
<b>MSH517</b>	ST08, Structure 1	ST08.08.01	Room 1B, Structure 1
<b>MSH518</b>	ST08, Structure 1	ST08.78.01	Room 13, Structure 1
<b>MSH519</b>	ST08, Structure 1	ST08.78.01	Room 13, Structure 1
<b>MSH520</b>	ST08, Structure 1	ST08.55.01.01	Room 13, Structure 1
<b>MSH521</b>	ST08, Structure 1	ST08.08.01	Room 1B, Structure 1
<b>MSH532</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH533</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH534</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH535</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH536</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH537</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH538</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH539</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH540</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH541</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH542</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH543</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1
<b>MSH544</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1



<b>MSH545</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH546</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH547</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH548</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH549</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH550</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH551</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH552</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH553</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH554</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH555</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH556</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH557</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH558</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH559</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH560</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH561</b>	ST08, Structure 1	ST08.52.01	Room 11, Structure 1	Early Classic
<b>MSH562</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH563</b>	ST08, Structure 1	ST08.80.01	Room 13, Structure 1	Early Classic
<b>MSH564</b>	ST08, Structure 1	ST08.39.01	Room 3B, Structure 1	Early Classic
<b>MSH565</b>	ST08, Structure 1	ST08.34.01	Room 11, Structure 1	Early Classic

## Appendix B – Obsidian recovered from La Sufricaya Structure 1 contexts

Context Number	Small Find Number	Type	Color/Description	Length (cm)	Width (cm)	Thickness (cm)	Comments
SLT05.26	SLT05.26.05.01	Blade segment, distal	Opaque w light striations	4.00	1.00	0.10	Chipped edges
SLT05.26	SLT05.26.05.02	Blade segment, proximal	Opaque w dark spots/striations	3.80	0.80	0.20	Chipped edges
ST07.03	ST07.03.05.01	Blade segment, medial	Light gray/opaque	3.50	1.30	0.20	Retouched
ST07.03	ST07.03.05.02	Blade segment, medial	Light gray/opaque	2.70	1.00	0.25	
ST07.03	ST07.03.05.03	Blade segment, distal	Light gray/opaque w light diag striations	2.90	1.10	0.20	
ST07.03	ST07.03.05.04	Blade segment, medial	Light gray/green/opaque	1.90	0.80	0.20	
ST07.03	ST07.03.05.05	Blade segment, distal	Light gray/opaque w dark clouds	5.10	1.10	0.40	
ST07.03	ST07.03.05.06	Blade segment, medial	Light gray/cloudy opaque	4.40	1.10	0.20	Retouched
ST07.03	ST07.03.05.07	Blade segment, medial	Light gray/opaque	4.50	0.60	0.15	
ST07.03	ST07.03.05.08	Blade segment, proximal	Opaque w dark spots	3.80	0.70	0.20	
ST07.03	ST07.03.05.09	Blade segment, distal	Opaque w dark spots	4.00	0.70	0.30	
ST07.03	ST07.03.05.10	Blade segment, proximal	Opaque	3.10	0.80	0.30	
ST07.03	ST07.03.05.11	Blade segment, medial	Light gray/opaque	2.00	1.00	0.20	Chipped edges
ST07.03	ST07.03.05.12	Blade segment, proximal	Light gray/opaque	2.50	1.60	0.40	Chipped edges
ST07.03	ST07.03.05.13	Blade segment, proximal	Light gray/opaque	2.70	1.30	0.20	
ST07.03	ST07.03.05.14	Blade segment, medial	Opaque w dark spots	2.10	0.40	0.20	
ST07.03	ST07.03.05.15	Blade segment, distal	Opaque/light gray	1.90	1.20	0.25	Chipped edges
ST07.10	ST07.10.05.01	Blade segment, distal	Light gray/opaque	2.50	0.90	0.40	
ST08.02	ST08.02.05.01	Blade segment, medial	Opaque w dark spots/striations	2.30	1.00	0.25	Chipped edges

<b>ST08.02</b>	ST08.02.05.02	Blade segment	Opaque w light striations	2.80	0.70	0.30	Retouched
<b>ST08.02</b>	ST08.02.05.03	Blade segment, proximal	Light gray/opaque	2.30	1.00	0.25	Chipped edges
<b>ST08.05</b>	ST08.05.05.01	Blade segment, medial	Green	2.10	0.70	0.15	Retouched
<b>ST08.05</b>	ST08.05.05.02	Blade segment, proximal	Light gray/opaque	2.20	0.90	0.20	
<b>ST08.05</b>	ST08.05.05.03	Blade segment, medial	Green	2.60	0.80		
<b>ST08.08</b>	ST08.08.05.01	Blade segment, medial	Green	1.90	0.70	0.15	
<b>ST08.08</b>	ST08.08.05.02	Blade segment, distal	Light gray/cloudy	2.60	0.60	0.20	
<b>ST08.34</b>	ST08.34.05.01	Blade segment, medial	Green	2.70	0.90	0.20	
<b>ST08.34</b>	ST08.34.05.02	Blade segment, proximal	Dark gray/black	6.90	1.20	0.25	Nearly complete
<b>ST08.55</b>	ST08.55.05.01	Blade segment, proximal	Light gray/cloudy	4.20	1.10	0.20	
<b>ST08.55</b>	ST08.55.05.02	Blade segment, distal	Light gray/cloudy	2.00	0.50	0.25	Retouched
<b>ST08.78</b>	ST08.78.05.01	Blade segment, proximal	Light gray/smoky w striations	4.60	1.00	0.20	Nearly complete & Retouched
<b>ST08.78</b>	ST08.78.05.02	Blade segment, proximal	Clear with dark bands	4.40	0.70	0.15	Nearly complete & Retouched
<b>ST08.80</b>	ST08.80.05.01	Blade segment	Light gray/smoky w striations	3.60	1.20	0.30	Retouched
<b>ST08.80</b>	ST08.80.05.02	Blade segment, proximal	Light gray/cloudy opaque	6.60	1.10	0.20	Nearly complete
<b>ST08.80</b>	ST08.80.05.03	Blade segment, proximal	Light gray/smoky w striations	5.20	1.30	0.30	
<b>ST08.80</b>	ST08.80.05.04	Blade segment, distal	Light gray/opaque	3.55	0.50	0.30	Chipped edges
<b>ST08.80</b>	ST08.80.05.05	Blade segment, medial	Light gray/opaque	2.00	1.00	0.25	Chipped edges
<b>ST08.80</b>	ST08.80.05.06	Blade segment, medial	Light gray/opaque	1.80	1.10	0.35	
<b>ST08.80</b>	ST08.80.05.07	Blade segment, medial	Light gray/opaque w dark striations	3.20	0.90	0.25	
<b>ST08.80</b>	ST08.80.05.08	Blade segment	Dark gray/opaque	3.30	1.10	0.30	Retouched
<b>ST08.80</b>	ST08.80.05.09	Blade segment, proximal	Light gray/cloudy w light striations	2.80	0.70	0.20	

<b>ST08.80</b>	ST08.80.05.10	Blade segment, proximal	Light gray/cloudy opaque	1.80	1.10	0.30	Chipped edges
<b>ST08.80</b>	ST08.80.05.11	Blade segment	Light gray/cloudy w striations	1.80	0.50	0.15	
<b>ST08.80</b>	ST08.80.05.12	Blade segment, distal	Light gray/opaque	1.10	1.00	0.30	
<b>ST08.80</b>	ST08.80.05.13	Blade segment, proximal	Dark gray/opaque	6.70	1.30		Nearly complete
<b>ST17.13</b>	ST17.13.05.01	Blade segment, medial	Green	2.80	0.80	0.20	Chipped edges
<b>ST17.39</b>	ST17.39.05.01	Blade segment, proximal	Clear w light gray striations	3.25	0.80	0.20	
<b>ST20.11</b>	ST20.11.05.01	Blade segment, proximal	Light gray/cloudy opaque	2.20	0.90	0.20	
<b>ST20.14</b>	ST20.14.05.01	Blade segment, medial	Light gray/cloudy w striations	2.00	0.80	0.10	Chipped edges
<b>ST20.29</b>	ST20.29.05.01	Blade segment, medial	Light gray/cloudy w striations	2.50	0.70	0.25	
<b>ST20.29</b>	ST20.29.05.02	Blade segment	Green	2.00	0.80	0.15	
<b>SUF.T.22.09</b>	SUF.T.22.09.05.01	Blade segment, medial	Light gray/smoky	1.70	1.00	0.10	
<b>SUF.T.22.09</b>	SUF.T.22.09.05.02	Blade segment, medial	Light gray/clear	2.40	0.70	0.30	
<b>SUF.T.22.19</b>	SUF.T.22.19.05.01	Blade segment	Light gray/smoky w striations	2.20	1.00	0.15	
<b>SUF.T.37.03</b>	SUF.T.37.03.05.01	Blade segment, medial	Green	5.10	0.80		Nearly complete
<b>SUF.T.37.04</b>	SUF.T.37.04.05.01	Blade segment, proximal	Green	2.70	0.80		
<b>SUF.T.55.08</b>	SUF.T.55.08.05.01	Blade segment, proximal	Clear w black striations	3.20	1.00	2.00	
<b>SUF.T.55.09</b>	SUF.T.55.09.05.01	Blade segment, proximal	Smoky gray w striations	2.35	0.70	0.25	Chipped edges

Context Number	Small Find Number	Associated Structure	Type	Color/Source	Length (cm)	Width (cm)	Thickness (cm)	Comments
SUF.L.17.00	SUF.L.17.00.05.01	Structure 48	Blade segment, proximal	Green/Pachuca	1.90	0.70	0.20	Chipped edges
SUF.L.17.00	SUF.L.17.00.05.02	Structure 48	Blade segment, medial	Green/Pachuca	0.90	0.50	0.10	
ST08.05	ST08.05.05.01	Structure 1	Blade segment, medial	Green/Pachuca	2.20	0.70	0.15	
ST08.05	ST08.05.05.03	Structure 1	Blade segment, medial	Green/Pachuca	2.60	0.80		
ST08.08	ST08.08.05.01	Structure 1	Blade segment, medial	Green/Pachuca	1.90	0.70	0.15	
ST08.34	ST08.34.05.01	Structure 1	Blade segment, medial	Green/Pachuca	2.70	0.90	0.20	
ST17.13	ST17.13.05.01	Structure 1	Blade segment, medial	Green/Pachuca	3.60	0.80	0.20	Chipped edges
ST18.02	ST18.02.05.01	Structure 146	Blade segment, medial	Green/Pachuca	1.80	0.80	0.20	Chipped edges
ST18.07	ST18.07.05.01	Structure 146	Blade segment, medial	Green/Pachuca	2.75	1.10	0.30	Chipped edges
ST18.22	ST18.22.05.01	Structure 146	Blade segment, medial	Green/Pachuca	0.70	1.30	0.20	
ST18.32	ST18.32.05.01	Structure 146	Blade segment, proximal	Green/Pachuca	3.30	1.00	0.30	Retouched
ST18.34	ST18.34.05.01	Structure 146	Blade segment,	Green/Pachuca	2.50	0.80	0.20	Chipped edges

<b>ST19.00</b>	ST19.00.05.01	Platform 1	medial Blade segment,	Green/Pachuca	2.00	0.80	0.15	Chipped edges
<b>ST19.01</b>	ST19.01.05.01	Platform 1	Bifacial point Blade segment, medial	Green/Pachuca	2.30	2.00	0.45	
<b>ST19.02</b>	ST19.02.05.01	Platform 1	Blade segment, medial	Green/Pachuca	1.60	0.70	0.20	
<b>ST19.02</b>	ST19.02.05.02	Platform 1	Blade segment, medial	Green/Pachuca	2.30	0.70	0.10	Retouched
<b>ST19.02</b>	ST19.02.05.03	Platform 1	Blade segment, medial	Green/Pachuca	1.30	0.70	0.20	Retouched
<b>ST19.03</b>	ST19.03.05.01	Platform 1	Blade segment, medial	Green/Pachuca	3.90	0.80	0.20	Retouched
<b>ST20.29</b>	ST20.29.05.01	Structure 1	Blade segment, medial	Green/Pachuca	2.00	0.80	0.15	
<b>SUF.T.23.08</b>	SUF.T.23.08.05.01	Structure 146	Blade segment, medial	Green/Pachuca	1.20	0.80	0.15	Retouched
<b>SUF.T.31.02</b>	SUF.T.31.02.05.01	Structure 49	Blade segment, medial	Green/Pachuca	2.50	0.80	0.20	Chipped edges
<b>SUF.T.36.01</b>	SUF.T.36.01.05.01	Platform 1	Flake	Green/Pachuca				
<b>SUF.T.36.02</b>	SUF.T.36.02.05.01	Platform 1	Flakes (2)	Green/Pachuca				
<b>SUF.T.37.03</b>	SUF.T.37.03.05.01	Structure 1	Blade segment, medial	Green/Pachuca	5.10	0.80		Nearly complete
<b>SUF.T.37.04</b>	SUF.T.37.04.05.01	Structure 1	Blade segment, medial	Green/Pachuca	2.10	0.70	0.15	
<b>SUF.T.37.04</b>	SUF.T.37.04.05.02	Structure 1	Blade segment,	Green/Pachuca	2.70	0.80		

proximal								
<b>SUF.T.38.02</b>	SUF.T.38.02.05.01	Structure 54	Blade segment, distal	Green/Pachuca	1.00	0.60	0.10	
<b>SUF.T.39.02</b>	SUF.T.39.02.05.01	Plaza	Blade segment, medial	Green/Pachuca	2.50	0.60	0.15	
<b>SUF.T.48.02</b>	SUF.T.48.02.05.01	Structure 1	Blade segment, medial	Green/Pachuca	2.25	1.00	0.15	Retouched
<b>SUF.T.52.03</b>	SUF.T.52.03.05.02	Platform 1	Blade segment, medial	Green/Pachuca	3.90	0.80	0.20	
<b>SUF.T.52.03</b>	SUF.T.52.03.05.03	Platform 1	Blade segment, medial	Green/Pachuca	1.70	0.80	0.15	
<b>SUF.T.52.05</b>	SUF.T.52.05.05.01	Platform 1	Blade segment, medial	Green/Pachuca	2.90	0.80	0.20	
<b>SUF.T.62.05</b>	SUF.T.62.05.05.01	Platform 1	Blade segment, medial	Green/Pachuca	2.80	0.80	0.20	

## Appendix C – Pachuca obsidian artifacts

## Appendix D – La Sufricaya obsidian artifacts

Context Number	Small Find Number	Type	Color/Source	Length (cm)	Width (cm)	Thickness (cm)	Comments
Sufricaya T.03	M-06-001	Blade segment	Light gray with striations	4.40	1.20	0.30	
ST08.01	N/A	Blade segment	Clear w diagonal black striations	2.70	0.40	0.20	
STP01.03	STP01.03.05.08	Blade segment	Light gray/opaque	2.70	1.00	0.20	Platform/percussion site?
STP01.04	STP01.04.05.01	Blade segment	Clear w lateral gray/green striations	1.20	1.10	0.25	Really should be SF# STP01.04.02 & subsequent re-numbered
STP01.04	STP01.04.05.02	Blade segment	Light gray/opaque	2.90	0.30	0.20	
STP01.04	STP01.04.05.03	Blade segment	Light gray w single black striation	4.10	0.60	0.20	
STP01.04	STP01.04.05.04	Blade segment	Light gray w light ray diag striations	4.10	0.85	0.20	
STP01.04	STP01.04.05.06	Blade segment	Light gray w vertical gray striations	3.80	0.80	0.20	Reworked?
STP01.04	STP0.04.05.07	Blade segment	Light gray/cloudy striations	4.60	0.90	0.20	
STP01.04	STP01.04.05.01	Blade segment	Gray w striations	1.70	0.70	0.20	First obsidian small find from context STP01.04
STP01.04	STP01.04.05.08	Blade segment	Light gray	4.10	0.90	0.40	
STP01.04	STP01.04.05.09	Blade segment	Gray	0.70	0.60	0.20	
STP01.04	STP01.04.05.10	Curved blade frag	Light gray w darker striations	2.90	0.90	0.25	
STP01.03	STP01.03.05.09	Blade segment	Opaque w dark striations	1.50	0.80	0.20	
STP01.03	STP01.03.05.10	Blade segment	Light gray/opaque5mm	0.50	0.70	0.20	



<b>STP01.03</b>	STP01.03.05.08	Blade segment	Light gray w striations	2.20	0.40	0.20
<b>STP01.03</b>	STP.01.03.05.12	Blade segment	Opaque w/ striations	1.30	0.50	0.20
<b>STP01.03</b>	STP01.03.05.13	Blade segment	Light gray/opaque	3.00	0.80	0.20
<b>STP01.03</b>	STP01.03.05.14	Blade segment	Light gray/opaque w dark striations	2.10	0.50	0.20
<b>STP01.05</b>	STP01.05.05.01	Blade segment	Light gray/opaque	2.10	0.30	0.15
<b>STP01.05</b>	STP01.05.05.02	Blade seg w triang point	Light gray/opaque	1.10	0.40	0.20
<b>STP01.05</b>	STP01.05.05.03	Blade segment	Light gray/opaque w striations	0.50	0.35	0.20
<b>STP01.03</b>	STP01.03.05.01	Blade segment	Light gray/opaque w dark striations	3.50	0.80	0.20
<b>STP01.03</b>	STP01.03.05.02	Blade segment	Light gray/opaque	1.60	0.80	0.20
<b>STP01.03</b>	STP01.03.05.03	Blade segment	Light gray/opaque	1.70	0.40	0.25
<b>STP01.03</b>	STP01.03.05.04	Blade segment	Light gray/opaque	1.40	0.70	0.25
<b>STP01.03</b>	STP01.03.05.05	Blade segment	Light gray/opaque	1.30	0.80	0.20
<b>STP01.03</b>	STP01.03.05.07	Blade segment	Light gray/opaque	2.70	0.70	0.25
<b>STP01.03</b>	STP01.03.05.06	Blade segment	Opaque w dark striations	1.10	0.90	0.15
<b>ST07.03</b>		Blade segment	Light gray/opaque	2.80	0.80	0.20
<b>ST07.03</b>		Blade segment	Light gray/opaque	2.10	0.60	0.25
<b>ST07.03</b>		Blade segment	Light gray/opaque w light diag striations	2.30	0.50	0.20

<b>ST07.03</b>	Blade segment	Light gray/green/opaque	1.30	0.50	0.20
<b>ST07.03</b>	Blade segment	Light gray/opaque w dark clouds	4.20	0.70	0.40
<b>ST07.03</b>	Blade segment	Light gray/cloudy opaque	3.10	0.70	0.20
<b>ST07.03</b>	Blade segment	Light gray/opaque	3.60	0.20	0.15
<b>ST07.03</b>	Blade segment	Opaque w dark spots	3.10	0.40	0.20
<b>ST07.03</b>	Blade segment	Opaque w dark spots	3.20	0.30	0.30
<b>ST07.03</b>	Blade segment	Opaque	2.50	0.50	0.30
<b>ST07.03</b>	Blade segment	Light gray/opaque	1.80	0.60	0.20
<b>ST07.03</b>	Blade segment	Light gray/opaque	2.20	1.10	0.40
<b>ST07.03</b>	Blade segment	Light gray/opaque	2.10	1.00	0.20
<b>ST07.03</b>	Blade segment	Opaque w dark spots	1.40	0.20	0.20
<b>ST07.03</b>	Blade segment	Opaque/light gray	1.30	0.70	0.25
<b>ST08.02</b>	Blade segment	Opaque w light striations	2.10	0.30	0.30
<b>ST08.02</b>	Blade segment	Light gray/opaque	1.75	0.80	0.25
<b>SL05.26</b>	Triang blade frag	Opaque w light striations	3.70	0.60	0.10
<b>SL05.26</b>	Blade segment	Opaque w dark spots/striations	3.20	0.40	0.20
<b>LT01</b>	Blade segment	Clear	2.10	0.30	0.15

<b>LT01</b>		Blade segment	Opaque w dark striations	1.00	0.30	0.20	
<b>ST09.02</b>		Blade segment	Opaque w dark striations/spots	1.70	0.50	0.30	
<b>ST09.02</b>	ST09.02.05.05	Blade segment	Light gray/cloudy	1.80	0.50	0.25	
<b>T35.03</b>		Blade segment	Light gray/cloudy	1.80	1.00	0.20	
<b>ST10</b>		Blade segment	Light gray/cloudy w striations	1.20	1.00	0.25	Burial 10
<b>ST10.03</b>	ST10.03.05.01	Blade segment	Opaque w dark striations	1.90	0.40	0.20	2 pcs
<b>ST10.01</b>	ST10.01.05.01	Blade segment	Light gray/opaque	1.20	0.40	0.25	
<b>ST09.02</b>	St09.02.05.01	Blade segment	Dark gray/opaque	1.10	0.70	0.20	
<b>ST09.02</b>	ST09.02.05.02	Blade segment	Dark gray/opaque	1.90	0.50	0.20	
<b>ST09.02</b>	ST09.02.05.06	Blade segment	Opaque w dark diag striations	1.10	0.70	0.25	
<b>ST08.05</b>		Blade segment	Light gray/opaque	1.20	0.50	0.20	
<b>ST08.01</b>		Blade segment	Light gray/opaque w dark striations	3.80	0.90	0.40	
<b>ST08.08</b>		Blade segment	Light gray/loudy	2.10	0.20	0.20	Slightly curved
<b>ST08.55</b>		Blade segment	Light gray/cloudy	3.50	0.80	0.20	
<b>ST08.55</b>		Blade segment	Light gray/cloudy	1.05	0.20	0.25	Reworked?
<b>ST08.80</b>	ST08.80.05.01	Blade segment	Light gray/opaque w striations	2.90	0.70	0.30	Notched
<b>SUF.T.22.19</b>		Blade segment	Light gray/opaque	1.70	0.70	0.15	

SUF.T.22.09	Blade segment	Light gray/clear	1.80	0.50	0.10	
SUF.T.22.09	Blade segment	Light gray/opaque	1.20	0.55	0.30	
SUF.T.23.01	Blade segment	Light gray cloudy/opaque	0.40	0.20	0.20	
SUF.T.23.08	Blade segment	Dark gray/black	1.30	0.70	0.20	
SUF.T.23.08	Blade segment	Light gray/clear opaque	2.10	0.30	0.20	
SUF.T.23.15	Blade segment	Light gray/opaque	1.70	0.85	0.30	Notched? Reworked?
SUF.T.23.32	Blade segment	Light gray/clear/opaque	2.50	0.45	0.20	
SUF.T.24.01	Blade segment	Dark gray/black	1.80	0.70	0.20	
SUF.T.24.01	Blade segment	Dark gray/cloudy	1.05	0.70	0.20	Flake?
SUF.T.24.02	Blade segment	Light gray/cloudy w striations	1.30	0.75	0.20	
SUF.T.24.08	Blade segment	Light gray/clear/opaque	1.70	0.40	0.30	
ST08.80	Blade segment	Light gray/opaque w dark striations	2.50	0.45	0.25	
ST08.80	Blade segment	Dark gray/opaque	2.60	0.90	0.30	
ST08.80	Blade segment	Light gray/cloudy w light striations	2.20	0.30	0.20	
ST08.80	Blade segment	Light gra/opaque	1.30	0.70	0.30	
ST08.80	Blade segment	Light gray/cloudy/striations	1.30	0.25	0.15	
ST08.80	Blade segment	Light gray/opaque	0.65	0.50	0.30	

SUF.L.8.00	Blade segment	Light gray/opaque	2.70	0.50	0.30	
SUF.L.8.00	Blade segment	Light gray/opaque	4.90	0.30	0.30	Slightly curved
SUF.L.8.00	Blade segment		4.30	0.70	0.20	
SUF.L.8.00	Blade segment		3.20	0.40	0.25	
SUF.L.8.00	Blade segment		2.40	0.40	0.30	
SUF.L.8.00	Blade segment	Light gray/clear	2.40	0.70	0.25	
SUF.L17.00	Blade segment	Light gray/clear	2.20	0.20	0.15	
SUF.L17.00	Blade segment		1.60	0.20	0.20	
SUF.L17.00	Blade segment		0.70	0.35	0.10	
SUF.L17.00	Blade segment		0.40	0.20	0.10	
SUF.T.26.02	Blade segment	Dark gray/cloudy	1.30	0.45	0.35	
SUF.T.26.02	Flake?	Black	1.10	0.80	0.50	
SUF.T.26.03	Blade segment	Light gray/clear	2.00	0.80	0.20	
SUF.T.26.17	Debitage?	Light gray/opaque	1.20	0.50	0.50	
SUF.T.26.18	Blade segment	Light gray/cloudy/opaque	2.50	0.30	0.20	
SUF.T.27.02	Debitage?	Clear w/ dark striations	1.10	0.60	0.20	
SUF.T.28.01	Blade segment	Light gray/cloudy/opaque	2.10	0.90	0.30	
SUF.T.28.01	Blade segment	Clear w dark spots/striations	1.70	0.70	0.20	
SUF.T.28.02	Blade segment	Dark gray/cloudy/opaque	1.30	0.40	0.35	

SUF.T.29.02	Blade segment	Dark gray/opaque	2.30	0.40	0.50	
SUF.T.29.02	Blade segment	Light gray/clear	1.50	0.50	0.15	
SUF.T.29.02	Blade segment	Clear w black striations	1.50	0.35	0.20	
SUF.T.29.05	Blade segment	Light gray/clear dark spots	3.20	1.00	0.35	Slightly curved
SUF.T.29.06	Blade segment	Clear w dark striations	3.20	0.80	0.30	
SUF.T.29.06	Blade segment	Light gray opaque	2.75	0.70	0.30	
SUF.T.29.06	Blade segment	Light gray/clear w black striations	2.00	0.60	0.25	
SUF.T.29.06	Blade segment	Light gray/opaque	1.60	0.60	0.20	
SUF.T.29.06	Blade segment	Clear	0.60	0.20	0.20	
SUF.T.29.02	Blade segment	Light gray/opaque	2.90	1.10	0.30	
SUF.T.30.01	Blade segment	Dark gray/opaque	0.40	0.50	0.45	
SUF.T.30.02	Blade segment	Dark gray/opaque	1.00	0.50	0.45	
SUF.T.31.01	Blade segment	Light gray/cloudy	2.30	0.70	0.25	
SUF.T.31.01	Blade segment	Light gray/clear	1.00	0.90	0.20	
SUF.T.32.01	Blade segment	Light gray/clear	1.40	0.40	0.10	
SUF.T.32.02	Blade segment	Light gray/clear	1.10	0.20	0.20	
SUF.T.32.02	Blade segment	Light gray/cloudy	1.10	0.80	0.30	

	Blade segment	Light gray/cloudy/opaque w striations	2.45	0.55	0.30	
<b>SUF.T.33.02</b>	Blade segment	Light gray/cloudy/opaque w striations	3.50	0.90	0.30	
<b>SUF.T.34.02</b>	Blade segment	Light gray/cloudy/opaque	2.70	0.50	0.30	
<b>SUF.T.42.02</b>	Blade segment	Dark gray w atriations	1.20	0.20	0.20	
<b>SUF.T.37.02</b>	Blade segment	Dark gray/opaque	1.10	0.60	0.30	
<b>SUF.T.37.04</b>	Blade segment	Light gray/cloudy/opaque w striations	2.45	0.60	0.20	
<b>SUF.T.37.04</b>	Blade segment	Light gray/cloudy w striations	2.80	1.00	0.20	
<b>SUF.T.37.04</b>	Blade segment	Light gray/cloudy w striations	1.90	0.45	0.20	
<b>SUF.T.37.04</b>	Blade segment	Light gray/cloudy/opaque	1.60	0.90	0.40	
<b>SUF.T.37</b>	Blade segment	Light gray/cloudy/opaque	1.80	0.30	0.20	Check notes for context on 27-6-05
<b>SUF.T.37.02</b>	Blade segment	Clear w light gray striations	2.40	0.30	0.20	
<b>SUF.T.37.02</b>	Blade segment	Light gray/clear	3.00	0.20	0.15	
<b>SUF.T.37.02</b>	Blade segment	Light gray/clear w striations	2.45	0.30	0.25	
<b>SUF.T.37.02</b>	Blade segment	Light gray/clear w striations	2.25	0.30	0.20	
<b>SUF.T.37.02</b>	Blade segment	Light gray opaque	2.00	0.50	0.20	
<b>SUF.T.37.02</b>	Blade segment	Light gray opaque	1.50	0.70	0.25	

SUF.T.37.02	Blade segment	Clear w black striations	1.60	0.70	0.30	
SUF.T.37.02	Blade segment		1.00	1.00	0.25	
SUF.T.35.01	Blade segment	Cloudy gray	0.50	0.90	0.10	
SUF.T.35.01	Blade segment	Cloudy gray	1.80	0.40	0.20	
SUF.T.36.01	Blade segment	Cloudy gray	2.10	0.65	0.20	
SUF.T.36.01	Blade segment	Cloudy gray	1.75	0.25	0.20	
SUF.T.36.01	Blade segment	Cloudy gray	0.90	1.00	0.25	Reworked? Notchd?
SUF.T.36.01	Blade segment	Cloudy gray	0.30	0.80	0.30	
SUF.T.36.01	Blade segment	Light gray/clear	2.10	0.80	0.20	2 pcs
SUF.T.36.01	Blade segment	Light gray/clear w striations	2.45	1.00	0.30	
SUF.T.36.02	Blade segment	Light gray/opaque	3.20	0.40	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque	2.50	0.40	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque w striations	3.00	0.50	0.20	Rounded point
SUF.T.36.02	Blade segment	Light gray/opaque w vertical striations	2.10	0.50	0.20	
SUF.T.36.02	Blade segment		2.00	0.60	0.35	
SUF.T.36.02	Blade segment	Light gray/opaque	1.50	0.70	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque	1.40	0.50	0.20	



SUF.T.36.02	Blade segment	Light gray/opaque	1.40	0.25	0.20	Point frag
SUF.T.36.02	Blade segment	Light gray/opaque	1.20	0.40	0.10	
SUF.T.36.02	Blade segment	Light gray/opaque	0.95	0.60	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque	0.80	0.50	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque w striations	2.30	0.55	0.30	
SUF.T.36.02	Blade segment	Light gray/opaque	1.90	0.40	0.30	
SUF.T.36.02	Blade segment	Light gray/opaque	1.95	0.35	0.25	
SUF.T.36.02	Blade segment	Light gray/opaque	1.70	0.30	0.20	
SUF.T.36.02	Blade segment	Light gray/opaque	1.70	0.15	0.25	
SUF.T.36.02	Blade segment	Cloudy gray	1.10	0.50	0.15	
SUF.T.36.02	Blade frag/debitage?	Light gray/opaque	1.00	0.75	0.20	
SUF.T.36.02	Blade frag/debitage?	Light gray/opaque	1.40	0.85	0.20	
SUF.T.36.04	Blade segment	Opaque w dark striations	1.05	0.50	0.20	
SUF.T.36.03	Blade segment	Light gray/opaque	2.30	0.45	0.30	curved
SUF.T.36.03	Blade segment	Light gray/opaque	2.40	0.20	0.30	Curved
SUF.T.36.03	Blade segment	Light gray/opaque	2.10	0.50	0.25	Reworked edges?

SUF.T.38.01	Blade segment	Cloudy light gray w striations	2.05	0.30	0.20	
SUF.T.38.02	Blade segment	Cloudy dark gray	2.70	0.30	0.20	
SUF.T.38.02	Blade segment	Light gray/opaque	1.60	0.70	0.20	
SUF.T.38.02	Blade segment	Light gray/opaque	1.40	0.50	0.20	Chipped edges
SUF.T.38.02	Blade segment	Light gray/opaque	2.80	0.80	0.30	Hinge fracture?
SUF.T.38.02	Blade segment	Light gray/opaque w striations	2.50	0.30	0.25	Slightly curved
SUF.T.38.02	Blade segment	Light gray/opaque w striations	3.15	0.30	0.20	
SUF.T.38.02	Blade segment	Light gray/opaque	1.30	0.25	0.20	
SUF.T.39.02	Blade segment	Dark gray/opaque	0.70	0.60	0.25	Chipped edges
SUF.T.23.01	Blade segment	Light gray/opaque	3.00	0.30	0.20	
SUF.T.23.01	Blade segment	Black	0.60	0.35		
SUF.T.47.02	Blade segment	Black	2.60	1.35	0.60	
SUF.T.47.02	Blade segment	Dark gray/opaque	2.65	0.90	0.30	Slightly curved
SUF.T.47.02	Blade segment	Light gray/opaque w dark striations	2.80	0.55	0.20	Slightly curved
SUF.T.47.02	Blade segment	Light gray/opaque24mm	2.50	0.65	0.20	Notched?
SUF.T.47.02	Blade segment	Light gray/opaque w striation	4.40	0.70	0.25	
SUF.T.47.02	Blade segment	Light gray speckle/cloudy	3.10	0.30	0.30	

SUF.T.47.02	Blade segment	Light gray/opaque	2.80	0.35	0.25	
SUF.T.47.02	Blade segment	Light gray/opaque	1.10	0.60	0.25	
SUF.T.47.02	Blade segment	Light gray/cloudy w striations	6.05	0.55	0.35	Slightly curved/nearly complete
SUF.T.47.02	Blade segment	Light gray/cloudy w striations	3.15	0.55	0.20	
SUF.T.47.02	Blade segment	Light gray/cloudy w striations	1.70	0.55	0.20	Triangular point?
SUF.T.47.02	Blade segment	Light gray/cloudy w striations	1.10	0.55	0.25	
SUF.T.47.02	Blade segment	Light gray/cloudy w striations	1.10	0.30	0.20	
SUF.T.48.02	Blade segment	Dark gray/opaque	1.70	1.00	0.30	
SUF.T.48.02	Blade segment	Light gray/opaque w light striations	2.60	0.50	0.20	
SUF.T.48.02	Blade segment	Dark gray/blck	1.40	0.25	0.20	
SUF.T.49.02	Blade segment	Light gray/opaque	2.65	0.60	0.30	Slightly curved
SUF.T.49.02	Blade segment	Light gray/opaque	2.45	0.60	0.25	
SUF.T.49.02	Blade segment	Light gray/opaque	2.45	0.60	0.25	
SUF.T.49.02	Blade segment	Light gray/opaque	2.45	0.45	0.20	
SUF.T.49.02	Blade segment	Light gray/opaque	1.80	0.60	0.30	
SUF.T.49.02	Blade segment	Light gray/opaque	1.50	0.50	0.20	
SUF.T.50.02	Blade segment	Dark gray/opaque	2.35	0.40	0.40	Reworked? Hinge fracture?
SUF.T.50.02	Blade segment	Light gray/opaque	2.20	0.45	0.20	

SUF.T.50.02	Blade segment	Light gray/opaque w striations	1.85	0.95	0.20	Chipped edges
SUF.T.50.02	Blade segment	Light gray/opaque w striations	1.55	0.70	0.25	Chipped edges
SUF.T.50.02	Blade segment	Light gray/opaque w striations	0.60	0.30	0.20	
SUF.T.52.02	Blade segment	Opaque w dark striations	1.20	0.40	0.20	
SUF.T.52.02	Blade segment	Opaque w dark striations	4.15	0.20	0.20	
SUF.T.52.02	Blade segment	Light gray/opaque	2.70	0.65	0.20	
SUF.T.52.02	Blade segment	Dark gray/opaque	2.40	0.60	0.30	
SUF.T.52.02	Blade segment	Lt gry/oppq	2.50	0.30	0.20	
SUF.T.52.02	Blade segment	Lt gry/oppq	2.50	0.20	0.20	
SUF.T.52.02	Blade segment	Lt gry/oppq	2.40	0.30	0.20	
SUF.T.52.02	Blade segment	Lt gry/oppq	1.90	0.30	0.20	
SUF.T.52.02	Flake?	Opaque w dark striations	1.50	0.80	0.20	
SUF.T.52.03	Blade segment	Light gray/opaque	4.15	0.60	0.30	
SUF.T.52.03	Blade segment	Light gray/opaque	3.40	0.70	0.20	
SUF.T.52.03	Blade segment	Opaque w dark striations	3.70	0.30	0.20	
SUF.T.52.03	Blade segment	Dark gray/black	2.60	0.60	0.20	
SUF.T.52.03	Blade segment	Light gray/opaque	2.90	0.50	0.25	notched

SUF.T.52.05	Blade segment	Light gray/cloudy striations	1.80	0.60	0.20	
SUF.T.52.05	Blade segment	Opaque w dark striations	2.20	0.35	0.45	Slightly curved
SUF.T.52.05	Blade segment	Light gray/opaque	3.30	0.30	0.30	
SUF.T.52.05	Blade segment		1.95	0.40	0.25	
SUF.T.52.05	Blade segment		1.80	0.25	0.30	Reworked?
SUF.T.52.07	Blade segment	Clear w light striations	2.00	0.30	0.15	
SUF.T.52.07	Blade segment	Clear w dark specks	1.90	0.50	0.25	
SUF.T.52.07	Blade segment	Cloudy light gray	1.95	0.50	0.25	
SUF.T.52.08	Blade segment	Light gray/opaque	1.90	0.40	0.20	
SUF.T.52.08	Blade segment	Black/opaque	2.05	0.15	0.20	