DID THE CENTER HOLD? POLITICAL INTEGRATION AT YAXUNÁ FROM THE

PRECLASSIC TO THE TERMINAL CLASSIC

AN ABSTRACT

SUBMITTED ON THE FIRST OF AUGUST 2022

TO THE DEPARTMENT OF ANTHROPOLOGY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
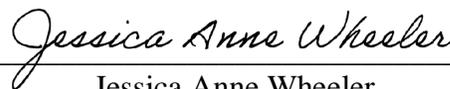
OF THE SCHOOL OF LIBERAL ARTS

OF TULANE UNIVERSITY

FOR THE DEGREE
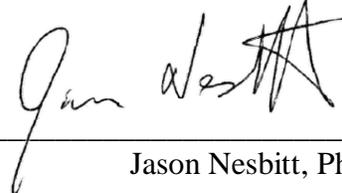
OF

DOCTOR OF PHILOSOPHY

BY

Jessica Anne Wheeler
Jessica Anne Wheeler

APPROVED: _____
Marcello Canuto, Ph.D. Director

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Christopher Rodning, Ph.D.

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Jason Nesbitt, Ph.D.

Abstract

The site of Yaxuná is the urban center of a polity occupied from the Late Preclassic through the Terminal Classic period in north-central Yucatán. Throughout the polity's existence, it was governed by various regimes that employed different strategies to exercise power over the area residents. These strategies relied on circulations of goods, ideas, and people between the seat of the ruling regime and the polity's followers throughout the area. Throughout its long history of occupation, the Yaxuná polity occupied different places on a spectrum of political integration, depending on the type of regime, its authority, and the strength and number of circulations related to political imaginary. The intensity of political integration can be seen through the impact of transformative events on the Yaxuná polity. These events, which targeted the various ruling regimes, had different effects on the polity's followers based on the strength and number of circulations between leaders and followers throughout the area and at different time periods.

By identifying archaeological correlates for distinguishing leaders and followers, identifying transformative events, and mapping circulations of people, goods, and ideas, an analysis of political integration at Yaxuná is possible. Data collected over 30 years throughout the Yaxuná area gives insight into the lives of the leaders based in the site center and their followers. This data included excavations at Yaxuná by two archaeological projects; regional survey, surface collection, and excavations; and lidar coverage. The type of regime, population and settlement of the hinterlands, and the proximity of other urban centers affected the political integration of the Yaxuná polity. The Terminal Classic period demonstrated the greatest extent of political integration,

followed by the Preclassic, the Early Classic, and finally the Late Classic. Through survey, mapping, and excavations of the areas between natural communities, new insight into political integration is possible. This dissertation analyzes the available data and interpretations to evaluate the political integration of the Yaxuná polity; synthesizes the culture history of Yaxuná through combining data, analysis, and interpretation from the Selz Project and PIPCY; and offers insight into the advantages and disadvantages to lidar as a survey tool in the Central Yucatán area.

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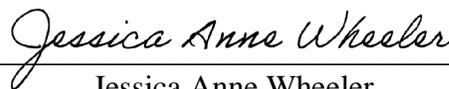
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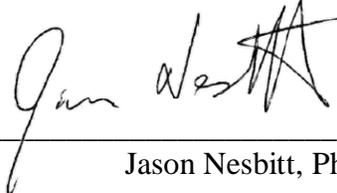DOCTOR OF PHILOSOPHY

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Jason Nesbitt, Ph.D.

Yo tardé 13 años en terminar este programa. En memoría de los que perdí en este tiempo…

Auriole Blanche "Snooks" Wheeler Moeller
(1921-2014)

Charles Maurice Moeller
(1922-2018)

Holly Williams
(1987-2013)

Noel
Miko
Addy
Zoey

Acknowledgments

Por siempre y para siempre – le agradezco a la gente de Popolá y Yaxunah por permitirme trabajar en sus terrenos, por sus ideas y análisis, y por cuidarme. Esta disertación no es el fin; es la primera etapa de una relación que durará por toda mi vida. Los comisarios ejidales y municipales de Popolá me ayudaron mucho: Carlos Lugo Dzul, Javier Lugo Dzul, Felix Diaz Caamal, Susanno Caamal Uc, y Tomás Diaz Caamal. Me quedé con la familia Lugo Maas por dos temparadas; muchas gracias a Doña Elena, Don Carlos, Marisol y su familia, Vani, y Walter. Les doy gracias a los señores que trabajaron conmigo en el campo por buscar las estructuras, limpiar las estructuras, excavar los pozos, matar las culebras peligrosas, y compartir su pozole: Martiniano Dzul Peraza, Andres Dzul Peraza, Susanno Caamal Uc, Juan Rosí Caamal Uc, Margarito Diaz Cohuo, Feliz Diaz Caamal, Enrique Poot Dzul, Aldolfo Maas Uicab, Marcelino Diaz Cohuo, Amado Lugo Gil, Virgilio Poot Diaz, Aristeo Diaz Cohuo, Sergio Diaz Nah, Dionisio Dzib Dzul, Amado Caamal Uc, Jose Crescencio Poot Lugo, Gilberto Chan, Ernildo Dzul Pat, Tomás Diaz Caamal, Manuel Lugo Dzul, Gregorio Lugo Dzul, Galindo Diaz Cohuo, Jose Maas, Ismael Cahuh, Liziandro Diaz Lugo, Carlos Lugo Dzul, Rogelio Diaz Dzul, Pascual Poot Dzul, Felipe Lugo Dzul, Hector Dzul Maaas, Zoilo Poot Dzul, Javier Lugo Dzul, Nestor Diaz Nah, Carlos Chan Maas, Jose Ramon Poot Dzul, Eliodoro Diaz Caamal, Andres Poot Dzul, Marcos Poot Dzul, Isobel Maas Peraza, Armando Maas, y Roberto Poot.

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My academic inspiration comes from the wonderful learning environment created at New College of Florida, especially under the mentorship of the anthropology department. I took fascinating classes, learned to ask new questions, reconsider my

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Chapter 1

Introduction

The Yaxuná area is a unique location: a site in central Yucatán with Petén-style

flair but no preserved hieroglyphic records, positioned as a connector between the

northern and southern ancient Maya areas. Throughout its long history, its generations of

residents were witness to divine kings, royal massacres, and the rise and fall of powerful

political dynasties. Thanks to decades of archaeological research in Yaxuná and the

surrounding area, there is a fairly comprehensive picture of the site's history despite the

lack of written records. This research has also elucidated extensive information about the

territory surrounding Yaxuná and the people who occupied it. This project seeks to

synthesize the archaeological data and scholarly interpretations for the Yaxuná area with

the purpose of exploring its political integration throughout its occupation. During the

Early Classic, Late Classic, and Terminal Classic, the political regimes centered at the

Yaxuná site core each experienced a transformative event that dramatically restructured

governance of the polity. In the aftermath of these events, which significantly shaped the

lives of leaders, I ask, "Were the lives of followers transformed as well?" In other words,

to what extent was the polity connected through circulations of political ideas, people,

and goods between leaders and followers? In this dissertation, I will summarize the

available archaeological data from Yaxuná and the surrounding region over the course of

Yaxuná's occupation, stretching from the Preclassic to the Terminal Classic. During each

period, there is clear evidence of a transformative event – a disruption in the political

regime and change in leadership at Yaxuná. After identifying the transformative event

archaeologically, I will analyze the data from Yaxuná and the regional area for changes in the circulations of political ideas, people, and goods following the transformative event and characterize the political integration of different leadership structures at Yaxuná. This dissertation draws on research I completed at Popolá-Puus Sil, Yaxuná, a transect between the two sites, and Kopchen, as well as the decades of data compiled by archaeologists through the Selz Project and Proyecto de Interacción Política del Centro de Yucatán (PIPCY), to provide as comprehensive an understanding as possible of Yaxuná and the surrounding area.

Research Goals

This dissertation was the result of several different objectives. One goal was to test the effectiveness of lidar for surveying in Central Yucatán. Another goal was to provide an updated overview of the culture history of Yaxuná, based on the work done by PIPCY and the foundation built by the work of the Selz Project. Finally, the central purpose of this project is to evaluate the extent to which Yaxuná was a politically integrated unit under different leadership regimes throughout its history of occupation. To answer this question, I explore the background context of life at Yaxuná and the surrounding communities, identify the transformative event and its archaeological correlates, and then analyze the extent to which this event disrupted life for those beyond the site center.

Theoretical Concepts

My analytical framework for this dissertation relies on several different concepts: the political imaginary and imagined community, "power over" and "power to," leaders and followers, circulations, and integration. Politics includes power, the political system, strategies used to obtain and yield power, the use and manipulation of power by those who are part of the political system (the regime), and interaction with and resistance to the political system by those who are not part of the regime. These concepts are central to analysis and interpretation of data from Yaxuná. Integration refers to the number, volume, and intensity of circulations of people, goods, ideas, energy, and materials – in this case, those between leaders and followers and related to "power over" and "power to."

The ancient Maya polity was an example of an imagined community; one that is too large for every member to interact directly but a group that shares expectations and comprehension of how the political system works and valid ways for expressing conflict and the consequences of doing so. The concept of imagined community expanded into the social imaginary, which I adapt for my purposes into the political imaginary. The political imaginary, like other communities, is defined by its distinctions and commonalities. In the case of the Yaxuná political imaginary, commonalities would have included language, religion, cultural practices, residential proximity, exchange networks, kinship connections, corvée labor projects, tribute paid, and ritual performances at the site center. Interactions between members are one way of producing and maintaining community, but another way of doing so is through circulations of people, ideas, and goods. In ancient Maya polities, people circulated between their residential communities

and the site center for purposes of providing labor, participating in markets, attending ritual events, visiting family or friends, and delivering tribute. In some cases, leaders or regime officials may have circulated through local communities to conduct ceremonies, collect tribute, or organize work parties. Goods such as pottery, stone tools, and textiles circulated between people through markets, loans, and inheritance. As items made by hand and in certain cases used for sharing ideas or symbols, their circulations helped establish and maintain the fabric of the community. Ideas circulated through stories, monumental architecture, landscapes, and ritual performances. These circulations served as the connections that comprise integration. The greater the number and volume of these circulations or connections and the flows of people, energy, information, ideas, and gods that pass through them, the greater the linkage between the various societal units that make up a polity – households, residential communities, and the urban center. Political integration is thus graded on a spectrum according to the intensity and number of circulations between two societal units – leaders and followers.

For the purposes of this dissertation, leaders are defined as those who had "power over" – members of the ruling regime in an ancient Maya polity. While the most notable of ancient Maya leaders was the divine ruler, leaders would also include nobles, government officials, and members of ruling councils. Leaders are those who are able to exercise ideational and/or coercive "power over" others – accomplishing effects through others' agency. Followers are those with the "power to" resist, reject, or organize against leaders. These are not bounded categories of people; there is no clear delineation between those who exercise "power over" and those who exercise "power to" because they are relational categories. Government officials, who exercise a form of "power over" in

interacting with the general public, are still followers of the divine ruler and can exercise their own "power to" organize against them. Over the period of Yaxuná's occupation, different types of regimes exercised "power over" and consequently employed different strategies for establishing and maintaining authority – some of which were successful and some of which were not.
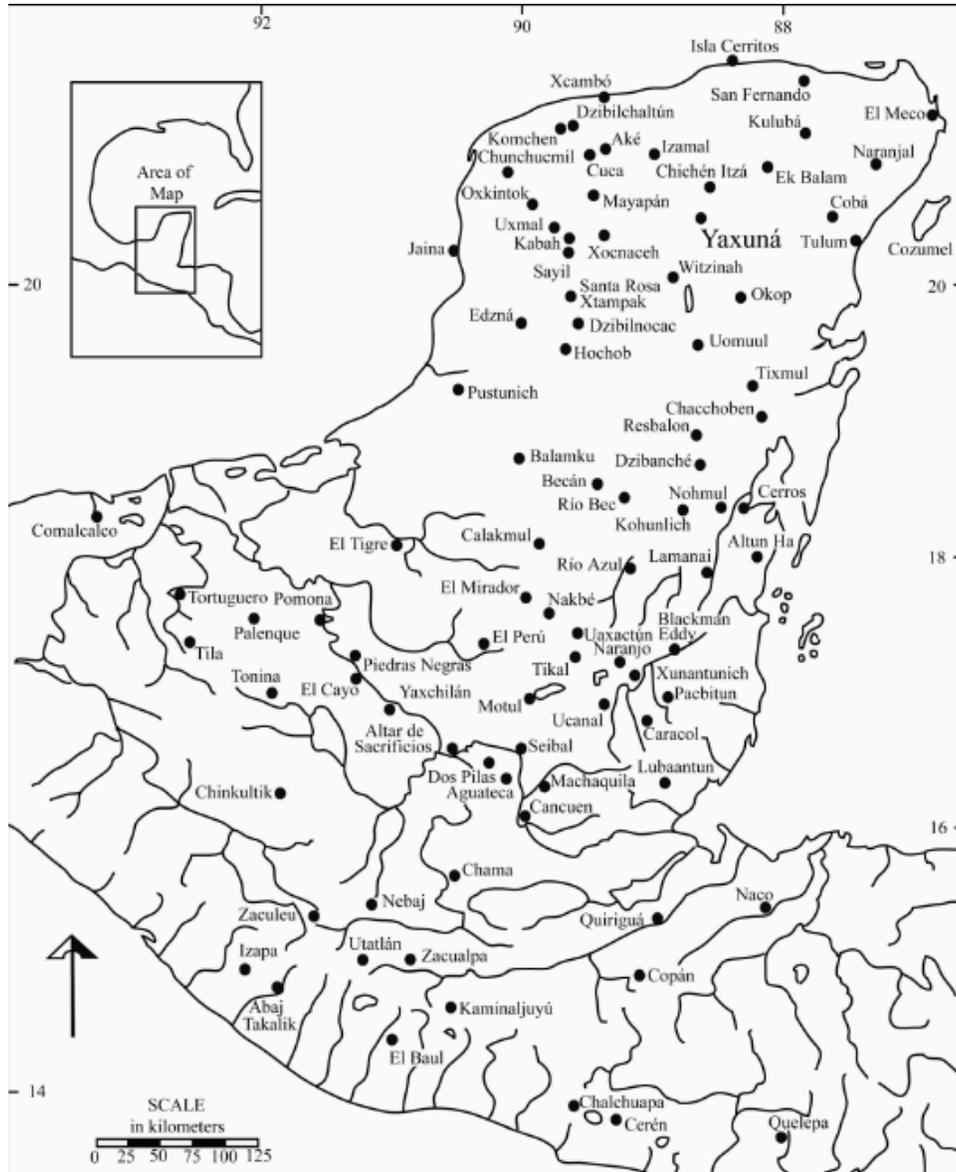
Figure 1.1: Map of the Maya area (from Stanton et al 2010: 6)

Research Conclusions

      Political integration of the Yaxuná polity was different in each period. During the times of divine rulers in the Late Preclassic and Early Classic, specific hinterland sites were closely linked to the regime, while other hinterland areas were loosely tethered through economic exchange (likely including labor and tribute). During the Late Preclassic the hinterland site of Tzacauil showed a greater volume and intensity of circulations with the Yaxuná center than other hinterland areas. During the Early Classic, Xkanhá appears to have held that role. In each case, their political integration is also shown in the fate of their populations following the transformative event; Tzacauil and Xkanhá are both abandoned, while other hinterland areas are continuously occupied and show little sign of disruption. This reflects the strategies and limitations of ancient authority; leaders relied primarily on economic networks and ideational strategies for establishing and maintaining the political imaginary, due to the lack of surveillance mechanisms and the high cost of coercive approaches. Rather than investing in a strong presence in every residential hinterlands community, replicating certain functions of the site center at Xkanhá and Tzacauil could extend the regime's authority without forcing its overextension. It also permitted resilience; the majority of the surrounding population, if loosely tethered, remained stable even in the face of disruptive political change because their everyday lives would not be significantly transformed. Retaining a stable group of followers left space for successive potential leaders (new regimes) to employ ideational strategies establishing their authority and legitimacy, in turn regenerating the political imaginary.

During the Late and Terminal Classic, the type of political regime changed. The Late Classic was perhaps the period of least political integration, which coincided with a decrease in circulations of goods, people, and ideas related to the political imaginary as the seat of power moved 100 kilometers away to the site of Coba. At this time, there is little to no evidence for a locally based government at Yaxuná. At the same time, numerous residential communities develop across the hinterlands area and previously abandoned spaces, such as Tzacauil, are reoccupied. Many of these sites lack significant monumental architecture, an indication that the local power vacuum appealed to followers looking for more independence. During the early Terminal Classic, the situation is much different. While it is possible that Yaxuná was incorporated into a Puuc alliance or as a client state of the Puuc area, the early Terminal Classic shows the clearest evidence of political integration. Range structures and iconography at Yaxuná and multiple hinterland sites demonstrate a shared conception of leadership and politics. This very intentional circulation of people and ideas may have been necessary for early Terminal Classic regimes to assert authority following the extended period of independence for followers during the Late Classic. This strategy was successful in a way that ultimately contributed to the demise of the Yaxuná polity; as Chichén Itza, through military or other means, compelled residents from Yaxuná, those in the hinterland areas followed. Unlike during the Early Classic and Late Classic, when looser forms of political integration enabled the stability of the area's settlement and population as a base of followers for new regimes, the interconnected Terminal Classic communities were similarly depopulated in the aftermath of Yaxuná's abandonment.

Dissertation Organization

I begin with a theoretical exploration of politics through a discussion of paradigms in political anthropology, polities as a form of imagined communities, definitions of political integration, and types of power in Chapter 2. I use the concept of circulations (of goods, idea, and people) between followers and leaders and evaluate the impact of transformative events in disrupting those flows. Circulations can also be defined as the connections between units or sub-system linkages – the flows of material, energy, information, and people – that have been used to define integration by other scholars (Blanton et al 1993; Flannery 1972). I differentiate between "power over" and "power to" in ancient Maya societies, each of which acted differently to maintain or interrupt the circulations that created the fabric of the sociopolitical imagined community. Finally, I discuss some ways in which leaders produced and maintained ideational power through performance of certain ideas, the performance's witnesses, and associated goods.

In Chapter 3, I categorize the different ways in which "polity" has been defined in Maya archaeology, from the definition of site to the territorial influence of patron gods to the seat of dynastic kingdoms. From there, I turn to political power in ancient Maya cities: its sources, organization, and maintenance. I question under what circumstances a political regime is able to successfully navigate upheaval or succumb to disruptive forces. This discussion prepares for the evaluation of four different case studies from the Maya area in Chapter 5. Chapter 4 serves as an introduction to the area of study and the history of research at Yaxuná prior to my own fieldwork.

Table 1.1: Major Time Periods

Time Period	Date Range
Terminal Classic	750 CE – 1100 CE
Late Classic	650 CE – 750
Early Classic	300 CE – 650 CE
Preclassic	1000 BCE – 300 CE

I begin Chapter 5 by describing my research in the Yaxuná area and continue with a description of the field and laboratory methods used to gather evidence. Given the central role of lidar in conceptualizing this project, I offer background on this technology and an evaluation of its efficacy in the Central Yucatán environment. I define political integration as the extent to which the lives of the majority of Yaxuná's population were affected by regime changes and upheaval within the elite political class – to what extent did upheaval transform, interrupt, or sever existing circulations of people, goods, ideas, and information between the political class (leaders) and followers. In order to evaluate political integration, I lay out archaeological correlates for: circulations of goods, ideas, people, and information; distinguishing between the elite political regime (leaders) and the surrounding population (followers); and types of transformative events and their impacts. These archaeological correlates drive the interpretation of data collected by others and myself in the following chapters. As an illustration of methodology, I discuss four case studies from the Maya area that also underwent transformative events and use the archaeological correlates to analyze the impact on their political integration. These case studies lead into the presentation of data and analysis from Yaxuná.

When proceeding chronologically it is easy to fall into a particular narrative in which earlier events become de facto explanations for later events. Because this is not a continuous history of Yaxuná, but one that highlights particular moments in time, I have chosen to begin at the end to avoid this tendency; the data and discussion chapters begin with the Terminal Classic and travel back in time to the Preclassic. This also reflects how we learn about the history of Yaxuná; stratigraphy dictates that we move from the most recent to the most ancient. Chapter 6, therefore, focuses on the Terminal Classic. This chapter will present data from other members of Proyecto Interacción Política del Centro de Yucatán (PIPCY) and the Selz Project as well as data I collected dating to the Terminal Classic period at Yaxuná, Popolá-Puus Sil, Ikil, the Yaxuná-Popolá transect, Kopchen, and other nearby sites. This data makes it clear that during the Terminal Classic, the Yaxuná area experienced perhaps its greatest political integration; there is extensive evidence for the circulation of people, ideas, and goods related to the political imaginary across the local landscape. These circulations are the numerous points of connection that define integration. While the Yaxuná polity may have been independent or a satellite of a Puuc area polity, its local regime clearly took steps to make its "power over" explicit in the residential communities of the surrounding area. The rise of Chichén Itza, however, offered followers with "power to" vote with their feet the opportunity to change their affiliation – and many of them did, given the drastic settlement and population changes across the area's landscape. This transformative event, unlike any earlier ones, ultimately resulted in the depopulation of the Yaxuná site center itself.

Chapter 7 presents the Late Classic, a 100-year period during which Yaxuná was incorporated into the Cobá polity. The fluorescence of architecture and record keeping at

Cobá demonstrates that Cobá's polity, likely under the divine ruler Lady *K'awiil Ajaw*, was in a time of political expansion. During this same period signs of political strength at Yaxuná were nonexistent; the greatest monumental construction was *Sacbe* 1, a 100-kilometer long road connecting the Yaxuná center with Cobá, effectively turning Yaxuná into a satellite of Cobá. Unlike during the Terminal Classic, this incorporation did not coincide with greater integration of the surrounding area through circulating people and ideas. Residential communities in the Yaxuná area were more connected by economic circulations of goods – specifically certain types of ceramic goods – than by a shared sense of political community. This chapter discusses the data from many hinterland residential communities occupied during the Late Classic, which show little indication of connected political identity. It also contrasts the data from hinterland communities located near *Sacbe* 1, which would have required significant amounts of labor to clear the landscape and lay the road, with those located on the other sides of Yaxuná. Data for this chapter comes from my own work, from Scott Johnson's work at Popolá-Puus Sil, and from the area survey conducted by PIPCY members under Travis Stanton, Scott Hutson, and Aline Magnoni in 2011. During the Late Classic, circulations of goods – economic exchange – tethered the area's communities together rather than the circulations of people and ideas that connected communities in a common political imaginary during the Terminal Classic.

During the Early Classic, political leadership at Yaxuná appeared to follow a traditional model for Classic period Maya polities, in which a divine ruler, their family, and court ruled from an urban center surrounded by monumental architecture. This trajectory veered sharply with the Early Classic transformative event – the mass killing of

a ruler and their family, including women and children. Chapter 8 discusses the ways in which this fallout revealed different ideational strategies employed by Early Classic political regimes. While some hinterland areas were tightly integrated through the circulations of people, ideas, and goods, most areas were more loosely tethered. In the aftermath of the mass killing, the more closely integrated areas suffered their own fallout, destruction, and depopulation, while other hinterland areas show little to no signs of upheaval. What is interesting to note is that whoever inherited or claimed "power over" following the death of the ruler was deeply invested in the maintenance of a shared political imaginary. The actors took intentional steps to transform a profound interruption into a narrative of political continuity. This chapter draws heavily on the work done by Traci Ardren at Xkanhá, mortuary analyses by Vera Tiesler, and initial excavations of Burials 23 and 24 by the Selz Project. My own test units and survey provided minimal evidence from the Early Classic and Preclassic.

In Chapter 9, I provide background context for the development of the Yaxuná polity itself, prior to the transformative events discussed in previous chapters. I discuss the political formation of the Yaxuná polity in the Preclassic, from the early focus on the E-Group as a communal space to the erection of the three acropolises as spaces embodying the political imaginary of the developing polity. Like Xkanhá in the Early Classic, particular settlements outside the site center were more closely integrated with the Yaxuná regime. During the Preclassic, this included the site of Tzacauil. This chapter discusses data and analysis at Tzacauil done by Chelsea Fisher, at the Yaxuná E-Group by Ryan Collins, and at the Yaxuná site center by Selz Project and PIPCY archaeologists.

Finally, the conclusion will discuss the various strategies for political integration employed by different regimes throughout Yaxuná's occupation. I will analyze how the type of political regime affected the strategies employed and the agency of leaders with "power over" and followers with "power to" to enact, contest, and adapt these strategies. Lastly, I will discuss how the case study of Yaxuná offers important insight into understanding the political integration of ancient Maya polities.

Conclusion

The urban area referred to as Yaxuná was occupied continuously for over 1,000 years. It is important to recognize that the "polity" of Yaxuná was therefore not a stable, consistent, or singular entity throughout its existence. At different moments in Yaxuná's history, there were various types of political organization, leadership, sources of power, and circulations of ideas, goods, and people taking place. In order to investigate integration of the polity, it is important to answer (or attempt to answer) the following questions: What type of political organization existed during this period? Who are the visible leaders and how are they differentiated from followers? What circulations of goods, ideas, people, and information are evident? Did the period's transformative event disrupt, reroute, or terminate those circulations?

The transformative events under investigation took place in various time periods: Terminal Classic, Late Classic, Early Classic, and Terminal-Late Preclassic. For each period, it is necessary to define the transformative event and its archaeological signatures, identify the form of political organization - the regime - in place at Yaxuná at the time of the event, and provide context for life in the Yaxuná center and the surrounding area.

This background allows me to use the archaeological evidence to elucidate some of the circulations (political, economic, social, symbolic, and ideological) that existed between leaders and followers in the urban and surrounding areas. Once these circulations have been identified, it is possible to examine their maintenance, severance, or transformation in the aftermath of the period's transformative event. The durability of these circulations, especially those that connected residents of the surrounding area with the political regime at Yaxuná, gives insight into the level of integration of the Yaxuná polity during that period.

My three part goal for this dissertation is to: analyze the available data and interpretations to evaluate the political integration of the Yaxuná polity; synthesize the culture history of Yaxuná through combining data, analysis, and interpretation from the Selz Project and PIPCY; and offer insight into the advantages and disadvantages to lidar as a survey tool in the Central Yucatán area. Through an analysis of each period of settlement combining data and discussion from my own research and that of numerous other PIPCY and Selz Project archaeologists over the past 40 years, I have attempted to focus on a single polity in a comprehensive manner.

Basing the political imaginary on economic and ideational connections enabled the continuity and rebirth of the Yaxuná polity through regime changes and transformative events over hundreds of years. The greater political integration of the Terminal Classic resulted in leaders and followers both abandoning the imagined community of Yaxuná. The understanding of Yaxuná's chronology has transformed over time with additional data and context from the area outside of the site center, which I synthesize here by combining data and interpretation from the Selz Project, PIPCY, and

recent works by Travis Stanton, Vera Tiesler, Traci Ardren, and others (Stanton et al 2020; Tiesler et al 2017). Finally, my experience of "ground truthing" lidar results demonstrated the importance of factoring in recent climate, its effect on vegetation, and consideration of local topography in evaluating its potential usefulness for survey.

Chapter 2

Politics and Power

This dissertation deals with political integration of an ancient polity. The first place to start, therefore, is with the study of politics within anthropology – the various paradigms used to explain political organization, functioning, and classification and how they have been applied to understanding the ancient Maya. The scale and complexity of ancient Maya city-states means that the polity is ultimately a form of imagined community, with its own social imaginary generated by its leaders and followers. The circulations of people, goods, and ideas between members of this community compose the integration of the polity. These circulations are motivated, generated, maintained, and challenged by the fluctuating dynamics of those exercising "power over" others and those exercising their "power to" sidestep coercion. Through archaeological remains such as the depictions of performance events, the transformation of the landscape through public architecture, and the distribution of goods, it is possible to extrapolate to some extent the political imaginary, how it functioned, and under what circumstances it transformed.

Paradigms of Political Anthropology

Analyses of ancient polities are shaped by the paradigms of political anthropology. These paradigms can be generally classified as a materialist or ideational; while political anthropology initially focused on the material, focus has shifted to the ideational over the last decades. A brief overview of the dominant paradigms sheds light on the ways in which they are used to analyze politics and the political in past and

contemporary societies. Political evolution, political economy, structural-functional, and processual-action paradigms for evaluating political forces will be covered.

Political evolution has long been associated with static classifications and an associated hierarchy of complexity (Fried 1967; Service 1962). The classification of various societies as bands, tribes, chiefdoms, states, egalitarian, or hierarchical is the origin of political evolution and is intimately tied to the society's level of integration (Kurtz 2001; Service 1975). Each classification is defined by the organizational principles – sodalities, centers of redistribution, governments, laws – that create and maintain integration among the population. This paradigm also addresses the explanation of qualitative changes in political systems wrought by three evolutionary processes: differentiation and specialization of political roles and institutions, the emergence of centralization and political authority in these roles and institutions, and the role that political organizations play in the functional integration of increasingly diversified and stratified political communities (Kurtz 2001: 133). Exemplars of the political evolution paradigm "explore holistically how political formations…emerge, change, and yet function to retain the integration of increasingly differentiated political systems" (2001: 137). The causes of political evolution are therefore central; there is no single cause or set of causes, but common forces include religious ideologies, psychological dispositions, warfare, technology, and population growth. These forces can either contribute to the process of change, or impede change and encourage stability. Political evolution is not a unilinear process; one type of political formation does not necessarily emerge out of another, and political devolution is also part of political evolution. The institutions or organizational principles that create and maintain integration break down, are

redeveloped, or are simplified. Political evolution and devolution can function in cycles, creating dynamic models of societies whose political institutions increase and decrease in levels of integration (Marcus 1989). While once confined to the study of populations and institutions, political evolution now also incorporates the actions of agents; political evolution "is characterized by the increased centralization of agents' political power and the increased nucleation and density of the population of political communities with which the agents are affiliated" (Kurtz 2001: 151).

Functionalist understandings of polities argued that societies were stable and integrated systems of structures and institutions (Malinowski 1961; Radcliffe-Brown 1965). Structural-functional approaches in political anthropology therefore focused on how social structures and related human practices contributed to that stable and integrated system. This paradigm was one of the first to identify social structures such as age sets and kinship associations as political structures (Fortes & Evans-Pritchard 1940). Such social structures functioned to maintain the integration and stability of the social organism through the enforcement of order and conformity (Kurtz 2001: 70). The structural-functional paradigm distinguished between state and stateless political systems. While stateless systems did not contain the same type of easily recognizable political and legal institutions, exemplars of the structural-functional paradigm first recognized the political dimensions of other types of social structures.

Political economy addresses how power relations affect the use of resources and human labor (work) and its products satisfy human needs and wants (Foias 2013: 25; Fried 1967; Kurtz 2001). Political agents acquire and manipulate economic instruments of power as they pursue their goals, affecting the processes of production and distribution

(Kurtz 2001: 120). Distribution requires systems of reciprocity, exchange, and redistribution, which maintain social integration and cohesion. The integrating forces of society – such as kinship, government, or chiefs – influence the modes of production (Wolf 1982). A more hierarchical and centralized society often creates an ideology of work around the common good met by the production of goods above the minimum level required for survival. Political economy includes how ideological means are used to create this conception of work, facilitating the production of surplus that partially sustains the power, authority, and legitimacy that leaders need to maintain their positions. Leadership institutions control or influence the redistribution of surplus resources and use the ideology of work and redistribution of resources to facilitate the incorporation of their values in the general community (Kurtz 2001). The ancient Maya prestige economy, class stratification, and harnessing of labor for monumental construction are rich sources for political economy analyses. While this model is useful for tracking the movements of goods and services to the elite class from the general population, it does not address "the details of how political power is manipulated, contested, and reshaped by active human actors or factions" (Foias 2013: 25).

Political economy and functionalism emphasize structures; processual-action models shifted attention to independent political agents competing for power. Processual-action models emphasize the importance of dynamism, conflicts, and tensions between various agents, rather than stable, functional positions (Bailey 1969; Kurtz 2001). Functionalist works acknowledged political dynamism, but in cycles that always returned to stability and integration. Even conflicts and competition were understood through how they eventually achieved integration. The processual paradigm

demonstrated a profound shift; rather than integration, its subject is conflict. Practices that cause divisions in society, such as argument, dissension, competition, and fight, are distinct from conflict. Conflict, however, is "the result of oppositions in social relations at the heart of a political system that are compelled by the very structure of the system and that result in the alteration of sociopolitical statuses and roles but not in the pattern of these positions" (Gluckman 1965; Kurtz 2001: 101). Rather than structures, processualism typically focuses on the dynamic, agent-driven processes of team-building, factional formation, and strategies for acquisition of power, authority, and legitimacy. Its practitioners explore how disruptive political processes and conflicts lead to changes in political structures. Like the structural-functional paradigm, processualism identified new arenas of politics – all processes related to public goals and the differential distribution and uses of power are political, regardless of their relationship to governance (Kurtz 2001). There is a dialectical relationship between agents and political structures; agents are constrained by political structures while simultaneously influencing and changing them (Kurtz 2001; Sewell 1992). From its original materially defined manifestation in political economy, the most recent topics of political anthropology "have been the fluidity of political power, the heterogeneity and conflictive nature of human societies and political structures, the importance of symbolic ways to negotiate conflicts, and the relational nature of power as it permeates all human relations" (Foias 2013: 28).

A cursory examination of political anthropology's primary paradigms demonstrates that the topics of integration and conflict lie at their hearts. Whether concerned with the origins or end of societies as political institutions, integration and conflict are central to understanding how and under what circumstances polities

developed, held together, or dissolved. From previous conceptions of integration as maintenance through the stability of mutually beneficial and interdependent parts to the processual view of integration as an illusory process masking continual conflict, questions remain as to if, when, and how political integration functions (or doesn't). Identifying a community – whether spatial, social, political, or economic – means identifying the structures and processes that facilitate, create, and maintain integration among its members. These structures and processes are meaningfully defined internally, but can also be defined externally through boundaries, borders, and schizmogenesis. This dissertation is primarily concerned with a political community; the polity of Yaxuná, operated and embodied by different regimes through time in a changing political landscape. As noted in the discussion of political anthropology's paradigms, however, politics and their operation are not restricted to government institutions; they touch on economic, social, spatial, linguistic, gender, age, and class institutions and practices as well.

Although political evolution as a defining paradigm has receded in prominence, the classifications of political organization it generated remain salient and central to categorizing and discussing communities' political organization. The two types most relevant to the Yaxuná polity are chiefdom and state. These are idealized, static types that should not be applied indiscriminately, but understanding the general characteristics associated with each is helpful in elucidating some of the specific features of political organization for Yaxuná regimes over the polity's existence. Chiefdom and state are therefore used as "flexible ranges of organizational variation" rather than as "tightly defined structural types" (Rothman 1994: 4). These two types are most applicable when

evaluating the scale, integration, complexity, and boundedness of ancient Maya societies (Blanton et al 1993: 14). Scale refers to the size of a society – the population incorporated and/or size of the area involved, as well as the working capacity of organizations of different scales. Integration refers to connections between units – established as flows of materials, energy, information, or people - and the interdependence of the units based on the extent of the flows. Complexity is determined by the extent of functional differentiation among social units. Complexity is often associated with hierarchy but is not necessarily contingent on hierarchy; complexity can be heterarchical as well when the differentiated social units can be ranked differently or are unranked. Complexity can also be classified as horizontal (parts of equivalent rank) or vertical (parts with different ranks). Boundedness refers to how the population of the community interacts with other populations outside of its boundaries, and the extent of the boundary's permeability (Blanton et al 1993: 14-18).

Classic Maya societies such as Yaxuná are typically classified as states; Preclassic Maya societies are typically classified as states, chiefdoms, or chiefdoms approaching statehood. A brief examination of the features commonly used to distinguish each type will be provided here, with the caveat that these idealized types do not define the specifics or idiosyncrasies of each society. Chiefdoms are typically placed before states in evolutionary paradigms; they are lesser in complexity and integration, more permeable in boundedness, and smaller in scale – the number of people incorporated. Permanent settlement, population growth, and inequality are the primary hallmarks of stratified societies such as chiefdoms; access to food resources, especially through agriculture, encourages permanent settlement, sustains a larger population, and enables the

development of social and economic inequality through the production of surplus (Sharer & Traxler 2006: 76). Leadership becomes associated with status and greater access to desired goods; if status is inherited, institutionalized social stratification can occur as an elite group forms. Those within the elite group exercise authority over the society; their authority is marked by social status and specialized goods access. Chiefdom-level societies are recognized archaeologically through some craft specialization and trade, especially in non-local materials; collection and redistribution of tribute; inherited social ranking based on relationship to the leader; and public works (2006: 77). The leader derives their authority and legitimacy through success in war, ideology, and obligations created by the redistribution system.

Preindustrial states embody many of these same characteristics, with increases in scale, complexity, and integration. States are more closely associated with territory than chiefdoms, which emphasize control over people. Centralized political control, full-time craft specialization, complex social stratification, management of production and distribution of goods, major public works, and true cities are common characteristics of preindustrial states (Sharer & Traxler 2006: 77-79). Scholars typically classify Classic Maya polities as states, due to the presence of a centralized political authority in the form of the divine ruler with their administrative body, who exercised authority over large populations and held persuasive and coercive power buttressed by state ideology and success in maintaining the welfare of their subjects and performance in warfare (2006: 78). The focus for this dissertation is not the emergence or evolution of particular political types within ancient Maya societies, but it is necessary to explore the common classifications used when considering the organization of a Maya polity through

evaluating its scale, boundedness, complexity, and most central to this dissertation – its integration.

Various models derived from historical or ethnographic descriptions of preindustrial states from other parts of the world have been used as analogies to further develop understanding of the Maya state. The extent to which power was centralized in the hands of political leaders is the primary barometer for classification of these types as strong states or weak states. Strong-state models centralize power in the hands of rulers who head an administrative hierarchy that manages critical elements of the economy and exercises coercive power based on the threat of force (Sharer & Traxler 2006: 712). Rulers in weak-state models derive their power from ideology, control over labor, and social networks rather than control of economic systems and territory. Rather than considering them as poles, it is more useful to consider strong-state and weak-state designations as a spectrum, along which various Maya states would have fallen differently at different times. It is also important to note the implications of the terms "strong-state" and "weak-state." Either type of state is subject to conflict, disintegration, and reorganization.

One of the most common analogies for ancient Maya states has been the galactic polity or theater-state. Galactic polities are a form of segmentary states; the unifying mechanism underlying a segmentary state is wide-ranging ritual suzerainty, while political sovereignty is limited to a central core area (Southall 1988). The primary political relations in a segmentary state tend to be locally based, either through kinship or client-patron relations. Southeast Asian states were argued to form an unstable and competitive peer-polity landscape that shared an identity via a commitment to a religious

political identity and similar economic, demographic, and logistical features (Demarest 1992; Tambiah 1982). Characteristics of the Southeast Asian galactic polity include capital centers loosely controlling a galaxy of subordinate centers; redundant structure and functions between the capital center and subordinate centers; emphasis on a cosmological model for structuring relationships between capitals and subordinate centers as well as the capital's physical environment; the tendency to expand and contract in territory; control over labor and allegiance rather than territory; limited direct control over economic infrastructure; and extreme dependency over the performance of the ruler in ritual and warfare (Demarest 1992). As with ancient Maya states, "political allegiance, power, and the degree of the centralization of the state were dependent on these networks of personal, political, and religious control that radiated out from the ruler himself" (1992: 151). The theater state's stability and maintenance depended on the performance of the ruler in public ritual, warfare, and alliance making. Maintaining the illusion of power centered on the ruler through their public performance in culturally significant events could have a stabilizing effect on the polity's functioning.

Another useful analogy for ancient Maya states is found in Mesopotamia. While Mesopotamian polities were historically viewed as temple-states, where temple priests held all economic and political power, this view has shifted to focus on heterogeneity, contingency, and competition in ancient Mesopotamian states (Stein 2001). Similarities between ancient Maya and Mesopotamian states include palace-based production through attached specialists, elite control over production and circulation of prestige goods, the inability of the state to control the manufacture and circulation of everyday utilitarian goods, conflict and warfare between different city-states, and restriction of writing and

reading to a small percentage of society. Gil Stein (2001) emphasizes that these factors led to tension between integrative strategies – practiced by the religious and administrative sectors of society and centrifugal tendencies – the strategies of autonomy and resistance found in the rural sectors, competition for power and prestige between elite factions, and a poorly-integrated economy.

Within the classification of state are many different polity types, which examine the parameters of a particular polity's scale, boundedness, complexity, and integration as well as the organization of its politics. Politics includes the political system(s), the use and manipulation of political power by those who are part of the political system (the office holders within the government), and interaction with and resistance to the political system by those who are outside of the political system (non-office holders) (Foias 2013: 20). This definition encompasses both the structures that are the concern of political evolution, structural-functionalism, and political economy, as well as the individual agents who are the focus of processual approaches. The political system includes the structures of the organizational and administrative sectors as well as its functions – maintenance of societal order, policy implementation, and safeguarding the polity's sovereignty (Rice 2004). To understand the political system, it is necessary to examine both the infrastructure and the forces generating the political processes – organization, control, logistics, and communication (Mann 1986; Wolf 1964). The actions of those within and outside of the political system – their contributions to, support for, and reactions against – highlight the individual agent's place in the operation of politics. The extent of the individual's choices is shaped by structure and process – competition for political power, wealth, status, religion, and kinship (Barth 2007; Foias 2013: 22).

Polities as Imagined Communities

Polities, political entities, and states are types of community, which at its most basic level is a conjunction of "people, place, and premise" (Yaeger & Canuto 2000). Politics are a form of human interaction, made comprehensible through categorization of social relations – a premise that creates shared affiliation. While politics are dynamic and conflict-ridden processes, participants in a political community share expectations and a repertory of valid actions for expressing conflict, as well as an understanding of the consequences of the actions. Conflict and resistance over acquisition of power, authority, and legitimacy require shared comprehension of valid and invalid ways of obtaining and exercising them, as well as the workings of the political structure and the patterning of its positions. Polities, including the state, develop in the context of community, which serves as its organizing principle or binding force (Pauketat 2000).

The exploration of community in archaeology has traditionally been defined in terms of solidarity created by two things: shared residence or space and shared life experiences, knowledge, goals, sentiments (Isbell 2000: 243). The natural community, a small group of directly interacting individuals fulfilling each other's social, economic, and reproductive needs, is a static, functionally integrated unit whose material interdependence makes shared sentiments of solidarity a natural byproduct. It consists of a population of individuals who socially reproduce the group through their repeated interactions and share a sense of membership due to common residential and subsistence interests (Kolb & Snead 1997). The community organizes labor and controls land both to produce a livelihood but also to create a shared cultural landscape and sense of place. This type of idealized stable community has been increasingly critiqued by social

scientists for its preclusion of human agency (Isbell 2000). In archaeological investigation, elements of the natural community are used; the site is the spatial community, and to some extent its residents had shared residential and subsistence interests. However, the site – which in some cases is the polity's city or capital – was not a natural community in the sense that its residents all directly interacted. In many cases, the population was too large and the territory too extensive for all residents to regularly interact face-to-face.

In speaking of community within state-level societies, the imaginary is significant; most members of this shared identity will not know or interact with each other face-to-face (Anderson 1991). Imagined communities are volatile and dynamic; their members interact with others outside their group, hold multiple social identities, develop crosscutting allegiances, select from available alternatives, and strive to create new options (Isbell 2000). The material domain is simultaneously the means, medium, and outcome of social reproduction (Isbell 2000; Soja 1989). Imagined communities are real and influential; their practices of inclusion and membership are generated through linked habits, expectations, shared rituals, and performances (Anderson 1991; Ardren 2015).

The original discussion of imagined community dealt with the rise of nationalism and 3 key components: nationalism's political power but "philosophical impoverishment"; the naturalization of nationalism into a necessary identity; and disconnect between how nations' modernity is viewed by their members compared to later historians (Anderson 1991). The nation is a type of imagined political community since most members will never know each other or interact face-to-face, but still share an

image of connection and mutual purpose. Language use and shared rituals, such as the convergence of capitalism and print media to elect a dominant language, the circulation of materials in that language, and the daily shared ritual of reading a newspaper in that language, all contributed to the enactment of a community.

The original concept of imagined community expanded into the broader concept of the social imaginary, "the ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations" (Taylor 2002: 106). The social imaginary includes the normal expectations members have of each other, the sense of how members fit together in carrying out the practice, and an understanding of actions that validate and invalidate; "people who share a social imaginary possess a common repertory of possible actions as well as the knowledge of how to choose among them and the consequences of an alternative choice" (Ardren 2015: 11; Taylor 2002).

Social Identities and Imagined Communities

Humans exist within and embody multiple social imaginaries – multiple imagined communities. Language, age, gender, economic status, job/work, social status, religion, and residence are all social identities. These identities are constructed, reproduced, and resisted through relations with other people, objects, and the landscape (Ardren 2015). Identities are constructed and reproduced through a shared understanding of mutual participation. Identity is a form of community building – the result of how individuals make sense of similarity and difference between themselves and others (Alcoff 2006).

Power permeates these communities, which may be organized hierarchically. When considered by age, for instance, older people may exercise different types of power than younger people. The sheer number and infinite combinations of identities means they often function in a heterarchical manner – individuals are in different positions of power depending on the convergence of their various identities and which identities take precedence at the moment of consideration. The imagined community is both produced by and produces integration through conceptualizing shared belonging. Large collectivities of people sharing a mental sense of membership and connection create a community through shared praxis (Ardren 2015). This community is identified by its distinctions – what sets it apart from others – and its commonalities – the shared features, beliefs, and identities that bind its members.

The salience of shared identities and the communities formed around them are constructed through a process of daily practices and interpersonal relationships. While an imagined community has a membership too large for each individual to meet regularly face to face, interactions between members and circulations of material culture and social understandings link members. In certain cases, a shared built environment also links members and gives a common frame of reference. The occupants of a particular city are members of an imagined community; though the city population is too large for them all to interact daily or know each other face to face, the urban environment and the particularities of the city's planning principles and execution provide shared understandings and experiences on which they can draw. Their experience is distinct from those living outside the boundaries of the city in non-urban environments and farther away from the architecture and institutions significant to city life (Houk 2015).

Their collective identity as residents thus shaped and was shaped by the shared understanding of how people fit into communities, their expectations and notions, and the use and design of spaces within the city (Ardren 2015: 160).

These shared understandings also shape the organization of labor, the production of material culture, its circulations, and its uses. In ancient Maya society, commodity production was a process occurring within a ritualized practice that shaped the social identities of producers and consumers (McAnany 2010). People were both members of communities shaped around their specific types of labor as well as members of broader communities generated by the circulation of the materials and goods they produced and used. Artisans in materials such as clay or greenstone, specialists in workshops attached to royal courts, residential communities that specialized in chert or salt, and labor assigned according to gender are all examples of communities of production within the economics of ancient Maya societies. The goods produced also reflected shared social understandings – which people had access to prestige materials such as greenstone, quetzal feathers, and cacao; what foods were palatable; acceptable types and styles of clothing; and the communication of shared ideological and religious values through media such as pottery.

Other types of social identities were also significant in ancient Maya societies – religion, gender, age, kinship, household, territorial affiliation, and language among them. Shared religious understandings manifested socially, in household and pan-community ritual participation; economically, in production and consumption of certain types of goods with ideological significance; and politically, in the harnessing of supernatural connection by divine rulers as justification for their positions of authority.

Gender and age proscribed certain behaviors and opportunities – the types of labor one would practice, the ways in which one would participate in the world beyond the household, and the roles one could fill. Kinship created horizontal communities, additionally affirmed in some cases by household ties. Language delineated boundaries between elites and commoners and religious leaders and practitioners through access to reading and writing as well as use of "high" language and everyday language.

Social identities and the communities which they form and are formed by are numerous and interconnected. The shared identity, developed through daily interaction, interpersonal relationships, and a mutually comprehensible social imaginary, serves as one form of societal integration. People feel a sense of belonging and in some cases obligation to each other due to perceived interdependence – the necessity of other community members for maintaining the identity's social significance and its place in the broader social imaginary. This type of integration, while suffused with the power that is embedded in all social practices, is not necessarily authoritative. Political integration, the focus of this dissertation, is predicated on the sources, strategies, and use of authoritative power.

Political Integration

Richard Blanton and colleagues (1993: 14) identify four core features of human society: scale, complexity, boundedness, and integration. Scale refers to size differences – the number of people incorporated into the society and/or the size of the area involved. These are not concomitant – gatherer-hunter societies may support smaller groups of people over a larger territorial area than a sedentary society. Complexity refers to

functional differentiation among distinct societal units – greater complexity is associated with more diversity and specialization and less redundancy. Vertical differentiation refers to rank differences among functionally diverse parts, while horizontal differentiation refers to specialization among equivalently ranked parts. Boundedness deals with how the population of a social system interacts with other populations outside its boundaries, and the permeability of those boundaries to exchanges of energy, materials, people, and information. Integration refers to the interdependence of units – the number of connections and the extent of the flows of energy, information, materials, and people through those connections (Blanton et al 1993: 14-19). In evaluating a political imagined community, integration and boundedness are the most salient features to consider.

Boundedness distinguishes one community from another, whether territorially or conceptually. The community's boundaries are what define and differentiate its members and participants from outsiders. Boundary indicates the bounds of an entity, such as a polity, while a frontier is a zone of interaction and influence between two or more entities and typically outside of any entity's authority (Johnson 2017). Boundaries can be open, closed, or semipermeable based on the passage of people, items, and ideas between entities. A border is a static boundary fixed in space dividing political units (Parker 2006). While often conceived of solely in spatial terms, boundaries can also operate conceptually. Community is a relational concept; members of a community have something in common with each other, and this common characteristic distinguishes them from those not part of the community in a way that holds significance for them (Cohen 1985). The conceptual community is defined as much by difference as

commonality. Schizmogenesis, the "self-conscious differentiation of cultural norms within groups as an outcome of cumulative interactions between them" is an example of self-imposed cultural boundedness (Wengrow & Graeber 2018: 4; Bateson 1936). Interactions between communities provide exposure to different social imaginaries – alien expectations, notions, valid and invalid actions, and understandings. These interactions may cause groups to shift their understandings, actions, and expectations to converge through imitation or adoption; social change might then challenge the shared understandings and expectations that previously held the group together. Interactions can also cause groups to intentionally and thoughtfully intensify the differences between them. Schizmogenesis is a positive strategy of cultural refusal and a form of political action for those who lack means of physical resistance. This process can also intensify intra-community integration; the factors that hold the group together are consciously articulated and intentionally elaborated as conscious inversions of those held by others (Wengrow & Graeber 2018).

Integration evaluates the extent to which the community is connected within various social imaginaries. In functional and evolutionary analyses, integration specifically deals with the interdependence of different societal units (households, villages, districts, etc) (Blanton et al 1993:16). Self-sufficient units are more loosely integrated because they require fewer connections between them; more integrated societies see greater number and volume of connections between units, and the flows of material, energy, information, and people that pass through those connections (Blanton et al 1993). Integration has been similarly defined as "the degree of linkage among those sub-systems in the functioning of the system" (Flannery 1972: 409). Economic

integration refers to "the extent to which households or other units are interdependent in terms of the exchange of goods and services" (Blanton et al 1993: 17). Mitchell Rothman (1994: 4) adds cultural or ideological integration, arguing that a shared cultural tradition can integrate groups as functional units even when political and economic integration is low. Political integration refers to the "extent to which units are autonomous in power and decision-making" (Blanton et al 1993: 17). This dissertation explores questions of political integration; the extent to which the populations outside of the urban center were linked to the polity's administration through political connections (which were also economic and ideological by nature in ancient Maya societies).

Political integration in societies is often defined through placement on a spectrum from centralization to decentralization. The extent of a society's centralization is defined by "the degree of linkage between the various subsystems and the highest order controls in society" (Flannery 1972: 409). This degree will often fluctuate within a society based on conflict, factionalism, and resistance. Certain sectors of society may serve as forces of integration and centralization, such as Mesopotamian temple institutions (Stein 1994). Other sectors of society, particularly non-governmental social spheres, may serve as sites of autonomy and resistance to forces of centralization.

Integration as a quality of community does not just exist; it is actively produced, cultivated, maintained, and dismantled. In the case of politics, leaders (those who attract, cultivate, and wield "power over") and followers engage in strategies to create, maintain, and resist integration between the two groups. Leaders exercise coercive and/or ideological power over followers to bind them to their faction, express their authority, and emphasize their legitimacy. As mentioned earlier, there can be no leaders without

followers; leaders are thus dependent on the incorporation of followers into their community. Leaders require a certain level of integration – a number and intensity of connections and flows of material, energy, information, and people – to attract and maintain followers. At the same time, followers exercise their own form of power; they may choose to enjoy the benefits of affiliation and avoid the dangers of autonomy or exercise their resistance to increased connections and interdependence by asserting their autonomy. Expressions of autonomy can take the form of establishing clear borders or boundaries, emphasizing social differences, and maintaining independence in governance and economics.

Power and Integration

Power is central to a governing entity's organization and maintenance; the types of power, how they are exercised, and why they are used are necessary considerations for understanding the functioning of the polity. To begin, there are various definitions of power developed by scholars to consider. In analyzing integration, understanding the mechanisms that strengthen relationships between leaders and followers are paramount. Political power is not a measurable item possessed by some and lacking for others; "Political power has to be understood as a contested relationship between leaders and followers, rulers and subjects, both sides always looking for ways to gain an advantage or maintain a balance" (Foias 2013: 32). Power is understood as a relational phenomenon not an entity; it is important to consider all actors to understand how and why power functions in a society.

Foucault identified power as a diffuse resource permeating all social relationships and interactions (Foias 2013: 29; Foucault 1979). While this definition highlights the relational and fluid nature of power, it does not address the specifics of authoritative power that are key to political organization. Weber offers the simplest definition of power as the "ability to make others do one's will" (Foias 2013: 29; Weber 1964). Mann (1986) defines power as the "the ability to pursue and attain goals through mastery of one's environment" (Foias 2013: 29). Mann also distinguishes between diffuse power, as discussed by Foucault, and authoritative power that is "actually willed by groups and institutions…[and] comprises definite commands and conscious obedience" (Mann 1986: 8). Authoritative power is more germane to the understanding of how power functions in politics and governing, and will be the focus here. Wolf (1999: 5) refers to this type of power as structural power, "the power to deploy and allocate social labor" and "manifest in relationships that not only operates within settings and domains but also organizes and orchestrates the settings themselves, and that specifies the direction and distribution of energy flows." While this structural or authoritative power is central to the operation of a polity, power is still a relational phenomenon. Miller and Tilley (1984) distinguish between "power over" – which coincides with authoritative and structural power – and "power to," the ability to do what one wants (Foias 2013: 31). Miller and Tilley's "power to" corresponds to Mann's collective power, "whereby persons in cooperation can enhance their joint power over third parties or over nature" (1986: 6). "Power to" relies on cooperation and persuasion and develops in alliances between individuals or groups (Miller & Tilley 1984). Ancient Maya rulers, administrators, elites, and members of the royal court wielded forms of "power over." "Power to," however, was significant

for ancient Maya commoners and non-elites; they were capable of "voting with their feet" by changing residence. Beyond the definitions of power, to understand how the polity was organized and maintained it is necessary to understand the sources of power. How and from what sources did authorities derive their "power over" and what aspects of ancient Maya societies made it possible for followers to exercise their "power to"? How did circulations of ideas, goods, information, and people support or undermine the exercise of these types of power?

To understand how power functions to integrate polities, it is necessary to examine the sources of power, types of power, and strategies for exercising and maintaining power. Control over resources gives some the capacity to force others to do their will. Scholars have identified various sources of power: ideological or symbolic orders, military, economic institutions, political institutions, social, and modes of sanction and repression (Earle 1997; Giddens 1981; Mann 1986). These sources can be classified into two categories: material and ideational (Kurtz 2001). Material sources include land, food sources, domestic animals, money, non-local and prestige goods, natural resources, and human supporters. Information, moral codes, ritual practices, symbols, and ideology are examples of ideational sources of power (Foias 2013: 30; Mann 1986: 22-23). Political leaders typically rely on both; material resources are needed to support to their political strategies, but when coercive means for controlling them are too costly, leaders must use ideational strategies to obtain them (Foias 2013; Kurtz 2001). Specific examples of each and their interaction in ancient Maya societies will be discussed later.

Since power is a relational phenomenon, it is based on reciprocity (connections) between leaders and followers. Each party provides material and ideational resources for the other – circulations of goods, ideas, and people. Leaders are a more restricted category, but there are multiple capable individuals within a society capable of filling a limited number of leadership roles. This factor leads to competition between individuals to hold leadership roles, and plays into the "power to" followers can exercise by aligning themselves with different leaders. In order to be a successful leader, an individual must have a large and/or strong supporting group, which requires attracting and maintaining followers (Foias 2013: 32). There are several common political strategies in which leaders engage to build and maintain their following, and consequently preserve their political power. Authority and legitimacy are cornerstone strategies for engaging and sustaining followers.

Authority is a group's public recognition of a leader's right to make decisions on its behalf while legitimacy is the "institutionalization of people's acceptance of, involvement in, and contribution towards order" (Baines & Yoffee 2000: 15). Both are dependent on formal and public recognition of particular leaders' rights to represent a larger group; the competitors with legitimacy, able to justify and bolster their authority, will gain power and increase their number of followers (Foias 2013: 33). Authority and legitimacy are also relational collective endeavors involving leaders and followers (Fleischer & Wynne-Jones 2010: 184). Weber divides legitimacy into 3 ideal types: charismatic, which derives from the spiritual and bodily gifts of specific individuals who create emotional connections with followers and are often believed to have supernatural gifts; traditional, which legitimizes through its association with time-honored traditions;

and legal-rational, which predicates legitimacy on elevation to authority through an impersonal system of law predicated on rationality (Foias 2013: 32-33; Weber 1964). The strategies used to attain political power, and their success or failure, are central to understanding the rise and fall of political leaders and their governments. Legitimacy, authority, and power are achieved through coercive and ideational methods (Fleischer & Wynne-Jones 2010; Foias 2013).

Ideational methods are more common than coercive for gaining legitimacy because coercive methods are costly (Foias 2013: 30; Kurtz 2001). When using coercive methods, political elites and institutions impose power on followers; they rely on bodies such as military and security forces that accept leaders' legitimacy and can use force or intimidation to ensure compliance to authority. Coercive methods can leave archaeological traces: barracks in which forces were housed, written descriptions of battles or military engagements, iconographic depictions of forces on murals or stelae, weapons, and guard posts are all examples. There are many different ideational methods for gaining legitimacy, "such as naturalizing the political structure of the community and/or the political power of the leaders through rituals, transforming or inscribing the landscape with political symbols of power, creating a society-wide identity that all members share, or forming affective connections between the polity and its members" (Foias 2013: 34). Many of these methods utilize physical media that leave traces visible to archaeologists. The emphasis on ideational methods has led to a focus on political ritual as the "locus for producing, reproducing, and transforming power" (2013: 35). While political rituals and the institutions that perform them are not observable, their repetition and use of particular landscapes, equipment, and facilities leave material traces

that can be identified. Political rituals are performed at multiple levels of society, from households to state-level governments; each setting and sociopolitical class utilizes different physical media. These institutions serve the purpose of integrating people in increasingly differentiated ways; the mechanisms that create and maintain this integration are materialized in different ways (Earle 2001). Built landscapes, writing, symbolic objects, and ceremonies are examples of physical media through which institutions are ideationally embodied and provide material evidence of the circulation of ideas, goods, and information (Foias 2013: 35).

Because of the relational nature of power and its connections to conflict and competition, it is crucial to understand that there are numerous political actors within a society, each utilizing a variety of different strategies to advance their agendas (Blanton et al 1996; Foias 2013). Institutions from the household to local council to divine ruler must employ varied strategies according to the context and competition. An exclusionary strategy is characterized by "the development and maintenance of individual-centered exchange relations established primarily outside one's local group" (Blanton et al 1996: 2). Political actors utilizing the exclusionary strategy monopolize particular sources of power, and attempt to build society's political system around those sources of power (Foias 2013: 40). This strategy is associated with "ruler cults recorded in art and writing, a well-developed economy of prestige goods, and wealth finance" (2013: 40).

In the corporate strategy, on the other hand, "power is shared across different groups and sectors of society in such a way as to inhibit exclusionary strategies" through restrictions on the political behavior of people in power (Blanton et al 1996: 4). Corporate strategy is more collective; its emphasis is on balance and distribution of

power, rather than monopolization. It has a cognitive code with anonymous leaders, an internal system of intensive agricultural production, and staple finance (Foias 2013: 40). Corporate and exclusionary strategies can coexist and may dominate the political landscape at different times; Maya polities such as Copan, for example, may have relied primarily on an exclusionary strategy under the system of divine rulership, then shifted to a more corporate strategy with council leadership following its defeat by Quirigua. Corporate and exclusionary are not ideal types but rather patterns and correlations between particular mechanisms of legitimation, production, and finance. Both strategies link materialist and ideational power by connecting mechanisms for legitimation with production and finance.

The distinction between hierarchical and heterarchical models of society is similar; they can coexist or fluctuate from one to the other. Hierarchy orders society through ranking certain factors as subordinate to others, while heterarchy is the "relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways" (Crumley 1979; Crumley 1995: 3). Relations between different institutions, individuals, and factions may be hierarchical, but could also be ranked in a number of different ways depending on political, social, and economic factors (Foias 2013: 42).

Authoritative Power: Sources and Strategies for Maintaining Political Integration

The imagined community of early state polities may have been defined by adherence to a chief or king, expressed through community labor (Knight 1989; Sahlins 1985). Political integration entails the number and volume of connections – flows of

ideas, people, goods, and power – between leaders (chiefs or kings) and followers. Centripetal strategies, institutions, and sources enhance political integration through establishing and strengthening strategies and sources of "power over" exercised by leaders. "Power over" is the accomplishment of effects that can only be realized by an agent through the agency of others rather than agent's own effort (Miller & Tilley 1984). While inherently coercive in the sense that it requires the ability to get another agent to do or not do something they would otherwise do or not do, "power over" is "ineffective and unstable in the long run if the only resort to bolster control is by means of physical force or the threat of the use of such force in the form of coercive sanctions" (1984: 7). "Power over" also requires legitimizing the social order, justifying the principles of control, and normalizing asymmetrical social relations. Centrifugal strategies challenge political integration through strategies of autonomy and resistance that assert "power to" – power as a component of all social interaction, a dispositional capability that is a structural feature of social systems rather than a possession of any particular agent or collectivity (Miller & Tilley 1984). "Power to" includes the collective and individual capabilities of followers to resist, reject, and replace their leaders. "Power to" is visible in conflict between opposing factions, the deposition of leaders, resistance to orders issued by leaders, and mobility, as followers change one ruler for another by "voting with their feet."

One set of strategies for establishing and maintaining connections between leaders and followers is coercive. Leaders engaging in coercion use force or intimidation to achieve their goals when interacting with followers. Fear of negative consequences (and the possibility of rewards for compliance) from the leader maintains connections between

leaders and followers. The leader's authority includes the use of followers' or collaborators' bodies to exert the leader's will on other followers. Police, military, and security forces are trademarks of coercive power – institutions that derive authority and legitimacy from the ruler for the use of physical force. The authority to use physical force against other agents is one way of getting them to do or not do something that may be directly contrary to the objectives of those agents. While coercion can be an important strategy for leaders, "production and maintenance of this control is likely to be both ineffective and unstable in the long run if the only resort to bolster control is by means of physical force or the threat of the use of such force in the form of coercive sanctions" (Miller & Tilley 1984: 7). Coercive power requires a great outlay of resources: in creating institutions for enforcement, training and provisioning those forces, producing incentives to ensure loyalty, and use of propaganda to normalize its presence. Coercive strategies are rarely used alone; they are most often accompanied by ideational strategies that legitimize, normalize, and justify the exercise of power by leaders to their followers.

A central challenge of the state is to maintain a coherent and cohesive body politic that recognizes the authority and legitimacy of the central government (Golden & Scherer 2013). In order to survive transformative moments, leaders must cultivate trust between themselves and followers, whether individuals or collectives. The cultivation of trust enables perception of the benefits of participation in the larger imagined community and acceptance of leaders' legitimacy. In an imagined community the size of a state, it is generalized trust – when one party believes another party has incentive to act in the first party's interests – rather than specific trust, carrying the expectation of reciprocation, which maintains the body politic (Cook et al 2005; Uslaner 2001). Generalized trust

includes engagement with and moral commitment to the state, built through associations of people outside of the immediate family, above the level of household, and outside the people with whom one regularly interacts (Stolle 1998). A healthy state requires this commitment; a failed state is not a by-product of negligent political actors, but an active result of political actors' choices to abandon the state as a political option (Rotberg 2003).

Trust is a culturally contingent value. There is epigraphic and ethnographic evidence across the Maya area for the conceptualization of a contextual "self" that includes participation in social groups and engagement with material culture that had its own set of social identities (Golden & Scherer 2013). A trustworthy person would be a complete social being whom participated in social, economic, political, and religious community life. Observation of actors through daily interpersonal actions and communal activities would be the primary avenue for building trust beyond the social scope of the household. Ethnographic evidence from Mopan, Kakchiquel, Yucatec, and Tzotzil communities emphasizes empathic opacity, the inability to anticipate motive and outcome, the insignificance of intent as opposed to outcome, and the importance of public performed social behavior (Danziger 2010; Hanks 1990; Haviland & Haviland 1983; Warren 1995). This pattern is reflected in ancient Maya art; human protagonists are "inscrutable, formally positioned, and starkly contrasted with writhing, fearful, animalistic antagonists" in elite and commoner art, from murals and ceramics to figurines (Golden & Scherer 2013: 401).

More challenging or risky activities often created greater bonds of trust between participants. Activities such as hunting, agricultural work, military service, building

monumental architecture, and childbirth, offered opportunities to create stronger bonds of trust between those who experienced them together. While quotidian activities, each contained significant physical risks and required actors to rely on others for the maintenance of their safety and wellbeing. For actors not in daily contact, trust was constructed through mutual participation in highly charged events such as marketing, feasting, and participation in royal spectacles (Golden & Scherer 2013). Warfare and corvée labor were also arenas through which actors not in daily contact could evaluate each other's trustworthiness. It is important to consider actions taken by leaders "to establish themselves as moral centers for the polity and as a pivot to integrate people with the body politic" and to facilitate followers' participation in the political life of the polity (Golden & Scherer 2013: 403; Houston 2006; Inomata 2006; Robin et al 2010).

The establishment of royal courts in Late Preclassic and Early Classic Maya societies may have offered stable political nuclei in the wake of Preclassic polity fragmentation. Rulers attempted to accomplish this by offering a social experience accessible only within the polity, including protection, economic opportunity, and spectacle. The affective nature of Classic Maya rulership required frequent interaction of leaders and followers; public interactions that built trust included preparations for warfare, feasting, political performances, and creating the city's landscape (Golden & Scherer 2013). Participation in these activities enabled the extension of trust between supra-household groups; that trust served as one integrating mechanism between factions of followers as well as followers and leaders. Participation also provided the interactive space for the circulation of people, goods, ideas, and information.

As polities increased in size, population, territory, and complexity the bonds of trust that originally supported their integration were weakened. The interactions that fostered trust in the Early Classic could not build trust over the larger territories and populations of the Late Classic due to the lack of bureaucratic organization and restrictions on transportation and communication. As states expand they require political-economic mechanisms to replace regular interactions; Charles Golden and Andrew Scherer (2013) argue that those mechanisms were not well developed in the Usumacinta kingdoms of the Late Classic, leading to their collapse.

Generalized trust can develop between leaders and followers when leaders take actions perceived as beneficial to followers. For the maintenance of a state, generalized trust is also necessary between followers. Specific trust, with expectations of reciprocity, is fostered within a household or neighborhood by daily interactions and circulations – both social and material. Beyond the household level, specific trust may also exist within explicitly defined supra-household communities: artisan guilds, age-set groups, religious practitioners, etc. For an imagined community, in which all members will not meet face-to-face, generalized trust is facilitated by participation in and cooperation with supra-household social imaginaries. There are expectations of behavior and social sanctions for not meeting expectations within these spaces. One way in which the political imaginary is enacted and generalized trust is created and reinforced is through the use of public theatrical performances.

In the preindustrial state, "subject populations' perception and experience of authority and national unity was highly uneven, accentuated in the specific temporal and spatial contexts of state-sponsored events such as ceremonies or construction projects but

diluted or even nonexistent in the routines of daily lives" (Inomata 2006: 805). Leaders of early states did not necessarily have the resources, mechanisms, or technology to insert their presence in the minds and daily lives of their followers through written media, laws, security or police enforcement, mass communication, and transportation (Foucault 1977). They were therefore dependent on the spectacle – public theatrical performances – for objectifying and embodying the moral and cultural values of the community in a way that enabled mass participation and belonging. This type of performance is another important integrating mechanism. Takeshi Inomata (2006) argues that theatrical performances – creative, realized, repeated acts within a domain of cultural intelligibility and requiring an audience serving as evaluators and observers – are one form of creating symbols that give concrete forms to political identities (Beeman 1993; Hymes 1975; Kertzer 1998). The public event of performance physically brings together members of the imagined community to share a space and experience while sensing the presence of other members, thereby establishing a foundation for a community that exceeds the range of face-to-face interaction (Inomata 2006; Turner 1986).

Performances create and communicate meaning differently from written media. The physicality of a performance is key; actors are in close physical proximity, in a specific built environment, and the bodies of performers have a central role. A performance is more likely to be multivocal than a text, communicating meanings through speech, music, noise, spatial organization, costume/dress, and pacing. It can transmit preexisting meaning, transform the existing meaning, and create new meaning (Bell 1992). There are many different scales, from a solitary act to a mass spectacle. The large-scale performances involving a substantial number of participants are the focus

here, as the primary performance type that functioned to integrate the political community.

Public performances dramatize the moral and aesthetic values of the community and serve as arenas for negotiating power and meaning. Leaders use theatrical performances "as a means of conveying their worldviews, history, cultural ideals, value systems, and social order" (Inomata 2006: 808; Baines & Yoffee 1998). As a public event, however, performances are a way for leaders to exercise "power over" by requiring their followers to attend, but also allow a considerable degree of internal resistance and disinterest – ways in which followers assert their autonomy. The public transcript shaped and executed by leaders may dominate performances, but there are many opportunities for the insertion of hidden transcripts, while other theatrical events are rooted in the challenge to and subversion of the public transcript (Scott 1990; van Gennep 1960). Ultimately people acting together, not thinking together achieves the desired goal – community integration (Durkheim 1965).

Participation in a prestige economy can also serve as a source of legitimacy and a strategy for maintaining power. For the ancient Maya, certain items were highly prized and deeply linked with understandings of divinity, the supernatural, and political power. Typically these items were from limited sources; their rarity emphasized the leader's power to participate in long-distance circulations of goods and generate significant resources as payment. The prestige economy highlighted leaders' "power over" – to generate tribute, command the labor of those who traveled to obtain and crafted specialty items, and to use and wear symbolically charged items with direct associations to ancestors and the supernatural. Leaders who could participate in the prestige economy

also demonstrated that they belonged to an elite class; the circulation of these goods also served to circulate ideas and information about social identities. While in some cases these items would be used in more private contexts, they were often included in representations of significant events such as performances.

"Power over" and "power to" were made, reproduced, and embodied in performances located in institutions – from the household to state government (Foias 2013). These institutions, the social imaginary in which they existed, and how power played out in each one, served to integrate more people in increasingly differentiated ways (Earle 2001). Public performance was embedded in the social relations, experiences, institutions, and economic activities of daily life. They took time and resources to prepare and enact, while the memory of past performances and anticipation of future ones also shaped perceptions and experiences of daily life (Inomata 2006). The institutions cannot be directly observed but they were materialized in specific recurring ways in particular landscapes using distinguishable equipment. The landscape – including the settlement organization, walls, roads, and monumental architecture – embodied and represented power over human labor, supra-household collaboration, and shared ideological understandings. In early states where performance was a key aspect of political integration, an important aspect of the built landscape was spaces such as plazas and amphitheaters that emphasized performers and gathered observers. The landscape might also contain reminders and signifiers of past performances and their messages through murals, stela, sculptures, and plaques.

Political integration is most often understood through the relationship between leaders and followers, each of whom develop and exercise their own forms of power.

The two primary methods for exercising "power over" are coercive and ideational; they are often combined in various strategies since coercive power requires a prohibitive outlay of resources. Various strategies, such as generalized trust, coercion, theatrical performance, and transforming the landscape were commonly used in early states to integrate and maintain the body politic prior to the economic, technological, communication, and transportation innovations that serve as integrating mechanisms for contemporary state societies. While other types of identities also reinforced ties between community members, the primary focus of this dissertation is the strategies used for political integration by ancient Maya rulers – which in some cases incorporate social, economic, and residential identities.

Conclusion

Analyses of political entities have shifted from earlier classifications based on scale and complexity with an emphasis on interdependence and an assumption of inherent integration. Political entities are now recognized as shaped by competition and conflict over power in its various forms and as socially constructed. Polities are a type of imagined community in which two types of power – "power over" and "power to" can serve as integrating or disintegrating forces. "Power over," or authoritative power, relies on various strategies, coercive and ideational. In the context of early and preindustrial states, ideational strategies such as generalized trust, transformation of the landscape, and theatrical performance were part of producing and maintaining the political imaginary through justifying authoritative power. This political imaginary was generated, reproduced, and negotiated through circulations of ideas (communicated through

performances and public architecture), people (who participated in performances, built the public architecture, visited the "ceremonial centers," and returned to their residential communities), and goods (which evoked memories and associations of events and ideas).

Chapter 3

Politics and the Ancient Maya

This dissertation focuses on polity integration under different regimes; the polity

is defined spatially as well as politically through the people who populated the space and

exercised power within it – the regimes which operationalized the polity. To understand

what a polity is, how it develops, functions, and under what circumstances it is

maintained or dissolved, it is necessary to examine power – both "power over", exercised

by those with established authority and legitimacy who exercise control over economic

and ideational sources of power – and "power to", exercised by all members of a polity,

who collaborate economically and ideationally to maintain the polity or contribute to its

dissolution through withdrawing their participation. In the examination of ancient Maya

polities as a general category, the specific mechanisms used to attain, exercise, and

challenge power through conflict, competition, and cooperation will be addressed.

Coercive and ideational sources of power and methods for achieving and maintaining it

in ancient Maya societies will be examined.

Categorizing Ancient Maya Polities

Ancient Maya polities were not monoliths or a singular type of institution; each

polity was uniquely predicated and had its own historical trajectory. However, through

examining many polities on multiple scales, patterns and trends become visible;

similarities and differences are illuminated. In addition to operating across different

polities that are now classified as members of ancient Maya civilization, it is necessary to

take a multiscalar approach for analyzing political dynamics, from the individual to intra-

polity to macro-scale (Foias 2013: 3). After examining various emic and etic definitions

of the ancient Maya polity and sources and mechanisms of power in ancient Maya

society, case studies will explore sociopolitical integration of several Maya polities as

they faced transformative events. The case studies are ones in which the transformative

event targeted the regimes - ruling/elite political structures of the polity. They include if

and how the regime transformation affected the general population beyond the site's

epicenter.

The extent of sociopolitical integration of ancient Maya populations is a topic of

great interest and significance in understanding Maya society and requires analyzing

political organization. Debate on the substance of Classic Maya political organization

has fallen primarily into two camps focused on the extent to which the Classic Maya state

was centralized (Foias 2013: 2). One approach emphasizes a centralized state model,

while the other highlights the autonomy of commoners and the regional population.

The centralized state model emphasizes the political and economic power of

ancient Maya elite populations. From an early focus on ceremonial centers and

monumental architecture and the requirements of labor and organization for their

construction, the subjugation of non-elite populations to an elite population is accentuated

in this approach. The role of non-elite populations in providing the basic subsistence and

labor for the increased access to resources enjoyed by elite populations painted a picture

of a non-elite population under elite hegemony and a centralized political system (Adams

1986; Chase & Chase 1996; Haviland 1992; Haviland 1997; Marcus 1993; Rice 2009).

The centralized state model uses the existence of huge public works systems at cities such

as Tikal, Calakmul, and Caracol to argue that such systems indicate rulers were able to

exert considerable political power over the population, including through the economic

and social systems. The site of Caracol in Belize has been held up as a model for the

centralized political system, with causeways, standardized terrace systems, a social

system based on socioeconomic classes, and a middle class (Chase, Chase & Haviland

1990; Chase & Chase 1996; Chase & Chase 2003). "Power over" would have

considerably more sway in such a society, with political rulers exerting considerable

control over material resources for the general population, such as agricultural

production, in addition to ideological sources of power.

Table 3.1: Archaeological correlates for centralized vs. decentralized states (adapted from LeCount & Yaeger 2010 & Iannone 2002)

Criterion/correlate	Centralized or unitary	Decentralized or segmentary
Economic, administrative, political, and ritual structures	Differentiated	Redundant
Economic, political, administrative hierarchies	Present	Absent (ritual only)
Endogamous classes that crosscut and supersede kin groups	Present	Absent
Principal basis of sociopolitical organization	Bureaucracies	Kin-based institutions
Settlement hierarchy	Four-tier	Two- or three-tier
Decision-making hierarchy	Three-tier	Two-tier
Centralized control over specialized public works	Present	Absent
Centralized control of institutions like writing and legal force	Present	Absent
Centralized control over commoner lives and labor	Present	Absent

Another approach has highlighted the autonomy of the general population, classed

as commoner or non-elite. Household archaeology studies and the existence of

settlement clusters without monumental architecture or significant socioeconomic

distinction have suggested a relatively economically self-sufficient non-elite population. This non-elite population may or may not have been integrated with an associated elite population in terms of providing labor or resources and social, religious, and/or political displays. The commonly produced view of non-elite populations suggests a significant amount of mobility over political landscapes and a decentralized political model (Ball and Taschek 1991; Ball 1993; Demarest 1992; Fox et al 1996; Freidel 1986; Grube 2000; Houston 1993; Renfrew 1982; Southall 1998).

There are numerous proposed models for decentralized political systems, including the peer-polity model, the segmentary state, the "theater state", the "galactic polity", regal-ritual centers model, and the city state model, drawing from cross-cultural political models (Foias 2013: 60). Their commonalities are: the existence of a capital city and a hinterland with secondary and tertiary centers that replicate all the functions of the primary center; the ruler's power is dependent on charisma and success in endeavors that bring prestige (warfare, rituals, etc.); the legitimation of the power holders through ritual rather than economic control (Demarest 1992; de Montmollin 1989; Foias 2013: 60; Iannone 2002; Rice 2004). "Power over" is predicated primarily on ideological mechanisms in a decentralized or weakly centralized political formation; the material sources of power are generally under local control. While "power to" is not as restricted by logistical concerns (the necessities of food, water, etc.) ideological mechanisms can play a significant role in shaping people's understandings of their choices, options, and opportunities.

A third approach to understanding ancient Maya sociopolitical integration has been to use the centralized and decentralized structural types as poles of a continuum

(LeCount & Yaeger 2010). Prior to the 1980s, the predominant interpretation of ancient Maya society emphasized non-elite populations living in spatially scattered communities near agricultural land. Major and minor centers brought these scattered populations together for trade and ritual, but maintained low residential populations (Kurjack & Garza T. 1978: 288). This earlier interpretation consequently argued for a relatively low level of sociopolitical integration, in which social, political, economic, and spatial boundaries distinguished the daily lives of elite from non-elite populations. While this model balanced considerations of elite and non-elite, rural and urban populations it also glossed over the diversity of socioeconomic life among ancient Maya peoples and was blatantly incorrect in its residential analysis of ancient Maya centers. An updated approach is predicated on the nuances – the potential class diversity within the general non-elite population, the variation in sociopolitical relationships between hinterland areas and defined site center polities, and the relative power of elite populations of different polities. Given the diversity of Maya political organization over time and place, this approach seems the most fruitful for elucidating the contexts in and extent to which sociopolitical integration existed for ancient Maya polities. Larger sites have often tended towards the more centralized end of the spectrum, while smaller sites are closer to the decentralized end (LeCount & Yaeger 2010).

The dichotomy between centralized and decentralized models of ancient Maya political systems has been collapsed in more contemporary scholarship; "the key question is not how power is centralized; it isn't. The key question is how the illusion that power organizes a social formation composed of a center and periphery emerges and acts in society" (Arens & Karp 1989: xvi). Larger sites were the seats of polities that had "larger

populations, more complex bureaucracies and administrative structures, greater potential for surplus production and wealth accumulation, and more potential for social differentiation" (LeCount & Yaeger 2010: 23). While referred to as illusory, the exercise of power may manifest it as reality for those living with it in larger sites – the illusion of centralized power would have been much stronger at Tikal or Caracol compared with smaller Maya polities. This "illusion" would also have operated differently under various regimes at the same site; council compared to divine king compared to competing lineage groups.

Integration is not contingent on power – linguistic communities, for example, do not require power hierarchies to hold them together, but a shared sense of identity (Ardren 2015). In this case, given the limits of archaeological research in exploring the opinions, thoughts, and emotions of past peoples, the focus will remain on integration achieved through circulations related to power – the dynamics between those who were part of each political regime and the people who resided in the hinterlands of the Yaxuná site core. When and how did the Yaxuná regimes exercise ideational and coercive "power over" in the face of political and economic upheaval? When and how did residents of the area use their "power to" in aligning or dividing themselves from the Yaxuná regimes in these moments of change? Were the circulations between residents of the Yaxuná site core and residents of the surrounding area numerous and intensive enough that changes in who wielded "power over" affect followers? Did transformative political events for the population of the site core have reverberations throughout the rest of the settlement area?

Defining the Maya Polity

The exploration of political integration is predicated on the existence of a political entity – referred to as the polity or, in the case of ancient Maya political organization specifically, the city-state. These general terms tend to obscure the complexity and variety of political organization, centralization, and power strategies utilized across the Maya area over several thousand years. Ancient Maya people lived in spatially and socially united communities of many sizes and organizations over vast geographical space and long chronological periods. While this dissertation will focus specifically on defining the iterations of Yaxuná's political identity through analyzing its different political regimes, an overview of some emic and etic ways of defining and conceptualizing Maya political organization are of use.

In the fascination with evolutionary and cross-cultural models indicative of "New Archaeology," archaeologists were forced to consider how to classify ancient Maya political organization – as chiefdoms or state-level societies. While many Maya polities likely fit the definition of chiefdoms during the Preclassic period, archaeologists overwhelmingly assigned Maya political organization, at least during the Classic period, to the state category (Baron 2016: 4). The development of state-level societies in the Maya is typically dated to the Late Preclassic, the first chronological period covered in this dissertation (Foias 2013: 9-10). States are distinguished from chiefdoms through territorial boundaries, more centralized control, administrative hierarchies, social stratification based on status and wealth, and management of the economy (Sharer & Traxler 2006: 73). The term "city-state" is applicable to Classic Maya polities due to the conflation of state political organization to a single large settlement. Within a city, these

polities performed "specialized economic, administrative, political, and religious functions" that affected their hinterlands (Houk 2015: 8). The city was a regal-ritual center and the epicenter of the ruling and elite classes (Houk 2015; Sanders & Webster 1988). Classic Maya polities are also often referred to as kingdoms, due to the institution of divine rulership, which will be discussed in greater detail later. In much of the literature around Classic Maya political organization, the terms kingdom, community, polity, and city-state are used interchangeably. Upon further analysis, however, there are myriad understandings of how to identify, define, and comprehend ancient Maya political entities.

Spatial Definitions of Maya Polities

The most commonly used archaeological correlate for identifying ancient Maya political entities is through spatial analysis. This process relies on differentiating political entities through the use of settlement data and urban analysis. As Chase et al (2009: 181) note, "most archaeologists are site-focused, even when carrying out survey." This focus leads to the classification of larger centers (in terms of settlement, population density, and monumental architecture) as polities (2009: 181). Spatial analysis has the advantage of applying to communities at various levels of political organization, with proximity to a designated site center as the primary determinant. Site centers are defined by the clustering of monumental civic-religious-political architecture; in cases of egalitarian residential communities, the center is the area with the highest density of residential settlement or the public space, open to use by all members of the community.

Monumental architecture is a significant marker of a polity because its execution requires the appropriation of skilled and unskilled labor to plan, engineer, and construct and therefore was "the most public material embodiment of the power of the upper classes" (Houk 2015; Trigger 1990:126). In the Maya area, monumental architecture is associated with the development of social complexity and the existence of governing bodies (Sharer & Traxler 2006). Examples of monumental architecture at ancient Maya sites include formal plazas, causeways, palaces, reservoirs, ball courts, temples, and tombs (Houk 2015). Their clustering, spatial organization, proximity, and density are typically used to identify site "epicenters" – the areas of the site where specialized economic, administrative, political, and religious functions were most likely to be carried out (Smith 2008; Trigger 2003). This epicenter is the spatial heart of the polity, typically situated in an urban context.

Ryan Collins (2018: 28) identifies four criteria for urbanism: large populations, high population densities, complex stratification, and extensive networks drawing in outsiders. While high population densities have historically been a sticking point for the classification of Maya centers as urban or cities, a comparative approach of their density compared to density of the surrounding areas allows the classification to stand (Hutson 2016). While Maya cities have lower population densities than urban centers in many other cultural contexts, dispersed settlement is recognized as an adaptation to the carrying capacity of the Mesoamerican tropical environment (Sharer & Traxler 2006). Ancient Maya cities are classified as the polities of ancient Maya political organization because they were the homes of the elite population – those who performed administrative and political functions and their retainers (Trigger 2003; Webster 2002). The city served as

the home base for elite and ruling individuals, their courts and retainers, and their ancestors – therefore "the history of the site is the surrogate for the history of its ruling family" (Houk 2015: 20). The equation of the physical site with the political entity is the core of using spatial analysis in defining and differentiating ancient Maya political entities.

Archaeologists differentiate political entities from each other through identification of boundaries or frontiers between them; boundaries refer to the bounds of a discrete entity, and frontiers are zones of interaction or space between two discrete entities (Johnson 2017: 110). Thiessen polygons and Central-Place theory both draw on spatial organization and territorial boundaries and have been applied in analyzing Classic Maya polities. In their simplest iteration, Thiessen polygons are drawn equidistant between site centers; in the Maya area, they have been used in conjunction with emblem glyphs, environmental characteristics, and assumed political power of individual centers (Iannone 2010). The polygon denotes the boundaries of the polity and therefore its size. Central-Place theory relies on the premise that dependent communities will be established in an evenly spaced hexagonal pattern around the primary center. The largest ancient Maya polities had frontiers around 30 kilometers from their center, corresponding to the distance that can be covered in one day's walk (Grube 2000; Hansen 2000; Iannone 2010; Marcus 2003). Reliance on this correlate is predicated on the nature of preindustrial society; a shared social imaginary and collective memory would develop through regular interaction between people who shared a residential community whose boundaries were accessible on foot. This imagined community would be created and reinforced through

public rituals and performances which engaged the local population in a collective

process of memory and identity negotiation (Ardren 2015; Iannone 2010; Inomata 2006).
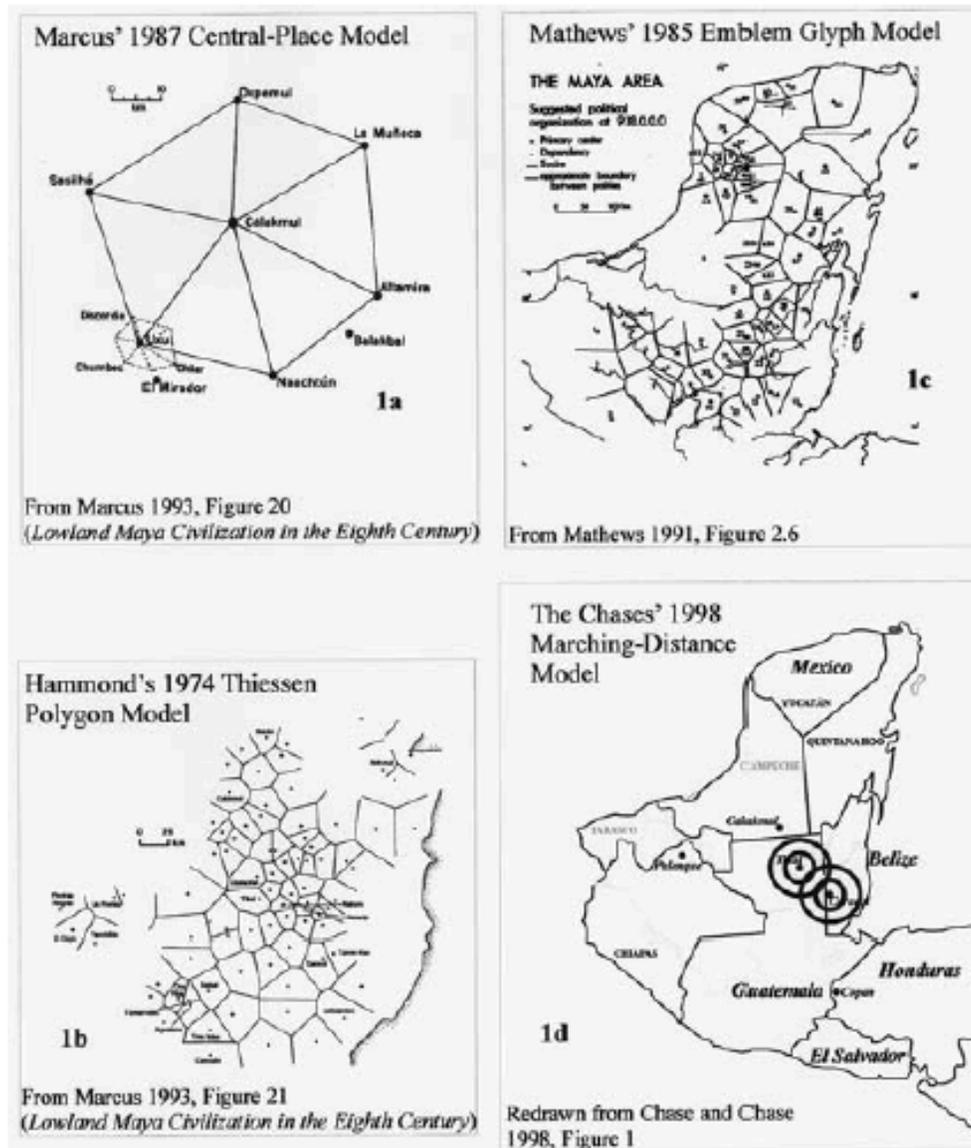
Figure 3.1: Models of ancient Maya geopolitical borders (from Iannone 2006: 205)

The use of spatial organization to define Maya polities is challenged by lack of

consensus on if and/or how ancient Maya polities maintained territorial boundaries, the

fluidity of political dynamics during the Classic period, and the reliance on artificially

imposed approaches for delineating the territorial extent of polities. While many scholars argue that ancient Maya Political organization was not concerned with territory or boundaries, others have pulled from ethnohistoric sources to argue for the use of natural and cultural features as recognized territorial markers (Foias 2013; Hammond 1991; Iannone 2010; McAnany 1995; Restall 1998). However, it remains of great use as a primary archaeological correlate for understanding residential organization, settlement density, and differentiating between site centers and surrounding areas. In evaluating Yaxuná, possible western and southern boundaries or frontier zones have not been identified. To the east, there is a 250 meter unoccupied zone between structures that is used to distinguish the site of Joya from Yaxuná. To the north, a transect established that settlement density decreased significantly around 800 meters north of the North Acropolis – only 200 meters from a large geological feature that could have served as a natural boundary for the urban area.

Epigraphic Definitions of Ancient Maya Polities

The development of epigraphy and decipherment of the ancient Maya writing system provided other avenues for identifying and understanding ancient Maya polities. Heinrich Berlin published the first discussion of what were called emblem glyphs – a class of compound glyphs thought to refer to the names or ruling dynasties of ancient Maya cities identifiable by a specific prefix (Berlin 1958). That prefix was eventually deciphered as "holy or divine lord," while the main glyph was linked to a particular place (Stuart & Houston 1994). This prefix is specific to the Late Classic; during the Early Classic the *k'uhul* was typically not included (Foias 2013: 77). While the main glyph

identifies place, the compound glyph references individual rulers, who are the "holy or divine lords" of the location specified. Place names in Maya texts refer to specific features, such as a city, a natural feature, or a particular building (Stuart & Houston 1994). Place names for large polity capitals typically composed the main glyph in the emblem glyph compound. It is possible that the emblem glyph represented not just the primary city within the polity, but served as a stand-in for the polity itself – its capital, incorporated territory, secondary centers, and ruling dynasty (Grube 2000; Houk 2015; Marcus 1973). However, research on emblem glyphs has also emphasized that they are tied to spatial locations associated with gods and/or ancestors rather than territory (Foias 2013: 75; Tokovinine 2008). The emblem glyph unites the royal title with a specific location within the polity capital that housed gods and/or ancestors; the city with the royal court was thereby equated with the polity as a whole (Grube 2000; Houk 2015: 24). In several cases, however, emblem glyphs "traveled" from one site to another – more than one site used the same emblem glyph. This practice may reflect an adaptation in meaning from "place" to "descent from place" in cases such as Tikal and Dos Pilas, Dzibanche and Calakmul, and Palenque and Tortuguero (Foias 2013: 77). There are over 30 identified emblem glyphs, which raised considerable debate as to the political dynamics of Classic period kingdoms (Foias 2013: 75; Mathews 1991). These smaller kingdoms may have resulted from the dissolution of larger unified Preclassic polities (Baron 2016: 10; Martin 2003). Based on epigraphic evidence, site size, scale of monumental architecture, and access to specialty and non-local goods, it is clear that not all kingdoms were on equal footing (Foias 2013: 75). Kingdoms such as Calakmul and Tikal headed up larger regional states, exercising influence over other smaller kingdoms

through warfare and alliance, using mechanisms such as gift-giving, marriage, and shared ritual activities (Houck 2015: 25). However, the fluidity of ancient Maya political dynamics permitted relative autonomy for each city-state in maintaining their dynasty and carrying out their internal affairs (Foias 2013; Houck 2015). Emblem glyphs and their distribution provide a more emic understanding of Classic Maya polities. Emblem glyphs from the northern lowlands typically use only the *ajaw* title, forgoing the "divine" prefix. Emblem glyphs in northern hieroglyphic texts also precede the ruler's name rather than following it (Foias 2013: 78; Graña-Behrens 2006).

Recently JoAnne Baron (2016) has proposed that the Classic Maya polity in the southern lowlands was based on norms of reciprocity with particular patron gods who were linked to specific geographic locations within the polity's territory. Similarly to emblem glyphs, patron gods were associated with particular locations on the landscape, giving them territorial connections. The kingdom, or primary entity of political organization, was the social group dedicated to the patron gods of that geographic location (Baron 2016: 170). The ruling group dressed, bathed, housed, and "fed" the patron gods of their geographic location, who in turn provided good luck, agricultural returns, success in warfare, and the safe passage of time for the residents of the polity (2016: 165). In some cases patron gods could be captured by other polities, who put them through a process of "domestication" that expanded their territory by asserting influence over gods of other landscapes. Rulers used patron gods to express control and influence over other polities, "either by taking over the role of local ruler by maintaining effigies…or by inserting the gods of the overlord into the role of the local deity effigies" (2016: 169). Baron emphasizes the instability of political dynamics beyond the

individual polity, given the significance of patron gods' ties to local landscapes and the intensity of care they required, ultimately resulting in a dynamic but fragile political system. While the focus on emblem glyphs and patron gods is often used to sever the Classic Maya polity from a territorial definition, the linkage of place-names and homes of gods to particular locations on the landscape demonstrates that they are still embedded in understandings and organizations of physical space.

Political Definitions of the Maya Polity

Patron gods and emblem glyphs lead to the defining institution of the Classic Maya polity: divine rule and the royal court. A polity's existence is predicated on at least two groups: the government/ruling group and everyone else. There can be a residential community without a ruling group, but there is not a polity without a government or governing entity of some type. This government or governing entity is interdependent with the rest of the population; the dynamic between "power over" and "power to" will be discussed in more detail later. Lisa Lucero (2006) has proposed 3 types of community organization in the Classic period lowlands: independent minor centers with communal or no political leadership; local polities focused on secondary centers; and regional polities that coalesced around major centers such as Tikal and Calakmul (Foias 2013: 156). Yaxuná would have fallen into the second category; while the largest settlement in its immediate area, it was a Rank II site rather than a regional polity. The primary governing entity for Classic Maya polities of Yaxuná's size was the royal court, which supported the divine ruler (Foias 2013; Houck 2015; Inomata & Houston 2001; Webster 2002).

The southern Classic Maya royal court revolved around the *k'uhul ajaw*, the divine king (and in some cases, queen). This ruler was the central figure of the polity and derived authority from a number of sources (Foias 2013: 166-171; Sharer & Traxler 2006). Religious authority was central to this role; the maintenance of divine relationships and patronage to ensure the necessities of daily life for the polity's residents and members. This authority was established through the explicit conflation of divine rulers with supernatural forces through public performances that were immortalized in iconographic depictions on stelae. At Yaxuná these performances left archaeological traces in the Late Preclassic "dance platforms" as well as the labyrinths and tombs in the North Acropolis built during the Early Classic (Stanton et al 2010; Tiesler et al 2017). On Late Classic polychrome vessels, the divine ruler's image is placed at the top and takes up the most space, as well as being the pivot around which action circulates (Reents-Budet 2001: 213). As discussed above, authority also came through caring for the patron gods of the polity. Success in military endeavors and control over critical resources, such as prestige goods, were also sources of authority (2006). The "cosmopolitical economy" included the palace economy, feasting, periodic markets, and the tribute-tax system (Foias 2013: 139; Rice 2009: 75). At Yaxuná, it is likely that one source of authority for rulers was the trade route linking north and south that passed through the polity (Tiesler et al 2017). The title *kaloomte'*, "king of kings" may have referred to divine rulers of the larger kingdoms or super states such as Tikal or Calakmul (Foias 2013: 78). These divine rulers exercised authority over multiple polities; however, there are cases of the title being used by rulers of a single polity (2013: 78).

The central administrative body for a Classic Maya polity was likely the royal court, organized around the ruler (divine or not) (Foias 2013; Houck 2015). These administrative courts were civil, ecclesiastical, and hierarchical; they may have used bureaucratization as a strategy but were not bureaucratic in nature. The royal court likely contained "lesser nobles and their families, advisors and officials, guards and military personnel, visiting dignitaries and ambassadors, Political prisoners and hostages, priests, scribes, scholars, physicians, entertainers, artists and artisans, and sundry other retainers, servants, dependents, guests, and general hangers-on" (Webster 2002: 157). The royal court's responsibilities included specialized work such as scribing, judiciary tasks, and overseeing the construction and maintenance of monumental structures, symbolic features of the built environment, and in some cases water and agricultural management systems (Houk 2015: 22). The hierarchical nature of Classic Maya administration is increasingly clear through epigraphic research, which has deciphered titles related to secondary center governance, military command, record-keeping, religious ceremonies, and tribute collection (Foias 2013: 117-123).

Some Maya polities may have also had council-style governments, particularly during the Terminal Classic and Postclassic and in the northern lowlands. Antonia Foias (2013: 193-194) suggests that councils and other collective forms of government became part of the political system when the revenue balance swings to internal (controlled by taxpayers) from external (independent of taxpayers). Iconographic and epigraphic evidence indicates that while northern lowlands sites had monarchical systems of governance, they were not as singularly contingent on the individual ruler (2013: 158). Rulers in the northern lowlands used the *ajaw* title without the divine prefix or *sajal*, and

in art they were depicted as one individual among many. Elite groups are the emphasis in northern lowlands art rather than the divine ruler. Texts describing public performances list multiple individuals who participated, rather than emphasizing the role of the divine ruler as an intermediary between the people and the supernatural. Architecture may also signify changes in political organization; larger and more open plazas, greater numbers of colonnaded structures, and easier access to royal palaces have all been used as evidence of a distinct tradition of northern lowlands rulership (Foias 2013: 158-159; Liendo Stuardo 2003). Central palaces and quadrangles were no longer residential; instead they served purely administrative functions (Foias 2013; Ringle & Bey 2001). Evidence for council houses, identified by use of mat designs on the building's facades, has been identified at Late Classic Copan and Yaxuná (Fash et al 1992; Stanton et al 2010). Colonnaded halls at northern lowlands sites may have served as council houses (Ringle & Bey 2001). Ethnohistoric documents from Yucatán and the Petén Itza Maya kingdom also describe governing councils (Foias 2013: 196; Jones 1998; Roys 1943).

Accounts of indigenous Maya states from the Postclassic and Contact periods can also provide insight into Maya polity organization and political structure. Understandings of Maya states from this period are based in the foundational work of Ralph Roys and more recent scholarship by Matthew Restall. Roys identified 16 states, referred to *cuchcabal* in Yucatec Maya and provincia in Spanish (1957). He divided these states into 3 different polity types: centralized states organized around a lord *(halach uinic)* who oversaw a network of dependent communities; confederacies of communities overseen by local ruler-governors (*batabilob*) from the same patronym group; and alliances of a few towns or settlements overseen by unrelated *batabilob* (Foias

2013: 95-96; Restall 1997; Roys 1957). The *cah* was the basic municipal unit, spatially defined by the residential site and the territorial lands controlled by the residents. It was also the "principal focus of Maya self-identity, loyalty, organization, and activity" (Restall 2001: 349). The *batab* and his council administered the *cah*. The office of *batab* had executive, judicial, and military functions, which were carried out with the support of the council. The council contained numerous ranked administrative positions, through which elite males could advance. The men who were eligible for council positions were *kuluinicob*, principal men of status and/or wealth (Restall 1997: 70-71). The council could impose limits on the power of *batabilob*. Various offices were part of councils in different communities, such as *ah kulel* (deputy), *ah cuch cab* (respected commoner elected as representative of a ward), *nacom* (war chief), *escribano* (notary), and *alcalde* (judge) (Restall 1997; Ringle & Bey 2001; Roys 1943, 1957). Restall (1998; 2001) argues that this participatory system, involving all members of the court to some extent depending on rank, is factional rule – characterized by negotiation and persuasion rather than hierarchy and coercion. The office of *batab* was often hereditary, although sometimes appointed by a *halach uinic*. Members of the dominant dynasty (*chibal*) and their allied kin typically held and inherited the *batab* office. *Batabilob* did not receive tribute but were typically supported through estates operated by community members on their behalf (Foias 2013: 99).

Restall identifies the patronym groups of ruling families as the second most important integrative unit for Maya society during this period (2001: 350). The *chibal* derived their legitimacy and authority from four areas: social differentiation, group hereditary status, dynastic origin mythology, and a monopoly over political activity

(Restall 2001: 352, 371). Yucatec elite families claimed foreign origins to distinguish themselves from local commoners; this separation also enabled them to maintain power through hereditary means (McAnany 2010; Restall 2001; Sahlins 1985). While lower-level elites and high-status commoners could participate in political rule through positions on the council, the elite families maintained control of the *batab* system (Restall 2001: 365). The political power of the *halach uinic* within this system is also debated. The person filling this office was also referred to as *ahau* (*ajaw*) just like Classic period Maya lords (Foias 2013: 95). While Restall argues that this position held little actual political power, Foias disagrees and compares the Contact period *halach uinic* to the rulers of Classic period hegemonies such as Calakmul and Tikal (2013: 96-97; Restall 2001). While the majority of day-to-day administration was under the purview of *batabilob* and their councils, multiple *cah* communities were sometimes incorporated into larger units overseen by the *halach uinic*. While these communities were self-governed entities, subordination to the *halach uinic* was expressed through tribute relations (Quezada 1993; Restall 2001). Restall regards the title as honorific with little power, but Foias considers the ability to impose and collect tribute as a significant form of political power (2013: 96).

The court surrounded the *halach uinic*. Foias considers the heart of the Contact period Maya polity to be the court of the *halach uinic*, given its position in opposing Spanish invasion, settlement, and conquest (2013: 98; Restall 1997). An average court was around 50 people in size, and included "previous rulers; relatives of the ruler eligible to succeed him; prominent members of allied or competing noble families; the rest of the general pool of principal men, including those with specific offices; representatives of

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commoner families holding lesser offices; and non-office-holding servants and dependents, including in pre-colonial times, slaves" (Restall 2001: 359). Contact-period Maya political structures are distinct from Classic period structures, but have many connecting threads and are of use in analysis.

Maya polities are diverse and defy easy categorization, particularly when considered over time. As a cosmopolitan trade center at the crossroads of the northern and southern lowlands, Yaxuná had different types of political organization over its history. Archaeological evidence from the Early Classic supports the existence of divine rulers at Yaxuná, while evidence from the Late and Terminal Classic indicates a council-style government (Stanton et al 2010; Tiesler et al 2017). In the early Late Classic, Yaxuná may have been incorporated into Cobá's regional polity and lacked an autonomous governing entity. Chapters on each temporal period will include an analysis of the evidence and discussion of the political regime operating as the leaders of the Yaxuná polity during that period.

For the purposes of this dissertation, I define the epicenter of the polity explicitly and the hinterlands more loosely. The epicenter is defined spatially as the monumental core of the Yaxuná site, from the North Acropolis to the 5E-30 Group south of *Sacbe* 3 and from the 5E-52 Group to the East Acropolis and dance platforms. Based on the previous discussions of spatial analysis, monumental architecture, and urbanism, this part of the site is where the majority of specialized administrative, political, religious, and economic functions would have taken place under each regime (Stanton et al 2010; Tiesler et al 2017). Along with this spatial definition, I include the people who at various times occupied these elite groups, oversaw the construction of monumental architecture,

oversaw the planning and engineering of the site layout, lived and worked as part of the royal court/administrative body, and participated in the governing of the population – the regime. While the regime centers on ruling elites, the royal court, councils, and divine rulers, I also include the site residents living in close proximity (within 200 meters) of the monumental core. The hinterlands area under investigation is somewhat opportunistic in order to include the information available. It includes the areas from the edge of the epicenter northeast to Popolá-Puus Sil (approximately 8 kilometers), northwest to the Xkanhá Group (2 kilometers), and east to Tzacauil (3 kilometers). In previous investigations, Popolá-Puus Sil and Tzacauil have been treated as distinct sites subordinate to the Yaxuná polity, while the Xkanhá Group was treated as part of Yaxuná's extended settlement (Ardren 1997; Fisher 2019; Johnson 2012). Each has its own versions of monumental architecture and more nucleated settlement compared to the surrounding area. My research questions, therefore, ask to what extent did people living outside of the epicenter but within the defined hinterlands area participate in the social, economic, and political creation, maintenance, and reproduction of the Yaxuná polity through its different regimes? To what extent were their fortunes and futures affected by transformations in the social, political, and economic organization of the polity – the space, the institutions, and the people?

Political Power in Ancient Maya Societies: Sources, Organization, and Maintenance
Material and Ideational Sources

To understand the manifestations of power at these different scales, first the sources of power, both material and ideational, must be identified. Political power derives from numerous sources: social, religious, military, and economic. There were

likely multiple hierarchies of power, some of which may have been mutually exclusive, and which would have operated differently on a regime-by-regime or polity-by-polity basis (Foias 2013: 166). The primary source of political power for ancient Maya regimes was ideological-religious (Foias 2013; McAnany 2010; Rice 2009). Ancient Maya political power could operate in coercive ways but primarily relied on ideational sources for establishing legitimacy and authority (Kurtz 2001). Symbols, ideology, ritual practices, moral codes, the exchange of information, and access to the supernatural domain are all examples of ideational sources of power (Foias 2013; Mann 1986: 22-23). These ideational resources were used to secure tangible resources – material sources of power such as human supporters or followers, land, natural resources, and food resources (Foias 2013: 30).

Most scholars agree that the fundamental source of political power for Classic Maya rulers was their ability to intercede with and influence the supernatural sphere through shamanistic rituals such as bloodletting, burning incense, trance, dancing, and use of hallucinatory substances (Demarest 1992; Houston & Stuart 1996; McAnany 2010; Schele & Freidel 1990). These rituals were performed in public and private contexts and were extensively depicted on various media: polychrome pottery, murals, stelae, lintels and other architectural features, and in tombs (Foias 2013: 175-176). Ancient Maya political power depended on wealth in people; the number of followers a leader could attract and the extent to which the leader could keep their loyalty determined the longevity of the leader's regime. Classic Maya leaders attracted and maintained followers primarily through persuasive means – by naturalizing and legitimizing the connections between elite rulers and supernatural deities. The general population relied

on the intercession of rulers with supernatural deities, while also playing a direct role in

provisioning the deities (and the rulers) through their labor, tax, and tribute. A ruler

could also lose the support of their followers if the polity's conditions suggested

supernatural displeasure with the ruler's regime – a defeat in warfare, poor agricultural

returns, or limited availability of prestige goods.

The close associations between the supernatural and rulers are evident in

numerous forms of archaeological evidence. Hieroglyphic texts describe rulers taking on

the persona of deities; stelae depict rulers dressed in deities' costumes. Goods with

ideological significance and supernatural associations were restricted to use by rulers and

elites, who controlled their extraction, production, and exchange. Deceased rulers were

absorbed into the supernatural pantheon and the layouts of their tombs reflected their path

to the other world (Tiesler et al 2017). Divine rule was often hereditary, reflecting the

passage of divinity from one generation to the next and reifying the ruler's lineage as

supernaturally chosen. Classic-period rulers claimed descent from mythical times and

major gods, distinguishing themselves from non-elites or commoners, who had mortal

origins (Houston & Stuart 1996; Schele & Freidel 1990). Shamanistic rituals included

communication with the supernatural and embodiment of the supernatural through

donning their costumes and ritual performances of their deeds.

The preeminent institution of Maya political power through the Preclassic and

Classic periods was divine rule. Maya political power was grounded in an ideological-

religious foundation; the economic underpinnings of this system were therefore ritual

(Foias 2013: 138-139; McAnany 2010; Rice 2009). State finance systems were ritual

economies that produced for the gods and their representatives (divine rulers) through the

institutions of the palace economy, feasting, markets, and the tribute-tax system (Foias 2013: 139; Rice 2009). Access to specialized goods and the ability to leverage other people's labor formed the heart of ritual economies. For certain Maya states, control over water sources, fertile agricultural land, and infrastructure for agricultural intensification such as terraces may have also formed part of the political economy (Houk 2015; Lucero 2006).

Economic power in precapitalist societies depends on control over land, production and/or exchange, and human labor (McAnany 1993). There is limited evidence for control over land by Classic Maya governing bodies; elites may have held land as part of private estates, and large-scale agricultural projects such as Caracol's standardized terraces or Tikal's drainage system and raised fields may have been under government control (Chase & Chase 1996; Grazioso Sierra et al 2001; Taschek & Ball 2003). Similarly, Calakmul and Tikal have water control systems, but most other sites do not (Foias 2013: 170). Most ancient Maya polities were based on relationships of allegiance and tribute (i.e. labor) centered on the ruler rather than land or territory (Chase et al 2009; Graham 2011).

Palace economies refer to the economies of the royal court. Antonia Foias argues that the royal courts were the heart of Classic Maya polities because they were significant sites of goods production and because the administration of the polity was an extension of administrating the royal household (2013: 139; Inomata & Houston 2001; McAnany 1993). The palace economies may have included access to estates, where staple and specialized goods were produced to sustain the residents of the royal court (Ball & Taschek 2001; Foias 2013: 139; Rice 2009). It is certain that their members included

craft specialists, who produced items requiring hypertrophic labor and/or required highly

specific knowledge (Clark & Parry 1990). Specialized items included finely painted

ceramic vessels, jewelry, clothing, musical instruments, and figurines.

The tribute-tax system includes taxes on the surplus produced by the non-elite

population and tribute relationships established through warfare. The ancient Maya

tribute-tax system included both wealth finance (prestige items or social valuables) and

staple finance (agricultural products and meat (D'Altroy & Earle 1985). Multiple vessels

and murals depict the presentation of tribute to rulers and elites and describe it textually

(Foias 2002; McAnany 2010; Stuart 1995; Zender 2004). Items commonly depicted in

scenes of tribute or tax presentation are textiles, corn, cacao beans, turkeys, jadeite,

quetzal feathers, and Spondylus shells (Foias 2002; McAnany 2010). Non-local prestige

goods such as feathers, shells, and jadeite had specific ideological meanings in the

context of divine rulership that further entwined ideational and material power (McAnany

2010; Tiesler et al 2017). The tax system would likely include staple agricultural goods

(including maize and beans), domesticated and wild animals (including turkeys), and

corvée labor. While tribute was authorized and legitimized through coercive means

(warfare) and justified through ideational means, the tax system was legitimized through

ideational means. Provisioning ancient Maya elites fed the earthly representatives of the

gods (and thus the gods themselves) while corvée labor facilitated the construction of the

city's cosmogram, which reinforced divine designs. Architectural restrictions and

continuous occupation means ancient Maya cities were in a continuous state of decay and

renewal (Webster 2002). City features such as *sacbeob*, temple pyramids, palaces,

acropolis, ball courts, stone monuments, and water management/agricultural

intensification systems were not built by elite residents, although their engineering, planning, and administration was the domain of elites (Houk 2015). Corvée labor had to be divided between simultaneous ongoing construction and maintenance projects and balanced with seasonal agricultural demands (Zaro & Houk 2012). Architectural volume analyses highlight the disparity in labor required for the construction of non-elite residences compared to royal palaces, temple-pyramids, and other monumental architecture (Abrams 1994; Foias 2012; Pyburn 1997). Control over the harnessing and organization of human labor is the clearest source of economic power for ancient Maya elites.

Material sources of power for ancient Maya regimes were predicated on access to goods and the ability to mobilize labor. Elite control over production and exchange consisted primarily of goods that had ideological or status significance – polychrome pots, carved jade, marine shells, etc. Their control included the goods themselves and the control over specialized labor required to obtain and produce them. There are examples of elite control of markets (Chunchucmil) and obsidian and pottery workshops (Quirigua), but these are not consistent across polities (Foias 2013: 170). Royal courts had specialists, who produced the goods within the palace economy, as well as administrators who oversaw the procurement and delivery of goods and supervisors who marshaled the general population in maintenance and beautification of the city. Followers and elites collaborated to ensure the continued health and wellbeing of deities and their earthly representatives through the provision of necessary foodstuffs and coveted prestige items. As a ritual economy, the ancient Maya political economy mostly used ideational justifications for the extraction and circulation of goods; however the tribute system was

also based on coercive means – the establishment of tribute relationships through warfare.

Organizing Power: Administration

Political power in ancient Maya society was organized and operationalized through a civil-ecclesiastic administrative hierarchy. The royal court and household was the core of Classic Maya political administration (Houston & Stuart 2001; Rice 2009; Webster 2001). Ancient Maya administrators were chosen through patrimonial and merit-based processes; some positions required demonstrations of prowess, such as the capture of opponents on the battlefield while other ecclesiastical positions were not merit-based and often remained in a particular lineage for generations (Foias 2013: 124). Individuals appointed to administrative positions were not necessarily from the family of the divine ruler, but typically came from elite ranks or particular elite lineages (Houston & Stuart 2001; Sharer & Golden 2004; Zender 2004). Known administrative positions from hieroglyphic texts include the divine rulers (*k'uhul ajaw*), priests and speakers of the rulers (*ti'sakhuun*), royal priests/scribes/teachers (*aj k'uhuun*), warrior and fire priest (*y'awjawk'ahk'*), secondary center governors (*sajal*), and tribute collectors (*lakam*) (Foias 2013: 124).

During the Late Classic, Maya rulers may have used bureaucratization as a strategy to intensify ties with followers by creating additional subsidiary titles and sponsoring specialist craft producers (Foias 2007; Foias & Halperin 2010; Lacadena 2008). These actions allied the interests of the newly appointed administrators and sponsored artists with the elite regime. Specialist craft producers in particular were able

to leverage their ability to produce desired goods to access higher social status. The fluorescence of basal platform groups during the Late Classic is another indicator of bureaucratization; this architectural type was likely dedicated to administrative functions (Adanez et al 2009; 2011). In the northern lowlands during the Terminal Classic, palaces and quadrangles became nonresidential and only administrative (Liendo Stuardo 2003). As previously discussed, evidence from the Terminal Classic northern lowlands suggests less exclusionary strategies – based solely on the divine ruler – and more corporate/collective strategies for organizing power. While many regimes were still organized into monarchies, the methods of displaying power focused on the ruler as one among many – whether deities or mortal companions (Foias 2013: 137-138; Grube & Krocheck 2007; Masson et al 2006; Ringle & Bey 2001). Examples of more corporate political organization tend to be found during the Late and Terminal Classic. The non-elite population was still excluded from most participation in governing; those included were likely leaders of subordinate settlements within the polity. The principal ruler would periodically host these subsidiary dignitaries in the polity capital, as evidenced through the colonnaded halls, temples, and other forms of council houses found throughout the Maya area (Fash et al 1992; Kowalski 2007; Ringle & Bey 2001). Power-sharing agreements or alliances would ensure a broader base of support for the principal ruler and shared responsibility and collaboration for fulfilling political and religious duties. At the same time, this strategy would create potential competitors leading to increased conflict and fractures (Demarest 2006; Foias 2013: 129).
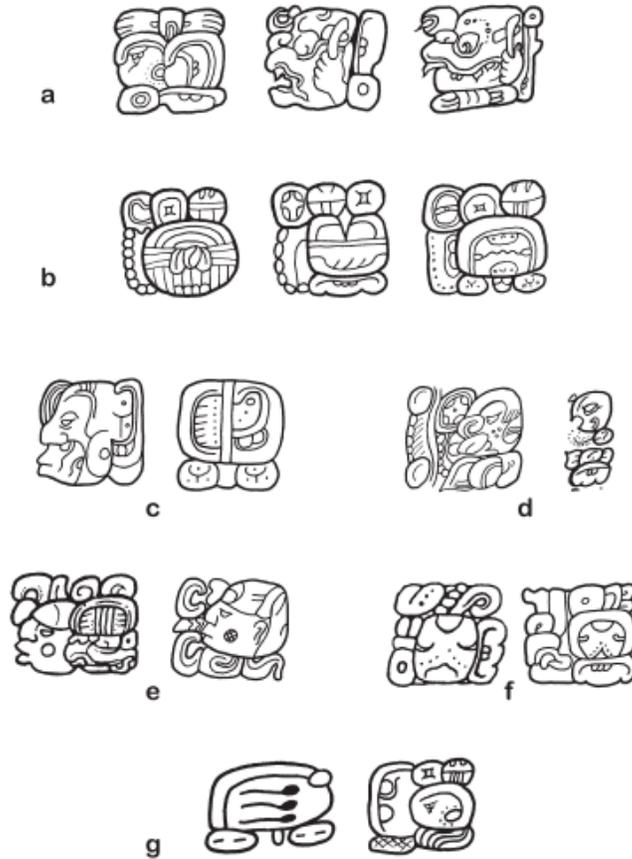
Figure 3.2: Classic Maya Political Titles (from Foias 2013: 118)
a. *kaloomte'*, b. emblem glyphs for *k'uhul ajaw* of Tikal, Yaxchilan, and Palenque,
c. *sajal*, d. *ajk'uhuun*, e. *yajawk'ahk'*, f. *ti'skahuun*, g. *lakam* followed by emblem glyph

Maintaining Power: Coercive and Ideational Strategies

Ancient Maya administrators and elites maintained "power over" through a

variety of strategies, while non-elites had their own set of strategies for exercising their

"power to." In this premodern society, the emphasis was on ideational strategies for

maintaining political power, although some coercive means did exist. Even coercive

means were underwritten with ideational justifications for their use and deeply embedded

in the ideological foundation of power in ancient Maya society. Communication,

transportation, and surveillance strategies are central to coercive ability and were mostly

lacking in ancient Maya polities. Depictions of military warfare and the evidence for the

military destruction of some cities demonstrate that coercive power did function in

ancient Maya polities.

The decipherment of hieroglyphic texts opened the door to understandings of

Classic Maya warfare after decades of "the peaceful ancient Maya" paradigm.

Descriptions of Classic Maya warfare suggest that it was limited in scope and primarily

undertaken by elites, but quite common (Inomata & Triadan 2009; Webster 2000). A

preliminary study of 28 centers focusing on 3 verbs associated with warfare identified

107 war events between 512 and 880 CE (Martin & Grube 2000; Webster 2000).

Hieroglyphic evidence from Yaxchilan indicates it participated in warfare every 13 years

(Foias 2013: 114). Divine rulers are pictured standing over captives and some adopted

names emphasizing how many warriors they captured in battle (Houston et al 2006). The

emphasis on elite participation in depictions of warfare led to the suggestion that shaming

and dishonoring elite captives, affronting their personal pride and honor, was a key aspect

of elite culture (Houston et al 2006). The loss of a divine ruler in warfare, such as 18

Rabbit at Copan or the entire dynastic family at Yaxuná, had serious and debilitating

consequences for the elites of the regime. Defeat in warfare required the payment of

tribute; the glyphs for both are present in several texts (Graham 2011; Stuart 1998).

While the triumphant ruler did not necessarily take over the direct administration of the

conquered polity, they did reap material benefits through tribute. Cacao, greenstone,

marine shells, cloth, and quetzal feathers were valued as tribute because they were

difficult to procure – produced in areas with certain conditions – and had ideological

associations with the supernatural. Defeated rulers sent messengers who may have been

held for ransom or as representatives of the amount of tribute due according to their economic status (Foias 2013: 142; McAnany 2010). Tribute payments may have lasted for years or indefinitely (Stuart 1998; Stuart & Stuart 2008).

While tribute was the milder sanction, widespread destruction also took place in ancient Maya warfare. Rulers, their patron gods, and their families were imprisoned, killed, or "domesticated" (Ambrosino et al 2003; Baron 2016; Freidel et al 2003; Inomata 2007). Site centers were damaged or burned and abandoned by their residents (Inomata 2001). Regime defeat in warfare is an example of a transformative event providing insight into polity integration. Losing sides often underwent periods of construction inactivity or gradual or rapid depopulation. Victorious sides, on the other hand, often had increased access to labor and goods that enabled new construction projects and attracted new population, possibly from the losing side (Chase & Chase 2003; Foias 2013). Classic Maya rulers could use warfare as a method for legitimizing their regimes by emphasizing the power of their supernatural connections and the material benefits manifested through those connections.

The other side of warfare is the complex social interactions centered on the creation of alliances. Alliances were another method ancient Maya leaders could use to maintain "power over." Alliance relationships were also based on circulations of people and resources between the allied regimes. One of the most common examples of alliance relationships is through marriage. People (most often women) from one elite regime would be sent to marry a leader or elite member of another regime, with the purpose of establishing a direct kinship relationship between two regimes. The hieroglyphic texts tracing the descent of divine rulers and recording their marriages provide numerous

examples of how regimes of different polities used alliance to strategically build relationships (Martin & Grube 2001). Those relationships could include the ability to draw on additional resources (material or ideational) to strengthen the power of their own regime. This practice also created links of kinship or fictive kinship between members of regimes, a horizontal type of relationship that was typically more durable than vertical connections (LeCount & Yaeger 2010: 26). Another possibility for alliance building comes from Ralph Roys' observations on sixteenth century Maya political organization: loose confederations of independent towns (1943). Southern Belize during the Classic period followed a similar pattern, with independent polities loosely organized into multipolity networks that avoided interaction with superstate capitals (Braswell **2**007; LeCount & Yaeger 2010). Independent allies, whose alliances did not form as a result of subjugation of one party through warfare, could use exchanges of labor, marriage partners, and tribute-tax resources to maintain their relationships. For the ancient Maya, the prestige goods economy, including the circulation of serving vessels used in feasting events, was one such arena for establishing and maintaining alliances (Stanton & Gallareta Negron 2001). The distribution of these ceramic types indicates their use in gift giving as part of maintaining independent alliances between the regimes of different polities.

Persuasive means of maintaining power can establish legitimacy through rational or emotive strategies (Smith 2000). Classic Maya society relied on both. Emotive ties were established and cultivated through the continual blending of rulers with the supernatural and ancestral patrons of the site, as the royal court, the divine ruler, and the regime's patron gods embodied the polity. This blending also provided a rational basis

for followers to align themselves with rulers; if the gods grant blessings and bounty, then affiliation with their earthly representatives is the most logical way to ensure protection and abundance. Ancient Maya rulers and elites used their supernatural ancestry and powers of intercession to naturalize the political structure of divine rulership; if rulers descended from gods and held the power to petition them on behalf of the general population, then a system which honored rulers and gods with labor contributions and specialized goods made rational sense. As rulers honored gods through sacrifices, offerings, and performances, so the rest of the population honored rulers. Participation in these rituals, including through observation of public performances, also helped create a shared identity based on deference to the sacred and upholding the ritual order of the universe (Foias 2013: 173-174; Inomata 2006; Yaeger 2003).

Another way of reinforcing a shared identity was through transforming the landscape and creating the built environment of the city. Construction was a collaborative and coercive process; the architecture and public spaces served both as a signifier of the ruler's ability to coordinate and control labor and as the sites for political performances that reinforced the naturalization of the political structure and group identity (Baines & Yoffee 2000; Lucero 2006; Smith 2003). The ritual space and performances that took place there were the "central arena where political power was created, reinforced, or contested" in ancient Maya society (Foias 2013: 174).

As in other early states, it is likely that Maya commoners' "perception and experience of national unity were highly uneven, accentuated in the specific temporal and spatial contexts of state-sponsored events and construction projects but diluted or even nonexistent in the routines of daily lives" (Inomata 2006: 805). Classic Maya ritual

performances are archaeologically identified due to the "repetitive use of emotionally

charged symbols in symbolically significant locations at symbolically appropriate times"

(Kertzer 1988**:** 92). Ritual performances took place in a variety of spaces: smaller

residential complexes, restricted areas such as caves, in and on temple pyramids, within

tombs, and in large plazas (Inomata 2006). Ritual performances in these smaller spaces

likely focused on reinforcing shared identity for elite and commoner groups respectively.

State-sponsored ritual performances that enabled the ruler and elites to maintain political

power would likely have taken place in larger plazas – publicly visible areas whose

surrounding built environment invoked the religious-ideological sources of power that the

rulers claimed. Stelae erected in these plazas probably commemorated the ritual

performances that took place, encouraging collective memory in those who saw them

(Inomata 2006: 810). Their depictions could also serve to rewire memory – "to

crystallize the most important elements of the rites from the point of view of both patron

and artist" (Looper 2009: 45).

Ritual performances included reenactments of significant events in the history of

the ruler's lineage or the polity, often through dance. Dance scenes are recognized

through text (the verb *ahk'ot*) and through depictions of dance – individuals with one foot

lifted off the ground or formal poses involving positioning of knees, arms, and wrists

(Foias 2013: 179). Dances are "named for the objects manipulated by participants and

have strong cosmological valences" (Foias 2013: 181). Dance subjects include warfare

victories, transfers of political power, and tribute offerings – the dance performance is an

offering to the gods or to an overlord (Looper 2009). Repetition of these events – and

recording them through stelae – allowed Classic Maya rulers to maintain their political

power by creating experiences of communal identity through shared experience for the broader population. The displays of ritual and economic power further naturalized the political structure of divine rulership by reinforcing the connections between rulers and the supernatural. The shared experience and the physical record facilitated communitas and transformed the landscape (Turner 1986). Ritual performance had multiple mechanisms for legitimizing rulers' regimes and thus enabling them to maintain political power. Specialized paraphernalia was used for ritual performances, including marine shell, greenstone, and feathers. The economic ability of rulers to obtain non-localized resources and have them turned into elaborate clothing, headdresses, and jewelry for ritual performances also reinforced their political power (Foias 2013: 179).

Ritual performance remains significant even among ancient Maya polities with different forms of government. Councils met in large public centrally located buildings. Barbara Fash and colleagues (1992) argue the eight individuals portrayed on the Copan *popol na* were responsible for the rites to care for particular supernatural realms. At Terminal Classic Chichén Itza, groups of people are portrayed carrying out fire ceremonies and dedications of buildings and shrines, rather than just the ruler and one or two other individuals (Grube & Krochok 2007). Ritual performance shifted in meaning and symbolism, but remained an important way for rulers and elites to legitimize their political power by encouraging group identity through shared experience and physically transforming the landscape.

The strength of the state – the effective legitimacy and authority of the regime – is reflected in the extent to which elites, corporate groups, and the general population act in the state's interest and perform in its legitimacy and purposefulness (Golden & Scherer

2013). The establishment of an imagined community, beyond the sphere of day-to-day

interaction, requires the cultivation of trust between participants. Charles Golden and

Andrew Scherer argue that "the trust needed to maintain a coherent political unit above

the level of the household or hamlet was only accessible and realizable through

communal activities" (2013: 402). For smaller-scale communities, trust was built

through shared agricultural labor, interaction due to spatial proximity, patronizing certain

workshops or producers, and participating in other local activities. To produce trust for a

larger polity such as the Maya state, the regime had to provide shared experiences for

building trust: ritual performances, feasting, monument dedication, construction of the

civic-ceremonial built environment, and warfare (Golden & Scherer 2013: 405). Large

ritual performances enabled communal observation and interaction as well as embodying

the ideological commitments of gods and their ruler representatives to care for the

population.

Establishing and maintaining authority, legitimacy, and trust through ritual

performance was particularly important because of the "power to" that commoners/non-

elites held in ancient Maya polities. Given the fewer resources for communication,

transportation, and surveillance, Classic Maya governments did not have "the

mechanisms to assert their constant presence in the minds and daily lives of their subject

populations" (Inomata 2006: 805; Foucault 1977). Kinship, residence, economic class,

gender, and language likely made up the key day-to-day identity groups for the general

population (Anderson 1991; Ardren 2015; Inomata 2006). Group identity was built by

the day-to-day practice of shared experiences – agriculture, food production, household

goods production, childcare, face-to-face interactions, conversations, gendered division

of labor, familial ties, and spatial proximity. The primacy of these group identities over political identity – membership in a political body – indicates that Classic Maya households had the economic and social foundations to operate independently of the polity. The heterarchical organization of ancient Maya society means there were multiple hierarchies – political, economic, and social – operating simultaneously. Some non-elites were farmers, some non-elites were goods producers, and other non-elites were economically wealthy (Masson & Peraza Lope 2004). Access to economic status, participation in specialized production, and control over production of basic subsistence goods was one form of "power to" for ancient Maya commoners. Commoners produced the majority of staple goods required by the ruling class and formed the labor base for the construction of monumental architecture; their economic power may have given them leverage for negotiating political power under certain circumstances. Although large-scale agricultural projects may have been under elite control, families, lineages, and communities likely held most land (Lohse 2004).

Perhaps the greatest "power to" that ancient Maya commoners held was mobility – the ability to "vote with their feet" (Farriss 1984: 76). Issues of mobility include the change of location of activities, repetitive movements vs. movements to new localities, the spatial scale of the movement, the social scale of the movement-making body, and the distinction between movement and mobility (Inomata 2004: 177-179). Factors affecting mobility, falling into "push" and "pull" categories, include availability of economic resources, transportation access, openness of communities to new residents, landholding patterns, language and communicability, landholding patterns, and social organization. There are also negative impacts of movement, such as the loss or abandonment of

previously held resources, and economic and energetic expenditure related to transportation and reestablishment of the social unit (Inomata 2004; Lamoureux-St Hilaire et al 2015). While various economic and ideological considerations connected individuals, families, and kin groups to their communities, the lesser energy and expenditure required for the majority of Classic Maya commoners in household construction and cultivation facilitated commoner migration as opposed to elite migration. Dispersed settlement facilitated subject populations' ability to break away from rulers (Demarest 1992). Maya commoners during the Contact and Colonial periods had significant mobility, and their ability to change political affiliation through residential migration is recorded during this period as well (Farriss 1984; Restall 1997; Tozzer 1941). The success of rulers depends on followers; the greater the mobility of the followers, the more power they exercise in contributing to the stability and maintenance of the political regime. While opportunities for social mobility, such as becoming attached to a royal court or elite house, may have existed, they would have also curtailed the mobility and economic independence of individuals who took them.

Integration and Disintegration: Creating Stability and Navigating Upheaval

Discussing the sources of political power, practices of organizing power, and strategies for maintaining power leads to considerations of how regimes used their Political power to create integration, cohesion, and stability for residents of their polities. It also highlights the best opportunities to view the inner workings of these processes – as regimes disintegrated in the wake of events, groups, individuals, and other polities challenging their "power over." Takeshi Inomata (2006) argues that the enactment of

power through public events – specifically theatrical performances – was critical to the development of Classic Maya polities and facilitated their integration and identity formation.

Theatrical performances and other classes of public events drew on the ideological-religious sources of power, their economic underpinnings, and their associations of rulers with the supernatural sphere to physically manifest the cultural and moral values of the broader community in service to the regime. Performances are creative and achieved acts that are interpretable by performers and the audience and repeatable (Hymes 1975). They create shared identities and common values for a community beyond the range of daily interaction and embody the worldviews, histories, cultural ideals, and value systems of their performers and patrons (Demarest 1992; Inomata 2006). Performances also required significant labor to organize and execute, affecting day to day routines through the necessity of amassing goods, organizing labor around the performance, constructing architecture or creating the stage, and producing specialized goods (instruments, jewelry, costumes). Inomata argues that these events, bringing together much of the polity community and grounding shared identity in symbolic objects and acts, were the primary strategy for creating and maintaining integration (2006: 818).

The organization of labor also played a role in integration. Ancient Maya commoners contributed to the most tangible and long-lasting demonstrations of elite power – monumental architecture. The polity's commoners produced the built environment that reinforced the ruler's supernatural connections. Whether they conceived of their labor as extracted or as a cooperative contribution to the good of the

community is unknown. Structures associated with individual rulers demonstrated the coercive and ideational ties between the regime and the rest of the population. They serve as an archaeologically visible demonstration of connections between leader and followers in ancient Maya polities. Unfinished, abandoned, destroyed, and terminated architecture provide insight into the disintegration of the polity (Houk & Zaro 2012). The inability to muster the participation necessary to complete a structure or finish a renovation is a sign that the connections between the leader and followers have broken down. Destroyed monumental architecture often signifies invasion and warfare – another group's attempt to terminate the regime's power through undoing their collective labor. Transformative events affecting regimes are identified epigraphically where texts exist, but are otherwise most obvious through an analysis of monumental architecture.

Transformative events are moments of upheaval that undermine and overthrow the stability and functioning of the reigning political regime. For the ancient Maya, who experienced political identity through emotive connections to the tangible images of the ruler's body, state buildings, and collective acts, an event that interrupted or disrupted these emotive connections provides insight into when and how integration functioned in ancient Maya polities. Events that targeted members of the regime – the people responsible for carrying out the processes that integrated larger populations – disrupted the creation of shared political identities and experiences. In certain cases, however, the individuals who engineered the events targeting members of the regime relied on the same types of ritual performance to reestablish stability, signify regime change, and create a new group identity. Crises do not necessarily weaken a state; in some cases it can inspire a renewed commitment to its maintenance (Golden & Scherer 2004: 399).

Joyce Marcus (1993; 1998) argues that all ancient civilizations cycled through periods of centralized states and smaller, fragmented weaker states. While larger centralized states are typically conceived of as integrated, their potential for exploitation and major divisions also makes them vulnerable to transformative events that threaten their integration (Foias 2013: 2-3). Eventual dissolution is inevitable, given that "political formations are contentious and fractious entities" (McAnany et al 2016: 261). The question remains – which transformative events caused the polity to dissolve and which events were successfully managed by the polity's regime to maintain its political power?

Conclusion

Ancient Maya polities varied in size, scale, and organization. An overview of political organization in ancient Maya polities provides a general understanding of the commonalities in sources of power, how power was organized, and how it was maintained by various regimes in different locations and times. While political entities regularly dissolve or cycle between more and less centralized formations, understanding the impacts of certain types of transformative events on polity stability and maintenance sheds further light on the mechanisms ancient Maya people used to create and maintain political identities and their efficacy. The regime was different during each time period; political organization varied significantly. A Yaxuná regime was terminated with a mass killing during the Early Classic but their burial indicates an attempt to maintain continuity in ideological sources of power; Yaxuná was incorporated into Cobá during the early Late Classic, whether as a direct annexation or a dependent ally; and finally the settlement of Yaxuná ended in the wake of the shining brilliance of Chichén Itza,

potentially under martial circumstances. What type of political organization existed in each period? Who were the visible leaders and how are they differentiated from followers? What circulations of goods, ideas, people, and information are evident? Did the period's transformative event disrupt, reroute, or terminate those circulations?

Chapter 4

Central Yucatán: The Yaxuná Area

The previous two chapters discussed the theoretical frameworks for this study of political integration. Those concepts will be applied to a specific area in Central Yucatán: the site of Yaxuná and the surrounding area. The proposed project focuses on an area of approximately 15 kilometers by 5 kilometers around the contemporary towns of Yaxunah and Popolá in the municipality of Yaxcabá. Within this contemporary municipality, numerous clusters of settlement classified and named as distinct sites have been identified by archaeologists working in the area, including X'telhu, Mopila, and Ikil. This chapter will serve as a brief introduction to the Yaxuná area before discussing the history of investigations, my own research, and the analysis of data from the Yaxuná area.

The lidar data produced by Juan Carlos Fernandez-Díaz's team in 2014 covers the site core of Yaxuná and extends NNE to Chichén Itza. Yaxuná is approximately 23 kilometers SSW from Chichén Itza. Of particular interest to this study are the monumental core and central residential settlement of Yaxuná, the 4 kilometer by 200 meter transect area extending from the North Acropolis at Yaxuná to Structure N05E11-1 at Popolá-Puus Sil, and a cluster of structures to the NNE of Popolá called Kopchen by local residents.

Popolá-Puus Sil is a Rank IV site of 110 identified structures over a 0.9 km by 0.5 km area with two perennial water sources (Johnson 2012: 224). The full extent of Kopchen is not known; during the 2017 field season, 15 structures were recorded. Data from excavations at Popolá-Puus Sil, test excavations at Ikil, and the INAH survey

conducted along the Yaxunah-Piste highway will also be incorporated when accessible and appropriate.

Natural Setting

The Yucatán peninsula is a marine limestone platform that emerged during the Pleistocene with a drop in sea levels (Wilson 1980: 6-7). The platform was covered by calcareous rock, specifically limestone, marl, and gypsum (Stanton 2000: 191). This platform reaches from the north coast of Yucatán to the Petén. The area under investigation lies within the northeastern Coastal Plain (Figure 2), stretching from the east coast of Quintana Roo to the Puuc Hills area (Isphording 1975). Within the Coastal Plain, the area is part of the inland zone (Wilson 1980). The karst bedrock is made of fresh-water soluble calcium and therefore water seeps through to the underground river system (Johnson 2012: 50). The nature of the bedrock also creates numerous geological features such as *aguadas* (shallow permanent ponds), *cenotes*, *rejolladas* (dry depressions), and caves (Stanton 2000: 193). There are no rivers or lakes in this region, and fresh water is obtained through these underwater cavities and caverns that reach the level of the water table. The Yaxcabá area is one of the regions of greatest *cenote* density in the north-central Yucatán peninsula (Wilson 1980: 12).

Bedrock depressions are culturally and ecologically significant features on the peninsula. The accumulation of sediment and moisture in *rejolladas* creates biodiverse microclimates, including larger plants and trees that the surface could not support (Fisher 2019: 62). *Sartenejas* are natural hollows that can be used for container-style gardening

due to the collection of rainwater (Fisher 2019: 63). Bedrock openings may also yield

mineral resources such as the white marl powder called *sascab*.

North-central Yucatán's climate is classified as tropical savanna or wet-dry

climate, with distinct wet and dry seasons during the year (Wilson 1980: 25). There is

very little precipitation and much cooler temperatures during the dry season, which lasts

from November to April. From May to October is the wet season, with higher

temperatures and precipitation increases, especially in June, July, and October. Rainfall

averages between 1000 to 1200 mm per year in the Yaxuná area (Stanton et al 2010: 33)

(Figure 3). Fluctuation in rainfall has profound effects on the water table, the quality of
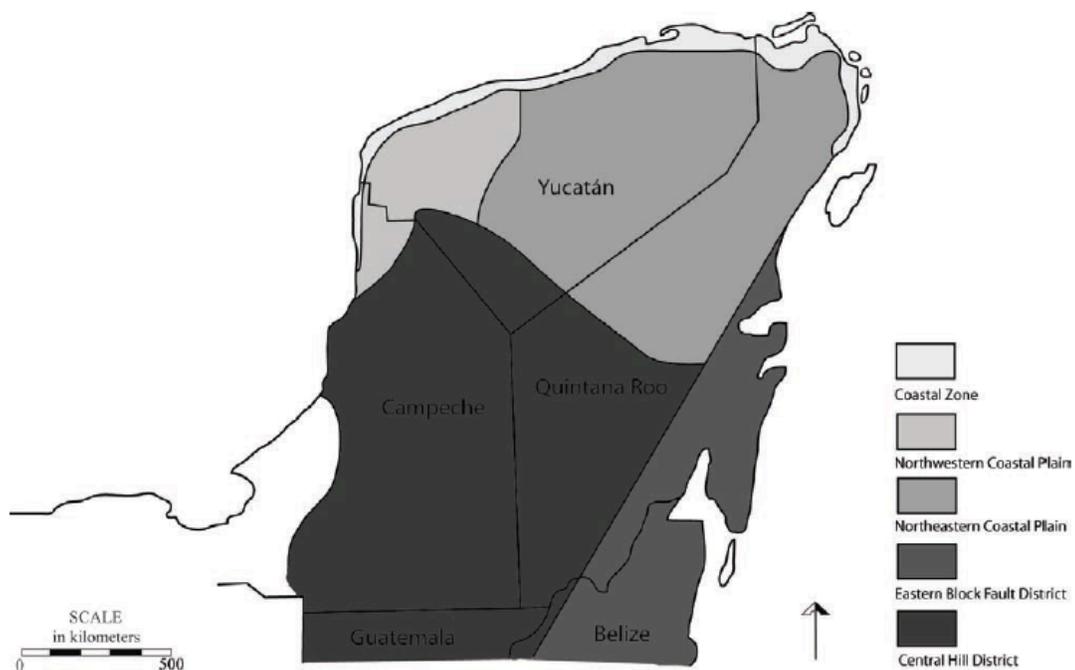
sediment, and the growth of flora.

Figure 4.1: Map of peninsula's geological zones (from Stanton et al 2010: 34)

The dry nature of northwest Yucatán creates shallow sediment low in phosphorus, manganese, and potassium and high in kaolinite (Wilson 1980: 33). The lack of surface riverine systems also deprives sediment the possibility of alluvial soil deposits (Stanton et al 2010: 33). The most common sediment types are reddish brown silty clays (Paleustaffs, Paleustolls, and Haplustaffs) and black clay loams (Calciustolls and Haplustolls) (Beach 1998: 786). Sediment formation occurs through the weathering of carbonate bedrock (Hutson 2004: 62). While sediment levels in the Yaxuná area are thicker than in the northwestern coastal plain, they are still usually less than 20 cm in depth (Stanton et al 2010: 33). Shallow sediment also has an impact on the root depth and accessible nutrients (Hutson 2004: 62).

The northwest peninsula is home to a scrub forest environment with an upper (trees greater than 0.5 meters in width up to 15 meters high) and lower (bushes, undergrowth, and trees less than 10 m high) canopy level (Wilson 1980: 29). There is a long history of forest clearance in the area, with evidence from Lake Cobá indicating widespread clearance by 1650 BCE (Leyden et al 1998). Forest clearance has continued without disruption through modern times, other than during the Caste War (Stanton et al 2003: 33). There is very little primary forest remaining in Yucatán (Stanton et al 2010: 33). The deciduous seasonal forest is made up of Caribbean pine, nance, oak, ceiba, ramon, guanacaste, chaka, and many other types of trees, some of which have been significantly reduced by logging and use in the local craft economy. Chaka in particular is prized for carving wooden art that residents create for statewide competition and sale in Pisté and the Chichén Itza market. Native domesticates include maize, beans, squash,

chilis, chaya (a green leafy plant), and avocado. Common fauna include snakes, toads, turtles, iguanas, white-tailed deer, rabbits, stingless bees, scorpions, and many others.

The area under investigation for this project is used as *ejido* (collectively owned farmland) for two different contemporary towns, Yaxunah and Popolá. Areas of this scrub forest have therefore been altered by agricultural activity, consisting mainly of swidden farming. The most common locally recognized types of sediment are *kancab*, red clay sediment overlying yellow subsoil and *bo'ox* or *ek lum*, a dark black sediment. *Bo'ox* or *ek lum* is valued for *milpas*, but *kancab* sediments are the site of intensive agricultural strategies such as applying manure and using herbaceous legumes for cover crops (Fisher 2019: 67). Agricultural practices create areas that have been cleared by hand and through burning of almost all vegetation; there is land currently under cultivation and land lying fallow. Residents classify vegetation levels in the *ejido* using 3 categories: *monte alto*, *monte bajo*, and *hu che'*. *Monte alto* has not been cleared for agriculture in the last 10 years; there is a higher canopy of trees and little ground cover. *Monte bajo* was used for agriculture 5-10 years ago, with a lower canopy of trees and increased ground cover. *Hu che'* was cleared within the last 3-5 years and consists of low, extremely dense scrub with no canopy.

The area's continuous settlement and agricultural land use have resulted in well-preserved and visible surface architecture (Suhler 1996:68). While vegetation growth can severely alter ancient architecture, the Yaxuná area's relative aridity and agricultural activity has maintained even small architectural features and kept them visible in visual survey. This visibility is of key importance in a study relying heavily on visual survey and focusing on a less densely occupied area adjacent to an urbanized site core.

The geological features of the Yaxcabá-Tinum area are of significance because of their impact on settlement organization and arrangement. Norman Hammond argues that archaeology in the Maya area prior to the 1950s typically analyzed major sites in isolation from their environments, with little focus on "the articulation of a site, to the way in which it was planned, its dominance of or by the local microtopography, the range of resources available, or the multiplicity of other factors that had resulted in the existence of a large and complex focus of human activity at that particular location" (1974: 314). He proposed several ecological explanatory factors for the organization of sites in the southern lowlands, from topography to resource availability.

Table 4.1: Common Yucatec and Spanish terms used in this dissertation

Term	Language	Definition
Albarrada	Spanish	Dry-laid multicourse stone wall
Cenote	Spanish	Natural sinkhole in the limestone bedrock reaching the water table below
Chich	Yucatec	Small limestone cobbles used for sub-floors in Maya construction
Ejido	Spanish	Collectively-owned farmland worked by members of the community and officially recognized by the Mexican government
Hu che	Yucatec	Low dense scrub with no tree canopy that was last farmed 3-5 years prior
Milpa	Spanish	Agricultural practice in Mesoamerica with a multi-year cycle of cutting, burning, multi-crop planting, and rest
Monte alto	Spanish	Land with a high tree canopy and little ground cover, not planted for milpa within the last 10 years
Monte bajo	Spanish	Land with some ground cover and a lower tree canopy, not planted for milpa within the past 5-10 years
Rejollada	Spanish	Natural sinkhole that does not reach the water table, but whose depression permits the accumulation of sediment and moisture to create a micro-climate
Sacbe	Yucatec	Raised limestone causeways, such as the causeway between Yaxuná and Cobá

The lidar images for the area under consideration provide unique insight into its topography and geology. Features such as *cenotes* and *rejolladas* are typically visible on lidar images. These features also had a significant influence on where ancient Maya settlement was established and how it was organized. The Yaxunah-Popolá area is in the center of the area of greatest *cenote* density in north-central Yucatán (Johnson 2012: 52). Almost half the ground surface in this area is exposed bedrock (Ringle 1985; Wilson 1980). These outcrops, some of which are 2-3 meters in height, provided construction material and were also used as the base for building a structure. Differentiating between natural outcrops and culturally modified outcrops is one of the tests undertaken by this dissertation when ground-testing the lidar data from 2014, and will be discussed later.

In addition, there several other interesting geological features visible, one of which may correlate with a drop-off in settlement within the transect area similar to that observed by Dennis Puleston in relation to Tikal's earthworks system (1974: 303). Lidar revealed elevated parallel features running east to west for several kilometers within the survey area. These features may have naturally resulted from the Chicxulub asteroid, or may have been culturally created. With spatial organization as one of the areas of investigation for establishing the degree of sociopolitical integration, it is important to take into account as many of the factors that may have influenced such organization as possible.

Reconstructed Climate History and Prehispanic Land Use

The paleoclimate history of the northeastern peninsula relies on the analysis of two sediment cores from Lake Punta Laguna, located 20 kilometers NNE of the

archaeological site of Cobá. Cobá is approximately 100 km from the Yaxuná area. The comparison of deep and shallow-water lake cores was used to infer the paleoclimate history of the area (Hodell et al 2007: 230). While previous research has focused primarily on the bearing of climate data on the transition from the Terminal Classic to Postclassic periods, information from earlier periods will be included here as well due to the diachronic nature of this study.

During the early Preclassic, relatively wet conditions are suggested by lower oxygen isotope values, but repeated wet-dry oscillations also took place (2007: 230). These oscillations may have been a result of hurricanes, which increase erosion and sediment transport (2007: 232). Lacustrine sedimentation and high lithologic variability correlate to the evidence of land clearance identified in the Lake Cobá profile. Circa 850 BCE the first indication of maize pollen in the Lake Cobá core emerges. Concurrently, data from *cenote* X'tojil near Yaxuná demonstrates that agriculturally based human occupation was established there (Stanton et al 2010: 34; Whitmore et al 1996). This human occupation may have included large-scale forest clearance.

The transition from the late Preclassic to the early Classic period sees a shift in climate as well, to drier conditions with a decrease in rainfall and several major drought periods. Drought periods occurred during the Terminal Classic, 760-1060 CE. This 400-year period alternated between wet and dry, with a prolonged period of wet conditions between 890 and 950 CE (Hodell et al 2007: 234). Based on the data from Lake Punta Laguna, Yucatán experienced dry periods around 765, 855, and 955 CE (Johnson 2012: 55). The early Postclassic period transitions back to wetter conditions, which continued until the 1400s CE (2007: 237).

Many of the landscape features previously discussed would have been incorporated into life in the prehispanic Yaxuná area. Limestone quarrying and *sascab* mining from *sascaberas* would have been used for construction and the production of plaster and mortar. Water management for cultivation, from the retention of water through bedrock depressions and use of soil traps in *rejolladas* to draining water through canals and berms, would have been another important focus (Fisher 2019: 82). Ethnographic examples are often used to extrapolate the ways in which houselot gardens and *milpa* agriculture would have been applied to the prehispanic environment (Fisher 2019). Preserved kitchen gardens and maize fields excavated at Cerén also provide insight into agriculture as part of the built environment (Sheets 2006). Fisher (2019) cautions against the assumption that *milpa* agriculture has existed unchanged from the prehispanic period; Sheets (2006) notes the proximity of *milpas* to domestic structures, whereas in contemporary Popolá and Yaxunah they are situated much farther from houses. Fisher also elaborates on the interrelated processes of waste management and soil enrichment in houselots at Tzacauil (2019: 197-199). Consistent water access would have been available in the *cenotes* throughout the area.

Introduction to Yaxuná

Yaxuná is a Rank II site situated in the center of Yucatán's northern plains. In archaeological literature it is most often referenced in relation to its famous northeast neighbor, Chichén Itza. The archaeological site is today the *ejido* of the contemporary town of Yaxunah. Yaxuná is also referenced in the *Chilam Balam of Chumayel* under the name of Cetelac, whose ruler clashed with the arrival of Itza people to the area. This

conflict was resolved with the Itza settling further north and the ruler of Cetelac paying

tribute (Stanton 2000: 148).

Figure 4.2: Yaxuná in the context of the Maya area (from Stanton et al 2010: 6)
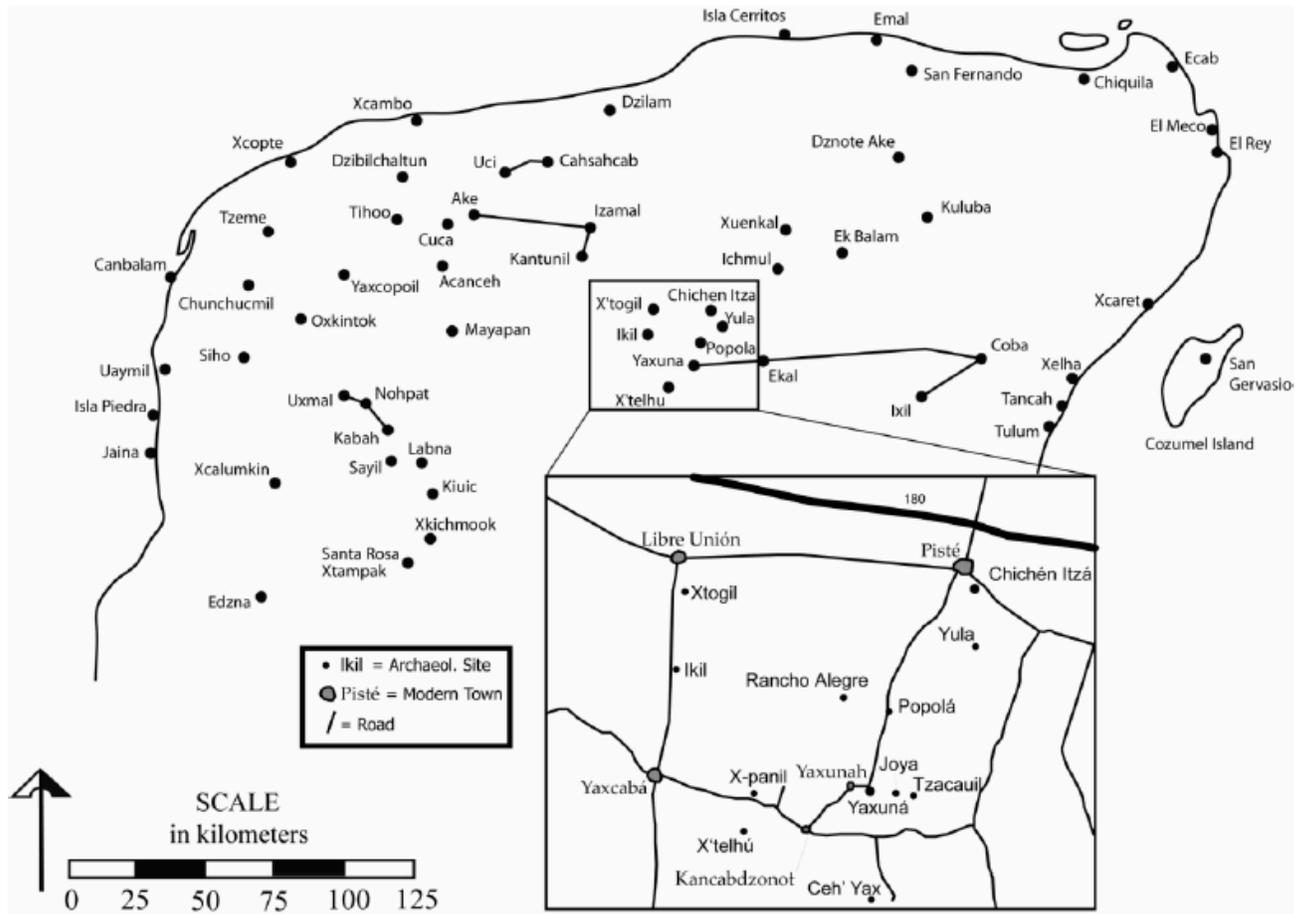
Figure 4.3: Regional map (from Stanton & Ardren 2020: 2)

Yaxuná is situated on a "critical crossroad of Maya civilization" (Tiesler et al 2020: 19). The site was uniquely situated on the boundary between eastern and western areas of the peninsula, as well as positioned on an inland trading route connecting the northern Yucatán salt resources to southern lowland sites (2020: 19). As we examine the dynamics of incorporation, integration, and participation between Yaxuná and the

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surrounding area, we must also keep in mind that Yaxuná itself occupied a fluid position in larger-scale political, economic, and social networks.

The monumental core of Yaxuná is defined for this dissertation as the area mapped by the Selz Foundation Project during its tenure. The Selz Foundation focused on creating an accurate topographic map of the site core (Stanton 2000; Stanton et al 2010). They used Structure 6E-14 at the center of the monumental core to set a 500 by 500 meter grid and map with a transit (Stanton 2000: 154). The monumental core contains 3 acropolis groups, an E-Group, several stone causeways, dance platforms, a ballcourt, and many secondary monumental structures and house mounds (Stanton & Ardren 2005: 216) (Figure 4). The full extent of residential settlement is unknown. Transects to the east and north indicate that occupational density decreased significantly (by half or more) approximately 1 kilometer from the monumental core. An eastern transect found that structure density decreased from 253 structures per kilometer squared to 114 structures per kilometer squared at 800 meters from Structure 6E-13 in the site center. Approximately 1.1 kilometers from Structure 6E-13, no architectural elements or structures were identified for 250 meters, until the cluster of structures identified as the site of Joya (Stanton et al 2011). The northern transect identified 44 structures within 1 kilometer of the North Acropolis, at which point a large geological feature bisected the transect at an angle (Stanton et al 2014). Structure density decreased drastically north of this feature. Although the limits of settlement may not be the same in all cardinal directions, the evidence from the northern and eastern transects indicate that Yaxuná covered an area of approximately 1 kilometer squared (Stanton et al 2011). Joya,

Tzacauil, X-auil, and other settlements, while spatially distinct from Yaxuná, are within close proximity.

The earliest evidence for long-term spatial investment in Yaxuná comes from the first floor of the E-Group, constructed between 900 and 800 BCE. Early Nabanché and Ek Complex ceramics also demonstrate that the area was settled during the Middle Preclassic. Population, political power, and economic influence waxed and waned due to various factors over the next 2000 years. With the rise of Chichén Itza, evidence from Yaxuná includes destruction and selected abandonment deposits containing Sotuta and Cehpech ceramics (Tiesler 2020: 40). This destruction corresponds to a drastically decreased population, suggesting that only a small village remained at what was once the most populated city center in the area. There is no evidence of residential settlement at Yaxuná during the Late Postclassic, only several small altars dedicated to memory rituals, hunting, and offerings (Ardren 2003, 2015; Gotz & Stanton 2013; Tiesler et al 2020).

Popolá-Puus Sil is the name I use for the archaeological site initially mapped by the Selz Foundation Project and the subject of Scott Johnson's dissertation in 2012. Johnson refers to the archaeological site and the contemporary town both as Popolá; following local conventions, I use the name Puus Sil. In order to avoid confusion, I combine the two into Popolá-Puus Sil when discussing the archaeological site; Popolá, I reserve for the contemporary town.

Introduction to Popolá-Puus Sil

Popolá-Puus Sil is a Rank IV site initially mapped by the Selz Foundation Project along with other subsidiary sites such as X'telhu and Xkanhá. Located 5 kilometers NNE

of Yaxuná and 13 kilometers SSW of Chichén Itza, it initially came to the attention of the Selz Foundation project due to panels placed in the Yaxcabá municipal library (Johnson 2012: 49). The project mapped the structure associated with the panels, which also held carved architectural elements and other monuments across the surface.

Popolá-Puus Sil was lightly occupied during the Middle Preclassic (Johnson 2012; Tiesler et al 2020: 30). Population expanded significantly during the Late and Terminal Classic period and the elite community was closely connected to Yaxuná while the non-elite community was involved in local utilitarian pottery economies. Consequently, the decline of Yaxuná's elite community with the rise of Chichén Itza was reflected at Popolá-Puus Sil, while the residential population at the site remained stable over the late and middle Terminal Classic. (Johnson 2012). Population declined over the Terminal Classic and Postclassic. Further discussion of the culture history can be found in later chapters.

The Hinterlands

This dissertation draws extensively on research developed by others as part of an analysis of political integration. In addition to data from Yaxuná and Popolá-Puus Sil, I will also discuss data from small sites surveyed by Proyecto de Interacción Política del Centro de Yucatán (PIPCY) (Figure 5.03). My own survey, mapping, surface collection, and test unit excavation was conducted along a transit 200 meters in width that began at the Yaxuná North Acropolis and continued until reaching the southeastern boundary of Popolá-Puus Sil as mapped by Scott Johnson. In addition, my fieldwork included opportunistic survey, recording structure locations, and surface collection at an area

northeast of the modern town of Popolá, referred to as Kopchen by Popolá's current residents.

Previous Research & Methodologies

This dissertation will draw significantly on data produced through previous work at Yaxuná and other sites throughout the Yaxcabá *municipio*. For that reason, I believe it is important to briefly discuss the methods used by these previous projects to identify, collect, and analyze the artifacts that led to their conclusions. The most pertinent data comes from the Selz Project, including Traci Ardren's excavations at Xkanhá, the work done by Scott Johnson at Popolá-Puus Sil, and the investigations by Chelsea Fisher at Tzacauil. Their work will be presented chronologically.

The Selz Project focused on survey and surface collection during their first few seasons. They estimated the monumental core of the site and placed a 500 by 500 meter grid, then mapped the grid with a transit to establish a topographic map of the site core (Stanton et al 2010: 9). This first phase was followed by a system of 2 by 2 meter test units, with 13 units placed throughout the site core for purposes of establishing a ceramic chronology, and other units specifically targeting domestic structures (low mounds, foundation braces, low stone alignments for supporting pole and thatch superstructures), and eventually by horizontal excavations and consolidations of various structures and contexts throughout the site. Mapping, surface collection, test units, and excavation at Yaxuná by the Selz Project focused primarily on the site core (Stanton et al 2010). The Selz Project's work established the initial ceramic chronology, which has since been updated by PIPCY's work. Analysis of stone tools, iconography, and faunal remains

rounded out the Selz Project's analysis.

As part of the Selz Project, Traci Ardren (1997) conducted research at Xkanhá, located almost 2 kilometers from the site core near a *cenote*. Yaxuná residents informed the project about the location of Xkanhá. Ardren explored an area of 1 square kilometer around the Xkanhá acropolis and used laser theodolite survey to produce a topographic map and connect it to the map of the Yaxuná site core. She ultimately investigated 12 of the 14 structures or structure groups identified at the Xkanhá acropolis through test units and horizontal excavations.

As noted in previous chapters, the work of Proyecto de Interacción Política del Centro de Yucatán (PIPCY) has used survey, total station mapping, lidar, surface collection, test units, and horizontal excavation to build on the work initially produced by the Selz Project. PIPCY expanded the scope of research beyond the site core of Yaxuná into sites such as Ikil and Popolá-Puus Sil, caves throughout the Yaxcabá *municipio*, and to Cobá by following *Sacbe* 1 as well as continuing work at Yaxuná. Ceramic analysis by Travis Stanton and Sara Dzul overhauled the Yaxuná ceramic chronology, while other project members have contributed to a deeper understanding of the area through sediment analysis and marine shell analysis.

As part of PIPCY's work, Scott Johnson used survey, total station mapping, surface collection, test units, and horizontal excavation at Popolá-Puus Sil. Johnson's work included survey using a grid-based system centered on structure N10E10-1, which had been initially recorded by the Selz Project in the 1980s. A total station was used to create sub-datums, which were the starting points of new *brechas* (trails). Using the trails, 100-by-100 meter squares were delineated, and workers searched the square by

lining up at 10 meter intervals along one side of the square and walking a transect, maintaining the distance between themselves and others. Potential structures were verified by Johnson then sketched and labeled with a number on flagging tape. Structures were mapped by total station of measuring tape, compass, and GPS. Sixty-four structures at Popolá-Puus Sil were mapped with the total station, along with their recognizable architectural features. Forty-six structures were mapped with measuring tape, compass, and GPS. Forty structures were surface collected, using a grid of 2 by 2 meters. Based on the volume of pottery collected, 22 structures were selected for off-mound test units. Two structures were horizontally excavated and consolidated. Johnson conducted his own type-variety analysis on the pottery, consulting with project ceramicist Sara Dzul and Travis Stanton. He also conducted a modal analysis of the pottery. Analysis of lithics material focused on color, basic metrics, and morphology, though a small portion of chert was also analyzed by XRF to explore to possibility of visible color correlating to common source.

Chelsea Fisher conducted 3 types of excavations at Tzacauil: horizontal and axial excavations of house groups, test units on the acropolis, and trench excavations in intra-settlement spaces. Fisher conducted horizontal excavations for superstructures, penetrating only to the top layer of fill, while basal platforms were explored through axial excavations to minimize redundancy and time. The test unit on the Tzacauil acropolis was 4 by 2 meters and placed in the elevated plaza space framed by superstructures, in order to focus on the sequence of flooring episodes in the main body. Targeted areas between structures were excavated with trenches, along a grid of 2 by 2 meter units. Along with recovery of artifacts, soil samples were taken for soil chemistry analysis.

The excavations at Popolá-Puus Sil by Johnson, by me at Ikil, at Tzacauil by Chelsea Fisher, and by me on the survey transect followed the protocols used by PIPCY; therefore the data can produce a regional context rather than a site-specific one. While this is not necessarily the case for data from the Selz Project and the data from PIPCY, there is some consistency; PIPCY directors Travis Stanton and Traci Ardren both worked on the Selz Project for many years, and their work with PIPCY is shaped by their experiences with the Selz Project. This connection provides more continuity in methodology for data collection and analysis than can be found at many other sites, which is significant when attempting to combine multiple different data sets as I do in this dissertation.

Chapter 5

Methodology

This project began as a way of ground truthing data from a 2014 lidar test in Central Yucatán. It was based in a 20-year history of research with strong continuity; the directors of the current project were initially members of the first project based at Yaxuná. In addition to discussing the use of lidar in Central Yucatán, in this chapter I will lay out the frameworks used for evaluating archaeological evidence for indicators of integration, political imaginaries, and leaders and followers. This process will be discussed generally and will also be illuminated through a series of case studies from other areas of the Maya world.

Fieldwork

A team led by Juan Carlos Fernandez-Díaz completed lidar coverage from the site core of Yaxuná to the site core of Chichén Itzá in Spring 2014. While lidar is increasingly common in archaeological investigations in Mesoamerica, it is only in the last 10 years that it has been used in northern Yucatán. The most extensively published results in Mesoamerica come from its use at Caracol, Belize (Chase et al 2011; Chase et al 2012). The northern Yucatán landscape is significantly different, and a methodological goal of this project was to evaluate lidar's efficacy as a survey tool in northern Yucatán.

The PIPCY-INAH lidar data were collected during three flights by the National Center for Airborne Laser Mapping during May 2014 (Fernandez-Díaz et al 2014; Magnoni et al 2016). Approximately 48 square kilometers around Yaxuná and Chichén Itzá were collected, as well as a 1-kilometer wide transect between Chichén Itzá and

Yaxuná, and a 1-kilometer wide transect along the first 3 kilometers of *Sacbe* 1 between

Yaxuná and Cobá. Data collection was performed with an Optech Gemini, which

recorded up to 4 discrete returns per laser shot with a system range resolution of about 2

meters. Sixty-five flight lines were flown at 500 meters above ground level. The laser

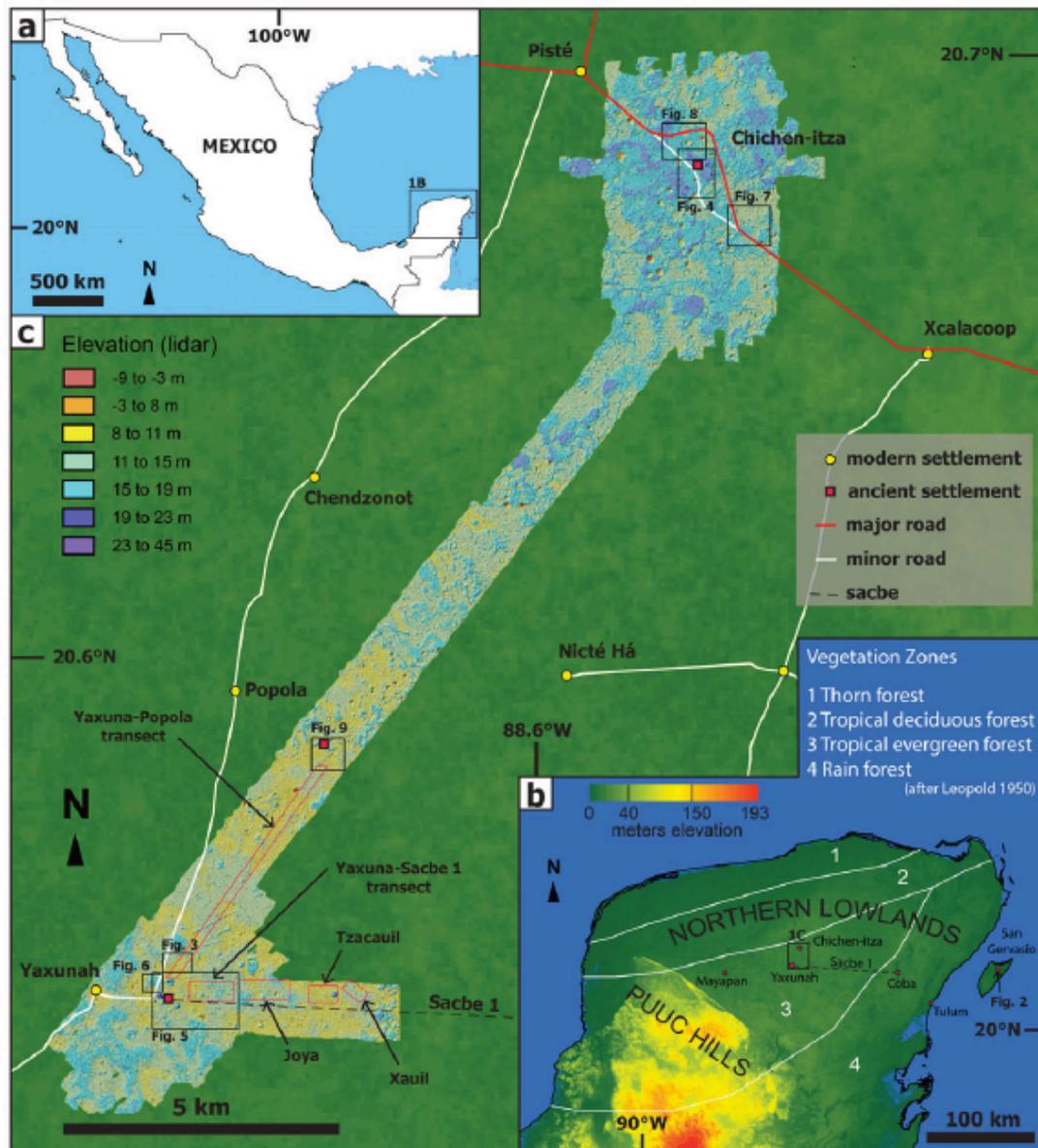pulse density was approximately 15 pulses per square meter (Stanton et al 2020).

Figure 5.1: An overview of the 2014 PIPCY-INAH lidar survey
(from Magnoni et al 2016: 234)

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For data processing, a grid of 1-kilometer by 1-kilometer tiles was laid over the project area, which covered 83 tiles total. Terrasolid's Terrascan software was used to classify returns from the laser shot as "ground" or "non-ground." Ground returns are produced by the laser shot reaching the ground; buildings, vegetation, and other non-ground structures produce non-ground returns. Tiles were processed individually and the first ground returns were interpolated using the kriging algorithm into 1 meter resolution digital surface models (DSM) and 50 centimeter resolution DEMs. The individual DSM and DEM tiles were joined into rasters and stored in an ArcGIS format (Magnoni et al 2016). Using ArcGIS, the project area could be viewed in hillshade.

With Aline Magnoni, I established a transect area, originating at the North Acropolis of Yaxuná and terminating at structure N05E11-1 at Popolá-Puus Sil in 2014, using the hillshade view in ArcGIS from the preliminary lidar results. These points were chosen because Scott Johnson mapped the area around Popolá-Puus Sil for his dissertation research, while the northern boundary of Yaxuná had not been established beyond the North Acropolis. The Selz Project focused their mapping efforts on the site core, which ended with the North Acropolis. Xkanhá is northwest of the North Acropolis, while the transect area proceeded northeast. This transect area was 200 meters wide and covered approximately 6 kilometers between the site core of Yaxuná and the southeastern area of the Popolá-Puus Sil site as established by Scott Johnson. Through examining the lidar data in ArcGIS, I recorded coordinates at multiple points along the transect boundaries in the Garmin GPS used for survey and mapping. The survey of the transect area took place over 2 field seasons, opportunistically divided along the Yaxuná-

Popolá *ejido* boundary. I worked with Yaxuná residents to survey the transect area in the Yaxuná *ejido* during 2014, and in the Popolá *ejido* during 2015 and 2017.

After establishing and recording the east and west boundaries of the transect area, I divided the area into mapping units (MU) of 500 meters by 200 meters. I assigned the mapping units numbers 1-8, with 1 corresponding to the unit closest to the North Acropolis and numbers proceeding consecutively to the north. The four corners of each mapping unit were noted using ArcGIS and recorded in the Garmin GPS for reference. Each corner of the mapping unit was marked with flagging tape in the process of survey.

Using recorded points in the GPS, I charted a *brecha* (path) along the center of the transect area (halfway between the eastern and western boundaries). Workers cut the central *brecha* for one mapping unit at a time. At 100 meter north to south intervals along the central *brecha*, I placed stakes with flagging tape. Along the east-west line created by the stake, workers cut another *brecha* 100 meters to the east and 100 meters to the west. In effect, this system of *brechas* created subunits of 100 meter by 100 meter squares. Workers and myself would then systematically search each subunit for structures and signs of human activity. Depending on the number of workers and the visibility due to vegetation undergrowth, we lined up 5-15 meter apart along the central north-south *brecha*. Each person would walk a straight transect, maintaining the distance between themselves and the others. Two workers were equipped with compasses to maintain the spacing and direction of the survey, charting a line east (90 degrees) or west (270 degrees) The group would cover first the east side of the transect area then the west side. When workers identified a potential structure, cultural feature, or geological feature of note, they called me over to make the decision. Workers often cleared the vegetation

from a suspected feature to aid in identification. If I confirmed the feature as a structure, workers completely cleared the structure of vegetation to enable mapping, surface collection, and test units.

The spring of 2014 was exceptionally wet in Yucatán, which had a significant impact on the vegetation density. Typically May is one of the driest times of year, when vegetation is at the lowest. Given the goal of assessing the utility of lidar as a survey tool in north-central Yucatán, I also recorded observations and emic classifications of vegetation density within each mapping unit and around each identified structure. Workers classified vegetation using 3 categories: *monte bajo*, *monte alto*, and *hu che'*; through experience and their descriptions, I developed specifications for each vegetation type. Recording vegetation density during the 2014 season helped assess lidar's effectiveness in identifying structures and the impact of vegetation density on its effectiveness. *Hu che'* is low bushy scrub, where visibility is less than 3 m in any direction and there is no canopy. Typically *hu che'* is found in areas that were used as *milpa* within the past 3-5 years. *Monte bajo* is used to refer to areas with a canopy 5-10 m high and some undergrowth, with visibility generally between 7-12 m on all sides. Areas with a canopy above 10 m, very little ground vegetation, and visibility between 15-20 m on all side is called *monte alto*. Specifying the extent of ground cover around each structure and evaluating it in conjunction with the vertical and horizontal breadth of the structure assisted in clarifying the conditions under which lidar is most useful as an archaeological survey tool.

I recorded structures using a GPS, compass, measuring tape, and graph paper. After identifying the northwest corner of the structure, I took a GPS point to locate it on

the lidar map. I completed a Maler drawing of each structure on graph paper using the measuring tape and compass; the drawings were later traced in ArcMap over the lidar hillshade images using the GPS point as reference. I took photos from multiple angles of each structure, as well as recording a short written description of the size, architecture type (basal platform, foundation brace, superstructure) and any identifying features (architectural or cultural).

I carried out surface collection and test units opportunistically due to environmental limitations. The transect area, like much of this part of Yucatán, has shallow sediments and exposed bedrock in many areas; units often terminated after 40 centimeters or less of excavation. I had permission primarily for off-mound units; workers often tested the depth of the sediment around a structure to decide if it was a good candidate for a test unit. We attempted to excavate test units at as many identified structures as possible to provide a broad sample from the transect area. If a structure was particularly robust for surface collection, we prioritized excavating test units there as well. Some structures or structure groups had 1 test unit; others had 2 or 3 test units.

All test unit operations were labeled YPT (Yaxuná-Popola Transect) and operations began with number 300, increasing consecutively. Operations changed based on the structure where the test units were located. If more than 1 test unit was placed at a structure or structure group, the test units would be designated as sub-operations with letters A, B, or C. The first test unit of the operation was designated A, the second B, and the third C. Test units were also classified by their size; they were either 1- by 1-meter and designated "1" or 2- by 2-meter and designated "2." Test unit locations were determined opportunistically, based on the estimated depths of sediment, the amount of

sherds surface collection yielded, and proximity to the structure or structure group. Measuring tape was used to establish the units' area, and workers cut stakes to place at the 4 corners of the unit. I recorded the location of each test unit using a GPS; these points were also transferred to ArcMap. We placed a datum, generally 40 centimeters above surface level, for each unit, to record excavations. Workers excavated the unit arbitrary 20-centimeter lots. Excavations were recorded using PIPCY protocols. Levels designated sediment types or colors or cultural features, while lots were arbitrary 20-centimeter intervals. For each lot and level excavated, I measured and recorded the distance below the datum, completed a planar drawing and photograph, and recorded the Munsell designation of the sediment, the amount of artifacts yielded and any identifying or significant features using the PIPCY lot forms. Once workers reached bedrock or the unit was sterile for more than 40 centimeters, the unit was terminated. I created profile drawings and took profile photos of the four sides of the unit, and workers refilled it.

All sediment from the unit was screened using quarter inch screens. Artifacts were bagged according to level, lot, and artifact type: ceramics, obsidian, chert, shell, limestone tool, stucco, etc. The number of bags of ceramics and the number of individual lithic artifacts recovered were recorded on each lot sheet. Travis Stanton and Sara Dzul used type-variety analysis to analyze the ceramics. I completed rudimentary analysis of the chert and obsidian artifacts. I recorded weight, length, width, height, and color for each artifact. Chert artifacts were classified as flake, debitage, core, or tool type. Obsidian artifacts were classified as proximal, medial, or distal blade fragments. I measured, weighed, and described shell artifacts.

During this time, I also conducted reconnaissance in an area north of Popolá-Puus Sil known as Kopchen by current Popolá residents due to the deep *rejollada* and well in the area. This area is approximately 1 kilometer northeast of the modern town of Popolá and is located in the town's *ejido*. Workers assisted in opportunistically locating structures adjacent to existing *brechas*. Workers cleared the structures and assisted in recording and drawing them. The location was recorded using the GPS in the northwest corner and I created Maler drawings of the identified structures using a compass, measuring tape, and graph paper. Structures in this area had considerable artifacts on the surface; we carried out surface collection at multiple structures, which yielded a high volume of sherds, including diagnostic sherds such as vessel rims and bases. Ceramic artifacts were collected and bagged based on structure numbers.

Lidar

The term lidar comes originally from the acronym for "light detection and ranging" and is used as an umbrella term for a wide variety of technologies and applications (Fernandez-Díaz et al 2014). Topographic mapping from airborne platforms using lidar is also referred to as airborne laser scanning (ALS). Lidar units measure the two-way travel time of light from the sensor (the lidar unit, mounted on an airborne platform) to the target (the ground, vegetation, structures, features). The measurements are tracked by emitting short laser pulses and using an electronic system to measure the amount of time it takes for the pulse to and from a reflective surface. ALS systems sample a finite number of points distributed over an extended surface. Laser sources, surface illumination, signal strength, and signal processing distinguish different systems.

The pulse width and design and speed of the recording electronics determine the range resolution (the pulse length), which establishes the distance beyond which the sensor will be able to detect distinct returns from objects (2014: 9959-9960).

The ALS system produces several data products. The first is the point cloud, which consists of the X, Y, Z coordinates for each laser return in its most basic form. Point clouds are then classified based on the object that produced the reflection – if the object is from ground or non-ground objects (vegetation, structure, etc.). Classified point clouds are then converted into regularly spaced rasters, each with a single elevation value calculated by interpolating irregularly spaced elevation values from the point cloud (Fernandez-Díaz et al 2014). Rasters summarize and condense the information from point clouds, so they are less specific but easier to manipulate and analyze using imaging processing techniques. Rasters can be displayed as image maps, hill shade maps, contour maps. Digital elevation models (DEM) refer to bare earth surface, stripped of vegetation and modern manmade structures. Digital surface models show the "first surface," the representation of the surface from the first return of the laser shot – the first layer of vegetation, buildings and structures, and unobstructed ground.

Early tests of lidar technology in Central America during the 1980s and 1990s were deemed insufficient for recording surface remains and it did not gain traction as a mapping and survey tool in Maya archaeology until its use at Caracol, Belize (Chase et al 2010). Satellite imagery was the more common remote sensing focus. Using satellite imagery enabled the identification of previously unknown sites, but could not offer the same benefits of lidar in locating and mapping individual features. Lidar results from Caracol, mapping the entire 200 square kilometer area of the site, topography, and built

features, inaugurated the technology as the next step in survey and mapping for the Maya area. Since 2010, projects at Ceibal, La Corona, Yaxnohcah, Mayapan, Uxbenka, and many others have used lidar for surveying and mapping (Brewer et al 2017; Canuto et al 2018; Chase et al 2014; Hutson et al 2016; Inomata et al 2017; Prufer et al 2015).

Lidar received an enthusiastic endorsement based on the results from the Caracol project. It was lauded for its ability to reveal previously undiscovered structures, anthropogenic land modification, and features missed during ground survey (Chase et al 2010). Archaeologists described lidar as "literally 'seeing' through gaps in the rainforest canopy" (2010: 387). Not only could lidar reveal structures and features in un-surveyed areas, it could uncover features, modifications, and structures missed during ground survey. Given ancient Maya urbanism patterns, dispersal of settlement, the extent of landscape modification, the tropical forest environment, and the funding and time requirements for ground survey, it is little wonder that lidar was viewed as a savior from traditional "labor-intensive, tedious, and partial" survey and mapping methods (2010: 388).

The lidar data used for this project came from a joint PIPCY-INAH project, coordinated by PIPCY directors Travis Stanton and Aline Magnoni and the INAH Chichén Itzá director, José Osorio León (Magnoni et al 2016). Lidar was new to central Yucatán at the time; while it had been used in other parts of Central America and at Caracol, the 2014 results were among the first from this particular environment (surveys at Cansahcab and Yaxnohcah also took place in 2014, while a survey of Mayapán was conducted in 2013) (Fernandez-Díaz et al 2014). Directors designed the survey area to cover the epicenter of each site (Yaxuná and Chichén Itzá), while the transect area

connecting them included Popolá-Puus Sil. Due to the novelty of lidar technology in northern Yucatán, PIPCY project directors also wanted to test its efficacy in this new environment; my transect and survey were designed in part to evaluate its use as a survey and mapping tool.

In 2017, a second lidar survey was completed in the area by a project spin-off of PIPCY – Proyecto Sacbe Yaxuná-Cobá (PSYC). It included a small area of overlap from the 2014 lidar survey in central Yaxuná and the westernmost 4 kilometers of Sacbe 1. The 2017 survey covered a much larger area, approximately 394 square kilometers, including a block survey of Cobá, smaller block surveys of sites near Yaxuná, transects between Cobá and smaller sites (Xelha and Ixil), expansion of the areas around Yaxuná and Chichén Itzá, parts of the Island of Cozumel, and a 1 kilometer transect of Sacbe 1 from Yaxuná to Cobá (Stanton et al 2020). This survey used a Teledyne-Optech Titan MW, a multispectral, multichannel, multilook lidar system with 3 laser wavelengths and a pulse density of 25 pulses per square meter. Compared to an 18% surface illumination for the 2014 survey, the 2017 survey had a surface illumination of over 200%.

Analysis of the 2017 lidar data is ongoing in several phases. Teams of mappers are ground-validating this data in multiple locations, including Cobá, Yaxuná, and 2 sites located along Sacbe 1. This process of ground validation assists archaeologists in evaluating the impacts of ground topography and vegetation on surface models, as well as how surface features are represented (Stanton et al 2020: 4-5). Mapping team members draw the features over printed lidar images in the field before digitizing and georeferencing them in the laboratory. Maps of the area created by earlier projects are also digitized and georeferenced over the lidar. In addition, PSYC members recently

completed preliminary identification of elevated architectural features (polygonal shapes) in the non-surveyed area. This identification is limited to elevated architecture, plazas or patios enclosed on at least 3 sides, and features such as causeways and *albarradas*. PSYC members then conducted GIS analysis of the data, using the variables of polygon (structure) density, volume, and basal area of construction (2020: 6). These 3 variables were used to identify and locate discrete sites and understand spatial distribution of settlement in additional ways, such as highlighting monumental constructions or areas of dense settlement (2020: 9).

PIPCY and PSYC's experiences with lidar have confirmed that for central Yucatán, lidar is a powerful complement but not a replacement for traditional surveying and mapping techniques. Ground validation of the 2014 and 2017 lidar data elucidates the variables that must be carefully addressed in planning and developing ALS efforts in central Yucatán for optimal visibility, as well as important considerations for data analysis. Certain steps should be taken during the planning phases, while other considerations must be taken into account during the analysis of the data produced.

Data collection must account for variables such as aircraft speed, altitude above ground, and flight line orientation in addition to pulse repetition frequency and scan angle and frequency (Fernandez-Díaz et al 2014: 9967-9968). These factors are particularly important in tropical jungle or forested environments. ALS does not "see through" vegetation; the laser must penetrate gaps in vegetation to reach the ground and return to the sensor. Vegetation type can affect the probability of the laser reaching the forest floor, but the variables mentioned above can be customized and configured to improve the probability and achieve maximal canopy penetration (2014: 9971). Testing in

different environments found that maximal canopy penetration is most likely if the following conditions are met: illumination of the entire surface area multiple times from different angles; laser pulses with enough energy to make the round trip through the canopy; and a slant range with greater width than the laser pulse through the lowest understory vegetation (2014: 9972). Using a lower pulse repetition frequency in a jungle environment, for example, may have a lower shot frequency but a higher number of ground returns.

Our conclusion, based on analysis of the 2014 data, was that while lidar data is revolutionary for locating and mapping archaeological features, local conditions such as vegetation, topography, and type of architectural features will significantly affect the detection threshold of certain archaeological features (Magnoni et al 2016). We observed the impact of local conditions on the quality of the 2014 lidar data in multiple ways. The 2017 lidar data, which re-mapped some previously covered areas, also offered a comparative dataset for assessing the impacts of local conditions under different environmental circumstances on ALS results.

The first finding was that while lidar datasets had been judged on shot and returns or point density, this metric could be deceptive in assessing the archaeological usefulness of a lidar dataset. Return density is a solid metric for evaluating data products from areas with sparse vegetation, but for areas with complex canopies return density cannot be reliably predicted with nominal laser shot density. Instead different metrics, such as distribution functions of the spacing between ground returns and the percentage of the surface illuminated by laser footprints, are more useful for evaluating a dataset's archaeological usefulness (Magnoni et al 2016).

The second finding was that vegetation type has a significant impact on the fidelity of lidar datasets. While the Maya area is generally classified within the same type of environment, the variations between different areas have significant impacts on the quality of lidar datasets. Tall tropical forest environments with a higher canopy (20-25 m) are much more amenable to ALS because there are more gaps in vegetation. A higher canopy tends to discourage the low bushy undergrowth that is more difficult to distinguish from the ground using ALS. Central Yucatán has lower, more compact canopy environments (*monte bajo* and *monte alto*) with fewer vegetation gaps, and therefore less accessibility for ALS penetration. Secondary growth from swidden agriculture (*hu che'*) is particularly difficult to distinguish from the ground using ALS.

Local weather conditions and vegetation growth patterns can change the visibility of the same area in different years. 2014 was an extremely wet year in central Yucatán and the vegetation growth pattern that year was dense and thick. In 2017, when the second lidar dataset was collected, rainfall was exceedingly low and there were several wildfires across the survey area (Stanton et al 2020: 3-4). These conditions increased the fidelity of bare earth models significantly and reduced much of the previous vegetative "noise" that interfered with analysis of 2014's data. The difference in vegetation was so extreme that it has been difficult to attribute the more detailed ground data to the refined technology used in 2017; the vegetation growth patterns likely played a significant role in improved fidelity as well.

The third finding was that local topography affects the ability to identify certain types of features. Lidar indicates potential elevation anomalies; additional information may be needed to identify whether feature is natural or human-made. Central Yucatán has

a rolling topography and numerous small bedrock hummocks (Magnoni et al 2016). These hummocks look very similar to house-mounds, and in some cases natural rises were used as the base for a structure. It is very difficult, and in many cases impossible, to distinguish between natural hummocks, elevated house-mounds, and hummocks with superstructures using only the lidar dataset. While ideally human-made structures will have visible corners and aligned walls, time, environmental degradation, and builder investment mean that human-made structures are not as distinct from hummocks as we would like. During ground validation, I found that many potential elevated structures were bedrock hummocks; some of these were the bases for single-foundation braces while others were not.

Finally, the type of archaeological feature sought will also determine the practicality of lidar as a survey and mapping technique. As previously noted, lidar identifies elevation anomalies, which means elevated structures (platforms, pyramids) are highly visible in the dataset, while low-foundation brace structures are very difficult to see. Lidar is more dependable for survey and mapping in more densely occupied areas with elevated and monumental architecture; in more rural areas, where structural remains are primarily quadrangular or circular foundation braces elevated less than 50 centimeters above the ground, lidar is more likely to miss a significant number of structures (Magnoni et al 2016: 244). These features are often difficult to identify through ground survey, so it is unsurprising that ALS's efficacy would not extend to them.

The 2014 lidar dataset was a useful addition to my project, but did not have a significant impact on survey. It became clear early on that the majority of the structures I was identifying were small foundation braces, and that the majority of elevated rises

noted on the hill shade images were natural bedrock hummocks rather than elevated cultural features. The lidar dataset was useful for visualizing the area as a whole in context, noting natural features such as bedrock rises, *rejolladas*, and *aguadas*, and identifying structures in clear-cut areas that were under cultivation during the summer of 2014. I identified 28 structures in the transect area, of which 7 were identifiable through lidar. This number includes 3 structures located in a cleared *milpa* with excellent visibility. Only 25% of structures located through ground survey had been marked on the lidar images. There were also 5 false positives. Other than the Yaxuná epicenter, the percentage of accurately identified structures in the area was typically between 30-40%, with 4-6 false positives on average (Magnoni et al 2016). The lidar dataset did provide an important comprehensive visualization of the survey area, especially in identifying structure proximity to natural features that were likely of use to past occupants of the area. Given that my questions focus on the relationships between leaders (elites) and followers (commoners), it is important to note that using only a lidar dataset rather than ground survey would have resulted in the invisibility of many followers in my analysis. While the material remains of elite "power over" were highly visible in the lidar dataset through urban settlement, monumental architecture, and elevated platforms that served as elite residences, the lidar dataset provided very little information on the existence of settlement beyond the Yaxuná urban epicenter or the remains of people living in smaller pole-and-thatch structures farther from the center of city life.

Our use of lidar demonstrated that it is a powerful complement to ground survey and mapping. When deciding whether or not to use lidar, it is important to consider the type of data desired, the type of technology, the flight and laser variables, and especially

the local conditions – vegetation and topography. These factors can have a significant impact on the fidelity and ultimately usefulness of the dataset. Lidar datasets provide a wider-ranging survey that can help with broader-scale questions of settlement, occupation density, site identification and location, and urbanism. They provide a comprehensive aerial view that is crucial to effectively address questions at a larger scale. Ground survey and mapping are still necessary for addressing finer-grained questions, refining data, ensuring that households and their residents are not erased from the history of the area, and distinguishing certain types of cultural features from natural features. As more archaeological projects access lidar datasets, archaeologists' increasing knowledge and practice will continue to improve its capabilities as a tool for analysis.

Archaeological Evidence of Integration

Thus far, this dissertation has discussed the political imaginary, circulations and connections, distinguishing leaders (those individuals/groups of the regime) and followers, and the distinctions between "power over" and "power to." To apply these concepts in the context of Yaxuná, it is necessary to translate them into archaeological correlates – artifacts and contexts that when present are indicative of power and political dynamics.

In this context, I am defining integration simply, returning to the definition given by Richard Blanton and colleagues. Integration is determined by the number and extent of the connections between different societal units – the pervasiveness of the social imaginaries that encourage circulations between the units. The number and volume of connections between these societal units is indicative of their interconnectedness and therefore their integration. There are various archaeological correlates that provide

insight into integration: spatial organization of settlement, physical circulations of people, barter/trade, goods production, and artifacts relating to gendered production of labor, religious practices, and political affiliation. With this dissertation, I am seeking to place the Maya polity of Yaxuná on a scale of political integration from "tightly integrated" on one end to "tethering" on the other during various moments in its existence under different types of political regimes. While integration is an expansive concept, in this context I am limiting it to political integration, though in the ancient Maya context politics were closely bound with economy and spirituality. When I refer to political integration, I am discussing the extent to which the lives of the majority of Yaxuná's population were affected by regime changes and upheaval within the elite political class – to what extent did this upheaval transform, interrupt, or sever existing circulations of people, goods, ideas, and information between the political class (leaders) and followers. In order to address this question, it is necessary to identify the archaeological correlates for the following: circulations of goods, ideas, people, and information; distinguishing between the elite political regime and the surrounding population and for recognizing the exercise of "power over" and "power to" in ancient Maya societies. Defining these conditions gives insight into how to recognize markers of tighter or loosely bound political integration in Yaxuná's history.

To start with, I will examine the archaeological correlates for circulations of goods, ideas, information, and people. While "goods" and "ideas/information" did not necessarily separate into discrete categories in ancient Maya understandings of the world, they are useful here for general classification. Many archaeological correlates carry information about both; ceramic vessels, for example, provide material information (area

of manufacture, economic exchange, use, production process) and information about ideas (decoration, vessel style, iconography). The table below categorizes circulations into 3 categories: material, ideas and information, and people. Examples of the types of behavior that generate and maintain this type of circulation are then given, followed by the material remains of these behaviors – the data available to archaeologists. Finally, examples of contexts in which this data was produced are offered.

Distinguishing Leaders from Followers through Material Remains

Evaluating political integration requires an understanding of the parties involved; leaders cannot exist without followers. The question then is how to distinguish between these two groups archaeologically; how do we identify members of the regime, people who wielded Political "power over" and distinguish them from the polity's general population, who had access to their own "power to" at Yaxuná? There are multiple lines of evidence to assess when evaluating and classifying the archaeological remains and the people who produced them into these two categories. A leader/follower dichotomy is a simplistic approach; the complex bonds of kinship, gender, language, class, work, and neighborhoods undoubtedly functioned to complicate how people acted in and perceived the political social imaginary. Given the difficulty of accessing these more nuanced considerations at Yaxuná with the evidence available, I will focus on a simple classificatory system that can be clearly demonstrated archaeologically.

The most common Classic Maya regime was the royal court, a civil, ecclesiastical, and hierarchical administration that included the divine ruler and their family, lesser administrators/elites and their families, political advisors and officials,

priests, scribes, entertainers, artisans, specialist producers, retainers, and servants. During the Late and Terminal Classic, political regimes at certain sites may have changed to a council-type organization. In order to identify the extent to which a Classic Maya polity was integrated, it is necessary to establish the archaeological identifiers that distinguish the people within the regime – who exercised power within the royal court or council – from the people living in the polity, accepting and contesting the leadership of the regime's operators.

Given the association of leaders/elites with access to "power over" and followers with access to "power to," one way of distinguishing between leaders and followers is to identify archaeological correlates of "power over" and archaeological correlates of "power to." Based on the political organization of Classic Maya societies, the most useful archaeological correlates of "power over" are monumental architecture, spatial proximity to monumental architecture, a royal court compound, access to prestige goods, use of tribute for the provision of foodstuffs and other utilitarian goods, and access to politically and ritually charged items. Followers can be distinguished from the leaders based on archaeological correlates of their "power to" – dispersed settlement and proximity to the site epicenter, the surrounding landscape (access to land for agriculture and features such as *cenotes*, *rejolladas*, and *aguadas*), and access to utilitarian goods – the basic needs for survival. Evaluating each of these correlates provides important insight into how to distinguish between material remains left by the practice of leadership and the people who occupied leadership roles, and the remains left by followers who made the decision to support or reject the regime, the individuals within it, and its political organization.

Table 5.1: Circulations and Correlates

Circulations	Behavior & Practice	Archaeological Correlates	Examples
Material (Goods)	Production of goods	Ceramics	Areas of manufacture
			Vessel shapes
			Production styles
		Lithics	Quarry sites
			Tool types
	Exchange and Trade	Non-local goods	Economic status
	Construction	Structure volume and size	Labor
	Occupation	Spatial organization	Residential proximity and frequency of interaction
Ideas & Information	Construction	Architectural styles and volume	Cosmograms
		Civic and monumental architecture	Labor
		Urban landscape	
	Performance	Stelae	Artistic and written descriptions of performances and ritual practice
		Performance spaces	Styles (costumes)
			Monumental architecture
	Ritual enactment	Ritual contexts (specific configurations of spaces and artifacts)	Cosmograms
			Ritual sites (caves, cenotes, tombs)
			Iconography
People	Immigration	Strontium-isotope ratios	Burials of individuals who grew up in other areas
	Marriage alliances	Oxygen ratios	Related individuals
	Exchange and trade	Dental morphology	Origin of individuals correlated with sex
	Kinship	DNA analysis	
		Sex and age identification	

One method for distinguishing leaders from followers at many Classic Maya sites is through epigraphy. Texts in the southern lowlands provide a wealth of information to identify members of the political regimes at various sites. Classic Maya regimes are understood based on their descriptions in texts from stelae, monuments, altars, murals, and ceramics. In some cases the information is limited to the divine ruler, *k'uhul ajaw*, of the polity, while at other sites texts record the movements and actions of subsidiary political officials such as the *sajal* and *ajk'uhuun*, and religious officials within the administration (Foias 2013). The texts offer names, birth dates, death dates, accession dates, and other significant actions of the individuals who exercised political power within the polity. Texts are also important because they are one of the few emic sources archaeologists can access – their descriptions and the accompanying images provide some of the most direct information about how Classic Maya political administration functioned. At Yaxuná, however, there are no comprehensible textual records.

Beyond textual records, the most intimate and direct evidence that an individual or group cultivated and exercised "power over" in ancient Maya society comes from burials. Burials placed individual bodies in politically and ritually charged contexts, surrounded by objects whose production and consumption communicated messages about their owner's social identities. The placement of burials in monumental architecture, the size and construction quality of the tombs, the extent and quality of the objects that accompanied the deceased, and the practice of reentering the burial for ritual practices associated with veneration are indicative of the individual's association with "power over". The creation of this type of complex burial context required significant labor,

expenditure of resources, access to specialized goods, and the compliance of skilled artisans, architects, and ritual practitioners.

The political economy – resources whose acquisition, production, and circulation were centrally managed by privileged elite – also assists in distinguishing individuals who exercised "power over" at Classic Maya sites. The diversity of the Maya environment and the dispersal of settlement meant that basic needs, including subsistence, were primarily met locally and independently (Sharer & Traxler 2006). Certain types of pottery, jadeite, obsidian, salt, cacao, cotton, quetzal feathers, marine shell, and other goods were resources confined to specific parts of the Maya area rather than widely available. Systems – of acquisition, circulation, and production – were required to move these resources from one place to another. To a certain extent, there was elite control over these systems and the evaluation of archaeological contexts with these systems in mind can help identify the spaces of those with "power over."

Prestige goods have been identified in several ways; they are most commonly found in larger residences with more architectural specialization, in burials of individuals entombed in monumental architecture, and in artistic depictions of important individuals, such as rulers. They were obtained through long-distance trade and refined through labor-intensive and skilled artisanship. Prestige goods may be more common at sites located near the resource, such as salt at Chunchucmil but are found in more restricted contexts across the rest of the Maya area. It is also important to distinguish between production sites – artisan workshops – that worked with the goods but would not necessarily have access to their use or display in their final form.

Residential structure groups with access to prestige goods are one way of distinguishing space occupied by people with "power over" and people with "power to." The residential structures typically required more labor – they are larger, have specialized architectural features, are more permanent and sturdier (platforms, built with stone), may have required additional labor (beyond the family or kin group) to construct, and are considered to be of a finer architectural quality (faced stones, facades, etc.). Within the structures, there is greater likelihood of finding prestige goods, and at greater volumes than in other residential structures. Some sites have clear royal court compounds – the largest compounds with specialized architecture, significant volumes of prestige goods, and proximity to the site's monumental architecture. At Yaxuná, several residential groups within the epicenter fit the structure criteria and contained prestige goods not found in equal distributions across the rest of the site, but there is not enough evidence to identify a royal court compound.

The presence of monumental architecture and residential proximity to monumental architecture are also signifiers of "power over." They required massive amounts of labor, both physical and mental, that had to be coordinated and controlled over the period of time it took to construct an acropolis, a causeway, or other form of architecture. Monumental architecture had to be designed, the resources acquired, and the construction overseen, as well as coordinated with existing architecture. Residential proximity to monumental architecture reflected "power over" – the association of rulers and leaders with projects they oversaw and for which they took credit. Monumental architecture shaped the urbanism of the Classic Maya site – creating a more densely occupied, commonly used, and visible space to broadcast the regime's power.

Residential proximity to monumental architecture is also indicative of acquisition of subsistence goods, such as foodstuffs, through tribute. The people who occupied the residential groups near monumental architecture did not have space to cultivate the amount of foodstuffs necessary to maintain the group's population. Food for the residents was produced somewhere else, by other individuals, and provided to regime members – possibly as part of the tribute economy.

The clearest indicators of those with "power to" but not "power over" are the ability to self-sufficiently meet basic needs and proximity to the site epicenter. Swidden agriculture required labor, not technology; most family groups were capable of growing their own food, supplemented with hunting and foraging. Water resources are less numerous in the area, so community negotiation may have been required over use of *cenotes*, *aguadas*, and *rejolladas*; there is no evidence currently that such negotiations were formalized or mediated by a centralized authority. While ancient Maya farmers may have distinguished territorial boundaries, there is no evidence that land parceling and distribution was centrally organized or administrated.

The lack of surveillance and transportation technology afforded Classic Maya followers much more independence from their political leaders. While migration decisions would have been mediated by investment in residences and agricultural fields as well as kinship and community ties, migration in the Classic Maya context required far less work than in modern states. Dispersed settlement and the lack of bureaucracy in Classic Maya political administration made tracking and recording an area's residents much less cost-efficient. While it is likely that some sort of census system existed for the purpose of soliciting tribute and labor to sustain the local regime (and regional regime in

some cases), the surveillance technology simply did not exist to record and track the movements of the general population across the Maya area. This trend would accelerate based on distance from the site epicenter; while populations within the site core and in the area immediately around it were easier to track and surveil, the greater the distance from the regime's center, the easier it would be to fly under the regime's radar.

Table 5.2: Power in Archaeological Contexts

Archaeological Signatures	"Power over"	"Power to"
Spatial Organization	Residences in site epicenter	Residences beyond site epicenter
	Proximity to monumental architecture	Greater distance from monumental architecture
	Urban	Rural
Architecture	Larger residences (groups, basal platforms, size)	Smaller residences
	Specialized architectural details (veneers, facades, vaults)	Simpler residences (pole and thatch, foundation braces)
	Burial vaults	
	Proximity to monumental architecture complexes	
	Palaces and administrative complexes	
	Council house	
Economic	Items made from finished/refined prestige goods	Access to basic utilitarian items (limestone, chert, basic pottery)
	Access to non-local goods	Limited or no access to prestige goods
	Participation in long-distance trade networks	
	Attached artisans and workshops	
Epigraphy & Art	Mentioned by name or title in hieroglyphic records	Invisible in hieroglyphic records
	Depicted on stelae, specialty pottery, monuments, or murals	Invisible or anonymous in artistic depictions
	Ritualistic burial contexts in monumental architecture	Simple burial contexts with few accompanying artifacts

Since this dissertation examines the Yaxuná polity over a long period of time, it is important to remember that political organization changed significantly; there was not a stable hereditary regime or even a singular type of government. "Power over" and "power to" operated differently during these times, and likely left different types of archaeological traces. A burial of an individual drawing on symbolic and iconographic references to the maize deity and entombed in monumental architecture suggests one type of government organization; a Puuc-style vaulted masonry superstructure with mat symbols around the basal façade suggests a very different type of political organization. The types and intensity of circulations between leaders and followers vary based on the type of political organization.

Identifying Transformative Events Using Material Remains

Transformative events are moments of upheaval that undermine and overthrow the stability and functioning of the reigning political regime. Events that targeted members of the regime – the people who depended on successful circulations in order to maintain legitimacy and authority– disrupted the creation of shared political identities and experiences. Disruption could take the form of conflict between rulers of 2 different polities, the establishment of a new dynasty, the natural death of a long-time ruler, the establishment of a new polity with a distinct regime under the sponsorship of an existing polity's regime, deposition of a ruler by other elites, or civil war. In certain cases, this disruption leaves archaeologically visible traces in contexts associated with political leaders. Evidence of politically transformative events can be found in epigraphic records, elite burials, monumental architecture, changing access to prestige goods, and evidence

of warfare. Because this dissertation specifically focuses on transformative events that influenced political integration, affecting the polity's regime, the archaeological correlates to identify disruption will be confined to artifacts and contexts from the site epicenter.

At sites with hieroglyphic records, such as Tikal, Copan, and Quirigua, politically transformative events are recorded in varying detail. The overthrow of Copan ruler *Waxaklajuun Ub'aah K'awiil* by Quirigua, for example, is mentioned very briefly and without detail or context in Copan's monumental records. At Quirigua, however, his defeat is described in more detail, involving the capture of two patron deities and the ruler's beheading at Quirigua six days later. Transformative events affecting various regimes are found throughout the records of Calakmul, Yaxchilan, Naranjo, and many other sites in the Maya area. These events include marriages between elites, alliances between different sites, acts of warfare, power transitions (whether hereditary or not), and much more.

Another context offering insight into disruptive events is elite burials. At Yaxuná, which lacks hieroglyphic records, the most compelling evidence of disruption comes from a burial context. As mentioned Burial 24 contains remains of 11 individuals, including men, women, and children. One individual is a mature male wearing a shell and jade headband associated with rulership. At least 4 bodies experienced perimortem violence; all deaths were contemporaneous and several bodies were clearly decapitated (Ambrosino et al 2003; Tiesler et al 2017). This mass grave, likely the resting place of an entire ruling family, is a clear example of a transformative event for the contemporary Yaxuná political regime. It contrasts significantly with Burial 23, which also contains an

individual who served as a ruler in the Yaxuná regime, but who appears to have died of natural causes and whose burial was the site of at least one reentry ritual.

Monumental architecture – its construction history and periods of use – also provides information about transformative events. It is used as one of the hallmarks of social complexity (Hansen 1998; Sharer & Traxler 2006). Rulers sponsored monumental construction projects; they demonstrated the regime's priorities, their ability to mobilize labor, and their access to resources based on the quality of the construction and the complexity of their decoration. Termination and dedication rituals offer information about the significance and association of the architecture and its completion date. In addition to how monumental architecture demonstrated "power over" through the mobilization of large numbers of laborers, it served as a processional set – the space in which large public and smaller but significant private performances took place. The setting was a necessary and important aspect of the theatrical performance, and monumental architecture was sometimes erected to commemorate the significance of particular performances (Houk 2015; Inomata 2006). At some sites, monumental architecture appears to have followed a particular common template, which may have been linked to Mesoamerican cosmological concepts (Ashmore 1991; Houk 2015; Stanton & Freidel 2005). Associations between monumental and residential structures also offer insight into shifting patterns of power throughout the occupation history of the site (Stanton & Freidel 2005). While monumental architecture at Yaxuná during the Late Preclassic and Early Classic contributed to the cult of the divine ruler, emphasizing their supernatural connections, the focus shifted during the Late Classic. Architecture hosting

political leaders or administrators was smaller and the majority of labor seems to be invested in the construction of *Sacbe* 1.

Warfare is another transformative event with archaeological signatures. Hieroglyphic records record instances of warfare, and osteological evidence from burials can provide insight into armed conflicts that took place during an individual's life through the presence of certain perimortem injuries. Beyond hieroglyphic records, archaeological signatures of warfare are commonly restricted to aspects of defense (Ambrosino et al 2003: 110). Some societal impacts of warfare may be archaeologically visible, such as population displacement, economy disruption, and interruptions in monumental architecture programs, but those cannot always be securely attributed to warfare (2003: 112). Constructed fortifications, use of natural barriers, and structure termination patterns are some of the most common archaeological indicators of warfare in the Maya area. Sites with fortification systems include Tikal, Becán, Muralla de León, and Aguateca, as well as other northern lowland centers (Inomata 2004; Kurjack & Andrews 1976; Puleston & Callender 1967; Webster 1976). Ritual termination can be either reverential or desecratory, and desecratory termination struck at the symbolic heart of the polity, signaling the regime's defeat and subjugation. Material signatures of desecratory structure termination include the destruction of architecture such as the defacement of veneers and facades), an overlay of white marl, smashed and scattered ceramics, and ritual sacrifice of items of power (Ambrosino et al 2003: 113). Desecratory deposits are often associated with transitions between chronological phases, stratigraphically and in ceramic types used (2003: 114). At the beginning of the Terminal Classic, people at Yaxuná built several fortification walls around the North Acropolis and

Xkanhá. Termination deposits dating to this period have also been identified across the

site epicenter.

Table 5.3: Transformative Events in Archaeological Contexts

Transformative Event	Impact	Archaeological Signatures
Marriage alliance	Connected 2 regimes, enforcing and strengthening ties between them	Hieroglyphic records (stelae, monuments, and/or fine pottery)
Power transition (hereditary, peaceful)	New leadership and ideas, more stability between regimes	Hieroglyphic record (stelae, monuments, and/or fine pottery)
		Continuation in material culture (access to prestige goods, monumental architecture construction programs)
Power transition (forced)	New power dynamics, likely displacement of most members of former regime, shifting relationships to other polities, potential resistance from general population	Hieroglyphic record
		Disruption in material culture (new pottery types, changes in access to prestige goods)
		Hiatus or unfinished monumental architecture construction programs
Warfare	Displacement, violence, elimination of regime	Defensive fortifications
		Rapid abandonment
		Desecratory termination activities and deposits
		Unfinished monumental architecture program

Given the focus on integration in moments of challenge for the various regimes

that exercised "power over" in Yaxuná throughout its history, it is important to identify

the archaeological patterns that correlate with closer or looser integration of the Yaxuná

polity. To do so, the following case studies offer several examples of how to interpret

levels of integration using patterns of material remains. The archaeological lines of evidence that provided the most information about the polity's level of integration in the wake of transformative events include the movement of people/migration, population fluctuations, settlement organization, construction and maintenance of monumental architecture, and participation in circulation and use of particular goods.

The political regime at each of these sites experienced transformative events that demonstrated the extent to which the broader polity population was integrated into the regime. These case studies will provide site-specific examples of Classic Maya political organization, political integration, impacts of political fragmentation and transformation on elites and commoners, and archaeological correlates for assessing and evaluating political integration under Classic Maya regimes. Classic Maya political organization was variable in size and structure; analysis of the complexities of individual studies prepares us for the specific case of Yaxuná.

Case Studies
Minanha

Minanha is located in the North Vaca Plateau of west-central Belize. It was one of the largest communities in the area during the Late Classic, strategically located on a hill at the junction of four valley passes (Iannone 2010). It is roughly equidistant from Caracol and Naranjo, located approximately 25 km from each site. The area was settled during the Middle and Late Preclassic, became a mid-sized polity during the Classic period, and was gradually depopulated during the Terminal Classic and Early Postclassic (Iannone 2010; Lamoureux-St Hilaire et al 2015). During the Late Classic, it was the

seat of a royal court and likely a frontier community occupying the border zone between Caracol and Naranjo.

The royal court complex includes two large plazas, nine courtyards, several smaller patios, a ball court, a causeway termini shrine, and a multi-level elite residential acropolis group (Iannone 2010: 360). The region around Minanha, including the Contreras Valley area, was densely occupied (Connell 2001; Macrae 2010). Occupation reached its greatest levels with the establishment of the Late Classic Minanha royal court; an extensive agricultural terracing system was also established during this period to support the growing population and sustain the Minanha royal court (Iannone 2010: 361-362).

Caracol and Naranjo were both regional states, sizeable polity capitals with large supporting populations and various subordinate or client centers. Minanha's equidistant location from each capital, its placement on a hill with high visibility, and its borders created by natural features suggest that it was a frontier zone between these two polities. It is unlikely that Minanha was a dependency or buffer state; its fluorescence corresponded with a period of contraction for Caracol and Naranjo. By the time they reemerged as regional powers, Minanha's royal court had been dissolved. The establishment of Minanha as an organized polity with a royal court may have been due to regional balkanization from the power vacuum left by Caracol and Naranjo's withdrawals from regional oversight (Iannone 2010). While it is unlikely that either polity directly established Minanha as a subordinate center, it is clear that Minanha drew inspiration from both. Material culture at Minanha emulated Caracol's program of political and ritual practice (2010: 362). Its epicentral plan resembles those of Naranjo and Caracol,

demonstrating hybridization in its design. There is evidence that the royal court had local affiliations, but also may have been initiated by elite Caracol immigrants (Schwake & Iannone 2001). The regime had enough legitimacy to attract new residents to the area, harness the labor and expertise required for constructing monumental architecture, and implementing agricultural infrastructure. Upon Caracol and Naranjo's return to regional politics, they restored their alliances and tribute networks and reasserted their power in the region. After a century, Minanha's royal court dissolved. Through examining the processes of preservation and abandonment in the epicenter and hinterlands, the persistence of ties between elite rulers and the general population can be evaluated.

In the early ninth century, infilling took place at the royal residential compound of Minanha (Group J). Workers swept the courtyards and floors clean, laid down a thick level of fine sediment to protect the architecture, and contained dry-stone fill within construction pens (Iannone 2010: 363). Care was taken to preserve most of the architectural elements; upper portions of vaults were razed, a stucco frieze on the temple-pyramid was defaced, and two stelae associated with an eastern shrine were broken. Groups L and F were terminated soon after; workers filled them with artifacts such as chipped stone tools and ceramics before collapsing them (Lamoureux-St Hilaire et al 2015: 557). The courtyard was used for the construction of a Terminal Classic residential group, an intentionally planned and smaller space. The residential group was built shortly after the infilling of the royal compound, since it used the architectural proportions of earlier buildings as guides in the construction (Iannone 2010: 363).

The termination of the royal residential compound at Minanha was a transformative event. It was a significant disruption for the regime that embodied the

Minanha polity, the royal court. While thoughtfully and carefully preserved, the evidence of the royal court's existence was also removed from sight and partially covered. In addition, several important visual elements related to the royal court, the stucco frieze and the limestone stelae, were intentionally destroyed. The people who occupied the royal compound likely vacated the area. How did this transformative event affect the general population of the Minanha polity?

The Social Archaeology Research Program, which investigated Minanha, divided the polity into 3 sections: the epicenter, the site-core, and the Contreras Valley hinterlands (Lamoureux-St Hilaire et al 2015). The epicenter was mostly abandoned in early ninth century, but the surrounding areas of the site were still populated (Lamoureux-St Hilaire & Iannone 2012). Two groups in the site-core were abandoned later in the Terminal Classic, marked by the deposition of refuse, construction of a masonry cache, and an intrusive burial (Lamoureux-St Hilaire 2011). Residences in the Contreras Valley were abandoned over a longer period of time, including some that were occupied until the Early Postclassic. A random stratified sample of the Contreras Valley showed that 78% of domestic structures were inhabited during the Late Classic, 54% during the Terminal Classic, and 21% by the Early Postclassic. After the abandonment of the epicenter, inhabitants of several groups in the Contreras Valley carried out new construction projects and increased in population (Lamoureux-St Hilaire et al 2015: 562).

The abandonment of Minanha by the royal court did not trigger an immediate migration or depopulation by the general population. SARP's findings "highlight that the fate of the non-elite was not directly associated to the royal court" (2015: 562). The surrounding population of the area remained for several generations, though may have

shifted through gradual attrition. The earliest groups established in the Contreras Valley were also occupied the longest; their preferential access to resources such as fertile soil and water supported them economically through drought and environmental degradation. The labor involved in constructing the domestic groups and altering the agricultural environment of the valley, as well as the emotive and ideological investments in genealogical space were significant enough to root the occupants in Minanha even in the absence of a royal court (2015: 560).

However, the lack of centralized community in the absence of the Minanha royal court did contribute to gradual population attrition. Other factors were at play as well: the abandonment of inland trade routes, environmental degradation, and regional encroachment by the rejuvenated Caracol and Naranjo states. Minanha's royal court served as a unifying symbol; the last collective political process of the Minanha polity was the infilling and burial of its royal architecture. Without a shared political identity, other community identities came to the fore: family and kinship, linguistic, economic, social, and residential. These horizontal linkages were more enduring than the vertical linkages between residents and the royal court (LeCount & Yaeger 2010: 26). The emphasis on these identities facilitated the fragmentation of shared identity into smaller groups, who over several generations gradually removed themselves spatially from the area. Residential groups with the longest history of occupation stayed beyond the time when many others left. The continued use of royal architecture as a place for nonroyal burials may be a sign of reverence and identity maintenance; on the other hand, it could suggest reclamation of formerly inaccessible space for the population (McAnany et al 2016).
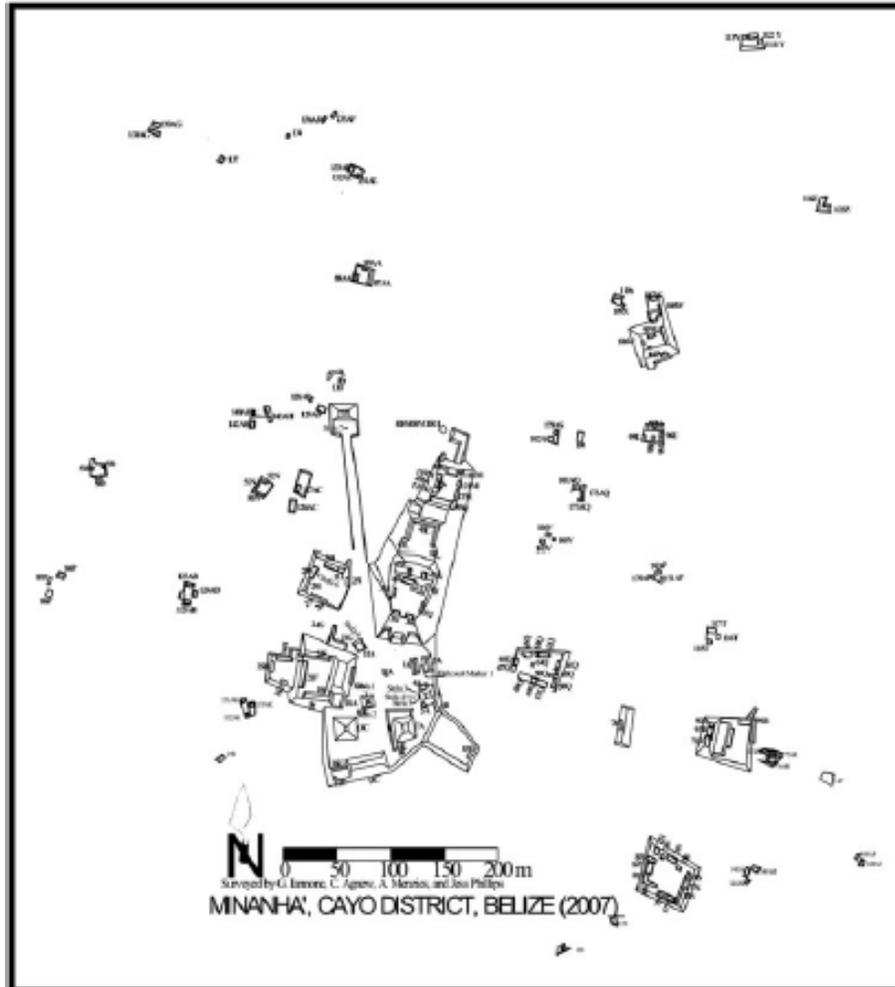
Figure 5.2: Map of Minanha site core (from Iannone 2010: 361)

Archaeologists have argued that the Minanha case study shows that the fates of non-elites and elites were not directly connected (Iannone 2010; Lamoureux-St Hilaire et al 2015). A transformative event for the ruling regime, which removed them from the landscape and destroyed tangible reminders of their existence, did not result in immediate abandonment of the polity's former territory. At Minanha, the brevity of its royal court must also be taken into account; for generations before and several generations after people occupied the area without a royal court. The earlier abandonment of domestic structures that were settled later also suggests different levels of affiliation and identity

with the polity; those who moved into the Contreras Valley during the Late Classic, attracted by the presence of the royal court, were more likely to leave once the royal court dissolved. Long-time residents, on the other hand, had shared residential and family memories of occupation to sustain their investment in and claim to the area. The case of Minanha reminds us again that commoners were not a homogenous group; while some were more integrated and followed the movements of the royal court to and away from Minanha; others were rooted in more persistent, localized identities.

Xunantunich

Xunantunich is a large center in the Upper Belize Valley in western Belize. It is located 13 kilometers from Naranjo, and was incorporated into its multipolity network during the Late Classic (Foias 2013; LeCount & Yaeger 2010). Xunantunich's period of fluorescence, known locally as the Hats' Chaak phase, took place between 670 and 780 CE. The Hats' Chaak phase at Xunantunich corresponded to the resurgence of Naranjo under Lady Six Sky and her son in the late seventh century. The case study of Xunantunich is multiscalar; it provides insight into Xunantunich's integration into the Naranjo network as well as how subsidiary settlements in the hinterlands navigated this integration.

During the Hats' Chaak phase, the Xunantunich site core was rebuilt in the image of Naranjo's core (Ashmore 2010). It included a new palace complex, Plaza A-III, at the north edge of the central group. The palace complex had a small and simple layout, no royal throne, and no artisan workshops (Yaeger 2010). This palace complex differed significantly from most independent royal courts, which include residential quarters for the royal family, facilities for administrative offices, artisan workshops, storage for

tribute goods, and housing for visiting dignitaries (Martin 2001). There were also very

few artifact types usually associated with royal residences in Plaza A-III. Very few Petén

polychrome vessels, greenstone, or other non-local goods were recovered from caches or

burials (LeCount 1999).

There are various incorporation strategies that empires or hegemonies use to

incorporate subject regions into their networks: patron-client relations, alliances, and

annexation (D'Altroy 1992). Incorporation strategies differ in their degree of

coerciveness; the extent to which the dominant polity controls the affairs of the

subordinate (Doyle 1986). Patron-client relations and alliances are less coercive,

informal modes of rule, which rely on collaboration and cooperation between the

dominant polity and its subordinate. Annexation consists of the direct involvement of the

dominant polity in the internal and external political, economic, and social affairs of the

subordinate polity (1986).

Patron-client relations are the loosest and most intermittent form of incorporation

based on exchange relationships; dominant state rulers obtained services and support

from client states in return for gifts. Services were intermittent or one-time events. Gift

exchanges are the primary means of building relationships; there are rarely marriage

alliances, warfare, and foreign symbolism and no tribute payments or restructuring of the

client polities (LeCount & Yaeger 2010). Archaeologically, patron-client relations are

identified by the "presence of a few rare items in elite contexts at a site that otherwise

lacks evidence of extensive interaction or contact" (2010: 39). Since provision of

services was temporary and reimbursed in the form of gifts, both polities maintained their

functional independence.

Alliances could be dependent or independent, although typically both polities

retained some level of political independence (Salmon 1982). Dependent allies were

usually polities that had been subjugated through warfare, which also entailed tribute

payments, marriage alliances, dominant symbolism, and forms of servitude (LeCount &

Yaeger 2010: 33-35). Dependent allies also experienced a reorganization of their

political hierarchy, with a collaborator or trusted subordinate placed as the local ruler

and/or a restructuring of the economy (2010: 35).

Annexation entailed a thorough restructuring of the sociopolitical, economic, and

demographic structures of the subordinate society. Politically, a nonlocal ruler would

establish a new provincial capital, which would impose the dominant polity's ideology

through art and architecture. Previous ruling elites would be stripped of some political,

economic, and social power through redistribution of their assets. New tribute demands

would require a reorganization of the economy to focus on the intensified production of

goods desired by the dominant polity (LeCount & Yaeger 2010).

The influence Naranjo exerted over Xunantunich during the Hats' Chaak phase

suggests that it either annexed Xunantunich or made it a dependent ally. Architecture was

significantly reorganized to mirror Naranjo's layout; a dependent court was established,

and access to sumptuary goods was restricted. The extensive construction during the

Hats' Chaak phase contrasts significantly with the low population density around

Xunantunich during this period; intervention may have included the transfer of a labor

force to Xunantunich to complete the building program (Foias 2013: 82).

The direct incorporation of Xunantunich into the Naranjo network was a

transformative event for the area. The Xunantunich polity capital was transformed to

reflect its relationship to Naranjo, and its local rulers' powers were restricted politically and economically compared to an independent royal court. During this period of transformation, changes at smaller settlements within the Xunantunich polity shed light on their political and economic integration with the Xunantunich capital.

Chaa Creek is located 6 kilometers from Xunantunich. At the beginning of the Hats' Chaak phase, the compounds associated with leaders of the community were abandoned and smaller centers were rebuilt to larger dimensions (Connell 2010). Unlike the previous compounds, these groups did not have their own temple-pyramids. One group was oriented towards Xunantunich and included specialized architectural details and impressive offerings. The economic power of the residents of the reestablished groups may have come from political connections to the Xunantunich ruler rather than local kinship ties (2010). There was continuity in settlement for commoner households, but there were changes to the pottery assemblage. Black-slipped pottery associated specifically with Xunantunich and its hinterland became the most frequent pottery used at Chaa Creek (LeCount 2010). Wealthier or elite groups at Chaa Creek increased their use of this pottery from 35% to 81% during the Hats' Chaak phase. Black-slipped pottery accounted for 65% of pottery used by commoners, rather than 52% previously (Connell 2010). The wealthier or elite groups at Chaa Creek may have been more tightly integrated into the Xunantunich polity during the Hats' Chaak phase than Chaa Creek commoners (Connell 2010; LeCount & Yaeger 2010).

The Xunantunich hinterlands had been settled since the Middle Preclassic. Initial investigations suspected that residents were mostly tied to various civic centers across the hinterlands. Xunantunich's political development during the Hats' Chaak phase

corresponded to increasing commoner settlement in the hinterlands; during the Terminal Classic Tsak' phase population decline and settlement abandonment took place across the board (Robin et al 2010: 318). L. Theodore Neff argues that this increased population shifted power relationships between elites and commoners, and that elites held more political power during the Hats' Chaak phase (2010).

Increased political power for elites manifested in greater ability to coerce or exploit the labor of commoner farmers (Abrams 1995). Lower population levels increased the value of commoners' labor, enabling them negotiate from a higher position of power. Higher population levels, as during the Hats' Chaak phase, lowered the labor value and marginal agricultural productivity. These conditions allowed elites to tie commoners into exploitive power relationships that intensified the integration of a Xunantunich-based polity and increased the local political power of its regime. Lower agricultural marginal productivity resulted in lower labor values, facilitating elites' ability to extract labor for producing surplus and tribute (Neff 2010). Local elites were thus able to intensify alliance relationships with elites at Xunantunich through tribute and displays of wealth. Polychrome ceramic frequency and distribution suggests an increase in feasting events that were the site of political negotiations (2010: 267). Higher population levels led to decreases in labor value, which allowed local and polity-level elites to exercise greater coercive power over the non-elite population of the Xunantunich hinterlands during the Hats' Chaak phase. This increase in political power created a more centralized polity, centered on the regime at Xunantunich.

The Xunantunich case study demonstrates integration on different levels – the integration of a semi-autonomous polity into a multipolity network and the impacts of

this integration on the hinterlands around the now subordinate polity. Artifact analysis such as distribution and frequency of pottery types can be a beneficial tool in identifying interaction and participation in political networks. Regardless of distance from the Xunantunich capital, elites at each settlement in the hinterlands appear to have been more enmeshed in the political network. During the Hats' Chaak period, Xunantunich experienced a transformative event – its incorporation into the Naranjo polity. The area attracted a larger population, perhaps partially through migration into the new dependent polity. Elites at hinterland settlements such as Chaa Creek were linked into Xunantunich's local political network, keeping the small centers across the Upper Belize Valley engaged with a broader political identity through their labor contributions.

Aguateca

Aguateca is at the southern end of the Petexbatún region, atop the same escarpment where other Classic Maya sites such as Dos Pilas, Arroyo de Piedra, and Tamarindito are located. It was primarily occupied during the Late Classic (600-800 CE). The site was not occupied for long; most of the major buildings only have one construction episode (Inomata 2004). The epicenter includes a royal residential compound (palace group), main plaza, causeway, and hastily erected defensive walls built towards the end of the Late Classic (Inomata & Stiver 1998; Inomata et al 2002).

There was little occupation at what became Aguateca during the Preclassic and Early Classic; stelae dating to the time period indicate that the area was a ritual spot within the Tamarindito polity (Inomata 2004). Dos Pilas was founded as the new capital for an intrusive dynasty, possibly from Tikal (Houston 1993). This regime built Aguateca as their second capital in the early eighth century and moved there by the late

eighth century, likely due to military defeat (Demarest 1997; Houston 1993). Inhabitants

dismantled temple-pyramids and other structures at Dos Pilas to build defensive walls.

Some non-elite inhabitants remained at Dos Pilas after the regime's move to Aguateca; it

is likely they made this decision independently of the regime, since they did not show any

care for royal architecture (Demarest 1997; Inomata 2004). Aguateca was built in a more

defensible location. Warfare was endemic in the region and Aguateca's residents

undertook more protective measures. At the end of the Late Classic, they built more than

4 kilometers of defensive walls, the most extensive and complex system in the region

(Inomata 2004; Inomata & Stiver 1998).

The defensive walls focus on the epicenter of the site; their focus is the royal

residential compound. The walls blocked the causeway and reorganized space within the

epicenter of the site (Inomata et al 2002). The defensive walls were likely designed and

overseen by members of the regime – ruler *Tahn Te' K'inich* - or their representatives.

Non-elite labor was used to build the walls, although they only protected the elite

residential area. The continued control over labor (whether economic, ideological, or

coercive) suggests that the threats were external. Unlike at Dos Pilas, where buildings

were dismantled to use in wall construction, the defensive walls at Aguateca connected

with existing structures, which remained intact and in use (Inomata 2004). Most of the

population remained at Aguateca during this time and retained their usual occupancy

patterns: elites within the protected center and non-elites outside the walls (Inomata &

Stiver 1998; Inomata et al 2002). Excavations of the palace group and artifact

distribution suggest the royal family evacuated Aguateca prior to the attack that

decimated it (Inomata et al 2002). The rest of the royal court likely remained at

Aguateca, continuing their jobs of carving, painting codices, and making ritual attire for the ruler (2002: 323).

Aguateca was attacked at the beginning of the ninth century. Fleeing residents from the epicenter left behind valuable goods such as greenstone beads and shell ornaments in their haste (2002: 323). Invaders burned the elite residential area, but left most items in place and conducted few termination rituals. They did not leave many material traces of their time at Aguateca, and likely discouraged its former residents or surrounding populations from entering the area. There are few signs of reoccupation, squatting, or later return for belongings. The invaders did not burn structures outside the Aguateca epicenter, which also had comparatively few artifacts left behind compared to those in the epicenter (2002: 326).
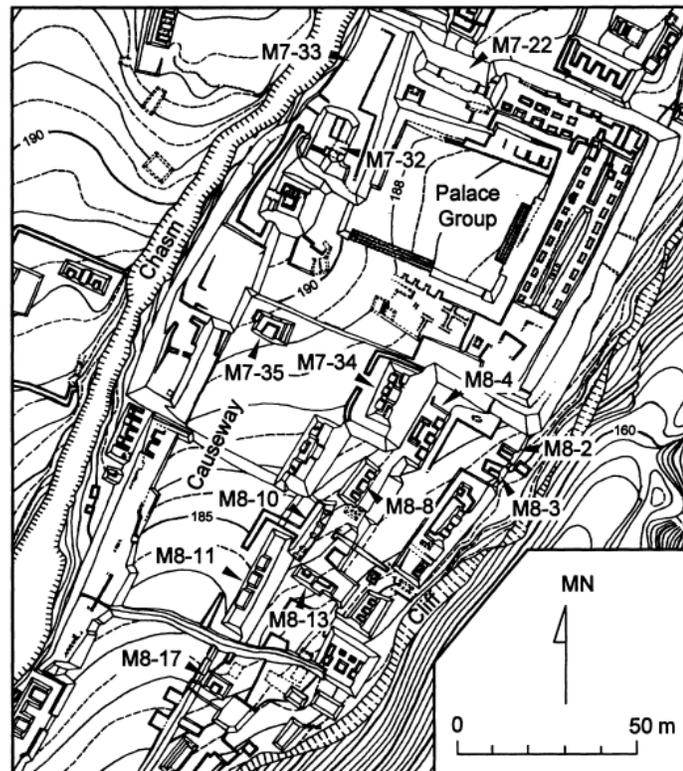
Figure 5.3: Map of the area along the Aguateca causeway that was targeted and burned (from Inomata et al 2002: 308)

Based on the material impacts of invasion, the target was likely the ruler (*Tahn Te' K'inich*), their family, and the royal court (Inomata 2004: 188). Elites may have left or may have been taken away by invaders; their exodus from Aguateca was rapid either way. Non-elite residents had a different experience; their homes were not burned and they seem to have had more time to pack and bring household items with them (2004). Nevertheless, Aguateca was vacated. Non-elites may have left before the attack, suggesting that they were independent of an elite population who needed their numbers in the face of an enemy. Takeshi Inomata suggests however, that the lack of evidence for scavenging or resettling suggests that non-elites were forced from the center by the invaders as well (2004: 189).

The foundation of Aguateca and its later destruction were transformative events for the Dos Pilas regime. Tracking the movement of the non-elite population as compared to the elite population can provide insight into the integration of the two – when the elites were affected, what happened to the non-elite people? Population growth at Aguateca was tied to the migration of the Dos Pilas regime; did they come voluntarily or involuntarily? Both may have been at play; the movement of a royal family would have required the move of the royal court and all those attached, elite or non-elite. While Aguateca was a new capital, the regime had history in its occupation of Dos Pilas; this history may have given the regime enough political power to ideationally or coercively influence members of the non-elite population to change their residence. Building the capital center required significant labor; a subject population was necessary (Inomata 2004). Rather than coercive strategies, elites may have used positive incentives such as "the attractions of religious ceremonies and high culture that elites offered at the

centers…and secured resources, such as water stored in reservoirs…the chance of social promotion through achievements in battle and defense against outsiders" (2004: 190). Whatever pragmatic and emotive ties linked elites and non-elites at Aguateca, they persisted in the face of serious threats and were drawn on to protect the embodiment of the polity – the royal family, royal court, and their residences through the labor for building Aguateca's defensive walls. Despite the targeting of elites and the royal family by invaders, the non-elite residents were also driven from their homes as part of the defeat of the polity. At Dos Pilas, however, a non-elite population remained even after Aguateca was defeated.

Figure 5.6: Map of the Petexbatún region showing the location of Aguateca (from Inomata et al 2002: 307)

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Ceibal

          Ceibal is located on an escarpment overlooking the Pasión River in the southwestern part of the Maya lowlands. As the largest center in the Pasión region, it was enmeshed in local politics. Monumental structures were built at Ceibal as early as the Middle Preclassic, including plazas, platforms, a pyramid, and an E-Group (Inomata et al 2013). During the Late and Terminal Classic, Ceibal experienced multiple periods of political disruption: twice in the eighth century and once in the ninth century before its eventual abandonment during the first half of the tenth century. Excavation data from the royal and elite context in Group D – two courts, buildings around the West Plaza, and a triadic group, demonstrate the chronology of political upheaval at Ceibal.

         Prior to 735 CE, Ceibal was ruled by *Yich'aak Bahlam*; Court A hosted one of the most important elite groups of his reign and perhaps his palace (Bazy & Inomata 2017: 91). After the defeat of Ceibal by the Dos Pilas-Aguateca regime in 735 CE, activity in this area declined noticeably. The dedication of the Ceibal Hieroglyphic Stairway by Dos Pilas ruler *K'awiil Chan Kiinich* in 751 CE indicates that Ceibal may have been incorporated as a dependent ally into the Dos Pilas network (2017: 92). Twenty years later, as Dos Pilas and Aguateca came under threat themselves, new ruler *Ajaw Bot* claimed authority over Ceibal, although he did not use the traditional Ceibal emblem glyph. Construction during his reign was limited, but he likely occupied Court B and dedicated four monuments (Bazy 2013). *Ajaw Bot*'s reign ended shortly after 800 CE based on dated monuments he erected, within a few years of the fall of Aguateca's ruler *Tahn Te' K'inich*.

         At the end of *Ajaw Bot*'s reign, buildings around the West Plaza, the triadic group, and stelae erected by *Ajaw Bot* were burned and destroyed. These areas associated

with his rule were targeted for burning and the deposition of midden materials, similar to termination rituals at Aguateca (Inomata et al 2013: 92). A dedicated stela was broken in half and another half-finished stela was abandoned (Inomata & Triadan 2013). For approximately 30 years following the termination of *Ajaw Bot*'s reign, there were no recorded rulers at Ceibal. Ceramic continuity between the Tepiljote and Bayal phases suggests that the original population continued occupying the area as opposed to foreign invaders (Bazy & Inomata 2017: 93).
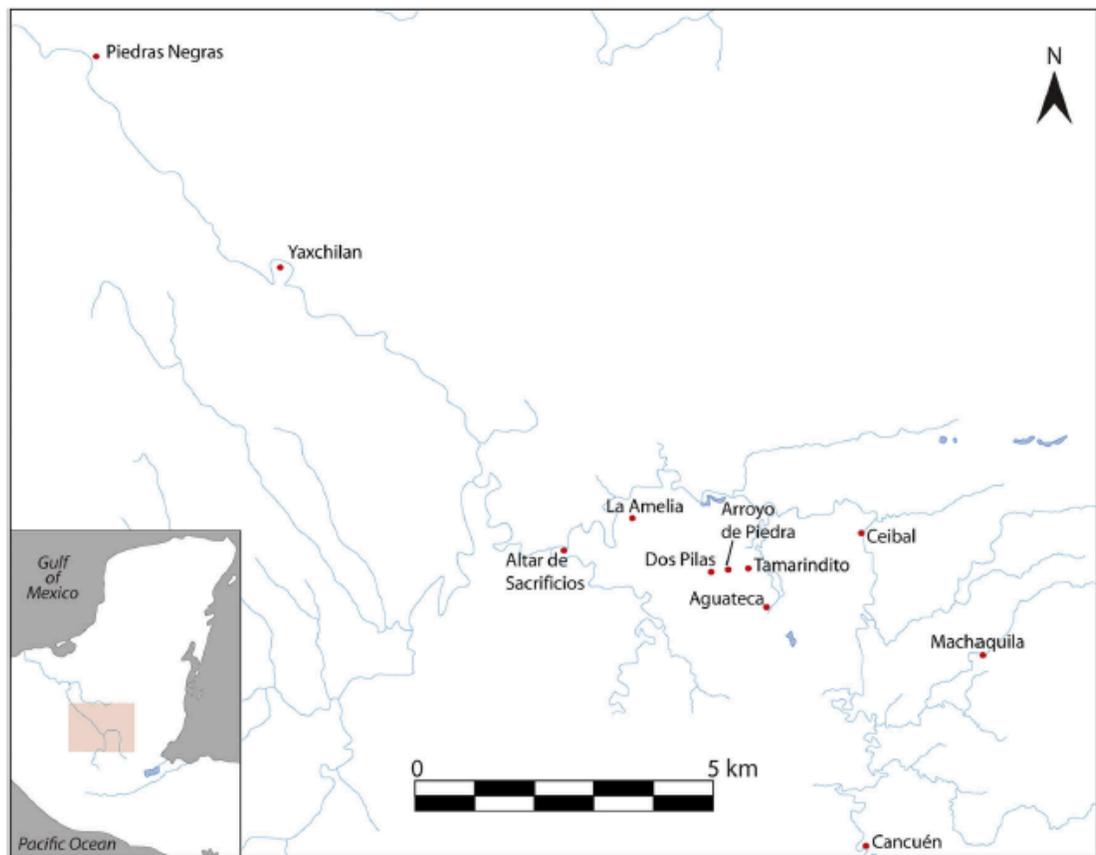
Figure 5.5: Map showing the location of Ceibal in the Pasión-Usumacinta region (from Bazy & Inomata 2017: 83)

The reign of *Wat'ul K'atel* began in 829 CE and signaled a rejuvenation of the previous Ceibal dynasty. Group A and Court A, areas of royal activity prior to *Ajaw Bot*,

were renovated and became the site of elite activity again. *Wat'ul K'atel* used the "original" Ceibal emblem glyph – the three stones of creation – that *Ajaw Bot* had not displayed (Houston & Inomata 2009). The new regime erected numerous monuments but there was little construction activity, and no renovation of any buildings or areas used by *Ajaw Bot*'s regime. This neglect may have signified his continued rejection by the new regime – relegating him out of the history of Ceibal (Bazy & Inomata 2017). Warfare in the region had subsided – Court A was in a less defensible position and monuments did not depict or discuss warfare events (Tourtellot & Gonzalez 2004). The last dated monument at Ceibal is from 889 CE; the surrounding population had left the area within 2-3 generations (by 950 CE) (McAnany et al 2016: 266).
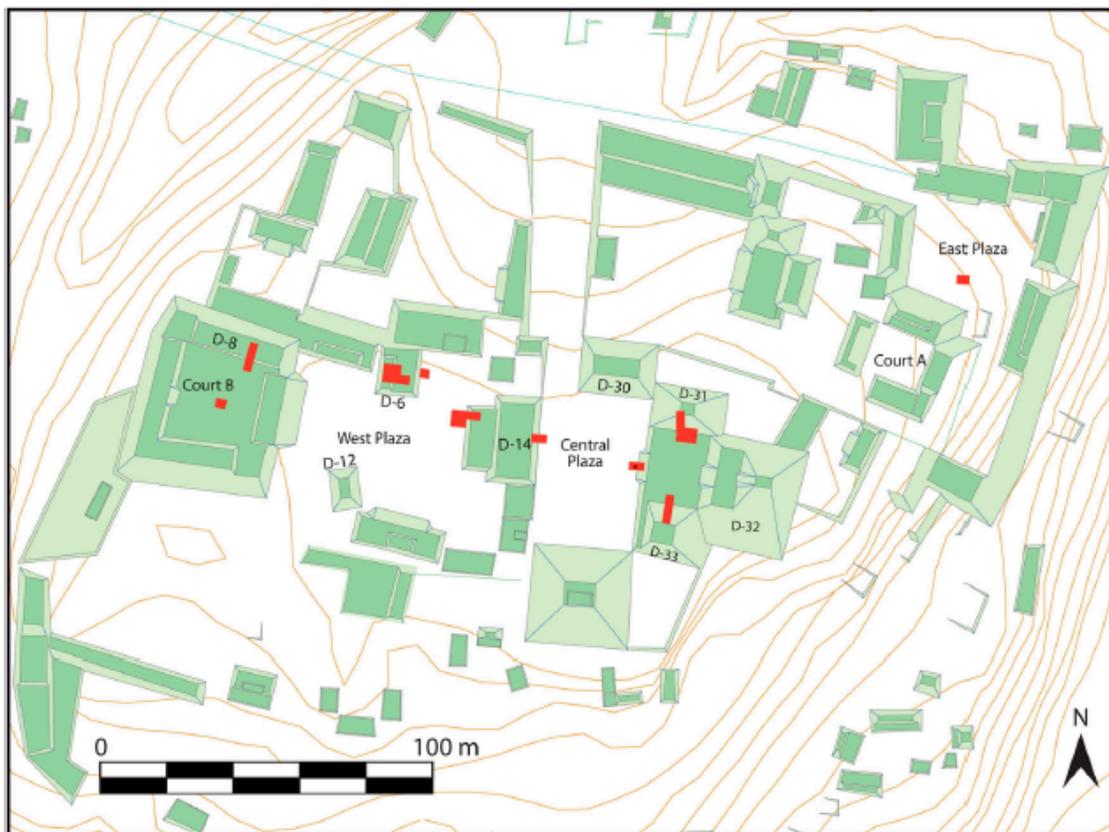
Figure 5.6: Map of Group D of Ceibal epicenter (from Bazy & Inomata 2017: 88)

Ceibal experienced numerous transformative events in the form of political upheaval – defeat in warfare, an outsider king, and the reclamation of the original regime identity. Throughout these processes, the sustaining population maintained stable occupation levels and continuity of occupation – apparently able to maintain day-to-day life in the midst of a conflict-ridden environment and changing political landscape. They apparently accepted *Ajaw Bot* for almost 30 years, but also contributed to the process of erasing his presence and rejuvenating the previous dynasty (or at least a representative). The case of Ceibal raises questions of allegiance, emotive ties, and coercion in the wake of regime change. Did the sustaining population simply "go with the flow" during *Ajaw Bot*'s reign, or did they maintain a shared sense of political identity that adhered to the "true" regime, later restored by *Wat'ul K'atel*?

Summary: Archaeological Lines of Evidence for Transformative Events & Integration

While each case study is distinct, there are shared characteristics that highlight certain aspects of political integration beyond the individual site. Each of these sites was Rank II or below; they were not super-states, but fluctuated in autonomy based on their relationships to surrounding polities. Each experienced archaeologically visible moments of political dissolution and in some cases, regeneration (McAnany et al 2016). Four barometers of the final period of staying (regeneration or maintenance) or leaving (dissolution) in the southern lowlands are: presence of Terminal Classic/Early Postclassic ceramics in a) royal courts and b) sustaining populations' residences; presence and characteristics of termination deposits; presence of unfinished monumental architecture; and date of final monument – if present (2016: 266). When political dissolution did arrive at the end of the Classic period in the southern Maya lowlands, it commonly

manifested in the following ways: residents of the royal court vacated the site due to capture, death, or fleeing to a more secure location; over the next two to three generations, the sustaining population migrated to a different place; while some communities dissolved completely, others reorganized in less hierarchical ways; these attempts at reorganization met with limited success (2016: 270). Patricia McAnany and colleagues suggest, using agent-based modeling, that the primary detachment for sustaining populations was the erasure of a polity's royal court, rather than other demographic and quality of life issues such as land access, weather impacts, and war (2016: 279).

Each case study also offers important insight into circulations – the overlapping experiences that emerge from an exchange of goods, ideas, stories, or rituals that lead to a specific and shared everyday understanding (Ardren 2015; Lee & LiPuma 2002). Circulations are performed and serve as a mechanism of social imaginaries, including politics. They are witnessed and ritualized. Circulations leave a material residue that offers insight into the expectations of membership in a shared social imaginary. This material residue is of particular significance in a cultural context that recognized and celebrated the animate nature of objects. Ancient Maya people performed ceremonies to animate, sustain, and terminate certain material objects (Ardren 2015). The relationship between objects and human agents was different than in contemporary US society, especially given the amount of time, energy, and skill required for the production of goods (McAnany 1995). Humans and objects were much more intimately linked in emic understandings of the social imaginary. The preservation of the Minanha royal court buildings; the targeting of the Aguateca royal court; the destruction of *Ajaw Bot*'s stela

and buildings; and the use of black-slipped pottery at Chaa Creek during the Hats Chaak'

phase each offer insight into circulations shaping the political imaginary in ancient Maya

polities.

The material remains of these common understandings are significant in

identifying the ways in which power was exercised to maintain or dissolve integration of

the political community. At Minanha, the preservation of the royal court's palace

required significant labor and coordination, reflecting a shared understanding of the

palace's significance to the local population, even once its residents had vacated the area.

While *Ajaw Bot* enacted the common practices of royal rulership at Ceibal, establishing a

court and erecting stela, his reign was ultimately rejected by Ceibal's residents. They

took collective action to destroy the materialization of his rulership – also reflecting a

shared understanding of how to effectively dismantle and delegitimize a political ruler.

Although 30 years passed before the reign of *Wat'ul K'atel* began, collective

understanding of Ceibal's history and practices of rulership were established in the

location of his court and the continued abandonment of areas used by the previous ruler.

Elite groups at Chaa Creek appear to have recognized the black-slipped pottery as a key

marker of incorporation into Xunantunich and consequently the Naranjo polity. The

material residue left by circulations – of labor, goods, rituals, and ideology – is

significant data in evaluating political integration (McAnany 2010).

Conclusion

Diversity of evidence and methodology is crucial in crafting a comprehensive and

elaborated argument. For this dissertation, I draw on data collected by myself, Selz

Project archaeologists, and other PIPCY archaeologists to present a robust and broad

picture of the Yaxuná polity from the Preclassic to Terminal Classic. Data collection methods range from lidar and ground survey to test units and excavation to artifact analysis, with significant continuity and consistency across projects and researchers. The archaeological lines of evidence for identifying transformative events and evaluating polity integration will be applied to each transformative event within the Classic period culture history of Yaxuná. The case studies of Aguateca, Ceibal, Minanha, and Xunantunich offer clear examples of how migration and population maintenance; settlement organization; monumental construction programs; and participation in the production, use, and circulation of particular goods provide insight into the number and extent of connections between leaders with "power over" and followers with "power to." In the following chapters, these archaeological lines of evidence will be applied to Yaxuná and evaluated based on the type of transformative event that took place at Yaxuná during the examined time period. Beginning with the Terminal Classic, the available data from each time period will be presented and discussed in relation to the type of transformative event. Because regimes shape the concept and embodiment of polity differently based on their organization, goals, and strategies, each period's regime and transformative event will be discussed separately

Table 5.4: Comparative Case Studies

Site	Event(s)	Archaeological lines of evidence
Minanha	Termination of royal court	Residential abandonment of central elite complex
		Intentional destruction of architectural elements associated with elites and rulership
		Intentional infilling and preservation of structures
		Changes in settlement patterns in the epicenter site core, and hinterlands over the Late and Terminal Classic
Xunantunich	Incorporation into Naranjo polity through annexation or as dependent ally	Rebuilding of site core
		Restricted access to sumptuary goods
		Increased population and settlement in hinterland areas
		Low population density in and immediately around site center
		Extensive monumental construction program
		Access to black-slipped pottery
		Reorganization of local leaderships' residential groups at Chaa Creek
Aguateca	Military attack targeting political regime	Resettlement at Aguateca from Dos Pilas
		Construction of fortifications around palace complex
		Rapid abandonment of palace complex
		Burning of elite residential areas
		Limited evidence of termination rituals
		Limited evidence of scavenging and re-entry
		No evidence of burning or sacking in non-elite residences

Site	Event(s)	Archaeological lines of evidence
Ceibal	Ruler usurpation	Use of different emblem glyph in title
		Use of different spaces and monumental architecture during reign
		Burning, destruction, and termination rituals in spaces used by Ajaw Bot regime
		Use of prior emblem glyph and monumental architecture by Wa'tul K'atel
		Continuity in surrounding settlement as measured with ceramic evidence

Chapter 6

Terminal Classic
750-1150 CE

The urban area referred to as Yaxuná was occupied continuously for over 1,000

years. It is important to recognize that the "polity" of Yaxuná was therefore not a stable,

consistent, or singular entity throughout its existence. At different moments in Yaxuná's

history, there were various types of political organization, leadership, sources of power,

and circulations of ideas, goods, and people taking place. In order to investigate

integration of the polity, it is important to answer (or attempt to answer) the following

questions: What type of political organization existed during this period? Who are the

visible leaders and how are they differentiated from followers? What circulations of

goods, ideas, people, and information are evident? Did the period's transformative event

disrupt, reroute, or terminate those circulations?

The transformative events under investigation took place in various time periods:

Terminal Classic, Late Classic, Early Classic, and Terminal-Late Preclassic. For each

period, it is necessary to define the transformative event and its archaeological signatures,

identify the form of political organization - the regime - in place at Yaxuná at the time of

the event, and provide context for life in the Yaxuná center and the surrounding area.

This background allows me to use the archaeological evidence to elucidate some of the

circulations (political, economic, social, symbolic, and ideological) that existed between

leaders and followers in the urban and surrounding areas. Once these circulations have

been identified, it is possible to examine their maintenance, severance, or transformation

in the aftermath of the period's transformative event. The durability of these circulations,

especially those that connected residents of the surrounding area with the political regime at Yaxuná, gives insight into the level of integration of the Yaxuná polity during that period.

The next four chapters are arranged chronologically according to stratigraphic excavation; a brief overview following more traditional chronological order is given here for orientation purposes. Yaxuná became a polity during the Preclassic, with a centralized government overseeing a regional population. During the Early Classic, Yaxuná participated in the ruling tradition of divine kings; at least two are known from the archaeological evidence. This political independence ended during the Late Classic, as Yaxuná was incorporated into the sphere of another large polity overseen by a divine ruler, that of Cobá. We begin in the Terminal Classic, as the Yaxuná polity emerges from the hegemony of Cobá and new types of political relationships are cultivated across the region.
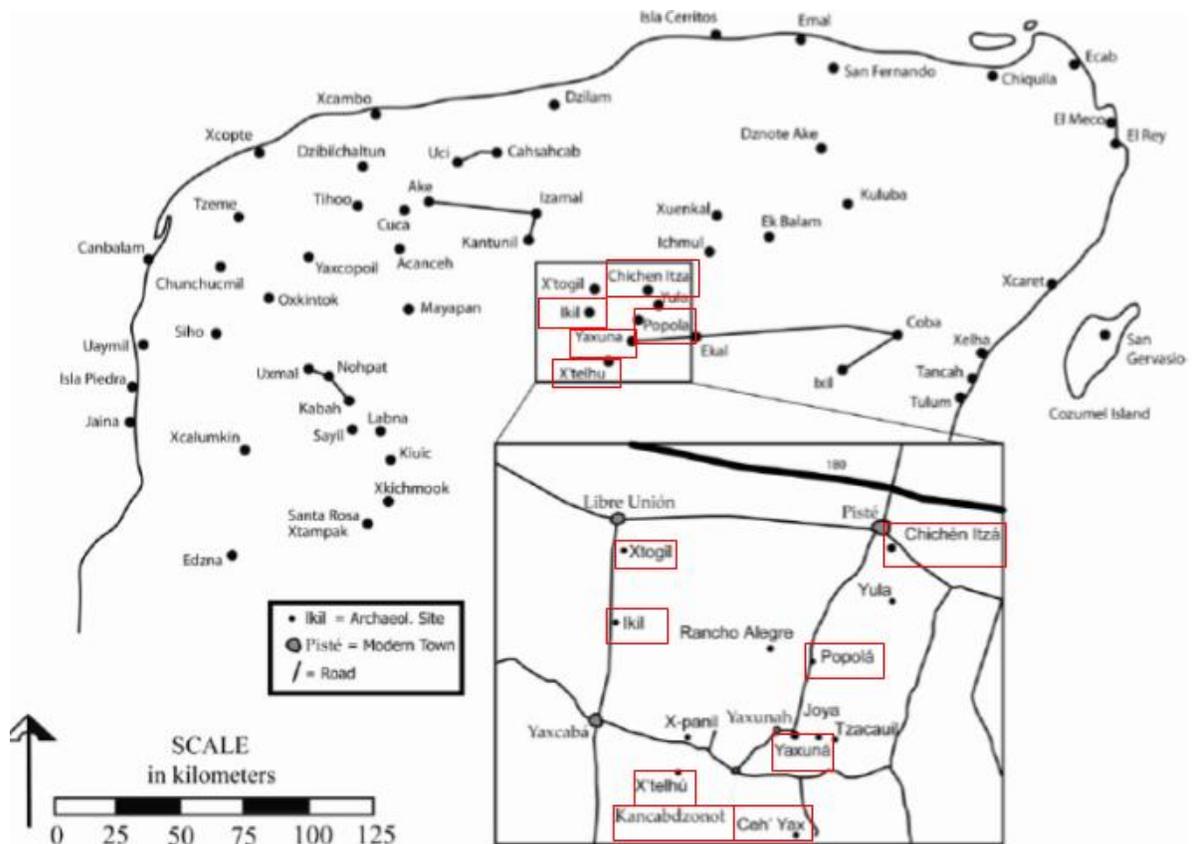
Figure 6.1: Area map highlighting featured sites (adapted from Stanton & Ardren 2020: 2)

The Terminal Classic begins with the revitalization of Yaxuná in the form of investment in monumental architecture and increased settlement. This revitalization was grounded in economic and ideological circulations with the Puuc area, as reflected in the architecture, ceramics, and iconography of the Yaxuná center and the surrounding area. New leaders, with a different type of political regime, oversaw this period at Yaxuná and possibly engaged with emerging leaders at hinterland sites. Economic and ideological exchange with residents of Chichén Itzá is also visible during this period. Between 850 and 1000 CE, Yaxuná experienced a rapid depopulation, a termination of the symbols associated with Terminal Classic rulership, and potential military engagements associated

with its now-dominant northern neighbor. The collapse of the Yaxuná polity in the age of Chichén Itzá is the first transformative moment that will be considered at Yaxuná.

At the beginning of the Terminal Classic, there are numerous lines of evidence supporting greater integration of the surrounding area with the Yaxuná polity, which had adopted regional styles. While most sites in the hinterlands showed few signs of socioeconomic stratification during the Late Classic, structures with iconography and architectural styles drawing on ideas and symbols from the Puuc area were constructed during the Terminal Classic, following the pattern at Yaxuná. These may have been the residences of local leaders deriving authority and legitimacy from their affiliation with Yaxuná, or may have been temporary residences for visiting leaders. Either way, the first part of the Terminal Classic saw extensive circulation of ideas and people within the political imagined community at Yaxuná. People living in the hinterlands, including settlements farther away from the Yaxuná site center, adopted particular styles of architecture and iconography reflecting their participation in a shared political community. These circulations coincided with settlement increases in both the site center and the hinterland area. The urbanization of Chichén Itzá and its leaders' and residents' participation in "International" circulations, however, offered a compelling alternative. Whether due to warfare or gradual migration, followers of the Yaxuná polity eventually voted with their feet, leaving only small hamlets of settlement at the Yaxuná urban center and across the formerly densely populated hinterlands by the second half of the Terminal Classic. Ultimately, the intensified political integration of the early Terminal Classic left Yaxuná's political regime vulnerable to system collapse. While some sense of shared political imaginary persevered through centuries of transformative events, the rise of

Chichén Itzá not only shattered Yaxuná's position in the political landscape, but transformed settlement of the entire area.

The Yaxuná Urban Center during the Terminal Classic

The Terminal Classic at Yaxuná is assigned to 700-1100 CE, though this chapter will focus on the period from 750 to 1050 CE (Stanton et al 2010: 43, 49). The data in this section comes from work done by the Selz Project and other members of PIPCY. The Selz Project divided the Terminal Classic into two periods based on ceramic analysis: Yaxuná IVa and IVb. During Yaxuná IVa use of Arena Red and polychromes ceased, while more diagnostic slatewares emerged and Teabo Red became the distinctive redware (2010: 43). Yaxuná IVa is also characterized by the "full arrival of western Cehpech sphere ceramics" (2010: 43). Several other Yaxuná III types fell out of use, including Chuburna Brown, Maxcanu Buff, and Batres Red (Stanton et al 2020). PIPCY's revision of the ceramic chronology has mostly corresponded with Johnstone's Yaxuná IVa and IVb designations. The *Tsolik* complex covers IVa, from 700-900 CE. The four principal types of PIPCY's *Tsolik* complex are Muna Slate (varieties Cafetoso and Gris), Piste Striated, and Yokat Striated (Stanton & Ardren 2020). The Selz Project argued that while there were a large number of ceramic types and varieties, only a few standardized forms were used. This form restriction could be indicative of a limited number of producers or a heavily elite controlled production system (Stanton et al 2010: 264). While slateware attributes were gradually adopted into local ceramic traditions over the seventh century, by 700-750 CE there was a rapid change in ceramic traditions. Slateware manufacturing techniques and styles locally produced but similar to those found in the Puuc region, replaced previous ceramic styles (Price et al 2018).

Table 6.1: Terminal Classic Tsolik Ceramic Groups, Types and Varieties (adapted from Stanton & Ardren 2020)

Ware	Group	Type: Variety
Fine Gris	Chablekal Gris	Chablekal Gris: Chablekal
Puuc Rojo	Teabo Rojo	Teabo Rojo: Teabo
		Tekax Negro Sobre Rojo: Tekax
Pizarra	Muna Pizarra	Muna Pizarra: Cafetoso
		Muna Pizarra: Gris
		Muna Pizarra: Verdoso
		Muna Especial: Negativo Cafetoso
		Muna Especial: Aplicado Impreso Cafetoso
		Muna Especial: Mediacaña Cafetoso
		Sacalum Negro Sobre Pizarra: Cafetoso
		Sacalum Negro Sobre Pizarra: Gris
		Sacalum Negro Sobre Pizarra: Verdoso
		Sacalum Negro Sobre Pizarra: Morado
		Chumayel Rojo Sobre Pizarra: Cafetoso
		Chumayel Rojo Sobre Pizarra: Gris
		Chumayel Rojo Sobre Pizarra: Verdoso
		Akil Impreso: Cafetoso
		Akil Impreso: Gris
		Dzan Compuesto: Cafetoso
		Tekit Inciso: Cafetoso
		Nohcacab Compuesto: Cafetoso
		Junquillo Impreso: Cafetoso
		Celtum Aplicado: Cafetoso
		Xaya Gubiado Inciso: Cafetoso
		Tabi Gubiado Inciso: Cafetoso
		Dzibalchen Acanalado: Cafetoso
		Dzibalchen Acanalado: Morado
Pizarra Delgada	Ticul Pizarra Delgada	Ticul Pizarra Delgada: Ticul
		Ticul Especial: Estucado
		Xtabentun Acanalado: Xtabentun
		Xul Inciso: Xul
Chichen Sin Engobe	Sisal Sin Engobe	Sisal Sin Engobe: Sisal
		Sisal Especial: Impreso
		Piste Estriado: Piste
	Tohupku	Tohupku Café: Tohupku
		Tohupku Especial: Gubiado-Inciso
	Provincia Pasta Fina	Provincia Pasta Fina: Provincia
	Dzibalche	Dzibalche Anaranjado Bayo: Dzibalche
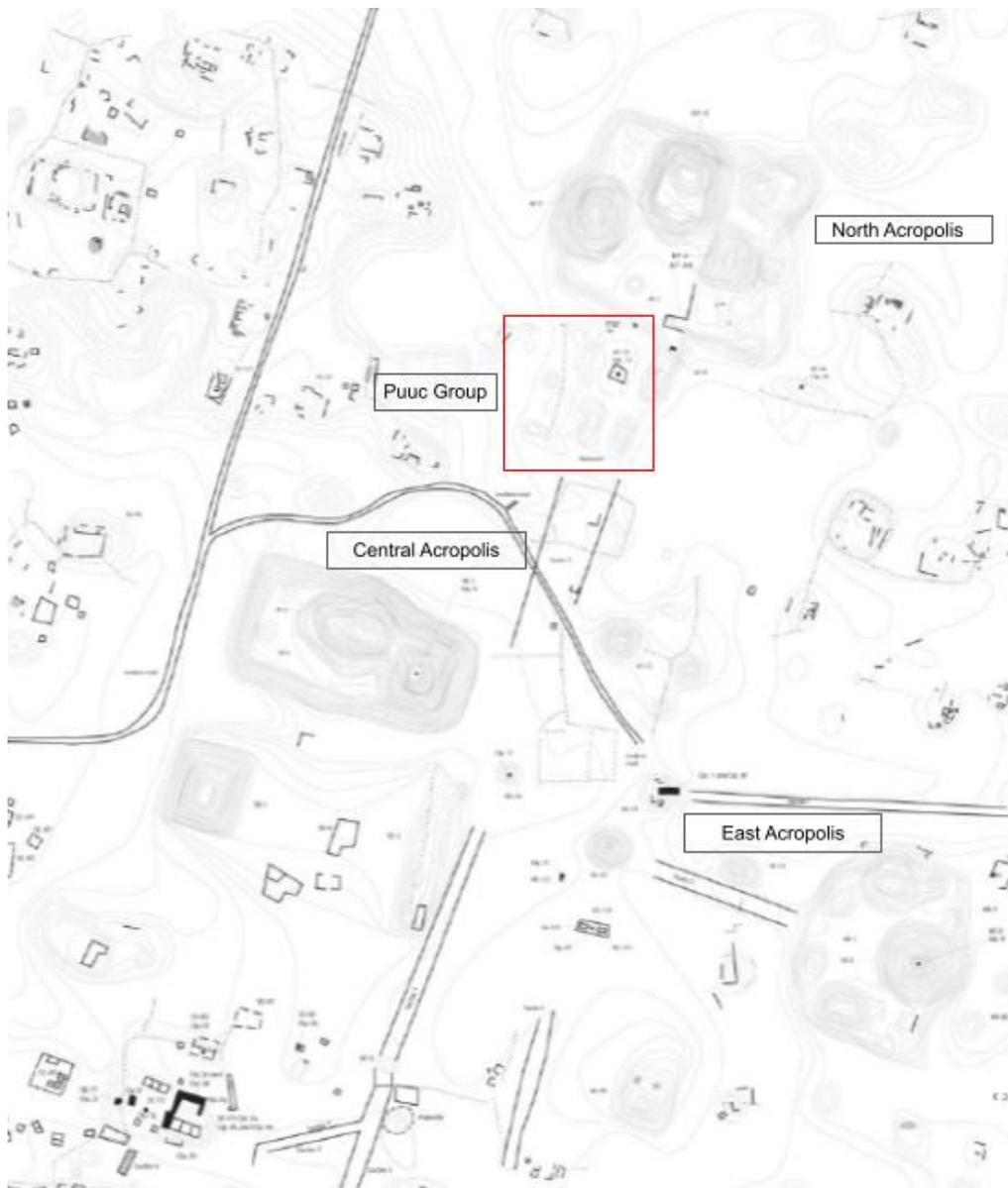
Figure 6.2: Topographic map of Yaxuná site center noting the location of the Early Puuc Ceremonial Complex (adapted from Stanton et al 2010: 11)

Shortly after the death of Lady *K'awiil Ajaw* at Cobá, *Sacbe* 1 was no longer maintained as causeway between the two sites (see next chapter). While a causeway of this size and distance would have been physically present in the landscape, the lack of maintenance meant it would not necessarily be useful for facilitating movement through the area. Although the surface might not have been maintained with marl and gravel, it is

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possible that communities along the *sacbe* each took responsibility for clearing brush from a certain section, much like *ejido* boundaries in contemporary communities. The causeway could have served to connect the smaller communities along its route, rather than facilitating transit between Cobá and Yaxuná. The ceramic changes mentioned above also took place at this time, as well as architectural innovations that suggest Yaxuná's engagement with a new sphere of influence. The monumental core, including the Central Acropolis, East Acropolis, North Acropolis, and the 5E-19 Group were all subject to refurbishment with Puuc-style stone carvings (Stanton et al 2020; Tiesler et al 2017: 39). These refurbishments have been associated with Cehpech-style slatewares.

The Puuc Group at Yaxuná is the clearest example of this influence. The Puuc Group is a polygonal arrangement of structures south of the North Acropolis and west of *Sacbe* 3. Diagnostic elements include ramps and stucco-covered masonry towers. This accretion of architecture began with Early Puuc styles and culminated in Structure 6F-68's fine veneer masonry style (Novelo Rincon 2012; Stanton et al 2010). The mix of architectural techniques suggests that local construction styles were used to create a Puuc aesthetic (Novelo Rincon 2012; Stanton et al 2020; Tiesler et al 2017). The final form of the Puuc Group takes the shape of an Early Puuc Ceremonial Complex (EPCC), a type of administrative center found throughout the Puuc area. The Puuc Group at Yaxuná is the only one outside of the western peninsula. One structure from the Puuc Group was placed on *Sacbe* 3 and later converted into Yaxuná's only ballcourt. The ballcourt followed the *sacbe*'s north-south orientation and may have been a revitalization and reinvestment in the previous sacred geography of the monumental core. The ballgame is associated with resurrection and communication between the supernatural and natural

realms, much like the world tree invoked in earlier spatial organization of monumental

architecture at Yaxuná (Stanton & Freidel 2005).
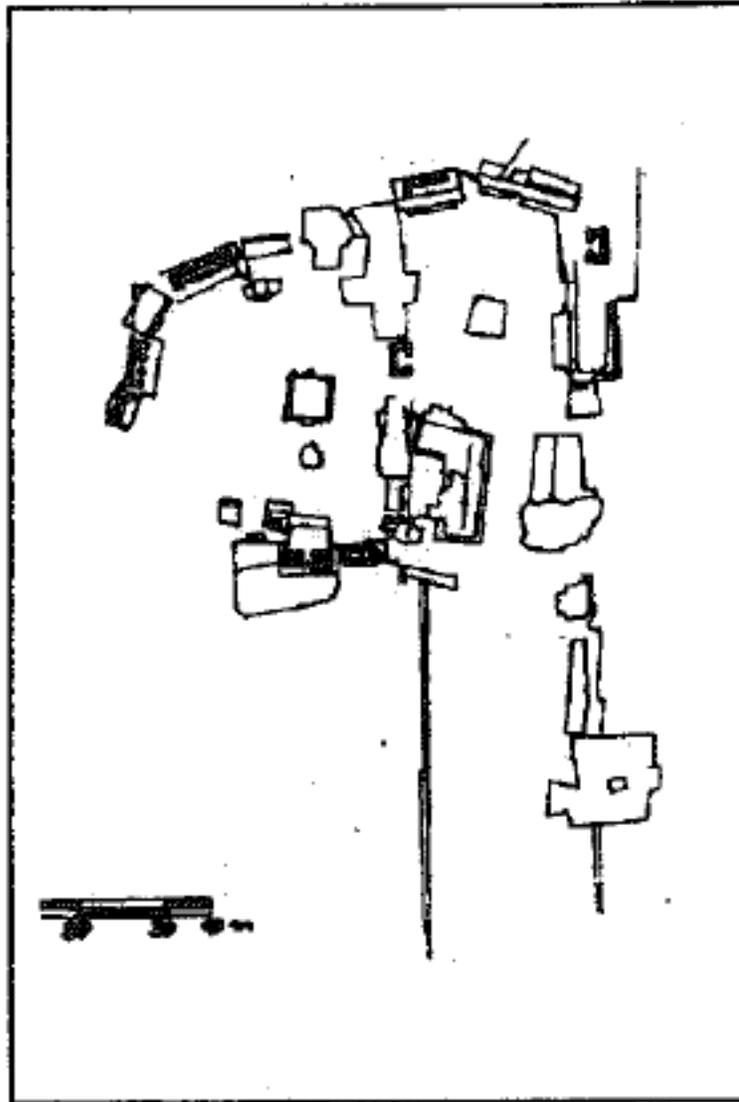
Fig. 2. Grupos Juego de Pelota y Puuc

Figure 6.3: Sketch of the Early Puuc Ceremonial Complex and ballcourt at Yaxuná (from Toscano Hernández & Ortegon Zapata 2003: 444)

The extent of Puuc influence at Yaxuná during the early Terminal Classic is uncertain. While some argue the EPCC denotes administrative control of Yaxuná, including migration from the Puuc area to oversee the local Yaxuná population others are more hesitant to propose direct political control (Novelo Rincon 2012; Stanton et al 2020; Tiesler et al 2017). Analysis of dental morphology and isotopic values of individuals buried at Yaxuná within this time frame do not show close biological connections or suggest migration from the Puuc area (Price et al 2018; Tiesler et al 2017). This lack of biological connection suggests that architectural and ceramic styles may have spread mostly through social and economic processes distinct from migration, such as market economies (Price et al 2018).

During the early Terminal Classic, Yaxuná had perhaps its greatest settlement since the Preclassic. The Selz Project identified numerous Terminal Classic occupations across the site core; structures were built on previously occupied spaces as well as spaces never before utilized (Stanton et al 2010). Simple Terminal Classic residences were variably shaped foundation braces for perishable superstructures, while diagnostic structures had a double wall line or core veneer masonry. On average, Terminal Classic structures investigated by the Selz Project were 40 square meters in size (Shaw 1998; Stanton et al 2010). Many Terminal Classic structures were built regard for earlier geomantic principles of the monumental core. The increase in settlement and changes in spatial organization may have resulted from an influx of new residents (Stanton et al 2010; Tiesler et al 2017).

Renovation projects during the first part of the Terminal Classic focused on monumental architecture important to Yaxuná's history as a regional capital (Tiesler et al

2017: 240). Two new structures in the North Acropolis complex were refurbishments of 6F-3 and 6F-4, the locations of Early Classic royal tombs. The north side of the East Acropolis was also refurbished. Structure 6F-12 and its accompanying plaza are also significant to monumental construction and renovation during the early Terminal Classic. Structure 6F-12 is the focal point of an area ringed with sacred geography; the North Acropolis, the ballcourt, two platforms with broad staircases (possibly serving as bleachers), and a platform with Puuc-style stelae make up each of its four sides. While originally interpreted as a sweatbath, it is now suggested that 6F-12 was a platform for celebrating major calendric ceremonies (Stanton et al 2010; Tiesler et al 2017: 242). Burial 22 was placed in a round pit at the center of the 6F-12 Platform within the open plaza. It consisted of a single fully cremated young male whose body was burned in the pit before it was filled in and covered with a new floor (Tiesler et al 2017: 222-223). This individual may have been sacrificed in a calendric ritual, as demonstrated on polychrome vessels and carved stone monuments at Tikal, Xculoc, Tohcok, Techoh, and Chichén Itzá (2017: 223). Fire rituals are often linked to Central Mexican practices, and evidence of them at Yaxuná indicates the regime's awareness of their practice at Chichén Itzá, Uxmal, and Kabah. Rather than spreading as part of a suite of International culture brought by Chichén Itzá through its conquest of neighboring areas, its presence at Yaxuná suggests complex exchange of ideas and practices over a longer period of time.

Structure 6F-68 is particularly significant given its interpretation as a *popol na* or council house. Built over 6F-4 in the North Acropolis, it has 3 rooms, 5 doorways, and fine veneer masonry associated with Puuc-style architecture (Stanton et al 2010). Like the EPCC, the architectural details suggest a local execution and adaptation of Puuc

architecture. Structure 6F-68 was decorated with columns and a basal molding

containing iconographic elements related to warfare, governance, and creation mythology

(2010: 222). These elements include the mat symbol – *pop* – associated with governance

(2010: 223). In the westernmost room of 6F-68, a crypt containing an individual was

placed, perhaps for dedicatory purposes. Burial 25 consists of a single individual,

tentatively sexed female, who was a young adult at death. The body was placed in an

extended supine position with at least the ceramic base for a mirror, greenstone beads,

and deer bones (Tiesler et al 2017: 179). There were likely more grave goods, but these

were removed when the burial context was disturbed later in the Terminal Classic.
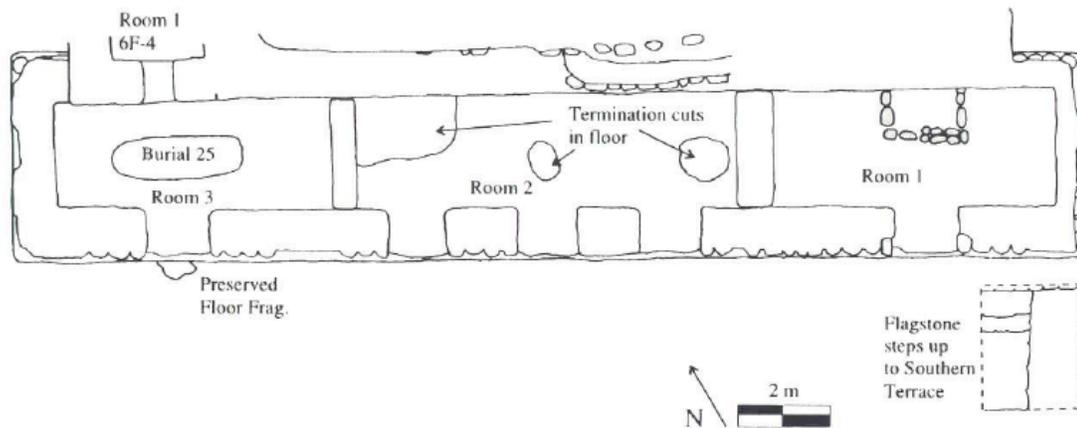
Figure 6.4: A drawing showing the layout of Structure 6F-68 (from Stanton et al 2010: 219)

There were 18 Terminal Classic burials found in 10 structures excavated by the

Selz Project; the number of Terminal Classic mortuary remains identified has since

grown to 24 individuals (Stanton et al 2010; Tiesler et al 2017: 160). Bodies were placed

in subfloor crypts of vertical stone slabs covered by capstones. These deposits were often

paired or multiple; two individuals would be placed in the burial after the first had

skeletonized, sometimes with the addition of mandibles, humeri, or skulls from other individuals (2017). Tiesler and colleagues argue these patterns represent "complex and sequenced ancestral behaviors" such that interment was not solitary, but enmeshed in social relationships (2017: 181). Individuals from the Terminal Classic appear to have been in good health and well-nourished, primarily on maize, beans, and squash as well a few species of terrestrial animals (2017:241). Population growth, at least in the site center, does not appear to have affected access to basic foodstuffs or negatively affected residents' health. While it is clear that settlement increased at Yaxuná during the Terminal Classic, it is unclear where new residents began their lives. Despite the ceramic and architectural data supporting circulations of goods and ideas between Yaxuná and the Puuc region, there is currently no evidence for a similar circulation of people. Isotopic and dental morphological similarities are inconsistent, supporting a common background rather than migration between areas (2017: 240). Burial 25 and its disturbance in Structure 6F-68 will be of particular significance to the Terminal Classic's transformative moment.

The Selz Project assigned the latter half of the Terminal Classic (900-1100 CE) to Yaxuná IVb. Yaxuná IVb is delineated by the introduction of Sotuta ceramics, including Dzitas Slate and Dzibiac Red (Stanton et al 2010). Very small amounts of tradewares such as Silho, Altar Fine Orange, and Peto Cream are also present. PIPCY also defines this period through the increased use of Sotuta slatewares in the *Helep* complex. None of the Sotuta deposits identified at Yaxuná were unmixed; almost all contained Muna Slate, variety Cafetoso in addition to Dzitas (Stanton & Ardren 2020). PIPCY also reported ceramics from Structure 6F-68 with mixed attributes, such as Sotuta-style slips on

Cehpech-style pastes (2020). They proposed that this indicates ceramic producers in central Yucatán were more open to incorporating new ideas, adapting, and experimenting with pottery production. Yokat Striated vanishes during the *Helep* complex, leaving only Piste Striated as the primary unslipped ware surviving from *Tsolik*.

Table 6.2: Terminal Classic Helep Ceramic Groups, Types, and Varieties (adapted from Stanton & Ardren 2020)

Ware	Group	Type: Variety
Peto Crema	Kukula Crema	Xcanchakan Negro Sobre Crema: Xcanchakan
Pizarra	Muna Pizarra	Muna Pizarra: Dzitas
		Muna Pizarra: Cafetoso
		Muna Pizarra: Gris
		Sacalum Negro Sobre Pizarra: Balantun
		Sacalum Negro Sobre Pizarra: Cafetoso
		Sacalum Negro Sobre Pizarra: Gris
		Chumayel Rojo Sobre Pizarra: Balam Canche
		Chumayel Rojo Sobre Pizarra: Cafetoso
		Chumayel Rojo Sobre Pizarra: Gris
		Akil Impreso: Dzitas
		Tekit Inciso: Cafetoso
		Chacmay Inciso: Dzitas
		Chacmay Inciso: Cafetoso
Chichen Rojo	Dzibiac	Dzibiac Rojo: Dzibiac
		Chan Kom Negro Sobre Rojo: Chan Kom
		Xuku Inciso: Xuku
Naranja Fina	Silho	Silho Naranja: Silho
?	Balancan	Balancan Naranja Fina: Balancan
	?	Pasta Fina no Especificada Chorreada
		Pasta Fina no Especificada
Chichen Sin Engobe	Sisal Sin Engobe	Sisal Sin Engobe: Sisal
		Piste Estriado: Piste
		Espita Aplicado: Espita
?	?	Tohil Plomizo: Tohil

The presence of Sotuta ceramics at sites is often associated with control (military or economic) by Chichén Itzá (Stanton & Gallareta Negron 2001). During this period at Yaxuná, it is clear that their northern neighbor had a direct impact on the Yaxuná polity and the lives of residents of the monumental core. The type of impact and its significance continue to be debated. The cremation of Burial 22 and its placement in a plaza complex potentially associated with Central Mexican-influenced fire ceremonies

have been suggested as evidence that ideological influences from Chichén Itzá arrived at Yaxuná before economic or military ones (Stanton et al 2020; Tiesler et al 2017). Burial 22 is not associated with Sotuta complex ceramics and predates their introduction at Yaxuná.

If the interpretation of Burial 22 as a sacrificial participant of a fire-focused ritual holds, it could indicate social and ideological interaction between pre-Sotuta Chichén Itzá (known for its ideological, iconographic, and economic links to Central Mexico) and Yaxuná prior to Yaxuná IVb (Tiesler et al 2017: 241-242). Stanton and colleagues propose that the ubiquity of Cehpech ceramics in Sotuta deposits at the site of Ikil and iconographic similarities between Ikil's Structure 1 and 6F-68 suggest that Yaxuná may have been incorporated into Chichén Itzá's developing economy during Yaxuná IVa (Stanton et al 2020). Sotuta ceramics may have already been available at Yaxuná when 6F-68 was built. The relationship between pre-urban Chichén Itzá and Yaxuná is currently unknown, but proximity dictates that it existed; it might have been Yaxuná's vassal or part of a network of relatively independent smaller sites, given the drastic increase in regional settlement during the Terminal Classic (Stanton et al 2020). During the end of the ninth century, a significant shift in political, economic, and perhaps military power vaulted Chichén Itzá to prominence over other sites in the region.

The Terminal Classic Transformative Event

Between 850 and 1000 CE, events transpired at Yaxuná that resulted in an extreme depopulation of the site's monumental core (Ambrosino et al 2003; Shaw 1998; Stanton et al 2010; Tiesler et al 2017). From a thriving and well-populated center, Yaxuná was reduced to a small village that no longer engaged in monumental

construction and abandoned many structures of significance throughout the monumental core. This depopulation is clearly linked to the rise of Chichén Itzá as a regional center, but whether it was precipitated by military or other means is still up for debate (Ambrosino et al 2003; Stanton et al 2020). The data and interpretations describing this transformative event are from the work of the Selz Project and other members of PIPCY.

Figure 6.5: Perimeter wall around the North Acropolis
(from Stanton et al 2010: 250)

During this period, laborers built a perimeter wall around the North Acropolis (Ambrosino 2001; Ambrosino et al 2003; Stanton et al 2010). It was constructed in segments to close off open areas between structures, and may have incorporated the large pyramidal structures of the North Acropolis as part of the fortification. A small one-room structure on the south side may have served as a gatehouse (Stanton et al 2010: 251). This wall has been taken as evidence that there was violent conflict between Chichén Itzá and Yaxuná, and that residents of Yaxuná attempted to defend themselves and their polity's center of political and religious power. The remains of Structure 6F-68 and re-entry of Burial 25 are also argued to support this claim (Ambrosino et al 2003; Suhler 1996).

Structure 6F-68, the potential council house of the early Terminal Classic, was severely damaged during this period. Vault capstones and doorjambs in all 3 rooms were removed; the removal of the jambs caused the collapse of the lintels (Stanton et al 2010: 229). Cuts were placed in the floors of each room and an intense fire burned the entire floor in Room 3 and the northern wall of Room 2 (2010: 228). The floor cuts in Room 3 were used to access Burial 25. The middle capstone of the crypt, set over the pelvis of the burial, was removed. The skull and most likely additional grave goods were removed, which resulted in the disarticulation of the upper torso while the lower extremities remained intact (Tiesler et al 2017: 279). After the removal, floor material and capstones were replaced in the crypt (Stanton et al 2010). Numerous artifacts were layered with architectural debris, including smashed ceramics, obsidian blades, animal bones, shell, and other objects. Many of the smashed ceramics were able to be

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reconstructed, including some smashed in place, others split in half before deposition, and others that were broken and scattered throughout the rooms and exterior of Structure 6F-68 (2010: 230). These smashed ceramics were mixed deposits of Cehpech and Sotuta types, including *molcajetes*. Many of the vessels were for serving and food preparation (Stanton & Gallareta Negron 2001).

Originally, the damage to Structure 6F-68, the burning, deposition of artifacts, and burial re-entry were interpreted as violent acts against Yaxuná's rulers (Ambrosino 2001; Ambrosino et al 2003; Stanton et al 2010). It was posited that military invaders from Chichén Itzá attacked the site and ritually terminated Structure 6F-68, desecrating its ancestral burial in the process and leaving Sotuta ceramics in the termination deposits as their calling card. Chichén Itzá's size, emphasis on military iconography, and domination of the region support the argument that Yaxuná's depopulation was a violent process. However, recent research has also led to the consideration that the termination of Structure 6F-68 and Burial 23 were carried out by residents of Yaxuná and members of that polity as they prepared to migrate from the site, whether to Chichén Itzá or another area (Stanton et al 2020b; Tiesler et al 2017). Sotuta and Cehpech ceramics are found in mixed contexts at Yaxuná, Ikil, Popolá-Puus Sil, and other parts of the area. The Sotuta ceramics were accessible to area residents, not necessarily brought by a Chichén Itzá invading force. The Burial 25 skull could have been removed to transport a lineage ancestor in the process of migrating from Yaxuná, perhaps to Chichén Itzá (Stanton et al 2020b; Tiesler et al 2017: 248-249). In addition to Structure 6F-68, Sotuta ceramics were found at refurbished structures in the Puuc group, which served as residences at the end of the Terminal Classic (Toscano Hernández & Ortegon Zapata 2003). This reduced

population may have been responsible for agricultural production to feed Chichén Itzá's urban population (Tiesler et al 2017: 41). Structure 6F-9 is a small vaulted building on the southern edge of the North Acropolis. It may have served as an administrative facility for overseeing the remaining population (Suhler 1996; Tiesler et al 2017).

The transformative events of the Terminal Classic resulted in the depopulation of the Yaxuná site center. What was once an urban capital became at most a small village with scant evidence of occupation. Settlement shrunk to one area of the site core. Residents renovated smaller platforms in the Puuc Group into domestic structures and built a small vaulted building off the south side of the North Acropolis – Structure 6F-9 (Stanton et al 2010; Suhler 1996; Tiesler et al 2017). Researchers have suggested that the village was one of many small hamlets that produced surplus foodstuffs for residents of the Chichén Itzá urban center, and that Structure 6F-9 was an administrative building for coordinating the intake and distribution of products (Suhler 1996; Toscano Hernández & Ortegon Zapata 2003).

Thus far, the only Postclassic structures identified at Yaxuná are simple C-shaped shrines with perishable superstructures (Stanton et al 2010). These structures are classified as part of the East Coast tradition (2010: 265). Chen Mul incensarios are the most common ceramic type, but occupational debris from Structure 6F-9 include ceramics from Mayapán Red and Mayapán Unslipped, demonstrating Yaxuná's artifactual affiliation with the Hocaba-Tases sphere (Stanton & Ardren 2020). Almost all monumental architecture investigated by the Selz Project contained small amounts of Postclassic ceramics at their summits (Stanton et al 2010). At least one area outside of the site center had a similar scattering of Postclassic ceramics, specifically incensario wares.

Structure 11 in Area 4 of Xkanhá, which was an Early Classic temple ritually terminated during the Terminal Classic, had numerous numbers of Postclassic incensario ceramics in its summit room (Ardren 1997: 139). Yaxuná may have continued to occupy a liminal zone between eastern and western spheres, given its western ceramic and eastern architecture affinities (Stanton et al 2010). Possible explanations include mobile populations temporarily occupying the area or offerings related to boundary maintenance. The altars may have been part of memory rituals or served as hunting shrines (Ardren 2015; Tiesler et al 2017).

Chichén Itzá and the Terminal Classic Political Landscape

As with Cobá during the Late Classic, the latter half of the Terminal Classic at Yaxuná was irrevocably shaped by another polity – Chichén Itzá. Just 23 kilometers north of Yaxuná, it developed during the Late Classic. Its early settlement, 600-800 CE, may have been a pre-Sotuta, Cehpech-using population (Perez de Heredia 2012; Stanton et al 2020b; Tiesler et al 2017). Chichén Itzá's early occupation is poorly known due to the extent of occupation through the rest of the Terminal Classic. The Itzá settled the area as newcomers to central Yucatán, whose military and economic prowess connected communities across Mesoamerica and likely controlled much of Yucatán through a council-style government. Situated north of Yaxuná, it controlled coastal ports such as Emal and Isla Cerritos, which were crucial to its economic success and far-flung trade network. From the mid-ninth century through the end of the Terminal Classic, Chichén Itzá was a dominant cosmopolitan urban center. In addition to the Puuc-style cluster of buildings known as Old Chichén, monumental constructions such as the Castillo, the Caracol, and the massive ballcourt indicate the government's ability to harness and direct

labor. Chichén Itzá is also intimately connected to the Sotuta ceramic complex, and the

presence of Sotuta ceramics at other sites is often taken for economic and/or military

influence by Chichén Itzá (Stanton & Gallareta Negron 2001). Its proximity to Yaxuná

created seismic shifts in local power relations as it grew in power and prestige.
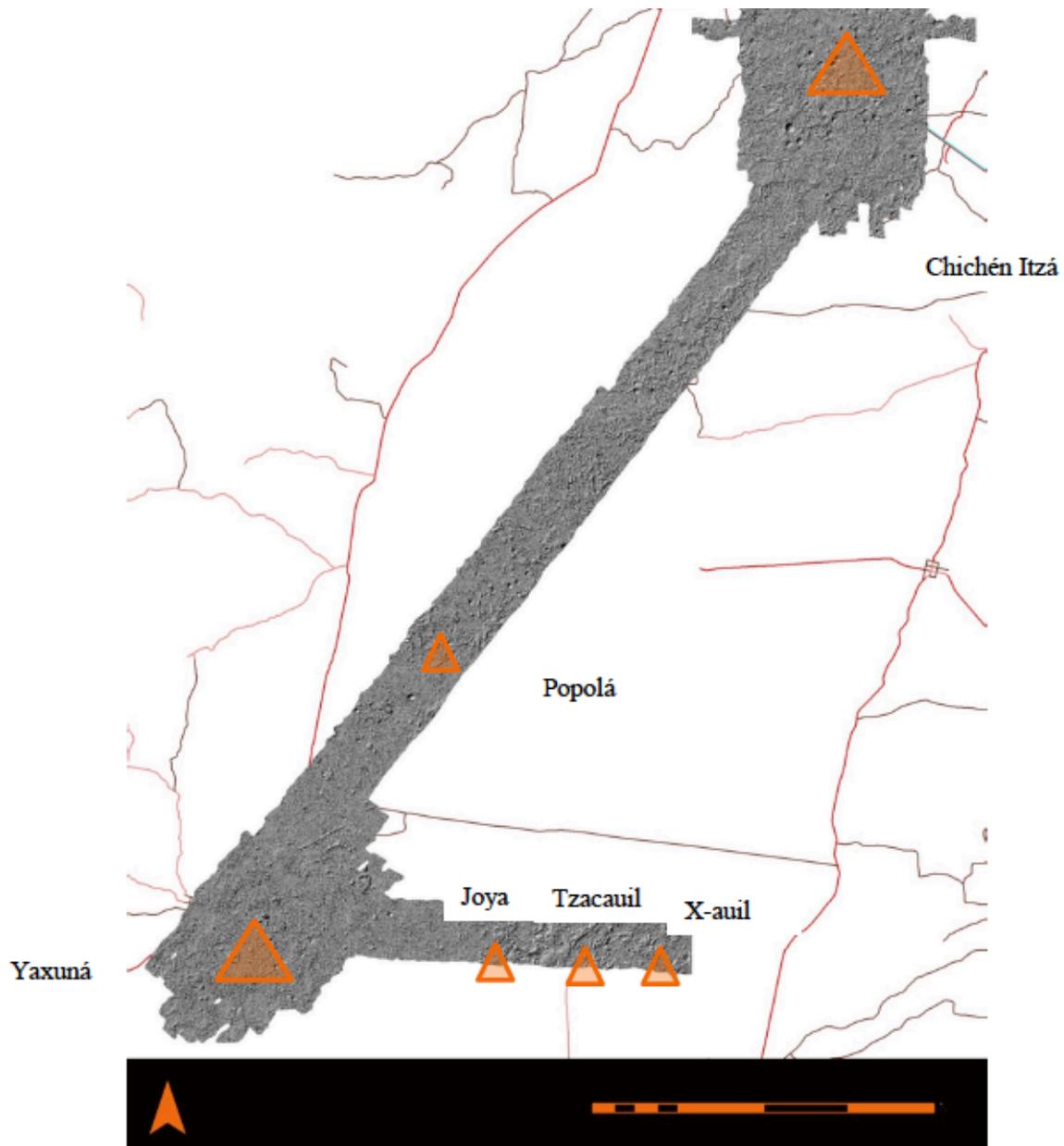
Figure 6.6: Hillshade of the transect area between Yaxuná and Chichén Itzá, produced by lidar data from 2014 (from Stanton & Ardren 2020: 8)

Much of the area around Yaxuná followed a specific pattern of settlement, with occupation noted in the Preclassic, Late Classic, and Terminal Classic periods. Lourdes Toscano Hernández's survey along the Piste-Yaxuná highway reported that most areas were occupied during two periods – the Late Preclassic and the Late-Terminal Classic (Stanton & Magnoni 2013: 43). Other settlement clusters such as Tzacauil and Joya appear to follow a similar pattern. Chichén Itzá's early settlement history follows this pattern; there is evidence of a Preclassic population, followed by abandonment during the Early Classic (Perez de Heredia & Biro 2017). The Late and Terminal Classic chronology of Chichén Itzá is hotly debated, and the traditional focus on the monumental center has also skewed understandings of the overall history of the site. A brief description of the proposed site history will be offered here for context; what is significant for this dissertation is that Chichén Itzá became a powerful and attractive polity whose circulations of goods, ideas, and people were rooted in broader exchange networks. For the first time, a polity with a community on scale with Yaxuná developed in the immediate area.

Eduardo Perez de Heredia defines the Late Classic ceramic complex at Chichén Itzá as Yabnal-Motul, with use of Early Say Slate ceramics. He claims the high quantities of these ceramic types and their widespread area support a dense population, long period of production, or a mix of both (Perez de Heredia & Biro 2017: 70). Architecture associated with Yabnal ceramics includes terraces from the Xtoloc Cenote area and terraces from the Temple of the Three Lintels, the Initial Series Group, and the Great Terrace. House of the Stuccoes and Platform 1 of the Monjas are also thought to date to this period. The lack of monumental architecture and hieroglyphic inscriptions during this

period have led to the interpretation of Chichén Itzá as a secondary site, perhaps allied with Yaxuná. Some of the dispute comes from different definitions of the Late Classic and Terminal Classic; Perez de Heredia defines the Late Classic at Chichén Itzá from 600-830 CE, while PIPCY uses the Terminal Classic designation for the period 700-900 CE. The period under discussion, 700-850 CE, fits within PIPCY's Tsolik complex and the Yabnal complex proposed for Chichén Itzá. Multiple archaeologists have proposed that Chichén Itzá's Yabnal-era settlement was allied with and perhaps subordinated to Yaxuná; this suggestion rests primarily on the proximity of the two sites and Yaxuná's larger population and construction of monumental architecture during this period. There is currently little to no evidence of circulations between populations of the two sites that elucidate political interaction.

Part of the dispute over Chichén Itzá's history is uncertainty over the dates of hieroglyphic inscriptions; securely dated inscriptions all fall within a 30-year range (867-897 CE), while some argue that there are two dating before 860 CE and four that date after 897 CE (Volta et al 2017: 46). The other issue relates to ceramic analysis and the question of distinctions between Cehpech and Sotuta ceramics. While initially understood as entirely temporally distinct, partial and total overlap models were also suggested. The current interpretation holds that utilitarian Sotuta types are mostly local variants of Cehpech whose differences are accounted for by kinds of clay and firing conditions (Johnson 2012; Volta et al 2017: 48). Proponents argue that Sotuta is useful for identifying decorative modes, forms, and types that are of foreign inspiration or origin. This complex is temporally later than the Cehpech pottery of the Puuc region and its regional variants. In this model, the circulations between consumers and producers of

"foreign styles" are economically distinct from the circulations between producers and consumers of utilitarian pottery accessible through regional exchange. The discussion is further complicated by the disagreement over whether a Cehpech phase is fully present at Chichén Itzá, or if the minimal contexts associated with it should be assigned to the end of the Yabnal complex.

Either at the end of the Yabnal phase or within the Huuntuun-Cehpech phase, people at Chichén Itzá built Puuc-style constructions including Iglesia, House of the Phalli, the central part of the Akab Dzib, and Platform 2 of the Monjas complex (Perez de Heredia & Biro 2017: 76-77). Again, most of these constructions are located in the area near the Xtoloc Cenote. Post 860 CE, another period of Puuc-style construction is associated with the ruler *K'ak' Upakal*. Significant architecture includes the Casa Colorada, House of the Seven Lintels, extension of Akab Dzib, and the Temple of the Three Lintels. These buildings combine semi-veneer block walls with decorative forms executed in a mosaic technique. During this period, *K'ak' Upakal* was the paramount ruler of the Chichén Itzá polity. He held the title of *k'uhul ajaw* and was the only individual mentioned on inscriptions outside of Chichén Itzá, representing the polity at Halakal and Yula (2017: 81). The discourse of the hieroglyphic texts is similar to contemporaneous Puuc inscriptions, focusing on rituals and dedicating buildings as the dwellings of deities and nobles, although Chichén Itzá inscriptions also discuss *K'ak' Upakal*'s geneaology and governmental organization.

The majority of hieroglyphic texts date to the period of *K'ak' Upakal*'s rule; International-style constructions and Sotuta ceramics define the following period. The Osario has two records from 998 and possibly one from 1007; otherwise there are no

dates for International-style structures (Volta et al 2017: 50). Cobá, Yaxuná, and Ek Balam are no longer peer polities by the end of *K'ak' Upakal*'s reign at Chichén Itzá; the only other powerful kingdom in the northern lowlands is the regime of *K'ak' Sip Chan Chahk* at Uxmal (Perez de Heredia & Biro 2017: 89). The first half of the tenth century corresponds to a period of drought and major subsistence failure across the northern lowlands region. The second half of the tenth century shows new and intensive circulations of goods and ideas between residents (particularly elites) of Chichén Itzá and other parts of Mesoamerica, including Central Mexico (Volta et al 2017: 52-53). These circulations were facilitated by Chichén Itzá's affiliation with related sites linked to coastal ports and manifested in new architectural forms, ceramic styles, artistic expression, writing, and religious/ritual practices. By the end of *K'ak' Upakal*'s rule, the Yaxuná site was largely depopulated. Other sites, such as Xuenkal, were also gradually depopulated (Vallejo & Manahan 2014). The growth of Chichén Itzá clearly affected the polity and residential community of Yaxuná. Did it similarly affect the communities around Yaxuná, which shared circulations of goods, ideas, and people with the residents of the site center and their leaders?

The Terminal Classic Hinterlands

I will begin this section with the data and discussion from the areas I personally investigated: a site referred to as Kopchen by Popola residents, surrounding a *rejollada* with an *albarrada*, and the transect between Yaxuná and Popolá-Puus Sil. The interpretations and arguments presented here come from the survey, Maler drawings, observation, test unit excavation, and surface collection conducted in these areas. I

expand this discussion through drawing on investigations at other hinterland communities by PIPCY archaeologists, with some reference to excavations I conducted at Ikil. Maler drawings and photos of all identified structures are available in Appendix 1. Complete survey and test unit descriptions are available in PIPCY informes (Stanton & Magnoni 2014; Stanton & Magnoni 2016; Stanton & Ardren 2020).
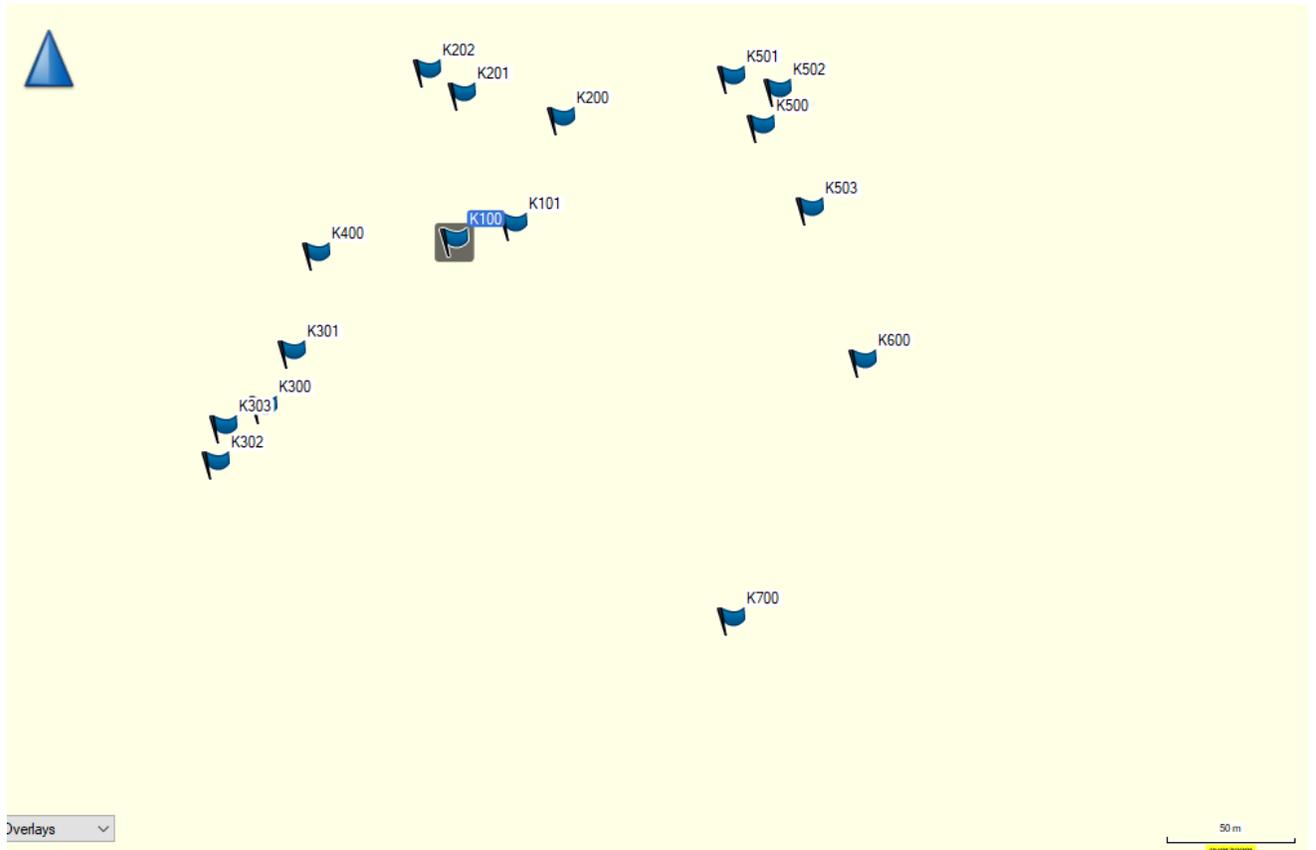
Figure 6.7: Structures surveyed at Kopchen (Scale = 50 meters)

Kopchen

Kopchen is the name local residents use for a *rejollada* north of Popolá. During the 2017 field season, local workers and I completed an opportunistic survey of the area (which has several maintained paths for access) to record locations of structures using GPS, produce Maler drawings, and conduct surface collection. The majority of ceramics

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collected dated to the Terminal Classic. Most of the platforms recorded at Kopchen were large (area greater than 10 meters squared) and high (1-2 meters height). In addition to the pre-contact structures at Kopchen, there are *albarradas* throughout the site. They may have once made up one continuous *albarrada*, but currently consist of shorter lengths (up to 12-15 meters long) in various locations. Several of these segments are built across pre-contact structures, dividing them. Several segments run along the bases of pre-contact structures. Several segments appear to have used stone removed from pre-contact structures in their construction. One segment runs along the edge of the *rejollada* itself. Within the *rejollada* is a stone well with a conduit for water leading into a trough.

K100 is between 10-15 meters southwest of the *rejollada* opening. It is constructed onto a bedrock *altía*, which makes up the southern half of the platform. K100 is bisected by an *albarrada*, which runs on a northwest/southeast axis across K100. The *albarrada* effectively divides K100 between the constructed platform and the natural bedrock *altía*. However, the southeast area of K100 (south of the *albarrada*) consists of a quadrangular superstructure with two possible rooms at its southern edge. This superstructure has a higher elevation than the platform on the other side of the *albarrada*, but the *albarrada* may have divided this superstructure in two. K100 is a mix of worked and unworked stones and is constructed to a height of 2 meters above the elevation of the surrounding area. The *albarrada* continues several meters beyond K100 on the east and west sides. On the east side of K100 the *albarrada* is interrupted after a few meters, then resumes approximately 5 meters later and continues for 20 meters near the *rejollada* edge.

K101 runs along the eastern side of K100, beginning at K100's northeast corner and continuing north to the edge of the *rejollada*. It is a low, semi-rectangular platform that runs along the *rejollada* opening for most of its length. On the eastern side of K101 there is an *albarrada* that begins on an east-west axis, runs for 3.5 meters, then turns south and continues for another 7.5 meters. The first 3.5 meters, and then 5 meters of the *albarrada* running on the north-south axis are very well preserved at a height of 80 centimeters. The *albarrada* in this area is constructed of fine quadrangular stones with planar faces. The rest of the *albarrada* consists of a single line of large stones. On the east side of the *albarrada* a small square boxed area was formed with a single line of worked stones.

K200 is a large semi-quadrangular platform that is substantially constructed on the south side but follows a natural elevation increase to the north, where only a few lines of stone delineate it. It is the easternmost structure in the K200 chain (includes K201 and K202). There is one potential superstructure, elevated approximately 90 centimeters above the platform height. There are elevation changes around the south side of the structure, with elevation gradually increasing towards the east. Level 1 of K200 is a bedrock outcrop modified into an additional level of the structure. It is 2 meters above the surrounding ground level. Level 2 is 3 meters above the surrounding ground level. A possible staircase was noted on the southwest side of K200. An *albarrada* begins east of K200 and runs northwest across Level 2, terminating 7.5 meters into the platform. The *albarrada* begins again 8 meters west and continues until it intersects with the northeast corner of K201. At the northwest corner of K201 the *albarrada* becomes distinctly visible again and follows the northern edge of K202 for approximately 9 meters before

blending into K202 until it reaches the southwest corner. At the southwest corner of K202 the *albarrada* again becomes distinct and continues southwest. K200 is constructed from a mix of unworked and worked stones.

K201 is a square platform west of K200 and consists primarily of fine quadrangular stones with planar faces. Mostly stone remains with very little sediment. The lack of sediment has contributed to the collapse of stones in several areas on the K201 platform. There is a short alignment of stones connecting K200 and K201 along their south sides. There is a small but elevated area ("bridge") between K201 and K202 at the northwest corner of K201.

K202 is a large semi-quadrangular platform west of K201 with a possible staircase entrance on the southeast side. As noted, the *albarrada* continues off the southwest corner of K202. Immediately to the east of the *albarrada* is an area of collapse – possibly the previous location of the stones used to construct the *albarrada*. K202 is approximately 1.5 meters elevated above the surrounding ground level, although elevation changes mean its height changes in relation to ground level.

K300 is a rectangular platform with a lower level appended to its south side, built from a mixture of worked and unworked stone. A significant volume of sherds was located through surface collection along its north side, indicating a possible midden location. The platform is open in the middle with at least rooms along its exterior – 3 rooms on the east, 1 room on the south, and 4 rooms on the west. The lower level along the south side is a modified bedrock outcrop, semi-quadrangular in shape. This level is approximately 1.5 meters higher than the surrounding ground level, while Level 2 of K300 is approximately 2.2 meters higher than surrounding ground level.

Table 6.3: Ceramic types and varieties recovered at Kopchen

Structure	Type-Variety	Time Periods Represented
K100	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
	Sacalum	Terminal Classic
K101	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
	Sacalum	Terminal Classic
K200	Dzibiac Red	Terminal Classic - *Helep*
	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
	Sacalum	Terminal Classic
	Arena Red	Late Classic
K202	Kukula Cream	Terminal Classic - *Helep*
	Silho Orange	Terminal Classic - *Helep*
	Muna Dzitas	Terminal Classic - *Helep*
	Dzibiac Red	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
	Tekit Incised	Terminal Classic
	Chacmay Dzitas	Terminal Classic
	Sacalum Balantun	Terminal Classic
	Arena Red	Late Classic
K300	Dzibiac Red	Terminal Classic - *Helep*
	Muna Dzitas	Terminal Classic - *Helep*
	Sacalum	Terminal Classic
	Tekit Incised	Terminal Classic
	Chacmay	Terminal Classic
	Piste Striated	Terminal Classic
	Ticul Thin Slate	Terminal Classic
K301	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
K303	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
K400	Dzibiac Red	Terminal Classic - *Helep*
	Muna Dzitas	Terminal Classic - *Helep*
	Sacalum	Terminal Classic
K400	Chacmay	Terminal Classic
	Piste Striated	Terminal Classic
	Arena Red	Late Classic
	Yokat Estriated	Late Classic
K501	Muna Dzitas	Terminal Classic - *Helep*
	Sisal Unslipped	Terminal Classic
Structure	**Type-Variety**	**Time Periods Represented**
K600	Muna Dzitas	Terminal Classic - *Helep*
	Piste Striated	Terminal Classic
	Tekax Black on Red	Terminal Classic
	Yokat Striated	Late Classic

K301 is a small quadrangular structure located between K300 and K400. Its base is built with stones 40-60 centimeters. A short alignment of stones continues south of it. It is elevated approximately 30 centimeters above ground level. K302 is a slightly elevated rectangular foundation for 3 discreet rooms. It is located 2 meters south of K300. K302 is constructed of a mix of stones 40-50 centimeters in width and 20-30 centimeters in width. The westernmost room is open on its north side. K303 is a small single-room foundation built primarily of stones 20-40 centimeters in size. It is quadrangular and is located approximately 10 meters west of K300.

K400 is a large semi-quadrangular platform with multiple levels constructed on a bedrock rise with a natural increase in elevation to the north. A partial *albarrada* runs along the northwest corner and continues for 2 meters beyond it. The primary platform level is mixed *chich* and sediment. This level drops off to two lower levels on the western half of K400. The south and east sides, due to lower ground elevation, are built up to approximately 3.5 meters high, while the northern side is less than 0.5 meters above ground elevation. The southeast quadrant contains a lower terrace level extending approximately 16 meters. There is a *sascabera* in the middle of K400's eastern half, near a series of 4 superstructures running north to south. K400 is constructed from a mix of worked and unworked stones, and its multiple levels, terraces, and rooms make it one of the most complex structures recorded at Kopchen thus far.

K500 and K502 were found on closer inspection to be more closely related than originally thought; they will be discussed together. K500 is a modified bedrock *altía* whose eastern side is constructed, while its western side is a natural slope that decreases in elevation until reaching the *rejollada* opening. K500 has two superstructure

foundations, with the north superstructure constructed of stones approximately 30 centimeters in height and width, while the south superstructure is built with larger stones (60-70 centimeters in height) placed upright. K502 could be called a lower level of K500, but they are not continuous – the modified bedrock rise on which K500 is built naturally decreases in elevation and K502 is built along its eastern side. K502 is a semi-quadrangular stepped platform with multiple sub-levels and a probable staircase in its southeast quadrant. Two superstructures were assigned to Sub-Level 1, one on the north side and one on the south side of the structure. K500 and K502 both appear more roughly constructed than many other structures recorded – there are few to none worked stones and visible alignments are more haphazard. K501 is a quadrangular foundation base north of K500. It is built from stones 20-30 centimeters in width, with a few larger stones. There is a possible entrance on its southeast side. K503 is a semi-quadrangular foundation base with a superstructure on the south side. It is constructed from inset stones approximately 20-30 centimeters in width. K503 sits between K502/K500 and K600.

K600 is a large irregularly shaped platform built on a modified bedrock *altía*. It appears to be almost triangular in form. The east side of K600 is not clearly defined; it tapers off into the *altía* itself, although the bedrock itself is somewhat aligned. The first platform level is triangular in shape with the longest corner to the west. The north side is built up until it reaches the modified bedrock *altía*. There is one elevated superstructure (Level 2) near the north side of K600, semi-quadrangular in shape and built on a bedrock outcrop. An approximately 2 meter wide area on the western side of this superstructure appears to have been hollowed out of the bedrock and filled with sediment. There are

two visible rooms on this superstructure. There is one visible room or superstructure foundation to the south, but the structure then again follows the lines of the natural *altía* and turns to the west before tapering off into bedrock. K600 was constructed primarily of unworked stones and modified bedrock.

K700 is a square platform constructed on a natural elevation increase; the northern side is considerably built up to reach the elevation of the southern side. The platform is open, with two possible quadrangular rooms noted in the corners of the platform and one small apsidal mound along the north side. Two probable staircases were noted – one in the southwest quadrant and one in the northeast quadrant. K700 is constructed of a mix of worked stones with planar faces and unworked stones.

Surface collection from Kopchen's platforms primarily yielded ceramics from the Terminal Classic. Ceramic types from the Muna Slate group dominated: Dzitas, Sacalum, Tekit, and Chacmay, along with Piste Striated as the most common unslipped ware. Small amounts of Dzibiac Red, Silho Orange, and Kukula Cream were also identified (Dzibiac Red was most common, while a single sherd each of Silho Orange and Kukula Cream were identified). While test excavations are needed to determine the longevity of occupation at Kopchen, the data from surface collection establishes it as a settlement during the *Helep* complex (900-1100 CE). No civic-ceremonial or monumental architecture was identified, but the entire area was not surveyed and there may be such architecture within the settlement. The large platform sizes are distinct from the majority of nearby architecture, such as at Popolá-Puus Sil. Excavations and survey could reveal if this distinction is due to different functions, population size, or other factors. Kopchen is north of Popolá-Puus Sil and therefore closer to Chichén Itzá; there are other small

communities with finely cut architecture near Chichén Itzá and in some cases connected by causeways to the site (Anderson 1998; Stanton et al 2020). The ceramic data from Kopchen suggests that it was occupied from at least the Late Classic (see next chapter) through the Terminal Classic and beyond the depopulation of the Yaxuná center. Kopchen's residents seem to have had enough "power to" maintain or perhaps even grow their community in the wake of political transformations at Yaxuná. While Kopchen's residents had some circulations with the residents of Yaxuná during the Late Classic, as evident through their access to Arena Red ceramics, very few Yaxuná IVa types were recovered through surface collection. At Yaxuná and Ikil, "Sotuta" ceramics (such as Dzitas) and "Cehpech" ceramics (such as Muna Cafetoso) are typically found in mixed contexts and in some cases traditionally defined attributes of each are found on the same vessel (Johnson 2012; Stanton & Ardren 2020: 543). Excavations may reveal mixed contexts at Kopchen, but it is intriguing that surface collection yielded only Muna Dzitas, with no Muna Cafetoso sherds recovered. Future investigations could explore the possibility that Kopchen became one of the new settlements for people leaving Yaxuná during the Terminal Classic and seeking greater participation in circulations of goods, ideas, and people with Chichén Itzá's residents. The remnants of Silho Orange and Kukula Cream wares from K202 suggest that some Terminal Classic residents at Kopchen participated in Chichén Itzá's "international" political economy in addition to the "local" regional ceramic economy.

Test units were excavated at 48 of the structures identified in the transect area. Ceramics were recovered from at least one unit at 40 of the structures, however ceramics from only 13 distinct structures were analyzed using the type-variety system. Non-

ceramic artifacts – primarily lithics – were recovered from 20 distinct structures, including groundstone, chert, and obsidian cores, debitage, and tools. Of the 13 structures for which ceramics were recovered, 10 structures contained types used during the Terminal Classic period, primarily Muna Cafetoso, Piste Striated, Teabo Red, and Sisal Unslipped. Six of these structures contained types dating to the second part of the Terminal Classic (*Helep*), around the time of Yaxuná's abandonment. The presence of Muna Dzitas and Dzibiac Red ceramics at these structures indicates that their residents were participating in circulations of Chichén Itzá ceramics as part of their regional political economy.
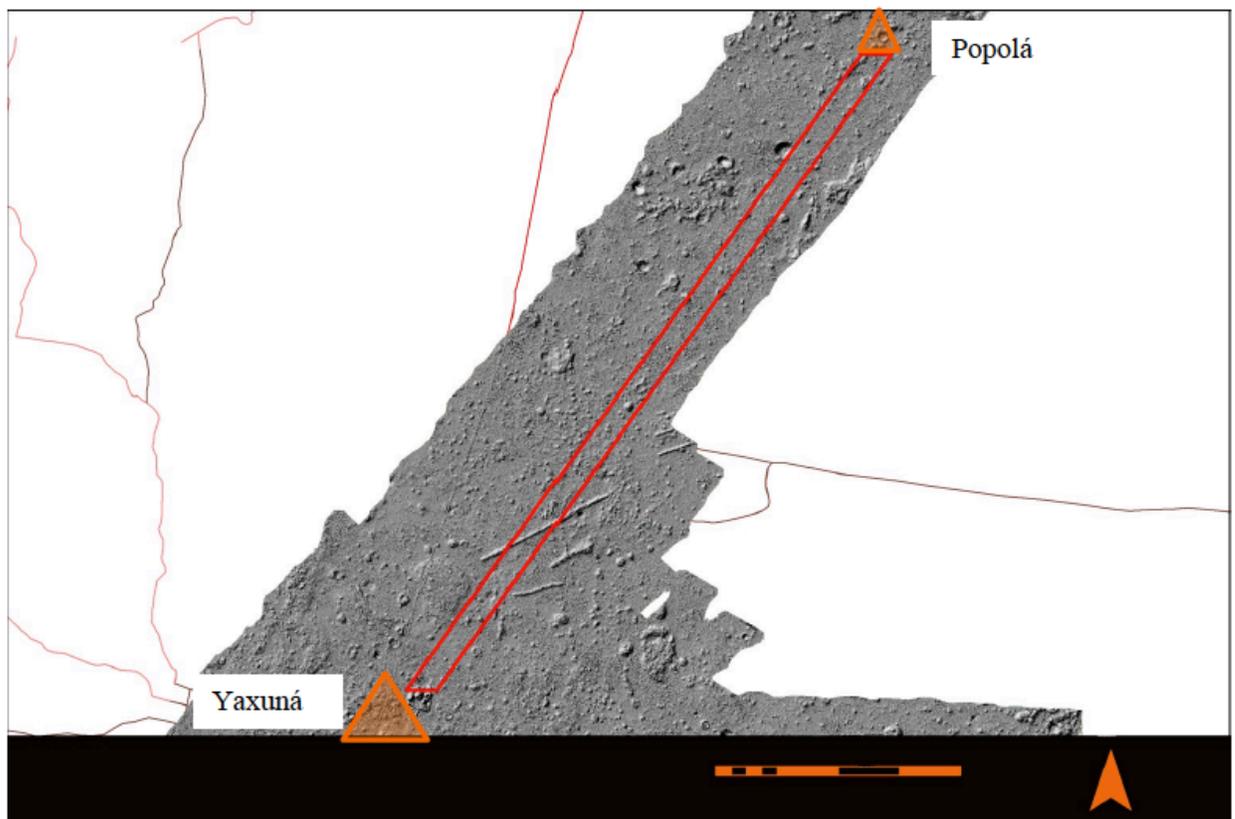
Figure 6.8: Hillshade of transect between Yaxuná and Popolá-Puus Sil (from Stanton & Ardren 2020: 11)
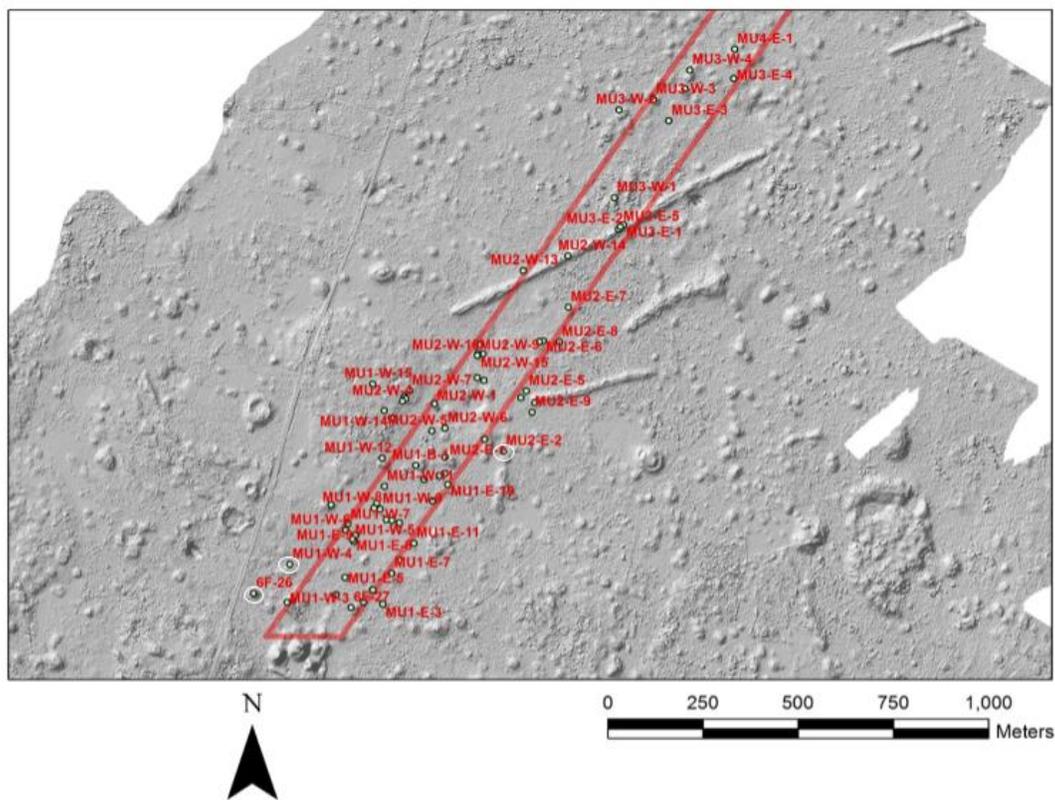
Figure 6.9: Transect mapping units 1-4, covering the area from the Yaxuná North Acropolis to the modern-day *ejido* boundary between Popola and Yaxuná

Transect Area

As previously described, the transect area was a 200 meter wide area extending northeast from the Yaxuná North Acropolis to Structure N05E11-1 at Popolá-Puus Sil. I designated structures based on which mapping unit (500 by 200 meter area of the transect) they were in, if they were closer to the western or eastern edge of the transect, and the order in which they were identified and recorded. If the Selz Project or PIPCY had already recorded the structure, I used the assigned designation (such as 6F-26). In this section I will only describe the structures for which I excavated test units and the ceramic contents underwent analysis.

MU1-W-1 is a larger quadrangular platform (approximately 19 m x 22 m) just outside the transect's western edge. The northeast side of the platform is built into a bedrock outcropping that levels off at the same height. This platform is located in an area that had recently been burned and planted as part of a *milpa*, so while traces of superstructure walls were noted on the eastern part of the platform, they could not be drawn. The south side of the platform has a partially intact staircase.

MU1-W-4 is a large low platform whose east side is built on a low bedrock outcropping. The platform retention wall is somewhat uneven and is not continuous. There are numerous architectural features of note on the platform. Near the center of the platform are numerous parallel stone alignments, formed from finely dressed stones. There are three potential square superstructures on the platform, but all of them are less than 2 meter x 2 meter in size and do not rise above the level of the platform. Two superstructures are near a possible entrance to the northwest, while the other is to the south. In addition to these features, there were numerous *metates* on and off the platform, as well as three different column fragments.

MU1-E-12 and MU1-E-13 may compose one larger structure, but were recorded as two separate structures. MU1-E-12 consists of a low quadrangular platform with two possible superstructures on its west side. Its east side may connect with MU1-E-13. MU1-E-13 is a low platform with one well-preserved superstructure on the north side and one possible superstructure on its south side.

MU1-W-15 is technically west of the transit area. MU1-W-15 is an L-shaped platform built into a bedrock outcropping. It has two square superstructures, one 5 meter x 5 meter and the other 3.5 meter x 3.5 meter.
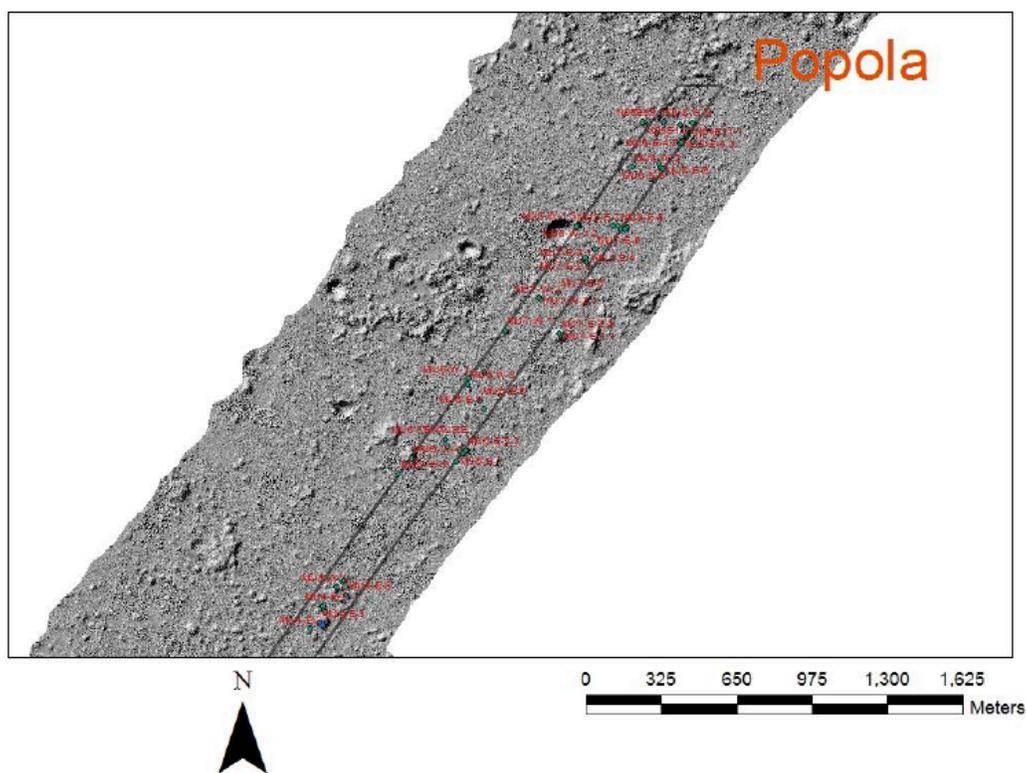
Figure 6.10: Transect mapping units 5-8, covering the area from the modern-day *ejido* **boundary between Popola and Yaxunáh to the archaeological site of Popolá-Puus Sil**
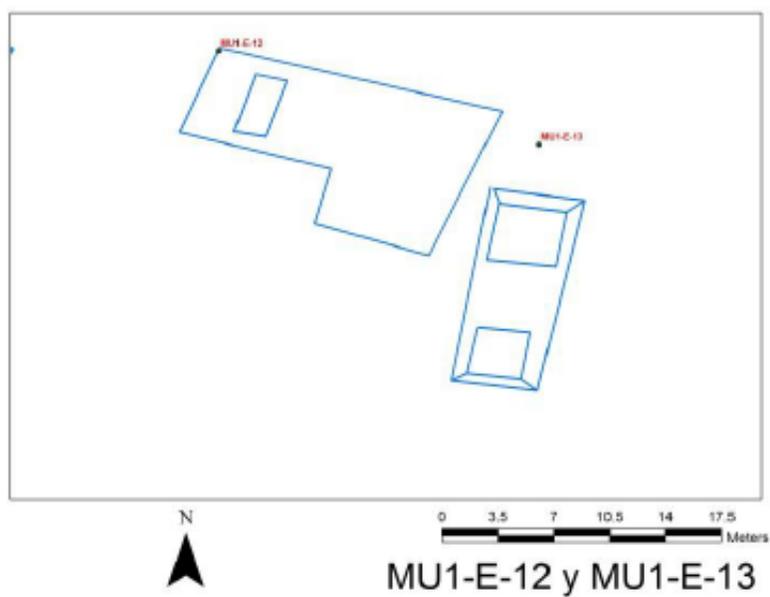
Figure 6.11: Maler drawing of MU1-E-12 and MU1-E-13

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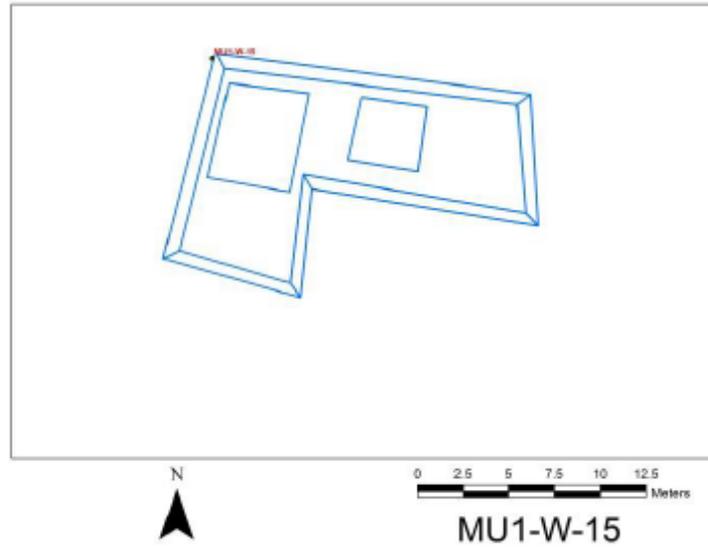
Figure 6.12: Maler drawing of structure MU1-W-15
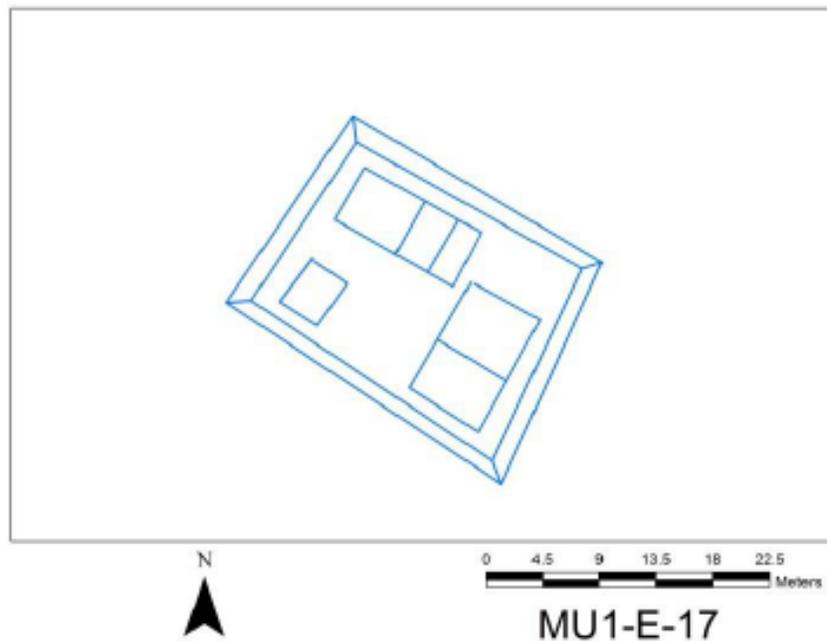
Figure 6.13: Maler drawing of structure MU1-E-17

MU1-E-17 is the second of the three large platforms within 100-150 meters of each other (MU1-W-12 and MU1-B-1 are the other two). It is constructed on top of a

bedrock outcropping and measures approximately 24 meters x 20 meters. There are three large joined superstructures in the northwest part of the platform, two superstructures in the southeast area of the platform, and one superstructure near the southwest corner of the platform. The preservation of the southwest corner of the platform indicated that it had been stepped, with several sequential smaller layers placed one on top of another. MU1-B-1 is a large high platform with two levels built on bedrock outcroppings. The southwest part of the platform is built to a height level with the bedrock in the southeast. There is great deal of architectural collapse in the southwest. The northern part of the platform is built 0.5 meters higher than the southern level of the platform. Level 1 (south) has one superstructure and Level 2 (north) has three superstructures. At least half the height of the platform is from the bedrock outcropping it is built on. On-platform there is one *metate*. This is the third of three platforms (with MU1-W-12 and MU1-E-17).

MU6-W-3 is a small foundation immediately north of a huge grouping of rocks (2-3 meters in diameter), with a slope along the east side that leads to the summit of the rocks, which is 1.5-2 meters high. They are piled rather than organized in any recognizable architectural configuration. The foundation slopes downward to the west and up an earthen ramp. It is made up of rocks 50-70 centimeters in diameter.

MU6-W-4 is a rectangular platform set on a large, high *cerro*. It appears to be partially built on bedrock in the south, with larger rocks 40-70 centimeters size set on top and visible in collapse at the edge. The elevation of the surrounding area is lower to the east; therefore the platform is built up more on this side. Along the west side are

additional bedrock outcroppings and some large boulders (1 meter or more), which continue to the north. The rest of the platform consists of rubble and smaller rocks.

MU7-E-2 is a mix of small rubble mounds and interesting features. MU7-E-2.1 is the largest mound, located southeast of the others. It consists primarily of rubble (20-40 centimeters in size) with a few larger stones making up the outer alignment. Due west is an area of rubble without a discernible shape, which was not given a designation. Further west and slightly north is MU7-E-2.2. It is also a rubble mound, although the central portion consists only of elevated sediment with no stones. In the NE and NW corners of MU7-E-2.2 are two larger stones, but all others are 20-40 centimeters in size. To the east of MU7-E-2.2 is MU7-E-2.3, a rubble mound that terminates in the north in a bedrock outcropping. Its southern end is more visible with a greater number of stones, mostly 20-50 centimeters in size. MU7-E-2.4 is approximately 3 meters east of MU7-E-2.3. Its southern end terminates in a bedrock outcropping. MU7-E-2.4 is built of larger stones (30-50 centimeters in size). MU7-E-2.2, 2.3, and 2.4 are long rectangular mounds while MU7-E-2.1 is closer to a square. West of MU7-E-2.4 is a large boulder (1.5 meters in size) lying along the western edge of the mound. Northwest of this boulder is a group of shaped stones, including cut stones. There is a grouping of several faced stones in the NW corner of MU7-E-2.4, some loose and some partially buried beneath sediment. They form a rough rectangle on the western side of MU7-E-2.4, within which YPT 332A was placed. That excavation uncovered one faced stone of similar size. In addition to the cut and shaped stones, there are several large irregularly shaped boulders immediately south. Southeast of MU7-E-2.3 is a circular pile of rubble with large bedrock outcroppings in

the south. In one piece of possible bedrock, a circular depression with a raised border was shaped.

6F-26 was recorded on the map made by the Selz Project. It is a large high quadrangular platform with several levels. The south side is the lowest level, and they ascend from there. Many of the stones used in its construction are faced. There is a bounded rectangular area on the structure's south end that encloses Level 1. Level 3 has two superstructures. Like many of the other large platforms in the area, 6F-26 is constructed on top of a bedrock rise that contributes to its size. There is a cluster of four *metates* in the southeastern corner.

Table 6.4: Ceramic type-varieties recovered from the transect test units

Unit	Associated Structure	Type-Varieties Present	Time Periods Represented
YPT 300A	6F-26	Muna Cafetoso	Late-Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Akil Cafetoso	Late Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic
		Sierra Red	Late Preclassic-Classic
		Xuch Red & Black	Late Preclassic
		Languna Green Incised	Late Preclassic
		Alta Mira Acanal	Late Preclassic
		Unto Black on Striated	Late Preclassic
		Ucu Black	Late Preclassic
YPT 302A	MU1-W-15	Sacalum Cafetoso	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Yokat Striated	Late Classic
		Batres Red	Late Classic
YPT 302B	MU1-W-15	Teabo Red	Terminal Classic
		Piste Striated	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Yokat Striated	Late Classic
		Chuburna Brown	Early-Late Classic
YPT 303A	MU1-W-1	Sacalum Cafetoso	Terminal Classic
		Piste Striated	Terminal Classic
		Teabo Red	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic

YPT 303A		Unidentified slateware	Late-Terminal Classic
		Chumayel Cafetoso	Late Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic
YPT 303B	MU1-W-1	Teabo Red	Terminal Classic
		Piste Striated	Terminal Classic
		Sisal Unslipped	Terminal Classic
		Muna Dzitas	Terminal Classic
		Dzibiac Red	Terminal Classic
		Sacalum Cafetoso	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic
YPT 303B	MU1-W-1	Akil Cafetoso	Late Classic
		Chumayel Cafetoso	Late Classic
		Chum	Late Classic
		Catoche Trickle	Early-Late Classic
		Sierra Red	Late Preclassic-Classic
		Xanaba Red	Late Preclassic-Classic
		Flor Crema	Late Preclassic
		Mateo Red & Cream	Late Preclassic
		Saban Unslipped	Late Preclassic
YPT 305A	MU1-B-1	Piste Striated	Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Arena Red	Late Classic
		Batres Red	Late Classic
YPT 306A	MU1-W-4	Sisal Unslipped	Terminal Classic
		Piste Striated	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Chumayel Cafetoso	Late Classic
		Chum	Late Classic
		Arena Red	Late Classic
		Xanaba Red	Late Preclassic-Classic
		Sierra Red	Late Preclassic-Classic
YPT 306B	MU1-W-4	Muna Dzitas	Terminal Classic
		Sisal Unslipped	Terminal Classic
		Piste Striated	Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Alex Orange	Terminal Preclassic
		Sierra Red	Late Preclassic-Classic
YPT 306C	MU1-W-4	Unidentified slateware	Late-Terminal Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic

YPT 307A	MU1-E-12	Teabo Red	Terminal Classic
		Sisal Unslipped	Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic
YPT 309A	MU1-E-15	Muna Cafetoso	Late-Terminal Classic
YPT 310A	MU1-E-17	Sacalum Cafetoso	Terminal Classic
		Muna Cafetoso	Late-Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Yokat Striated	Late Classic
		Arena Red	Late Classic
		Maxcanu Buff	Early-Late Classic
		Chuburna Brown	Early-Late Classic
		Xanaba Red	Late Preclassic-Classic
YPT 314A	MU2-E-2	Muna Cafetoso	Late-Terminal Classic
		Unidentified slateware	Late-Terminal Classic
		Chum	Late Classic
		Chancenote Striated	Late Preclassic-Classic
YPT 314B	MU2-E-2	Muna Cafetoso	Late-Terminal Classic
		Yokat Striated	Late Classic
YPT 339A	MU7-E-2.1	Eroded	
YPT 339B	MU7-E-2	Muna Dzitas	Terminal Classic
YPT 341B	MU6-W-3	Muna Dzitas	Terminal Classic
YPT 342A	MU6-W-4	Muna Dzitas	Terminal Classic
		Piste Striated	Terminal Classic
YPT 342B	MU6-W-4	Muna Dzitas	Terminal Classic
		Piste Striated	Terminal Classic

Xkanhá

Xkanhá is an outlying group located approximately 2 kilometers northeast of the

Yaxuná site center. Traci Ardren investigated this group for her dissertation research; the

data presented here is from her dissertation and from the summary of the Selz Project

data. It consists of an acropolis and at least 5 residential mounds, located within 500

meters of a *cenote* (Ardren 1997; Stanton et al 2010). The acropolis is approximately

square, measuring 80 meters by 80 meters. It was constructed on a natural limestone

outcropping 4-5 meters high. It is oriented to the east, with this side of the acropolis

modified through terraces and stairs to provide access, while all other sides are unmodified (Ardren 1997: 92). Simple structures oriented towards the interior plaza create passageways into the area, further narrowing the access points. The acropolis includes at least 14 structures or structure groups, representing a mix of architectural styles associated with different structure types, including ceremonial buildings, residential palaces and mounds, and a unique set of patio groups. Excavators noted three periods of use: two occupational periods, one during the Early Classic and one during the Terminal Classic, as well as ceremonial activity dating to the Postclassic (Ardren 1997). Xkanhá's relationship to the Yaxuná center has been defined in different ways; its distance from the site center is why I include it within the discussion of settlement outside of urban Yaxuná. It may have been a "suburban zone" given its proximity to the site center. The continuity of settlement in the area between the site center and the Xkanhá acropolis is not well established; continuous settlement from the urban center extends approximately 1 kilometer in other directions.

The acropolis consisted of a central interior plaza, while the structures lined each side of the square. Excavators divided the acropolis structures into 4 areas, corresponding to the different sides of the acropolis – Area 1: north side, Area 2: east side, Area 3: south side, and Area 4: west side. Area 1 includes Structures 4, 12, 13, 14, 15, and 16, among which are the three patio-quads (Ardren 1997: 57-58). Area 2 includes Structures 3, 8, 9, 10, and 18 and the access points for the acropolis. Only Structure 2 was investigated in Area 3, but this area was the site of two to three low residential platforms connected by plaster floors. While this side of the acropolis faces the Yaxuná site center and the outlying residential mounds, there are no access points.

Area 4 contains only one structure, Structure 11, but it is the largest single structure on the acropolis and at 3.5 meters high, visually dominates the acropolis (1997: 107).
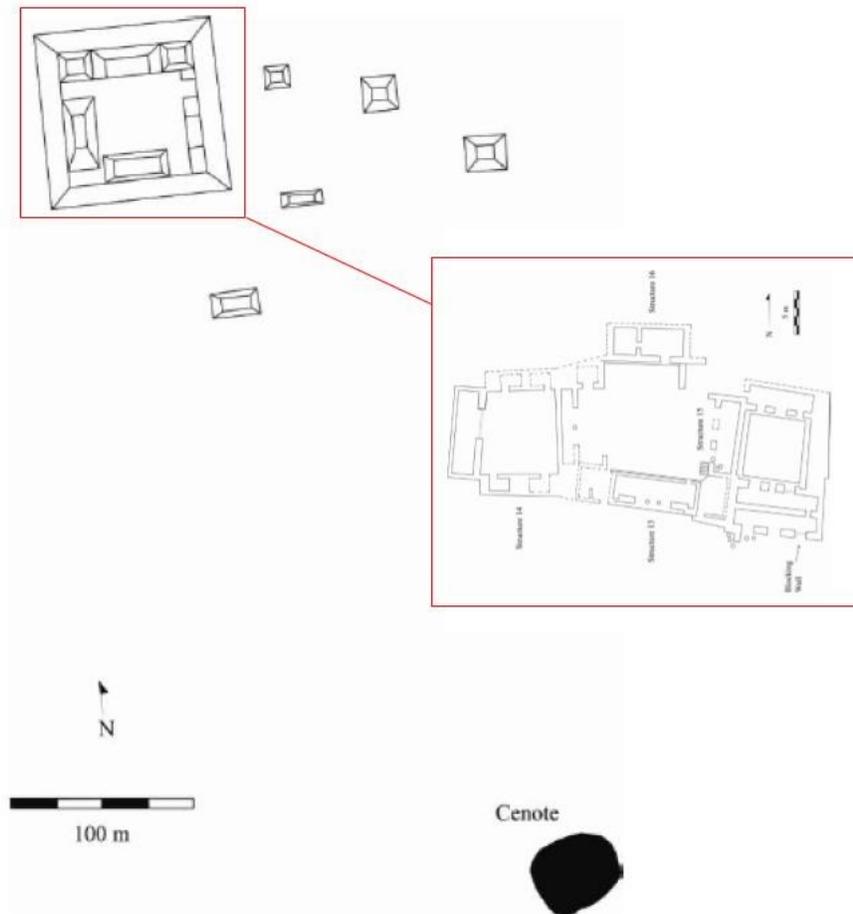
Figure 6.14: Maler-style map of Xkanhá with the acropolis inset (adapted from Stanton et al 2010: 108-109)

Structures 4 and 12 were possibly renovated during the Terminal Classic, while Structures 13 and 14 were superficially reused or abandoned (Ardren 1997: 116). A stairway built during this period connected Structure 15 and Structure 4, during which time Structure 15's interior may have been re-plastered. A makeshift blockade may have been added to the southeastern exterior corner of Structure 16 with a wooden palisade

placed in a row of stone (1997: 124). During the Terminal Classic, area residents transformed Structure 4 from the main access passageway for the patio groups into a tower or observation platform. Structure 4 is located in the northeast corner of the acropolis; it offered clear lines of sight for the primary entrance, the interior plaza area, and the exposed southern face (1997: 117). The Structure 12 group was renovated into an associated platform that could also have been used for surveillance. Archaeologists initially identified an associated burial as a ritual dedication for Structure 4. However, additional evidence suggests that the burial dates to the Late Classic rather than the Terminal Classic (Tiesler et al 2017: 156-157). The timing of Structure 4's renovation remains in question; other than the Teabo Red ceramics, which are modally similar to Kinich Orange, the majority of ceramics from this excavation could easily date to the Late and Early Classic: Muna Slate, Tinaja Red, and Aguila Orange (Ardren 1997: 231; Tiesler et al 2017: 157).

Area 2 was the primary point of access to the interior of the acropolis during the Early Classic. Structures 8 and 9 may have been re-used during the Terminal Classic (Ardren 1997:127). Structure 10 is a wall consisting of 3-4 courses of stone running approximately 20 meters across the east side of the acropolis. Its proximity to the stairway leading into the acropolis suggests that it was a later modification, rather than part of the original design of the acropolis. The wall served to further restrict access to the acropolis, and has been interpreted as contemporary with Structure 4's renovation into an observation tower (Ardren 1997: 127).

The south side of the acropolis, Area 3, saw very little construction during the Early Classic. The low platform base was covered by a rectangular residential structure

during the second phase of construction. The rectangular platform had 2 c-shaped rooms, one at each end of the platform. The eastern room had 1 entrance while the western room had 2 entrances. A patio paved with small stones ran the western length of the structure. Several large flat flagstones set into the floor were clustered at the ends near the c-shaped rooms. This residential structure has stylistic similarities to residential groups at a satellite 3.5 kilometers from the Cobá urban center (Ardren 1997: 132; Benavides & Manzanilla 1987: 31). Traci Ardren identified the ceramic material as Terminal Classic, but the ceramic data from this area was not included in the dissertation appendices.

During the Early Classic, Area 4 was the site of Structure 11, a tall pyramidal mound. Eventually its entire northern wall and the upper courses of the eastern and western walls were dismantled, possibly so the stone could be re-used in other construction (Ardren 1997: 133). A u-shaped alignment of re-used construction stones on the centerline of the Structure 11 summit was identified as a feature. Around this feature, a jade bead was found to the east and a concentration of sherds from a Yokat Striated water vessel was found on the south side. The floor around the sherds showed signs of burning. The Yokat Striated sherds were mixed with Arena Red sherds, also from a single vessel. Within Feature 1, the floor surface had been disrupted and then sealed with flat stones. The surface level contained Postclassic incensario wares and gray obsidian fragments. Below the first set of stones was a large sherd of Holactun Black on Cream. A second layer of slab stones was placed over the dry core construction fill (1997: 136-137). The lack of artifacts within the Feature 1 area led Traci Ardren to suggest that it marked the removal of a dedicatory offering placed during the original construction of Structure 11.

Area 5, the surrounding settlement, was not occupied during the Late or Terminal Classic. While Xkanhá formed a residential community during the Early Classic, during the Late or Terminal Classic the acropolis was renovated and likely served a specialized function – perhaps surveillance or defense. The people working and perhaps living at Xkanhá during the Late and Terminal Classic were closely integrated with the political regime; the circulations of goods, ideas, and people between Puuc- and Cobá-affiliated leaders at Yaxuná and the people at Xkanhá are evident in architectural styles, burials, ceramic use, and shared purpose. Its integration with those political regimes is also evident in its abandonment, prior to the depopulation of the Yaxuná urban center. If it did serve a specialized surveillance or administrative purpose during Yaxuná's incorporation into different governing regimes, it was no longer needed once those regimes withdrew from Yaxuná.

Popolá-Puus Sil

Popolá-Puus Sil is a Rank IV site located approximately 5 kilometers northwest of Yaxuná. Scott Johnson investigated this site for his dissertation; the data summarized here is from his work there. It is a small aggregated settlement of 110 identified structures around two perennial water sources. There is minimal architectural differentiation between structures, although they do include structures with high platforms, cut-stone masonry, specialty architecture, and cut-stone masonry (as well as low foundations and rubble platforms). During the Terminal Classic, approximately 93% of tested structures (38 out of 41) were occupied, suggesting the highest population of the site's occupation history (Johnson 2012: 227). Structure volume correlated with economic wealth (defined

as access to certain ceramic types and non-local lithics) at a statistically significant level. Although a Rank IV site with little socioeconomic differentiation during earlier periods, Terminal Classic residents at Popolá-Puus Sil occupied several different economic circles. Silho Orange was primarily recovered from larger structures, while utilitarian Terminal Classic types such as Dzitas and Pisté were recovered from smaller structures (Johnson 2012: 328). The site was occupied continuously from the Middle Preclassic on, including six structures occupied during the Postclassic. Unlike at Yaxuná, there does not appear to have been a significant population decrease partway through the Terminal Classic; 38 structures had Dzitas Slate sherds, the same number of structures with Muna Slate types.

Structure N10E10-1 is the "largest" platform at Popolá-Puus Sil (much of its height comes from a natural bedrock rise). It is oriented south, towards Yaxuná's North Acropolis. It was built in one phase, with most associated ceramics consisting of Muna slatewares (Johnson 2012: 234-35). By percent of structure totals, Structure N10E10-1 had more Silho Orange and Muna Dzitas sherds than the two fully excavated structures combined (1 on-platform test unit was excavated at N10E10-1). However, its overall ceramic assemblage was similar to the rest of the site – not distinguished by any unusual or diagnostic forms or types. Five prismatic blades were recovered, including three from Pachuca along with 43 chert artifacts (including 3 projectile points). Structure N10E10-1 is one of three structures with dressed stones and one of two structures with extant staircases at Popolá-Puus Sil. It is also the site of several bas-relief panels, carved colonnettes, and façade decorations incorporating the Puuc "Fluorescent" iconographic style.
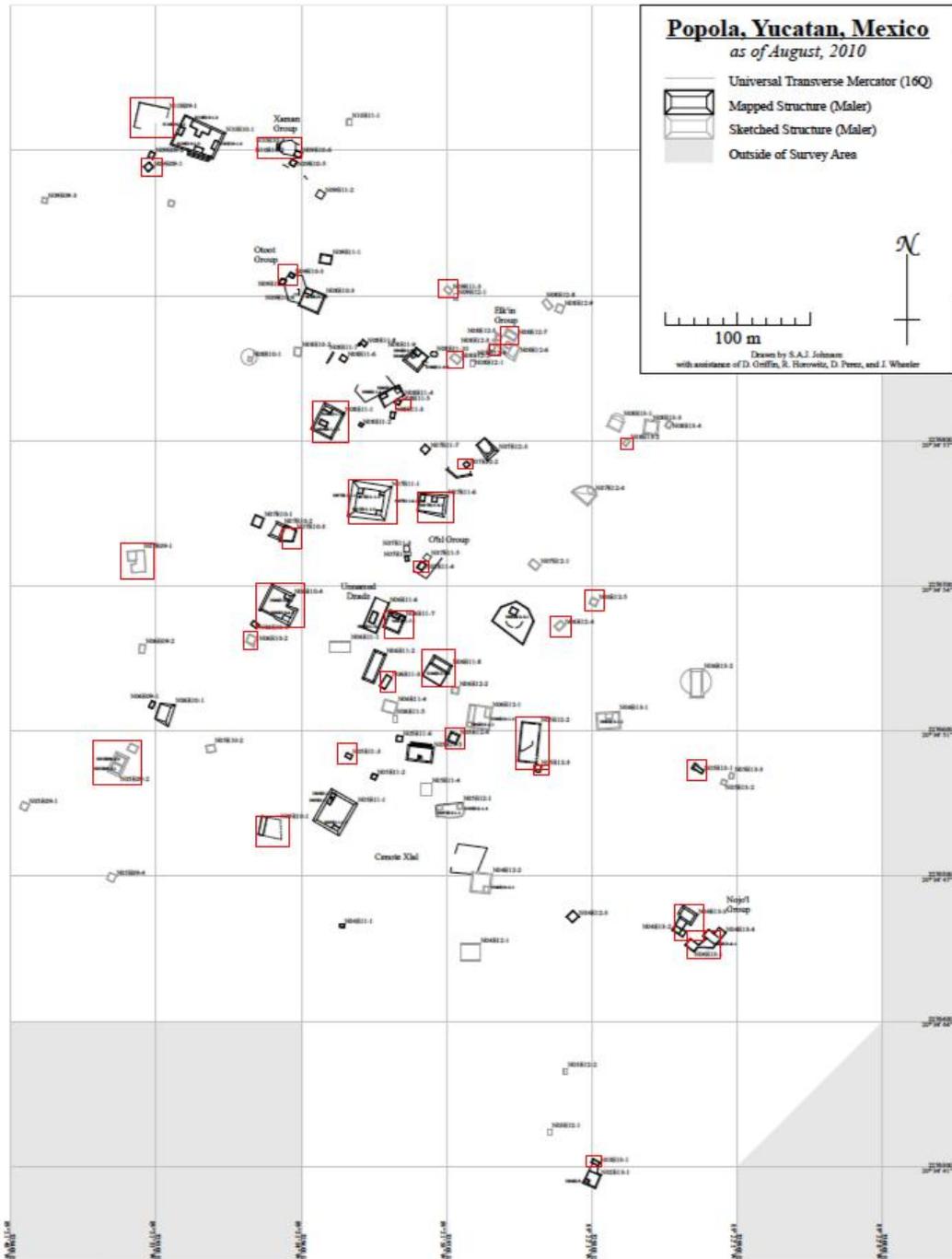
Figure 6.15: Map of Popolá-Puus Sil highlighting Terminal Classic structures (modified from Johnson 2012: 656)
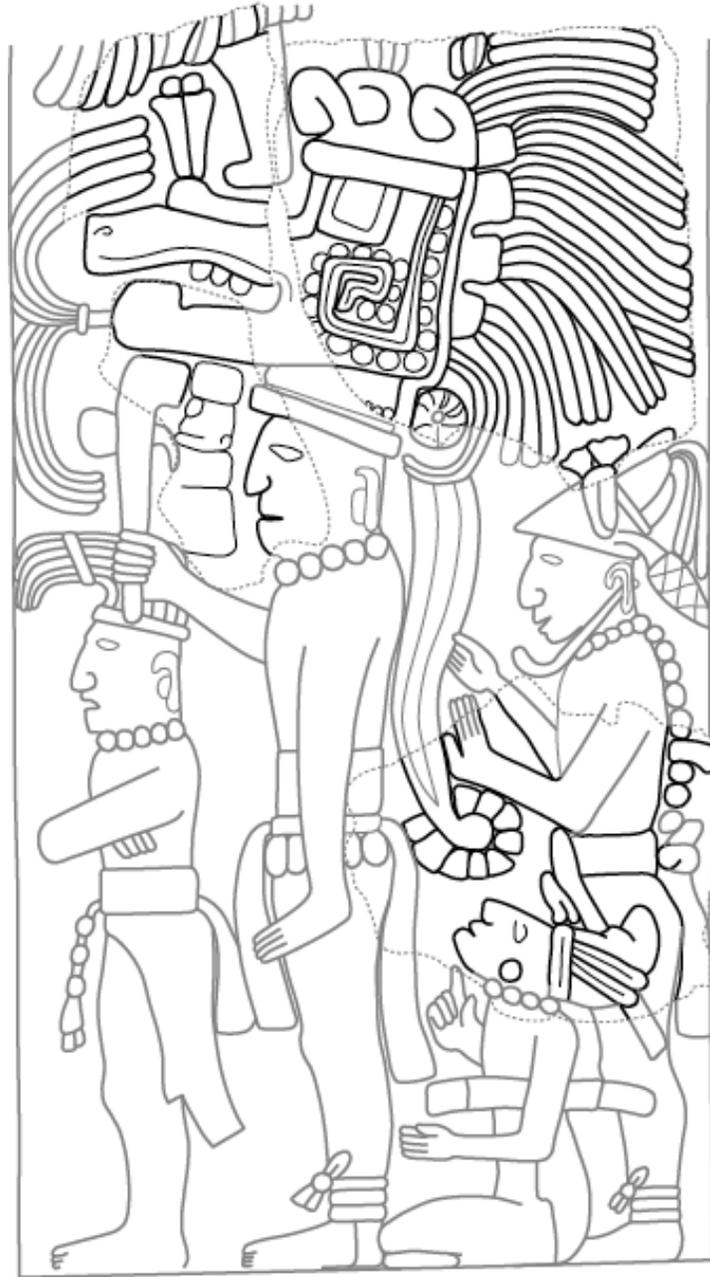
Figure 6.16: Line drawing of Popolá-Puus Sil Panel 1 (from Johnson 2012)

The iconography of Popolá-Puus Sil reflects the circulations of ideas from the

Puuc area to Yaxuná and between Yaxuná's leaders and local leaders at hinterlands

settlements. There are 8 bas-relief panels, 15 carved colonnettes, and many architectural

decorations at Popolá-Puus Sil – primarily found at Structure N10E10-1, although carved colonnettes were identified at other structures. Panel 1 is of four men; three are standing while one is seated and all face left (Johnson 2012: 244-248). Elements of the panel decoration (an individual's trilobe headdress, a disembodied leg, and a pronated hand bent at a 90 degree angle) are commonly seen in panels not only from Popolá-Puus Sil, but also X'telhu, Mopila, Ceh Yax, and Kancabdzonot. There is a column of four glyphs in front of Panel 1's central individual. Panel 2 is a bas-relief carving of three individuals in profile. Based on elements of dress, two of them may be the same individuals depicted on Panel 1 (2012: 249). Panel 3 has a carving of a single individual, who is wearing some of the same elements of the second individual in Panel 2. There is a column of eroded glyphs on this panel as well. Panel 4 is a bas-relief carving of two or three animals; the central figure is an owl with extended wings wearing a choker like several of the human individuals from Panels 1-3. The owl is also portrayed with human hands and arms in addition to its wings. The second figure is a snake. There is a third possible figure with a trilobe headdress but the monument is too damaged for identification (2012: 251). Panel 5 has a bas-relief carving of two individuals (each with three glyph blocks in front of the face) and an anthropomorphic creature (the water-lily monster). One individual wears the trilobe headdress, while the other appears to have a feline-inspired headdress. Panel 6 depicts two individuals with three glyph blocks between them. Panel 7 is divided into an upper and lower register; two birds in profile are facing each other in the upper register, while the lower register appears to have two snakes in profile (2012: 255). Panel 8 has the bas-relief carving of one individual wearing the trilobe headdress. Many of these

panels are fragmented; while there are glyphs on several, all of them are eroded past legibility.

In addition to the panels, there are other items with iconography at Popolá-Puus Sil. Monument 1 is a limestone panel with an anthropomorphic bat; its wings are outstretched and it has an eroded human face (Johnson 2012: 268). There is also a poorly executed jaguar throne; two crouching jaguars face away from each other with their hindquarters touching. Other architectural decorations include carved colonnettes in two different shapes. Most were found on Structure N10E10-1, but one colonnette was found near Structure N05E11-5. This colonnette was unique among the others, with a *pop* mat design. The other colonnettes were cylinder-shaped or diamond-shaped and may have formed the basal molding of N10E10-1's superstructure (2012: 268-269). The N10E10-1 platform also had several other architectural features that were likely façade decorations. These include blocks with T-shaped *ik* signs, "war banner," and *pop* motifs (2012: 269-270).

Circulations of Political Ideas

Structure N10E10-1 at Popolá-Puus Sil is one of several sites in the area with similar iconography on panels, columns, and façade decorations. Other sites in the area do not have monuments or panels, but do have Puuc-style stonework associated with Cehpech (Muna Cafetoso and Teabo Red) style ceramics (Stanton et al 2020). These sites are located farther from Yaxuná, but may have been part of its polity or a regional network of independent allies during the Terminal Classic. This iconographic style is relatively contemporary with Chichén Itzá (early Terminal Classic) but is markedly

distinct (Magnoni et al 2014). Its diagnostic elements include: a lack of distinctive features on the faces of individuals represented, almond-shaped eyes, figures portrayed in profile facing the left, lack of a neck depicted between the shoulders, disproportionately large heads, rigid posture, and hands held at a 90 degree angle from the arm (2014: 297). Many individuals portrayed have similar clothing and accessories, including large-bead chokers, trilobed headdresses, wide belts with pendants, and leather "skirts" (Greene Robertson 1986; Johnson 2012; Magnoni et al 2014). There are also similar themes: water iconography and the water-lily monster, supernatural snake-leg floating figures, processional scenes, and presentation of tribute or captives. A brief description of the panels and architectural features at nearby sites is included for context. The styles and subjects of this iconographic corpus are very different from those found at Chichén Itzá during this time.

X'telhu is 9.5 kilometers southwest of Yaxuná and has been dated to the Terminal Classic based on its architecture (excavation has not been possible at the site, although it is partially mapped). There are approximately 20 structures in the site center, including a central plaza on a 5-meter tall platform. There are 5 structures around the plaza, two of which have the remains of staircases, and a large pyramidal structure to the east. One of the structures to the west (N1E1-1) contained several carved panels (Stanton & Magnoni 2013). This structure and Structure N10E10-1 at Popolá-Puus Sil were relatively low with similar dimensions and both were located northeast of the "center" of the sites. Panel A has a bas-relief carving of three individuals various other anthropomorphic creatures. Panel B has six individuals portrayed in three different registers. Panel C is a bas-relief carving of four individuals, one of whom may be supernatural. Panel D shows

two individuals standing in profile, holding fistfuls of hair from two smaller individuals.

Panel E has a bas-relief carving of two individuals. One broken panel from the site of

Kancabdzonot shows the same serpent portrayed in X'telhu's Panel D and Popolá-Puus

Sil's Panel 4 along with a badly eroded glyphic inscription. Kancabdzonot is 15

kilometers southwest of Popolá-Puus Sil. Mopila, located 22 kilometers has a complete

limestone panel showing an individual with a human body but non-human head seated on

a throne with *pop* mat motifs. This panel also has two inscriptions, which are mostly

legible but whose decipherment is contested (Johnson 2012).

**Figure 6.17: Sites of monuments and panels with shared iconography style
(adapted from Stanton & Ardren 2020)**

Ceh' Yax is 28 kilometers south of Chichén Itzá. It has no monumental architecture and appears to be about the size of X'telhu. There are corbel-vaulted buildings and other architectural elements associated with the Early Puucc period, carved stones that could be in the Late Puuc style, and primarily ceramic slatewares (Magnoni et al 2014: 310). Several engraved mosaic stones, portraying birds, other animals (possibly deer), and at least one human figure were found across the site, although in very eroded states. Several engraved columns of human figures, similar to those that mark the entrances to vaulted structures in western Yucatán, were also identified at Ceh' Yax. The individuals depicted had one or two hands crossed at the front, headdresses, and mantels (2014: 312).

The site of Ikil also has evidence of some circulations with Yaxuná. The monumental architecture is dominated by a pyramidal structure originally built with two staircases before being modified into a radial structure during the late Terminal Classic. Two lintels on this structure contain a hieroglyphic text dedicating the shrines in Structure 1 to a royal female individual, and recording the male ruler or series of individuals under whom the dedication took place (Stanton et al 2020). These individuals are not found in any other known inscriptions, so it is difficult to identify who they were and understand their significance in the Political landscape. Like Yaxuná and Popolá-Puus Sil, many contexts in Ikil are mixed Sotuta and Cehpech ceramic types, including ceramic vessels with mixed attributes such as "Sotuta" forms with "Cehpech" slips. There are significant similarities between the basal façade of Structure 1 at Ikil and that of Structure 6F-68 at Yaxuná, leading to the suggestion that the same masons built both (Stanton et al 2020). These similarities could reflect Ikil's leaders' participation in

regional expressions of authority and leadership. Another possibility to consider is that one of the individuals named in Ikil's lintels was a ruler at Yaxuná; Yaxuná and Ikil could have been peer polities, or Ikil could have been under Yaxuná's leadership.

Table 6.5: Iconography of the Yaxuná region (adapted from Magnoni et al 2014)

Type	Description	Location
Façade decoration	Two and a half deeply cut *ik* signs, outlined with a shallow line and one line below the *ik* motif	Popolá-Puus Sil N10E10-1 Yaxuná 6F-68
Façade decoration	Double-lined circle surrounded by 16 isosceles trapezoids (small flower) with 3 rows of side by side isosceles trapezoids descending below	Popolá-Puus Sil N10E10-1 Yaxuná 6F-68 Uxmal entrance figurine
Façade decoration	Eroded face with pair of columns of rectangles and cross hatched *pop* motif on the right	Popolá-Puus Sil N10E10-1
Façade decoration/Panel detail	Cross hatched *pop* motif	Yaxuná 6F-68 Popolá-Puus Sil N05E11-5 X'telhu Panel A Mopila Monument 1
Panel detail	Disembodied leg	Popolá-Puus Sil Panel 1 X'telhu Panel B X'telhu Panel C
Panel detail	Individual wearing trilobed (*Chaak* or serpent deity) headdress	Popolá-Puus Sil Panel 1 Popolá-Puus Sil Panel 2 Popolá-Puus Sil Panel 5 Popolá-Puus Sil Panel 8 X'telhu Panel C X'telhu Panel D
Panel subject/Façade decorations	Animals (with anthropomorphic features) - serpents - birds - water-lily monster - bat deer	Popolá-Puus Sil Monument 1 Mopila Monument 1 Ceh' Yax Kancabdzonot Monument 1 X'telhu Panel D X'telhu Panel A Popolá-Puus Sil Panel 7 Popolá-Puus Sil Panel 5 Popolá-Puus Sil Panel 4
Panel subject	Leaders/"power over"	X'telhu Panel A X'telhu Panel C X'telhu Panel D Popolá-Puus Sil Panel 1 Popolá-Puus Sil Panel 2 Popolá-Puus Sil Panel 5 Yaxuná 6F-68 Mopila Monument 1

Conclusion

During the first part of the Terminal Classic, the political regime based at Yaxuná had clear circulations of ideas and goods with other natural communities in the region. Many residential communities had architecture and iconography communicating shared understandings of leadership, authority, and legitimacy. This includes communities beyond the immediate area of Yaxuná, such as Ceh' Yax, X'telhu, and Ikil, which are 8 or more kilometers from the Yaxuná site center. Political leaders used hieroglyphic texts (otherwise rare in the region) recording titles, artistic conventions for representing domination and subordination, regalia such as headdresses, and symbols of authority such as the *pop* mat motif to carve out specific spaces on the landscape demarcating leadership. These spaces were not confined to a single monumental center; instead they were scattered across the region, making them part of the daily lives for followers in many different communities. Followers helped create, participate in, and were exposed to the symbolic language of leadership and physical representations of "power over" in administrative architecture, texts, and artistic depictions.

At the beginning of the Terminal Classic, Yaxuná's type of political regime shifted but was once again locally based. The revitalization of certain significant areas of the site center suggests that the Terminal Classic political regime drew on sacred history and landscape, but fundamentally reshaped understandings of authority, power, and legitimation. While leaders at Yaxuná participated in circulations of ideas and goods with the Puuc area, there is no evidence for direct administration of Yaxuná by a Puuc-area polity. Yaxuná may have been incorporated into a broad network of relatively independent polities as part of the Puuc political landscape, or a local political regime

may have emulated Puuc-area ways of communicating authority, "power over," and leadership. The relationships between leaders and followers in the Yaxuná polity expanded in new and complex ways during the Terminal Classic. Smaller communities within a 20-kilometer radius of Yaxuná show evidence of elevating local leaders through construction of their own Puuc-style public architecture, range structures, and the production of a Puuc-influenced iconographic corpus. These structures may have been for local administrators, or may have served to house leaders from Yaxuná on administrative visits to different communities. Either way, it indicates that people with "power over" were much more directly engaged across the hinterlands area during this period. If they did not circulate between communities themselves, communication of ideas, legitimation strategies, and governing practices left far more visible evidence during the Terminal Classic than previous periods. The presence of politically significant iconography, as well as shared architectural styles and the economic network, suggests a significant level of integration within the Yaxuná polity during this period. The circulations of goods, ideas, and people during the first part of the Terminal Classic between leaders at Yaxuná (and local centers) and followers (at Yaxuná and the local centers) were numerous and clearly visible through archeological evidence.

The rise of Chichén Itzá and the decline of the Puuc polities (perhaps undermining trust in associated leaders) effectively severed these circulations. Whether due to a military attack or gradual abandonment, leaders and most of the followers left the Yaxuná area. Followers (those unaffiliated with local or Yaxuná leaders) remained in some small hamlets such as Popolá-Puus Sil, but did not maintain or establish the same type of political integration with regional rulers; while a residential community continued

at Popolá-Puus Sil, there is little evidence of their participation in the Chichén Itzá political community. Utilitarian Sotuta wares are fairly widespread, but items specifically associated with Chichén Itzá's political economy, such as Silho Orange pottery and Pachuca obsidian, are found in much more restricted contexts at Popolá-Puus Sil. While architecture and iconography were important parts of regional elite circulations during the early Terminal Classic, they were not during the late Terminal Classic. There is no diagnostic architecture or iconography inspired by that of Chichén Itzá in the Yaxuná region. This is in contrast to centers that may have been independent of Yaxuná during the early Terminal Classic; Ikil's Structure 1 was modified into a radial pyramid to enhance similarities to the Castillo at Chichén Itzá, while other small communities close to Chichén Itzá had architecture, sculpture, and hieroglyphic texts reflecting important circulations of ideas and people with the new regional urban center (Stanton et al 2020).

This distinction also demonstrates the different ways in which leaders and followers were integrated as part of a political community and in other local and regional communities. If the range structures at X'telhu and Popolá-Puus Sil were meant to be residences for local leaders who derived their legitimacy and authority from Yaxuná's political regime, then local elite residents were more closely integrated into the imagined community of the Yaxuná polity through their intensified interactions and circulations with the political regime. Followers – residents at the site who were not leaders – experienced regular reminders of the political community through their regular interactions with local leaders and the presence of associated architecture and iconography as part of their daily landscape. Their local economy remained relatively independent, however, meaning that the necessary items for their day-to-day lives were

primarily obtained through local and regional economic networks that operated somewhat independently of the political community. At Popolá-Puus Sil, non-elite residents used and exchanged material culture with people from different polities (Johnson 2012: 355-256). If the structures served as temporary administrative centers for Yaxuná-based leaders, then integration into the political community worked differently. While the architecture and iconography would still be part of the daily landscape of local residents, their interactions with leaders would have been rarer. Either way, during the late Terminal Classic many communities previously affiliated with the Yaxuná polity continued their economic circulations with the Chichén Itzá community, but did not develop the same circulations of goods and ideas related to governance with Chichén Itzá as they had with Yaxuná during the early Terminal Classic. Economic integration into a regional network remained consistent for residents of the Yaxuná area over the Terminal Classic, but their political integration declined significantly. One small vaulted building associated with the North Acropolis is suggested to be an administrative structure overseeing a small agricultural village responsible for serving Chichén Itzá's urban population during the late Terminal Classic (Suhler 1996). Similar structures have not been identified at Popolá-Puus Sil or other settlements within the Yaxuná region, also supporting a decrease in political integration across the area.

The case study of Minanha provides an interesting comparative study to Terminal Classic Yaxuná. At both sites, the leaders, represented at Minanha by the palace and at Yaxuná by Structure 6F-68, vacated the urban center – whether by choice or by force. At Minanha, parts of the palace were destroyed while others were carefully preserved; at Structure 6F-68, people destroyed similar architectural elements such as vault stones and

jamba, smashed serving vessels in place, and reopened and partially removed a dedicatory burial. Behaviors in both locations suggest intentional termination, marking the end of a regime – and formal leadership – in each area. While Minanha rose to power during hiatus periods for nearby powerhouses Naranjo and Caracol, Yaxuná had long dominated its hinterlands area, with no nearby urban centers until Chichén Itzá. Yaxuná's fall from prominence came from the economic, military, political, and urban fluorescence of Chichén Itzá.

At Minanha and Yaxuná, the termination of the leading regime triggered abandonment of the urban center. For both locations, the process of hinterlands abandonment took place at a slower pace. The Yaxuná hinterlands were abandoned more rapidly than the Contreras Valley, likely due to the attraction of a nearby growing urban center and the associated kinship, economic, and social ties. It is telling that no evidence of Postclassic occupation was recovered from Kopchen or the transect area; there is minimal evidence from the Yaxuná site center and Popolá-Puus Sil. In the Contreras Valley around Minanha, people in several areas built new constructions and likely saw population increases during this period, a pattern not observed in the Yaxuná hinterlands. Terminal Classic to Postclassic settlement patterns suggest that there was greater political integration at Yaxuna, a polity and urban center with a long history, than at Minanha; settlements affiliated politically with Yaxuná experienced fairly rapid depopulation in the wake of the regime's termination, while the Minanha hinterlands had a more gradual process of population attrition. The fates of elite leaders and commoner followers were more closely linked for Terminal Classic Yaxuná.

Chapter 7

<div align="right">

The Late Classic
600-700 CE

</div>

One hundred kilometers away from Yaxuná, a series of distinct communities with their own monumental groups began forming during the Preclassic period. Towards the end of the Early Classic and through the Late Classic, changing political organization, population increase, and urban sprawl resulted in the political, social, economic, and spatial integration of these communities into a polity overseen by a divine ruler (Benavides 1987; Loya González & Stanton 2013). Between roughly 600 and 800 CE, a massive building campaign at Cobá focused on the construction of intrasite causeways to connect these formerly distinct areas of settlement to a central core overseen by a ruler who took the title of *kaloomte* during the seventh century (Guenter 2014; Loya González & Stanton 2013; Stanton et al 2020).

In addition to the intrasite causeways, the period between 550 and 700 CE saw another massive building project involving Cobá. *Sacbe* 1, connecting the urban centers of Yaxuná and Cobá over a distance of 100 kilometers, was built during this time. Securely dated by the several sealed lots of Late Classic ceramics excavated from the causeway terminus at Yaxuná, this *sacbe* represented a massive effort not only by residents of Cobá and Yaxuná but also residents of communities along the causeway's path. *Sacbe* 1 is the longest surviving causeway in the Maya area and it both generated and reinforced economic, social, and political links between Cobá and Yaxuná during the Late Classic.
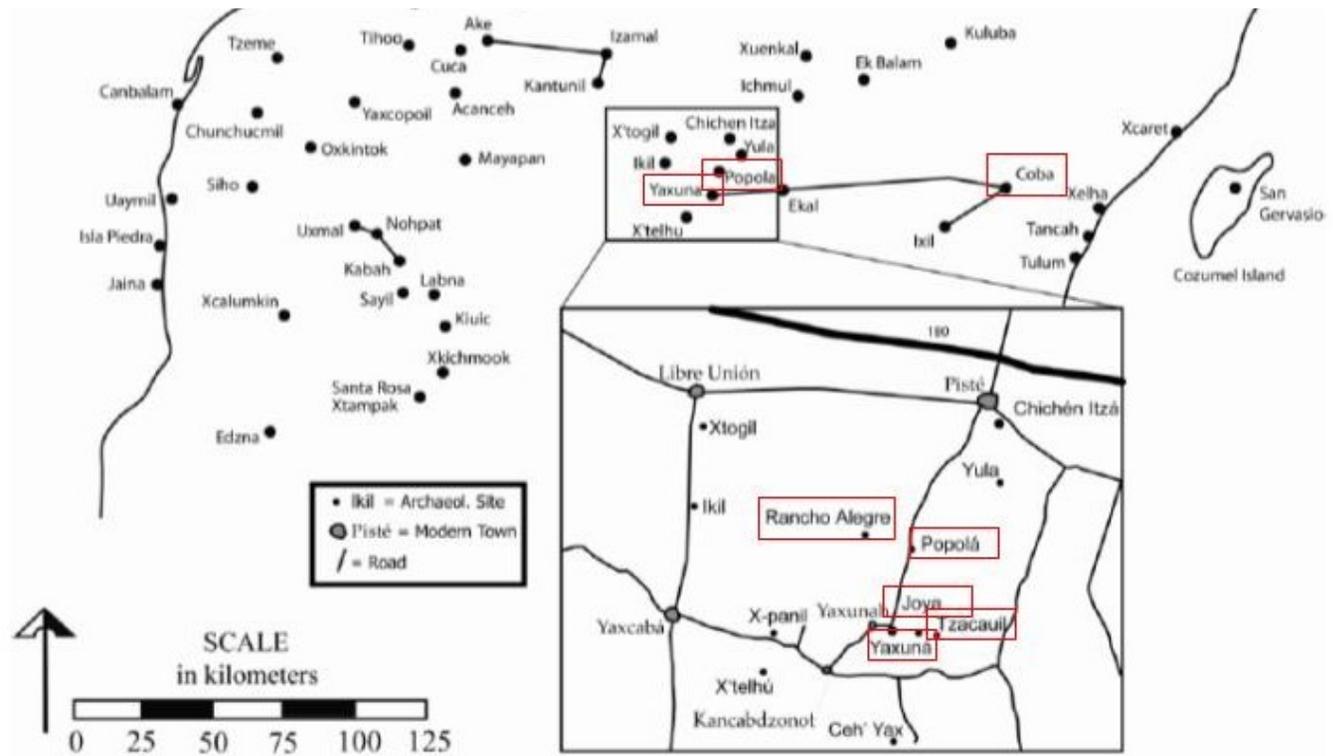
Figure 7.1: Map of northern Yucatán denoting locations discussed in this chapter.

This chapter will begin with a discussion of *Sacbe* 1, whose construction is the most visible event at Yaxuná during the Late Classic. To consider the context of its construction, Late Classic settlement, political organization, and material culture will be considered for the site centers of Yaxuná and Cobá. A brief consideration of political organization at Late Classic Yaxuná and how it was incorporated into the Cobá polity during this period will follow. Archaeological evidence from hinterland areas – the area approximately 5-6 kilometers around the Yaxuná site center – will be presented and analyzed to contrast the effectiveness of circulations of ideas and goods to attract and maintain a political community during this period. I will begin with data from investigations conducted by other members of PIPCY and finish with Late Classic data from my own fieldwork in the transect area and at Kopchen. Finally, I will synthesize the available data to offer an analysis of Yaxuná's political integration during the Late Classic.

Several lines of evidence establish that the Late Classic transformative event was the incorporation of Yaxuná and its residents into the Cobá polity. The causeway, lack of monumental architecture construction and renovation in the Yaxuná center, and the sole hieroglyphic record at Yaxuná all suggest that its political organization changed drastically during this period. Yaxuná was a type of secondary center during this time; any local leaders were likely administrators deriving authority from Cobá's ruler, given the lack of palace complexes or the occupation of elite residences associated with earlier monumental architecture at Yaxuná. During this period, Cobá's leader clearly prioritized circulations of people and goods between the two urban centers. *Sacbe* 1 served to facilitate the rapid movement of people along its path, whether for economic purposes, coercive purposes, or both. The construction process

also served to circulate people; organizing the labor for this undertaking would have introduced participants to people from different communities. The Arena Red production and distribution network also demonstrates that circulations of specific types of ceramic goods were very active among elite and non-elite area residents through *Sacbe* 1. Circulations of certain ideas, such as iconography around governance, warfare, and monumentality, are not as clearly present during the Late Classic. Late Classic residential communities around Yaxuná did not construct or re-utilize their own monumental architecture and did not have local elite residents who affiliated themselves with regional expressions of leadership.

Political integration at Yaxuná looked very different during the Late Classic than the Terminal Classic. During the Terminal Classic, the symbols and items that represented "power over" were regularly visible and present within the residential communities across the Yaxuná area, along with the people who embodied that political power. Even if Yaxuná was in fact part of a Puuc alliance, it is clear that leaders (whether local or foreign) were physically present in these communities on a regular basis, serving as an active reminder of the significance of membership in a political unit.

During the Late Classic, any political leaders at Yaxuná were integrated into Cobá's political regime as subordinates of its queen or king. There is no clear archaeological evidence for local administrators at Late Classic Yaxuná. Yaxuná was enmeshed in political networks for which divine rule was a salient form of organization, but its residents during the Late Classic had a very different relationship to this iteration of leadership than they did during the Early Classic. Late Classic Cobá has strong evidence for a flourishing political regime based on the divine rule of a *kaloomte*, whose political practice is strongly correlated with southern lowland traditions of divine rule.

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During the Late Classic, "power over" shifted at Yaxuná, as a leader from a different political community wielded authoritative political power. Circulations of ideas, symbols, and practices that maintained the common political imaginary were transformed and distanced from the area's residential communities. For residents of the Yaxuná hinterlands, the local residential community and regional non-elite trade networks likely served as the primary spaces of circulations during this period – and were economic rather than political. However, certain communities in the hinterlands closely collaborated with Yaxuná residents as they created the most visible evidence of political and economic integration between Yaxuná and Cobá: *Sacbe* 1. For most of the Yaxuná area, economic exchange served as the primary integrating factor during the Late Classic, with very little evidence of participation in a common political imaginary.

The Long White Road: The Late Classic Transformative Event at Yaxuná

Sacbeob (plural of *sacbe*) have been identified in greater numbers in the northern lowlands than the southern lowlands (Loya González & Stanton 2013: 26). The most commonly known type is the intrasite causeway, which were likely ritual procession routes and/or ways of connecting social groups with monumental architecture. The Preclassic and Early Classic intrasite causeways of Yaxuná, for example, appear to have linked certain residential groups to monumental architecture such as the North, Central, and East Acropolises. At Cobá, the intrasite causeways connected more distant residential areas to the site center.

There are four long-distance (10 kilometers or longer) known causeway systems in the northern lowlands (Hutson 2014: 243). Besides *Sacbe* 1, these include the causeways between Izamal and Ake and Kantunil, Uxmal with Kabah, and Uci with Cansahcab. In the southern lowlands, intersite causeways center on El Mirador, Calakmul, and Caracol and date primarily to

the Preclassic or Early Classic. Recent lidar data identified approximately 106 linear kilometers

of causeway construction in the southern lowlands. Intra-site causeways are mostly associated

with Late Classic centers (Canuto et al 2018: 13). In the southern lowlands, intersite causeways

link urban centers with smaller centers while intra-site causeways served as entryways to public

spaces. Causeway density in the southern lowlands increased from west to east and south to

north (2018: 13). The function of long-distance inter-site causeways is often debated: were they

for transportation, political symbols, boundary maintenance, ritual integration, commerce, or

warfare? It is likely that intersite causeways fulfilled multiple functions, and all of them

facilitated circulations – and thus integration - between the residents of different sites (areas of

settlement) located along them and at their endpoints.
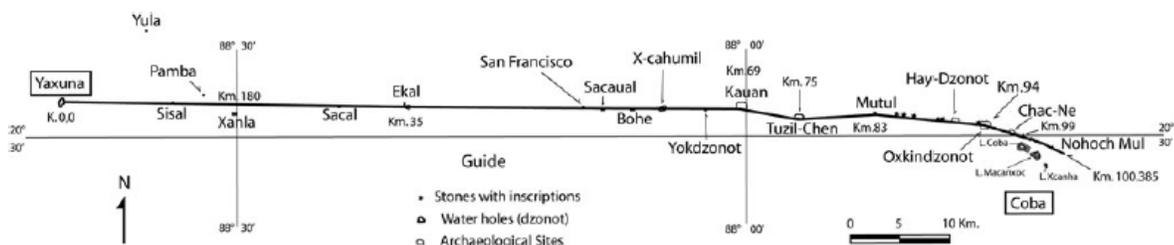
Figure 7.2: *Sacbe* **1 (from Loya González & Stanton 2013: 27)**

Sacbeob are generally stone platforms between four and ten meters wide and less than a

meter high. The dry core fill requires huge volumes of stone, and most causeways also had

plastered surfaces and cut stone along their edges. The labor required for quarrying, hauling, and

placing this volume of stone qualifies causeways as monumental construction that required

significant labor. It is also meant to mark continuity or stability; unlike a cut path, which can be

easily overgrown if not consistently maintained, a stone causeway confers more permanence on a

route over a longer period of time. Although Scott Hutson argues that causeways in the northern lowlands do not cross wetlands, Chelsea Fisher's work at Tzacauil demonstrates that maintaining bedrock pathways for walking access during the wet season was a consideration in the Yaxuná area. A stone causeway does confer some logistical advantages for transport over a long distance when considering the density of central Yucatán's vegetation and the pouring rains of the wet season. The monumental nature of causeways is also a sign of collaboration, cooperation, or at least permission between the residential communities at either end, as well as the residential communities along or near the causeway.

Sacbe 1 is the most significant monumental construction from the Late Classic at Yaxuná. It is Yaxuná's only known intersite causeway and the longest known causeway in the ancient Maya world. It sheds light on the Yaxuná polity's political, economic, and social connections with Cobá. *Sacbe* 1 is 100 kilometers in length; it begins at the eastern edge of Yaxuná's monumental core and terminates at Cobá's *Nohoch Mul* group, just north of the site's geographic center (Loya González & Stanton 2013). The causeway consists of dry core fill with vertical stone slabs covered with layers of gravel and *sascab*. Test units from *Sacbe* 1 all contained Late Classic ceramic types, specifically Arena Red (Loya González & Stanton 2013; Shaw & Johnstone 2001; Stanton et al 2010). The sealed lots of Arena Red indicate that the causeway was primarily or only in use during a short period of Yaxuná's history. Excavations of the *sacbe* demonstrate it was only in use during the Late Classic, from approximately 600-700 CE (Johnstone 2001; Loya González & Stanton 2013; Stanton et al 2010; Tiesler et al 2017: 37).

Several earlier structures at Yaxuná were modified in accordance with *Sacbe* 1. Structure 6E-13 is the terminus structure for the causeway, a 3.5 meter tall pyramidal structure facing *Sacbe* 1. It was originally built in the Early Classic but modified to face east during the Late

Classic. The structure had plastered walls and a plaster floor. The eastern wall of the final basal platform was attached to the northern causeway wall (Stanton et al 2010: 53). *Sacbe* 1 terminated in a ramp leading into Structure 6E-13. Structure 5F-3, the eastern half of a pair of pyramidal structures on the Central Acropolis, was reoriented towards *Sacbe* 1's terminus and resurfaced with a series of inclined terraces and an outset stairway leading to an open summit with a perishable superstructure (Shaw & Johnstone 2001).

Beyond the Yaxuná center, there are multiple sites along *Sacbe* 1. The longest distance between sites appears to be approximately 8 kilometers. There is a fairly clear distinction between sites along the causeway; the areas between them are mostly devoid of architecture (Stanton et al 2019: 8). Several of these sites have substantial public architecture, such as Ekal, Kauan, Oxkindzonot. Many of the communities existed prior to the causeway; its path veers opportunistically to incorporate them along the *sacbe* (Rohrer & Stanton 2019). Recent area density analysis of lidar data from around Cobá shows that settlement extends farther from the site core along the two intersite causeway – *Sacbe* 1 towards Yaxuná and *Sacbe* 16 towards Ixil, while it drops off significantly at the termini of the intrasite causeways. Intersite causeways seem to have attracted settlement close to Cobá, which was attractive due to its size, diversity, and economic and political power (Stanton et al 2019: 9). To understand what the construction of *Sacbe* 1 meant for political, economic, and social dynamics between leaders and followers at Yaxuná during the Late Classic, it is important to understand the contexts at Cobá and Yaxuná during this period.

Cobá in the Late Classic

Cobá was a major urban center; it is the largest prehispanic site known in the northern lowlands of Quintana Roo at 64 sq kilometers in size. Some estimates place its population between 20,000 and 60,000 residents during the Late Classic period, one of the highest-populated Maya centers (Folan et al 2009). The central core area of the site, Cobá Group B, is the intersection point for numerous intrasite causeways as well as the major site of high-status civic-ceremonial architecture such as the palace, vaulted architecture, open and confined plazas, a hieroglyphic staircase, two formal ball courts, and carved stelae (Folan et al 2009). Radiating north, south, east, and west from Group B are causeways several kilometers long leading to major groups of vaulted buildings. Cobá's investigators argue that the site shows a concentric settlement pattern. While there was not a direct linear correlation between labor investment in a building (used as a proxy for status) and distance from the defined midpoint of Cobá, labor investment peaked towards the site center, descended toward the middle, and peaked again towards the outliers – the major groups of vaulted buildings at the other end of the intrasite causeways. Statistical analysis of Cobá's zoning shows the primary leaders (divine rulers) centered at the core of the city, with minor elite presence strategically located at the peripheries of the site. William Folan and colleagues suggest that the complexes at the termini of the intrasite causeways were occupied by the equivalent of Colonial period *batabo'ob* – officials who administered the basic municipal unit (the neighborhood) and exercised power over its residents in minor judicial and executive matters (Folan et al 2009).

Economic and social status varied across Cobá's population, as seen through architecture. House lot size; basal platform height and size; number, size, and type of superstructure location; solar size; and the presence of *albarradas* (walls) enclosing house lots were significantly

correlated. Taking Zone 1 of Cobá as an example, elite compounds were generally located closer to Group B and were either isolated or associated with household architecture requiring less labor investment (commoner households) (Folan et al 2009). Investigators at Cobá suggest that residence was organized into units occupied by extended family groups and that elite units associated with commoner dwellings were neighborhood wards whose commoner population was related to the resident elite occupants through kinship. Residential units were clustered; leaving space that may have been used for arboriculture and horticulture and creating the "neighborhoods" that resident elites may have overseen (Folan et al 1983).

In addition to its monumental architecture, Cobá is also the site of numerous eroded stelae, including some with hieroglyphic dates portraying rulers (Guenter 2014; Loya González & Stanton 2013). Cobá has more stelae than any other site north of Calakmul, but because they were carved on northern Yucatán's poor quality limestone the inscriptions and images are often eroded. The stelae that have provided the most amount of data relating to the Late Classic are found in the Macanxoc Group, less than 1 kilometer southeast of Group B. The eight stelae in this group have the best-preserved Long Count dates, most of which date to the seventh century. Five of the nine portraits on the stelae in this group are most likely of women. Stanley Guenter has argued that the figures on Stela 1, Stela 2, Stela 4, and the back of Stela 5 all portray the same woman, a female ruler of Cobá during the seventh century (2014). An inscription from Stela 1 suggests she was born in 617. Stela 4 gives her accession date as April 4, 640 (9.10.7.5.9 4 Muluc 17 Uo) at the age of 23. Stela 2 commemorates the Long Count date 9.10.10.0.0 13 Ahau 18 Kankin (December 1, 642) and depicts her standing on a captive. Stela 5 was dedicated on August 18, 662 and includes the portrait of a male who may have been her husband. Stela 1 also includes the Long Count date 9.12.10.5.12, thought to be the accession date of a new ruler,

Chan Yopaat. Another date on the same stela falls less than a year before, suggesting it records the death or burial of his predecessor – Lady *K'awiil Ajaw* (Guenter 2014). The majority of the Macanxoc Group stelae date to a sixty-year period in the seventh century and represent only three or four distinct rulers, of whom Lady *K'awiil Ajaw* is the most commonly portrayed.
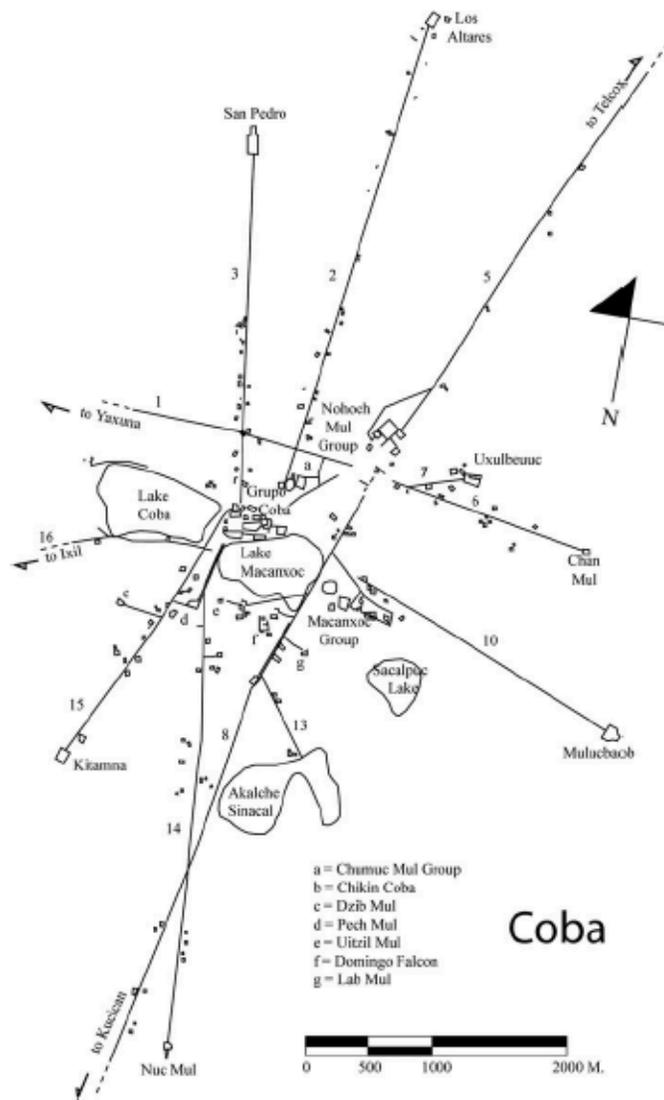
Figure 3. Map of Coba (modified from de Benavides [1987:24]).

Figure 7.3: Map of Cobá (from Loya González & Stanton 2013: 29)

Prior to the fifth century, Cobá may not have existed as a cohesive polity; its settlement organization and the emphasis on intrasite causeways suggest that the area may have initially contained numerous smaller distinct settlements that were eventually integrated. The causeways served to materially connect formerly independent communities to those who became the primary leaders – the divine rulers of a large and well-organized polity. Inscriptions on panels and stelae reference divine rulers during the sixth century as well. The evidence from Cobá suggests that the polity leader was a divine ruler, while other individuals had limited "power over" smaller residential units such as neighborhoods or wards. Interestingly, there is evidence for prior female rulers at Cobá, indicating, "women…had a prominence within the royal society of Cobá rarely seen in the better-known Maya kingdoms of the south" (Guenter 2014: 413). The many portraits of women from Maya sites were often posthumously commissioned by their ruling sons to record the ruler's lineage.

During the Late Classic at Cobá, Lady *K'awiil Ajaw* ascended to leadership of the polity. Her stelae record her using the title *kaloomte*, the highest title known to the Classic Maya prior to the late eighth century. It was held by those considered to be the most powerful rulers in the Maya area, suggesting regional warlord or emperor. Rulers holding this title often claimed power over large territories, including annexing other polities. She appears to have utilized the common strategies of ancient Maya rulers for maintaining power, such as carrying out civic-religious ceremonies marking the passage of time and engaging in warfare. Lady *K'awiil Ajaw* is portrayed on her commissioned stelae as standing over more than a dozen captives, more than most male Maya rulers. The suggested prowess in warfare gives support to her title of *kaloomte*, particularly if said warfare culminated in annexation of additional territories and incorporation of smaller communities into the Cobá polity. She commissioned a large number of monuments on

half-*katun* intervals. While a male was portrayed on one of her stela, it is clear that she was the divine ruler and primary leader. Stanley Guenter also argues that Lady *K'awiil Ajaw* was a major patron of the arts and sciences, given the unique calendric attributes of the stelae she commissioned. Stelae 1 and 5 both have examples of the Grand Long Count, expanding the typical 5 positions of the Long Count for the creation date to 24. Many of Cobá's monuments have multiple Long Count dates and provide G-numbers for Calendar Round dates as well. Therefore *Sacbe* 1 connected Yaxuná to a polity under an expansionistic and militaristic leader – what was happening at Yaxuná?

The Yaxuná Center in the Late Classic

The ceramic sequence for the Classic period has undergone significant revision since the Selz Project (Stanton & Ardren 2020). The Selz Project's Yaxuná IIb and IIc have been placed with Yaxuná III into the *Yulum* complex, covering the period from 550-700 CE. While Dave Johnstone had previously assigned flaky wares to the Early Classic, PIPCY recognized the continued use of flaky wares in the Chuburna group throughout the Late Classic (Johnstone 2001; Stanton & Ardren 2020). Along with Chuburna, the most common ceramic groups in Yaxuná during the Late Classic are Arena and Chancenote. Arena Red is the diagnostic type for the Late Classic at Yaxuná; it was originally thought to originate from Cobá and spread to Yaxuná via *Sacbe* 1 (Shaw 1998; Shaw & Johnstone 2001; Stanton & Freidel 2005). However there is actually a greater variety of forms and larger quantity of Arena Red ceramics at Yaxuná than at Cobá. Arena Red may have been locally produced and exported to Cobá along *Sacbe* 1 (Loya González & Stanton 2013).

Although Arena, Chuburna, and Chancenote dominate in the *Yulum* complex, other groups are present as well (Stanton & Ardren 2020). The first appearance of slate ceramics is during the *Yulum* complex; Muna Slate, locally produced near the peninsula center, is the earliest such type at Yaxuná (Johnstone 2001; Stanton & Ardren 2020). Muna Slate is rare at the beginning of the Late Classic but larger quantities are found towards the end of the Late Classic, when the Arena and Chuburna groups disappear. Chuburna flaky wares adopt some of the forms of Muna Slate before their production ceases (Stanton & Ardren 2020).

Ceramics from the Oxkintok Regional Complex at Yaxuná were initially confined to contexts at the North Acropolis and assigned to the late Early Classic (Stanton et al 2010). Very few ceramics from groups associated with this complex, such as Maxcanu, Batres, and Kanachen were initially identified at Yaxuná (Johnstone 2001; Stanton et al 2010). PIPCY's investigations have uncovered a greater quantity of these ceramics, including in contexts beyond the North Acropolis. Excavations at Groups 5E-110, 5E-52, 6E-30, and a large midden at the North Acropolis all yielded ceramics from those 3 groups, as well as from the Kochol and Kinich groups (Stanton & Ardren 2020). Oxkintok Regional Complex ceramics at Yaxuná are found most often in the company of Arena Red and Chancenote Striated (2020). Originally this period at Yaxuná was thought to have the fewest sources and types of ceramics, perhaps due to restrictions on trade imposed by Cobá (Shaw 1998). The recent excavations mentioned above reveal that this period in Yaxuná's history actually had the one of the greatest diversities in ceramic types and varieties; while in limited quantities, it reveals that some Yaxuná residents participated in regional exchange networks (Stanton & Ardren 2020). However there was a significant reduction in polychrome varieties and numbers at Yaxuná.

Table 7.1: Wares, groups, types, and varieties of the *Yulum* ceramic complex (adapted from Stanton & Ardren 2020)

Wares	Groups	Type: Variety
Pizarra	Muna Pizarra	Muna Pizarra: Cafetoso
		Sacalum Negro Sobre Pizarra: Cafetoso
		Chumayel Rojo Sobre Pizarra: Cafetoso
		Akil Impreso: Cafetoso
		Dzan Compuesto: Cafetoso
		Nohcacab Compuesto: Cafetoso
		Yaxnic Modelado: Yaxnic
Puuc Sin Engobe	Chum	Chum Sin Engobe
		Yokat Estriado: Yokat
Xcanatun Sin Engobe	Saban	Chancenote Estriado: Chancenote
Usil	Chuburna	Chuburna Café: Chuburna
		Dzununcan Compuesto: Dzununcan
		Kuyul Borde Pintado: Kuyul
		Buctzotz Inciso: Buctzotz
		Tekal Compuesto: Tekal
		Catoche Chorreado: Catoche
		Subincancab Compuesto: Subincancab
Yucatan Lustroso	Batres	Batres Rojo: Batres
		Batres Rojo: Ixil
		Batres Especial: Inciso
		Lakin Impreso: Lakin
		Coba Compuesto: Coba
		Xoclan Chorreado Sobre Rojo Abigarrado: No Especificada
		?Compuesto
	Maxcanu	Maxcanu Bayo: Maxcanu
		Tacopate Chorreado Sobre Café: Tacopate
		Tiznuk Compuesto: Tiznuk
		Koopiltrapech Inciso: Koopiltrapech
		Maxcanu Especial: Bayo y Rojo Bicromo
		Maxcanu Especial: Aplicado
	Hunabchen	Hunabchen Anarjanado: Hunabchen
		Hunabchen Anaranjado: Interior Engobe Negro
	Kanachen Cetelac	Kanachen Negro a Café: Kanachen
		Kanachen Rojo Interior: Var. Rojo Interior
		Cetelac Desgrasante Vegetal: Cetelac
?	Baca	Baca Rojo: Baca
?	Dzitya	Ditzya Negro: Dzitya
		Haabin Gubiado Inciso: Haabin
		Guayacan Compuesto: Guayacan
		Chakah Acanalado: Chakah
		Dzitya Especial: Impreso
	Zupulche	Zupulche Café Delgado: Zupulche
		Chunkatzin Bicromo: Chunkatzin
		Kumche Rojo y Negro Sobre Pizarra: Kumche
		Tajonal Negro Sobre Pizarra: Tajonal
		Chicbul Plano Relieve: Chicbul
		Zupulche Especial: Inciso

Table 7.1 continued: Wares, groups, types, and varieties of the *Yulum* ceramic complex (adapted from Stanton & Ardren 2020)

Wares	Groups	Type: Variety
Peten Lustroso	Saxche	Saxche Anaranjado Policromo: Saxche
		Saxche Anaranjado Policromo: No especificado
		Saxche Anaranjado Policromo: Mahalal
		Sibal Bayo Policromo: Sibal
	Chinos	Chinos Negro Sobre Crema: Chinos
	Zacatal	Zacatal Crema Policromo: Zacatal
	Palmar	Palmar: No Especificado
Campeche Lustroso	Chimbote	Chimbote Crema Policromo: Chimbote
?	Chablekal	Chablekal Gris: Chablekal
?	Chum	Oxkutzcab Aplicado: Oxkutzcab
?		Halacho Impreso: Halacho
?	Infierno	Infierno Negro: Infierno
?	Traino	Traino Café: Traino

Data and analysis for Late Classic Yaxuná come from the work of the Selz Project and other members of PIPCY. Late Classic civic-monumental construction did not correspond to the earlier norms used to organize the urban center (Stanton & Freidel 2005: 238). *Sacbe* 1 runs east to west at a different orientation from the Preclassic axis, and Yaxuná's internal causeway system was not modified or updated. *Sacbe* 5 may date to the Late Classic given its association with Structure 4E-4; it runs east to west. Structure 4E-4 is at the far western edge of the urban center. One of the few examples of traditional ceremonial architecture from the Late Classic, Structure 4E-4 is an elevated shrine with a 3 room foundation brace; it may have had carved stucco facades and sculptural friezes during the Early Classic (Shaw & Johnstone 2001; Stanton et al 2010). Structure 6F-11 is another rare example of Late Classic civic architecture at Yaxuná. It is associated with a carved monument containing a mostly eroded hieroglyphic text. The one legible glyph is *ch'aakba*, typically associated with warfare and conquest (Novelo Rincon 2012; Tiesler et al 2017: 38). Late Classic architecture consisted primarily of residences and small ceremonial structures, while larger monumental architecture was resurfaced (Shaw & Johnstone

2001). Structure 5F-3 was resurfaced, raised a meter, and reoriented towards the east. The renovations to 5F-3 are similar to Late Classic styles at Cobá, particularly Structures B-1 and C-1. All three of them have terraces with inset rounded corners (Shaw & Johnstone 2001).

Settlement data suggest a large population for Yaxuná during the Late Classic, though lower than the Terminal Classic. Identifying the extent of settlement is difficult since good housing areas at Yaxuná were occupied numerous times, with Terminal Classic occupations most visible on the surface (Shaw 1998). Settlement size appears stable throughout the Early and Late Classic; given the lack of new constructions, the same areas had continued occupation. Another difficulty is the lack of diagnostic features for Late Classic architecture; rounded corners on monumental architecture are the only hallmark and are unhelpful in identifying residential structures (Shaw 1998: 243-245). Late Classic residences were associated with raised platforms (often renovating or rebuilding Late Preclassic platforms) and modified outcrops (Stanton et al 2010: 262). All excavated Late Classic residences had thin floors, without the reinforcement of a gravel subfloor. Most of the residences were rectangular with single course foundation braces (Shaw 1998; Shaw & Johnstone 2001; Stanton et al 2010). Residential architecture at Late Classic Yaxuná appeared to be more expedient; less labor and effort were devoted to construction. On the other hand, lasting connections to residences and land are indicated by the placement of dead within the construction fill of these residences.

Structures 5E-75, 5E-77, and 5E-59 did replace Early Classic structures and were reoriented 180 degrees during their Late Classic renovation (Shaw & Johnstone 2001). This reorientation resulted in the structures facing away from the Early Classic palace 5E-52 Group. Structure 6F-13 contained a sleeping bench built against a wall. Structure 5E-75 was the most elaborate residence, with 3 rooms and stone walls four to six courses high (Stanton et al 2010).

Structure 6F-8 is an elite structure dated to the Late Classic. It was a vaulted, two-room residence with load-bearing masonry and a corbelled vault (Stanton et al 2010). While some residential groups in the site center, such as 5E-59 and 5E-75, were transformed to "face forward not back" by reorienting them away from the Early Classic palace, most Late Classic residences continued previous patterns of occupation in the same areas, prioritizing existing raised platforms and modified natural bedrock rises (Stanton et al 2010: 262).

In all, six mortuary contexts from the Late Classic were identified; most individuals were placed aligned north-south in simple lined pits dug into platforms and in three cases, accompanied by other human remains (Tiesler et al 2017: 153-159). Burial 5 was of a young child placed in the fill of Structure 5E-59 with a Late Classic polychrome bowl placed. Burials 12 and 14 were located in Structure 4E-22 in simple unlined pits; Burial 12 was a local female with an inverted Arena Red dish placed over her pelvis while Burial 14 was a tightly bundled middle-aged male. His head was covered with an Arena Red dish and grave goods included feline molars, a serpentine bead, and a bone bloodletter. This individual also had pieces of pyrite inlaid in his dentition. Burial 20, a post-menopausal female, was originally placed in the construction fill of Structure 6F-4's southern room. Her grave was eventually filled with *sascab* (which doubled as a floor patch) and her body was accompanied by a series of deer segments. Burial 28 was found in the plaza of Structure 6E-32; it consisted of a male in his fifties or sixties whose bundled body was placed seated in a circular cist with flat capstones. The cist was not filled with dirt; the capstones seem intended to protect the body, which was covered in a red substance. His grave goods included a greenstone bead, a Tacopate Black on Buff vessel, and a Kinich Orange vessel. Fragmentary remains of two other individuals, an adult and a child, were also present in the cist.
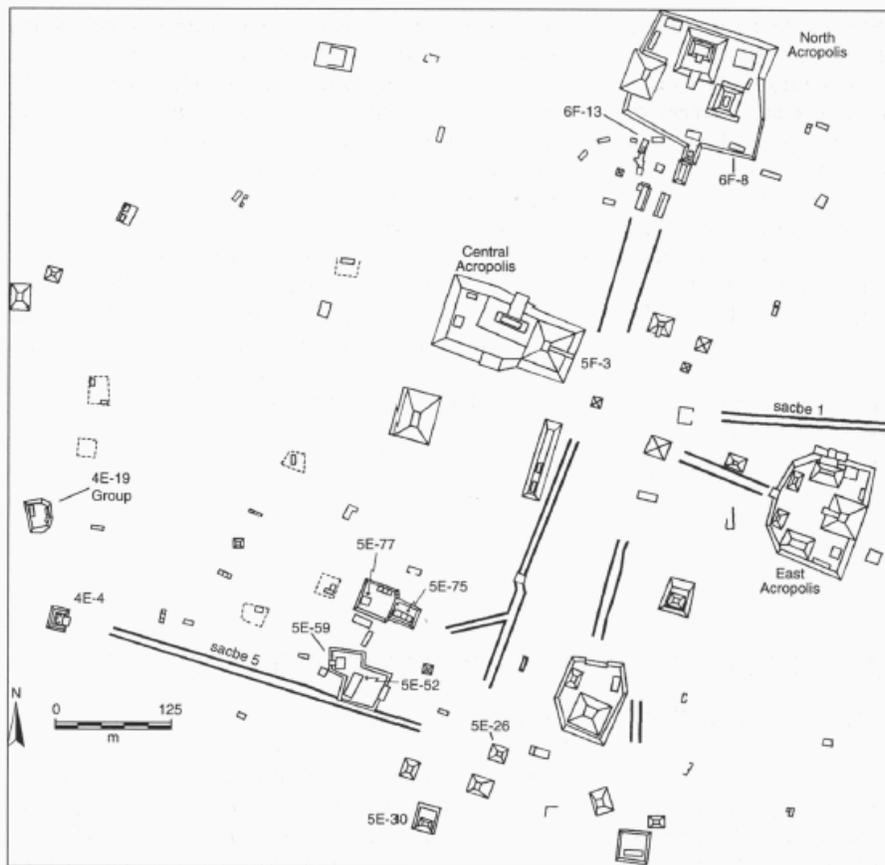
Fig. 2. Late Classic Structures at Yaxuna

Figure 7.4: Late Classic structures at Yaxuná (from Shaw & Johnstone 2001: 11)

The Late Classic evidence from Yaxuná is a dramatic shift from the Early Classic regimes of divine rule. There is no evidence for a divine king based at Yaxuná during the Late Classic; the Early Classic interments of Burial 23 and Burial 24 are the only two found within the acropolises. There are minimal examples of civic-ceremonial architecture beyond *Sacbe* 1; Structures 4E-4 and 6F-11 and *Sacbe* 5 are the only contenders. The only stelae related to the Late Classic is difficult to decipher, but the presence of the glyph *ch'aakba* in conjunction with other data suggests that whatever political regime held power at the end of the Early Classic, the transition to the Late Classic saw its forceful and possibly violent removal. The deposal of the

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Burial 24 ruler emphasized continuity in the institution of divine rule at Yaxuná through new constructions at 6F-4 and the reentry ritual at Burial 23. If the Early Classic to Late Classic transition did see political violence, the new leaders did not rely on maintaining continuity through maintaining the same type of political regime at Yaxuná. It is likely that whatever administrative leaders were present at Yaxuná during this period derived their authority and legitimacy from a different divine ruler – Lady *K'awiil Ajaw* at Cobá.

Late Classic Political Organization at Yaxuná: Incorporation

During the Late Classic, it appears that independent leadership at Yaxuná was subverted, either militarily or through other means. Monumental construction related to the collective tradition of Yaxuná ceased; instead, communal energy and effort was directed into creating a visible and functional connection between Yaxuná and Cobá. The Burial 24 family is the last clear demonstration of divine rulership at Yaxuná; it is likely that the organization of leadership at Yaxuná changed significantly following their deposal. The evidence from the Late Classic suggests that Yaxuná was not a fully independent polity during this time. "Power over" was ultimately based in the Cobá polity with its *kaloomte* Lady *K'awiil Ajaw*, while some form of local leadership or Cobá-appointed administration oversaw the followers living in the Yaxuná polity. During the Late Classic, Yaxuná was incorporated into the Cobá polity. The circulations of ideas, symbols, and goods that connected Yaxuná-based divine rulers and followers during the Early Classic shifted significantly. Instead, circulations increased between leaders and followers at Cobá and Yaxuná. These circulations intensified economic, social, and political connections between the Yaxuná site center and Cobá. The question is whether the surrounding area, for which Yaxuná had been the urban and monumental center and seat of "power over," similarly

integrated with Cobá. Yaxuná's incorporation into a distant polity may have been an excellent opportunity for residents of the area to exercise "power to" minimize their labor and tribute responsibilities.

Incorporation, as discussed in the example of Xunantunich and Naranjo, can take several different forms. Patron-client relations, alliances, and annexation are differentiated by the degree of coerciveness involved in the circulations connecting the dominant and subordinate polities. Patron-client relations are the loosest form of incorporation, while annexation consists of direct involvement by the dominant polity in the social, political, and economic affairs of the subordinate polity.

Table 7.2: Archaeological correlates for incorporation strategies (adapted from LeCount & Yaeger 2010: 40)

Criterion/correlate	Patron-client	Independent allies	Dependent allies	Direct rule
Gift exchanges	Yes	Yes	Yes	Yes
Tribute payment	None	Irregular	Regular	Regular
Foreign symbolism	Rare	Present	Imposed at highest levels	Abundant
Marriage alliances	Rare	Present	Common	Common
War events	Rare	Rare	Common	Common
Restructured sociopolitical institutions	None	None	Imposed at highest levels	Yes
Restructured land tenure or demographics	None	None	Possible	Yes
Restructured economic relations including markets	Some	Some	Likely	Yes

The archaeological evidence for Cobá as the polity with "power over" is clear. During the Late Classic, Cobá had divine rulers who oversaw one of the largest sites and biggest populations in the northern lowlands. These divine rulers had long reigns (*Lady K'awiil Ajaw*

appears to have led for 40 years) and were able to exercise significant "power over" in the realm of labor for monumental architecture – both ceremonial (temples) and civic (causeways). At Yaxuná, however, almost all labor appears to have been channeled into the construction of *Sacbe* 1 and the remodeling of associated architecture such as Structures 5F-3 and 6E-13.

Annexation results in a thorough restructuring of the sociopolitical, economic, and demographic structures of the subordinate society. Dependent allies are subjugated through warfare and are subject tribute payments and forms of servitude. The archaeological evidence of dynamics between Cobá and Yaxuná speaks to aspects of both. The labor requirements for *Sacbe* 1 and its associated architecture as well as the coordination required for such a massive effort suggest centralized planning – an effort directed from Cobá but requiring significant tribute and labor requirements from members of the Yaxuná polity. *Sacbe* 1 could have "expedited the flow of commodities, permitted the swift transport of important messages, helped administrators travel between sites, and served as a defensive infrastructure by allowing armed forces to be swiftly relocated to crisis areas" (Shaw & Johnstone 2001: 12). It also would have facilitated cultural exchange for traders and ambassadors between the two sites (Freidel 2007). The lack of evidence for local leaders at Yaxuná indicates that they may have lost their authority to Cobá's elites. The Yaxuná economy was certainly affected, given the large amount of labor directed towards *Sacbe* 1; the production of Arena Red *cajetes* may be another example of the reorganization of labor at Yaxuná. Yaxuná may have been incorporated through conquest, given Lady *K'awiil Ajaw*'s demonstration of prowess in warfare on her dedicated stelae and her use of the *kaloomte* title. It is also possible that Yaxuná's local leadership, seeking a stronger ally in the aftermath of Early Classic upheaval, sought out a connection with Cobá's regime for affiliation and protection. Vera Tiesler and colleagues offer another hypothesis: that Lady

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K'awiil Ajaw, potentially a Kaanal ally, oversaw the violent termination of Structure 6F-4 as retaliation against the perpetrators of the Burial 24 massacre and claimed the Yaxuná city-state as part of a Cobá polity allied with *Yuknoom Ch'en* the Great (2017: 37-38).

Circulations: Cobá and the Yaxuná Center

For residents of the Yaxuná center, reminders of political subjugation would have been consistently present. The stelae recording a conquest, the new structures to demarcate the causeway, and of course *Sacbe* 1 itself were built into the landscape. Labor and other forms of tribute shifted out of the site center to the construction of the causeway, possibly requiring workers to be away from their homes and families for extended periods. *Sacbe* 1 materialized the intensified circulations between Yaxuná and Cobá and served as a concrete representation of their integration. In order to identify if and how the Yaxuná hinterlands were integrated with the Cobá polity during the Late Classic, it is necessary to highlight the circulations between the residents of Yaxuná's core and Cobá's residents and leaders.

As previously mentioned, *Sacbe* 1 was not only the manifestation of circulations of labor and tribute; it also facilitated circulations – of people, goods, ideas, symbols, and practices along its length. Its construction followed the course of previously established communities, suggesting their residents were also included in construction and maintenance and incorporated as clients of Cobá (Stanton et al 2020). Analysis of lidar data shows residential communities fairly close together along the causeway – the greatest distance between communities was 8 kilometers; distance even families with young children could conceivably travel in a single day. Closer to Cobá's urban center, the causeway also encouraged new settlement; more people chose to live in proximity to *Sacbe* 1 beyond Cobá's urban center than in the surrounding area.

The strongest evidence of how *Sacbe* 1 facilitated circulations between Yaxuná and Cobá is the distribution patterns of Arena Red at each site. Originally identified as part of the Palmas complex, further research has demonstrated that Arena ceramics from Yaxuná have more modal variability and greater range of shapes than those found at Cobá (Loya González & Stanton 2014). At Yaxuná, the Arena group includes Arena Red, Xcatun Impressed, and Arena Orange. The vessel shapes include composite tripod bowls (*cajetes*), jars, and other forms of bowls. Arena ceramics include ash temper, indicating that Yaxuná was independently or through Cobá involved in long-distance exchange networks in areas of volcanic ash (2014: 350). Only Arena Red *cajetes* have been reported from Cobá, and they appear to have homogenous formal characteristics (Robles Castellanos 1990). The *cajetes* could be stacked and easily transported; they may have been used to seal political alliances like polychrome vases were in the southern lowlands or as ritual ware (Loya González & Stanton 2014: 355). These attributes have led to the argument that Arena Group ceramics were produced in Yaxuná and transported to Cobá, possibly as a tribute payment or for further export.

The regional ceramic markers of Late Classic interaction spheres are present at Cobá and Yaxuná: Muna Slate and Maxcanu Buff from the western part of the peninsula, and Saxche from the south in addition to Cobá's Batres group and Yaxuná's Arena group. Residents of Yaxuná appear to have retained their trade contacts with the north and northwest parts of the peninsula (participants in the Canbalam ceramic sphere). This circulation of goods, as well as Yaxuná's likely participation in an inland trading route connecting the coast with the Petén, would be attractive for Cobá's rulers and economic elite (Loya González & Stanton 2014: 356). *Sacbe* 1 would have facilitated the transport of goods as well as clearly asserting their connection – whether as allies or through annexation.
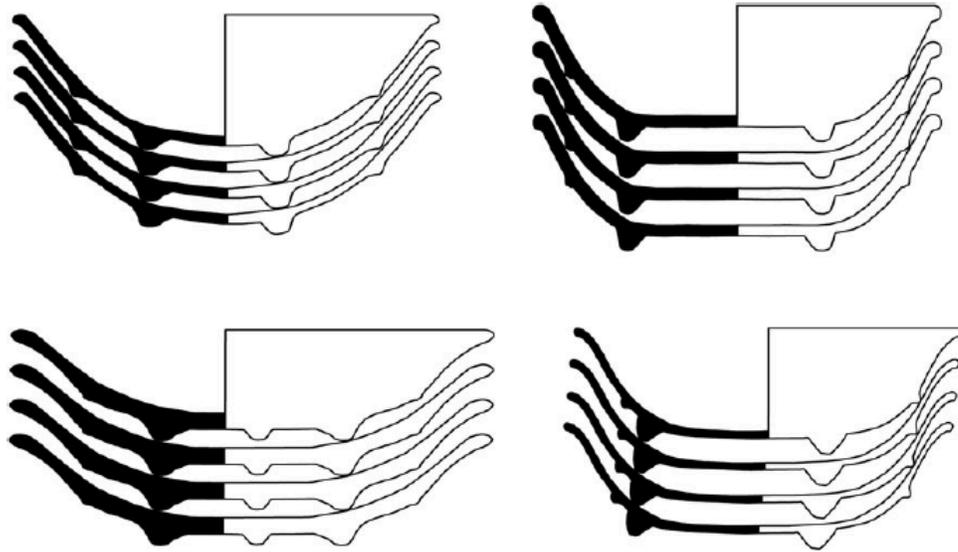
Figure 7.5: Hypothetical reconstruction for stacking of Arena Red *cajetes* (from Loya González & Stanton 2013: 37)

Civic monumental architecture at Yaxuná also shows circulations of ideas and practices between Cobá and Yaxuná. Structure 5F-3 has architectural similarities to several structures at Cobá. The reorientation and resurfacing of architecture at Yaxuná shows the introduction or imposition of new symbolism. The primacy of the artery connecting to Yaxuná and Cobá was asserted through ensuring civic architecture directly faced the causeway, regularly reminding residents and visitors of its importance.

Late Classic Political Organization in the Urban Center

The lack of evidence for local divine rule and the concentration of labor and energy into *Sacbe* 1, as well as the contemporary evidence for a divine ruler claiming regional power with the *kaloomte* title at Cobá evince the shift in political organization from the Early to Late Classic at Yaxuná. A change in political organization affects authority and legitimacy, the coercive and ideational strategies used for obtaining and maintaining power, and the shape of the social

imaginary. The types and intensities of circulations between leaders and followers change, reconfiguring the sociopolitical imaginary for participants. During the Late Classic at Yaxuná, evidence suggests that intensified circulations between Cobá's leaders and Yaxuná's urban center, whether through increased exchange, military action, alliance, or some combination, reshaped Yaxuná's sociopolitical imaginary. The residents of Yaxuná's urban center, daily observers of the social and material transformations that accompanied Yaxuná's closer relationship to Cobá, likely expanded their political imaginary along the course of *Sacbe* 1. Increased access to non-local goods such as obsidian and the exchange of pottery wares such as Arena group ceramics, as well as the labor-intensive process of building the causeway and remodeling the civic center to reflect its importance are archaeologically visible evidence of changing economic circulations. It seems likely that any Yaxuná-based leaders during the Late Classic at least partially derived their authority and legitimacy from the Cobá regime. They may have expressed their connections through overseeing the production and distribution of certain types of goods – tribute goods sent to Cobá and/or non-local goods among residents of the Yaxuná urban center.

The urban center appears to have had a stable population; residents continued to build, renovate, and occupy previously constructed Preclassic and Early Classic platforms. They also intensified claims to these residences through interring their dead within the construction of these platforms, including burials holding multiple individuals. The skeletal data from Late Classic Yaxuná indicate that residents of the site center enjoyed relatively good health, with lower frequencies of stress events (Tiesler et al 2017: 84-86; 239). Incorporation into the Cobá polity did not affect Yaxuná's residents' access to subsistence resources. However, mortuary traditions at Yaxuná are distinct from those noted at other Late Classic sites with cists, tombs, and crypts

(2017: 239). Interments at Yaxuná are simpler, placed directly in residence floors with no prepared grave or crypt space. This treatment of the dead could relate to social "restrictions" on certain types of ideological circulations – expectations that Yaxuná residents did not have the sociopolitical status for certain styles of burials. Another possibility is that Yaxuná residents were practicing schizmogenesis – in light of their lack of political and economic autonomy, they identified other ways to distinguish themselves from Cobá. Other than the transformation of civic-ceremonial architecture, spatial and settlement organization across the site center was consistent; Late Classic residences in the urban center continued to utilize bedrock outcrops and natural rises.

The Hinterlands of the Hinterlands

While Yaxuná was the largest center in its area, it was dwarfed by Cobá's size and reach, particularly if Lady *K'awiil Ajaw*'s boasted prowess in warfare was grounded in truth. In a sense, the Yaxuná urban center became part of Cobá's hinterlands during the Late Classic; like Xunantunich and Naranjo, it was incorporated into a polity with a ruler whose authority and legitimacy eclipsed local leadership. Yaxuná's urban center was not entirely rebuilt, but the urban landscape's focus shifted towards *Sacbe* 1 and away from symbols of locally based rule, such as the North Acropolis. Contrary to Xunantunich and Naranjo, Yaxuná's access to long-distance exchange networks and goods was not limited; items such as obsidian are found in much greater quantity across Late Classic residences than during other periods (Stanton et al 2010). The incorporation of Xunantunich into Naranjo had effects across the Xunantunich hinterlands at smaller settlements such as Chaa Creek. During the Late Classic, occupation was

reestablished at Tzacauil and Xkanhá and other smaller settlements began to coalesce across the landscape. Did they experience a similar shift due to Yaxuná's transformed political identity?

The sheer number of settlement areas across the Yaxuná hinterlands result in limited investigations due to time, financial, and permission restrictions. The data from the following areas is limited, but is helpful in noting general patterns across the landscape during the Late Classic. In-depth investigations at Tzacauil and Popolá-Puus Sil by Chelsea Fisher and Scott Johnson provide more detailed contexts for life outside the Yaxuná center during the Late Classic. Late and Terminal Classic material culture is often more visible because of its relatively more recent date and because in some cases it was the last occupation period before abandonment. It is possible that under-investigated areas such as Joya, Kaan Ha, Kopchen, X-auil and Rancho Alegre were established in the Preclassic or Early Classic and occupied through that time until the Late Classic. Investigators provided suggested occupation periods relying on visible (that is, the latest) architectural features, surface collection (in which later periods would likely be over-represented), and in some cases test units (Stanton & Magnoni 2013). Like Tzacauil, these sites may have been occupied in the Preclassic and reoccupied during the Late Classic. Lourdes Toscano Hernández's survey along the Piste-Yaxuná highway reported that most areas were occupied during two periods – the Late Preclassic and the Late-Terminal Classic (2013: 43). Settlements also might have followed the pattern of Popolá-Puus Sil, with continuous settlement from the Preclassic but a larger population, as reflected through a greater number of occupied household groups, during the Late Classic. With the available data, all that can be currently noted is that smaller sites – clustered residences located near significant geological features or minor civic architecture – were occupied throughout the Yaxuná hinterlands during Late Classic. For the purposes of this dissertation, I have chosen to focus on settlements within

5-6 kilometers of the Yaxuná urban center since this area includes all of the sites for which more detailed excavation data exist (Xkanhá, Tzacauil, and Popolá-Puus Sil). Kopchen is an exception, given my own work there and its location between Chichén Itzá and Popolá-Puus Sil. I also include information from the transect area, although these structures did not fall into a known discrete settlement. These sites fall within two groups; those located east of the Yaxuná urban center (Tzacauil, Joya, and X-auil) and those located north of the Yaxuná urban center (Xkanhá, Rancho Alegre, Kaan Ha, Popolá-Puus Sil, Kopchen). Members of the 2011 PIPCY survey team investigated the sites east of Yaxuná, while additional data from Tzacauil comes from Chelsea Fisher's dissertation work there. North of the Yaxuná urban center, Traci Ardren investigated Xkanhá for her dissertation research, Scott Johnson investigated Popolá-Puus Sil for his dissertation research, and Rancho Alegre and Kaan Ha were part of the 2011 PIPCY survey. I summarize the data generated by their work as the background to my analysis and interpretations. The data from Kopchen comes from my own dissertation research.

The East: X-auil, Tzacauil, and Joya

X-auil is the name given a concentration of settlement to the southwest of *cenote* X-auil. It is located approximately 4 kilometers east of Yaxuná. It consists of 25 structures, 17 of which are organized into 6 household groups. This concentration was identified on the edge of the survey area covered by PIPCY; it is possible that additional structures, civic architecture, and/or public plazas are located outside of the survey area (Stanton & Magnoni 2013: 72-75). The structures recorded by PIPCY were clustered around the *cenote* as if it was the center of settlement; there was no visible space or structure that was likely to host events and activities of administrative or ritual nature that would have integrated the community members politically

(Hutson et al 2012: 303). The limited data from architectural styles (worked stones) and surface collection (slate ceramics) matched the Late and Terminal Classic; this does not preclude settlement during other periods. Some ceramics collected from X-auil do date to the Late Preclassic (Stanton & Magnoni 2013: 47).
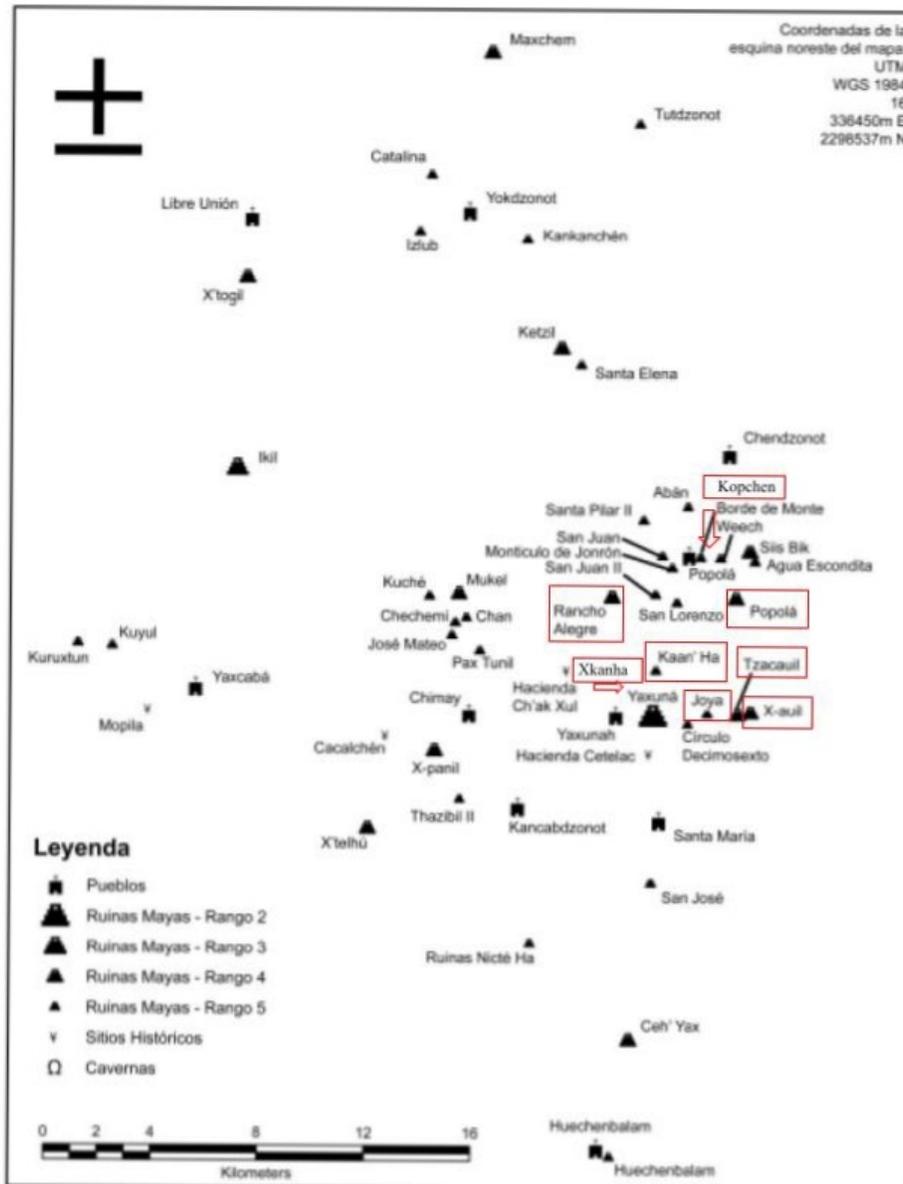
Figure 7.6: Sites with evidence of Late Classic occupation (from Stanton & Magnoni 2013: 12)
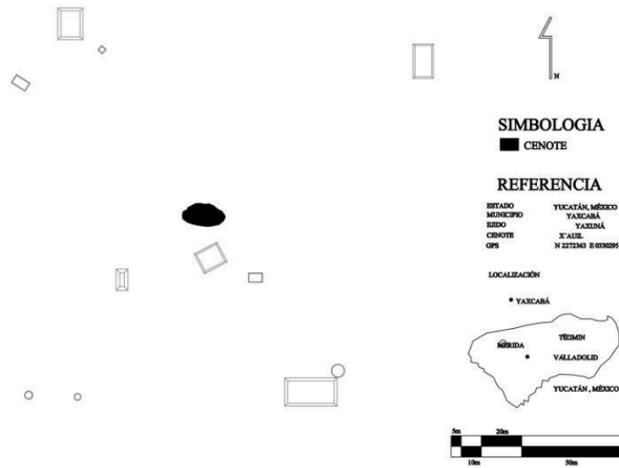
Figure 7.7: Sketch map of X-auil (from Stanton & Magnoni 2013: 52)
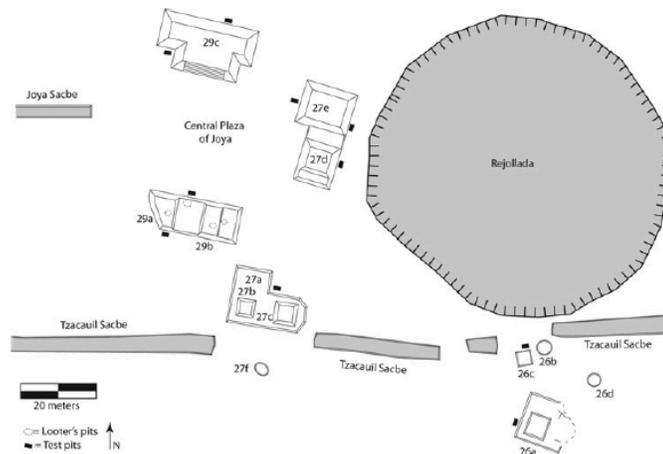
Figure 7.8: Sketch map of Joya (from Stanton & Magnoni 2013: 79)

Joya is located west of Tzacauil and incorporates 2 *rejolladas* and 1 *cenote* into its settlement area. 147 structures were recorded along with an easily definable center with a plaza and a *sacbe* on the plaza's west side running west (Hutson et al 2012: 303). Joya's *sacbe* does

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reach within the area of Yaxuná settlement. Test units placed among the buildings around the plaza yielded small amounts of ceramics from the Late Preclassic and Early Classic, but mostly from the Late Classic. The Maxcanu, Arena, and Muna groups were most represented (2012: 303). On average, Joya's basal platforms are larger than those at Tzacauil though Joya has no monumental architecture.

Tzacauil is located 3 kilometers from Yaxuná and consists of a triadic group (the Tzacauil Acropolis), an unfinished *sacbe* that runs west, and two dozen mounds making up nine distinct house groups situated around the acropolis and causeway (Fisher 2019; Hutson et al 2012). There are two *cenotes* located within 500 meters of the Tzacauil Acropolis. The first permanent settlement was established during the Late Preclassic. The Tzacauil area was reoccupied during the Late Classic. The Preclassic Kaan Group's basal platform was renovated, while new structures were also built. Late Classic occupation at Tzacauil was concentrated in the southwestern part of the site, while two small structures that may have been used as field houses, were located north of the Tzacauil *sacbe*. Inhabitants of the Kaan Group chose to reorient its basal platform southwest towards the rest of Classic period settlement. Other Preclassic platforms were not used for residences, a practice very different from settlement at the Yaxuná center, where Late Classic residences often utilized Preclassic basal platforms. A possible crypt was identified during excavations of the Kaan Group. The two structures north of the causeway had very few artifacts and were quite small; they may have been field houses or corn cribs (Fisher 2019: 303). The ceramics from these structures suggest they were used at a later date than the Classic residences at Tzacauil. Late Classic residents at Tzacauil appear to have had access to very limited amounts of non-local goods, including obsidian flakes, chert, a greenstone celt, and marine shell (2019: 285). The distribution of grinding stones in Classic-period Tzacauil

suggests that some collective practice of domestic labor may have taken place. Structure 6B's artifact signature indicates its use as a kitchen or food-processing area by multiple households (2019: 285).

Chelsea Fisher's analysis of intra-settlement signatures at Tzacauil led her to argue that Classic-period occupants practiced less place-based agricultural strategies than Preclassic residents. Classic-period occupants may have utilized more collaborative and cooperative strategies for agriculture; residents did not build directly on or near arable soils or practice the same types of intra-settlement intensification as during the Preclassic period. Rather, residence shifted over time as farmers went in search of new areas to plant *milpa*; as the distances between agricultural fields and the original residence increased, a household or kin group may have made a temporary or permanent move to a location closer to the fields. Rather than using soil-enhancing strategies to intensify the immediate area around a household, residents were shifting across the landscape in ways that reduced their labor input for particular plots of land, but required access to new and larger parcels to allow unenhanced areas sufficient time to lay fallow (Fisher 2019: 361-362). This suggested trend is also fascinating because it contrasts sharply with mortuary practices. During the Preclassic, there are few examples of burials in residential architecture, but greater labor investments in residential architecture and intra-settlement land maintenance. During the Late Classic, residential architecture is more expedient and intra-settlement land maintenance not as commonly practiced, if Tzacauil's data can be extrapolated. The interment of people in residential spaces, over time and generations, does suggest an anchoring of the occupants to the residential space, but this practice has not been firmly demonstrated outside of the Yaxuná urban center.

Fisher suggests that the Late Classic illuminated a rural-urban divide between residents of the Yaxuná center and residents at Tzacauil (and other areas). Residents in the urban center had less mobility but were more tied in to economic circulations of non-local valued goods. Unlike during the Preclassic, when ritual and political integration were manifested through the Tzacauil acropolis and *sacbe*, the daily lives of Late Classic residents at Tzacauil show little participation in the social imaginary of the Yaxuná center. Their access to non-local goods is limited and the shifting nature of settlement suggest that there was little incentive towards long-term investment in place. In Fisher's argument, political affiliation was increasingly expressed through personal ties; farmers remained aligned with specific political leaders while moving freely across the landscape (2019: 373-374).

Table 7.3: Late Classic ceramics excavated from Tzacauil (adapted from Fisher 2019)

Group	Arena	Batres	Muna Slate	Saxche	Maxcanu Buff
Kaan	-	14	12	1	3
Pool	15	56	13	9	1
Jaltun	1	-	11	-	
T'uup	-	-	2	-	-
Totals	16	70	38	10	4

This is one possibility. However it is also possible that people were able to move freely across the landscape and congregate in new communities because the shifting political organization at Yaxuná resulted in weaker integration and fewer circulations between the seat of political power (Cobá) and the Yaxuná hinterlands. The distance (even surmounted by the *sacbe*) between Cobá and Yaxuná weakened coercive and ideational strategies for deriving and maintaining authority, given the lack of surveillance and transportation mechanisms in ancient Maya society. The types of ceremonies and performances from which ancient Maya leaders derived authority were now focused 100 kilometers away, along with the landscape that

memorialized and reminded followers of them. The urban center of Yaxuná, as a more densely occupied area with greater place-based investment in their residences, an urban landscape whose transformation reflected Cobá's presence, and a participant in long-distance trade, would be more likely to share in Cobá's sociopolitical imaginary.
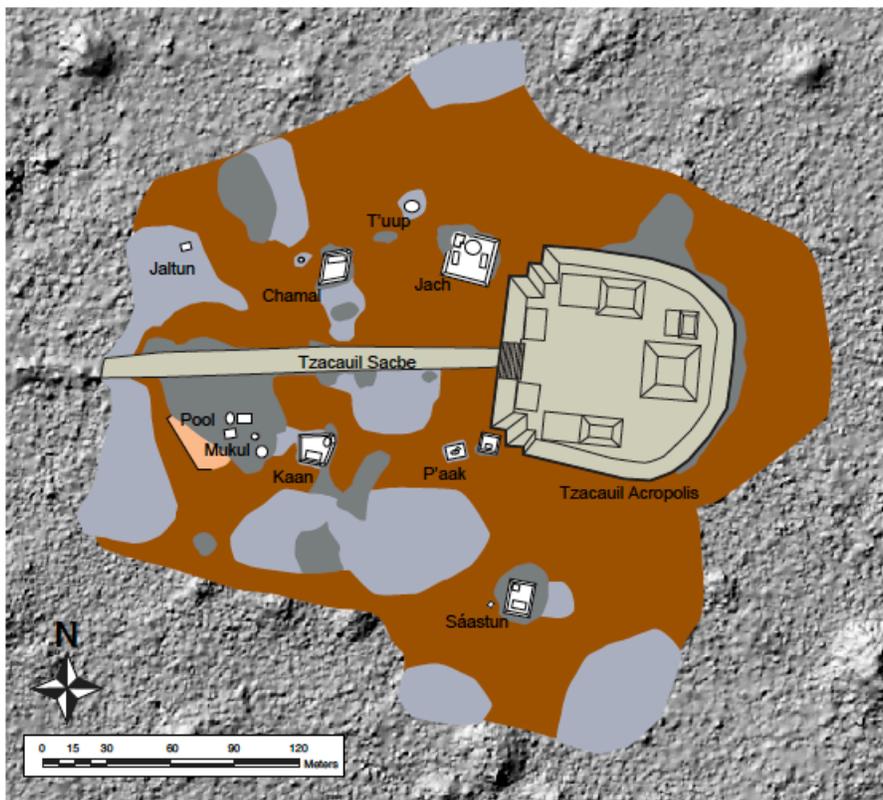
Figure 7.9: Map of Tzacauil in the Late Classic period (from Fisher 2019: 136)

Hinterland residents still participated in circulations of labor, ideas, goods, and symbols with residents of the Yaxuná urban center and the broader region. Residents of areas east of Yaxuná (X-auil, Joya, and Tzacauil) in particular lived relatively nearby the path of *Sacbe* 1 as it left Yaxuná. Their proximity to this area of construction may have made them more vulnerable to required labor contributions than residents of areas to the north of Yaxuná (Rancho Alegre, Kaan Ha, Popolá-Puus Sil, Kopchen, and Xkanhá). Tzacauil's ceramic evidence also suggests

greater participation in ceramic exchange with Cobá; Batres ceramics far outnumber Arena Red ceramics, particularly in the Kaan and Pool groups. What is clear is that a period of greater mobility for hinterlands residents coincided with the physical distancing of ruling authority. The already weak coercive strategies used by ancient Maya rulers would be insufficient to prevent this mobility and further challenged by apparent lack of direct political authority based in the Yaxuná urban center (Fisher 2019: 374).

The North: Rancho Alegre, Kaan Ha, Popolá-Puus Sil, Xkanhá, and Kopchen

Rancho Alegre is another collection of structures located 5 kilometers northwest of Yaxuná's urban center. The structures did not share a common orientation and most were small structures, some of which used natural rises to give the impression of being platforms. To the east of the largest structure was a triadic structure on top of a raised platform. This could have been built during the Preclassic, when triadic structures were common, but investigators thought it more likely that it belonged to the Late or Terminal Classic given its similarities to El Torre at Ek Balam (Stanton & Magnoni 2013: 40). If El Torre inspired it, this is another indicator that of the power vacuum at Yaxuná; symbols from other polities were influencing settlements in the Yaxuná area. This structure also had cut stone facades. There was also a pair of small temple structures, less than 2 meters high. Surface collection yielded mostly slate ceramics and other types from the Late and Terminal Classic.

Kaan' Ha is a small Rank 5 settlement, located approximately 2 kilometers north of Yaxuná. It consisted of a few low platforms around a *cenote*. Following the pattern noticed by Lourdes Toscano, the ceramic data collected showed occupation during the Middle Preclassic,

Late Classic, and Terminal Classic. The majority of ceramics collected were types used during

the Late Classic (Stanton & Magnoni 2013: 30).
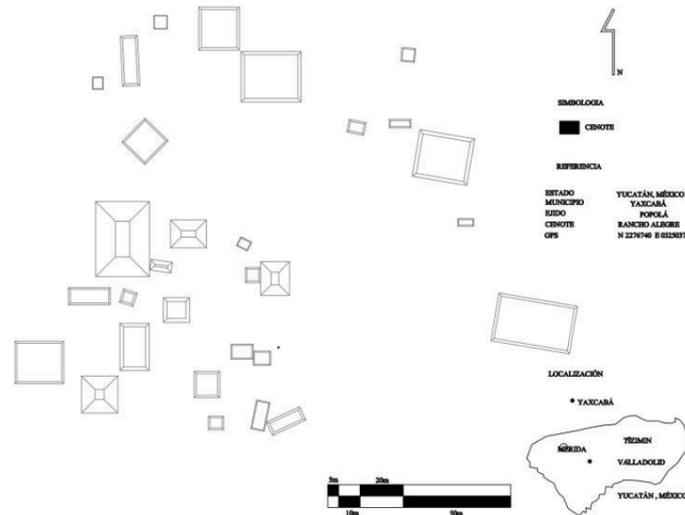
Figure 7.10: Sketch map of Rancho Alegre (from Stanton & Magnoni 2013: 40)

Initial investigations at Xkanhá firmly assigned occupations to the Early Classic and

Terminal Classic. Since then, the Xkanhá ceramics have been unavailable for reanalysis (Traci

Ardren, personal communication 2021). Tatiana Loya González and Travis Stanton reportedly

included Arena Red ceramics from Xkanhá in their petrographic analysis (2013). Arena Red is

recorded as part of the excavation of Feature 1 in Structure 11, Area 4 of Xkanhá. It does not

appear in a residential context; the sherds are the remains of one vessel, mixed with Yokat

Striated sherds, in a burned area to the side of a feature possibly associated with a termination

ritual. This ritual may have been enacted during or at the end of the Late Classic, or during the

Terminal Classic.

Burial 21 was found in Structure 4 of Xkanhá, in the construction fill. Its initial interpretation was of a human head placed with vessels as a dedicatory offering (Ardren 1997). However, long bone fragments among the remains suggest it may have been a complete burial, following the pattern of placing the body in the floor without a crypt or cist. The three vessels were identified as Aguila Orange, Tinaja Red, and Teabo Red types. Aguila Orange and Tinaja Red are both earlier types; while Teabo Red is a Terminal Classic type, it is modally similar to Kinich Orange (Stanton & Ardren 2020: 490). The radiocarbon dates from the bone material also support a Late Classic date (Tiesler et al 2017: 156-157). A *Spondylus* bead and carved shell earflare were also present. The individual buried was a non-local adult whose stable isotope analyses indicate they grew up in southern Quintana Roo or the Puuc Hills.
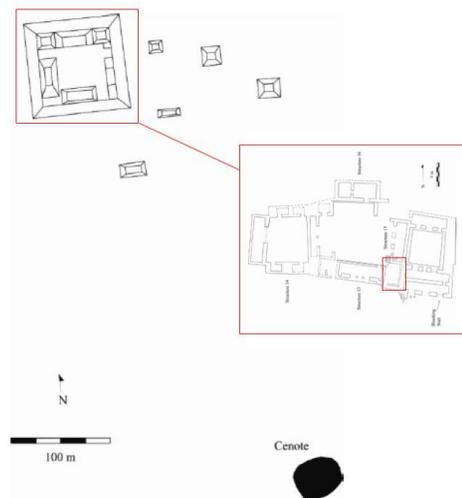
Figure 7.11: Maler-style map of Xkanhá with the acropolis inset
(from Stanton et al 2010: 108-109)

Structure 4 at Xkanhá is located in Area 1, which saw termination practices such as smashing vessels, removing plaster from walls, covering with sterile soil, and blocking entrances. The vessels included in this event are Early Classic types (such as Dos Arroyos polychrome). It is unlikely that Area 1 was reoccupied during the Late Classic; Burial 21 may have been someone whose community occupied other areas of the Xkanhá acropolis or may have been buried separately. It is interesting to consider that Xkanhá has a non-local architectural form (patio-quads) and that the only burial located there is of someone not raised in Yaxuná. While other individuals were buried in contexts that connected them with (possibly related) other dead and rooted them in occupied structures, this individual was placed in a terminated area that was not occupied by the living.

It is also possible that Structure 4 at Xkanhá was renovated during the Late Classic rather than the Terminal Classic, as initially assigned. This shift in dating would reopen the possibility that Burial 21 served as a dedicatory offering for the structure. Structure 4's transformation into a surveillance or observation tower would also be interesting to consider in light of the potential martial hostilities of the time, if Cobá's incorporation of Yaxuná did happen under violent circumstances. Traci Ardren notes that one of the vessels from Burial 21 was associated with manufacture in the Puuc region; its inclusion with a burial of an individual who may have been from the Puuc area is also interesting to consider, given the shifts in political and ideological circulations from the Late Classic incorporation by Cobá to the affiliations with Puuc region in the early Terminal Classic. Area 3's residential structure had architectural similarities to Cobá satellite groups, and could reflect the presence of Cobá-affiliated administrators. The termination of Structure 11, which included an Arena Red vessel, could also be associated with this period.
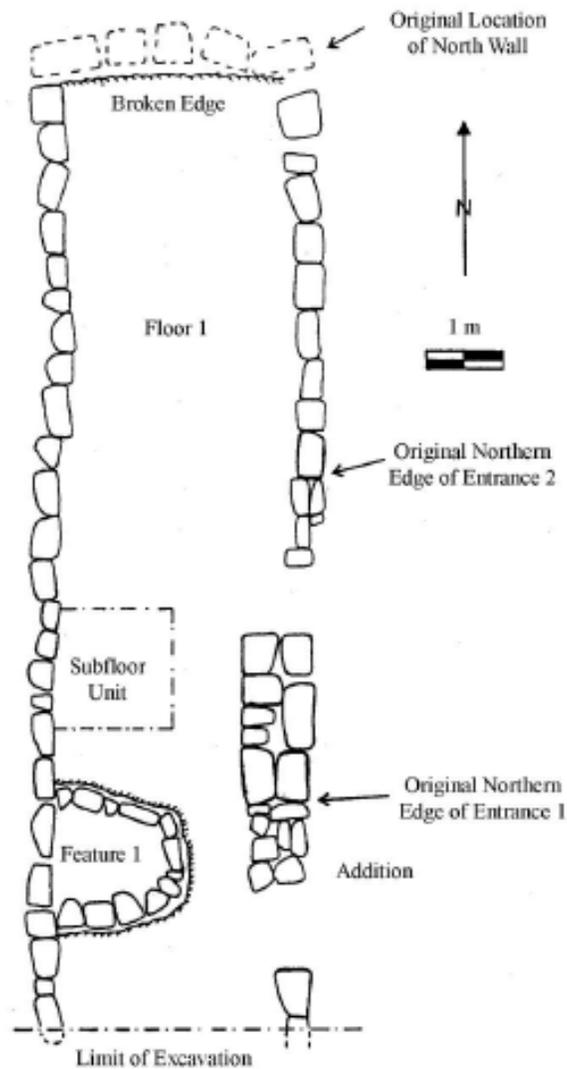
Figure 7.12: Plan of Xkanhá Structure 11 showing location of Feature 1 (from Stanton et al 2010: 127)

The Late Classic at Popolá-Puus Sil showed a significant increase in occupied structures; 69% or approximately 76 structures yielded pottery from this period, compared to 41-46% of structures during earlier periods (Johnson 2012: 365-366). Scott Johnson used correlation analysis on pottery counts to identify if residents of Popolá-Puus Sil exhibited an independent

pattern of material remains or was closely correlated with a single center. During the Late Classic, he found Popolá-Puus Sil had a high-moderate correlation with sites beyond Yaxuná and Chichén Itzá, while Yaxuná and Xkanhá and Chichén Itzá and Yula were extremely highly correlated (2012: 382). He suggested that these results support the idea of Popolá-Puus Sil as an independent settlement during the Late Classic, participating in economic circulations beyond those moderated by any Yaxuná political economy. This is especially the case since his findings also indicated an open trade system for non-elite residents (followers) – the ability to participate in multiple exchange networks with people from many different areas, even when local elites (local leaders) demonstrated stronger circulations of ideas, symbols, and goods with leaders from one particular site (2012: 356). Johnson also demonstrated a statistically significant correlation between structure size and volume and presence of non-local (often high-status) goods such as chert, obsidian, and shell. The second largest group of structures also correlated significantly with the presence of Arena Red.

There was one clear elite structure at Popolá-Puus Sil – N10E10-1. Its iconography and architectural elements correspond to the Terminal Classic; the majority of ceramics recovered through test units were also used during this period. Small amounts of Late Classic pottery such as Arena Red, Yokat Striated, and Batres Red were recovered. These could have been used as construction fill or could indicate a longer period of use for the platform.

Kopchen is the name local residents use for a *rejollada* north of Popolá. My surface collections found that several structures did have Late Classic types such as Arena Red, Ticul Thin Slate, and Yokat Striated. Structures K200, K202, K400, and K600 (one-fourth of 16 structures I recorded and almost half of the 9 structures surface collected) all had Late Classic ceramic types represented in their surface collections, albeit in small amounts. K200, 202, and

400 each had a small amount of Arena Red sherds on the surface (less than 10), while K400 and

K600 had small amounts of Yokat Estriated (less than 7 sherds). While surface collection data

suggests that significant occupation during the Terminal Classic, excavation may reveal more

extensive settlement from the Late Classic at Kopchen. At the moment, it is clear that the new

and reoccupied residential communities forming across the Yaxuná hinterlands during the Late

Classic included occupation at Kopchen.

Table 7.4: Late Classic ceramic types per structure at Popolá-Puus Sil (modified from Johnson 2012)

Group → Structure	Arena	Batres	Muna Slate	Saxche	Maxcanu Buff
N10E10-1	71	25	32	-	2
N10E09-1	36	5	-	-	-
N09E09-1	2	-	3	-	-
N05E11-5	4	-	-	-	-
N06E11-7	1	-	1	-	-
N06E11-8	4	-	-	-	-
N07E11-4	36	-	5	-	2
N07E11-6	129	4	-	-	-
N07E11-1	124	5	1	-	2
N07E10-3	7	2	-	-	-
N06E10-4	40	2	-	-	1
N08E11-1	185	2	-	-	1
N05E12-2	42	-	-	-	1
N05E12-3	3	-	-	-	-
N04E12-2	25	6	-	-	-
N04E13-2	40	7	50	-	-
N04E13-3	3	-	4	-	-
N05E10-1	7	1	-	-	-
N07E09-1	-	-	-	1	-
N09E11-3	1	-	-	-	-
N08E12-4	122	11	-	-	1
N08E12-7	24	1	-	1	-
N09E09-1	3	1	-	-	-
N10E10-2 & 4	4	1	-	-	2
N08E11-5	1	-	-	-	-
N07E12-2	17	-	-	-	-
N08E13-2	1	-	-	-	-
N03E13-1	4	-	-	-	-
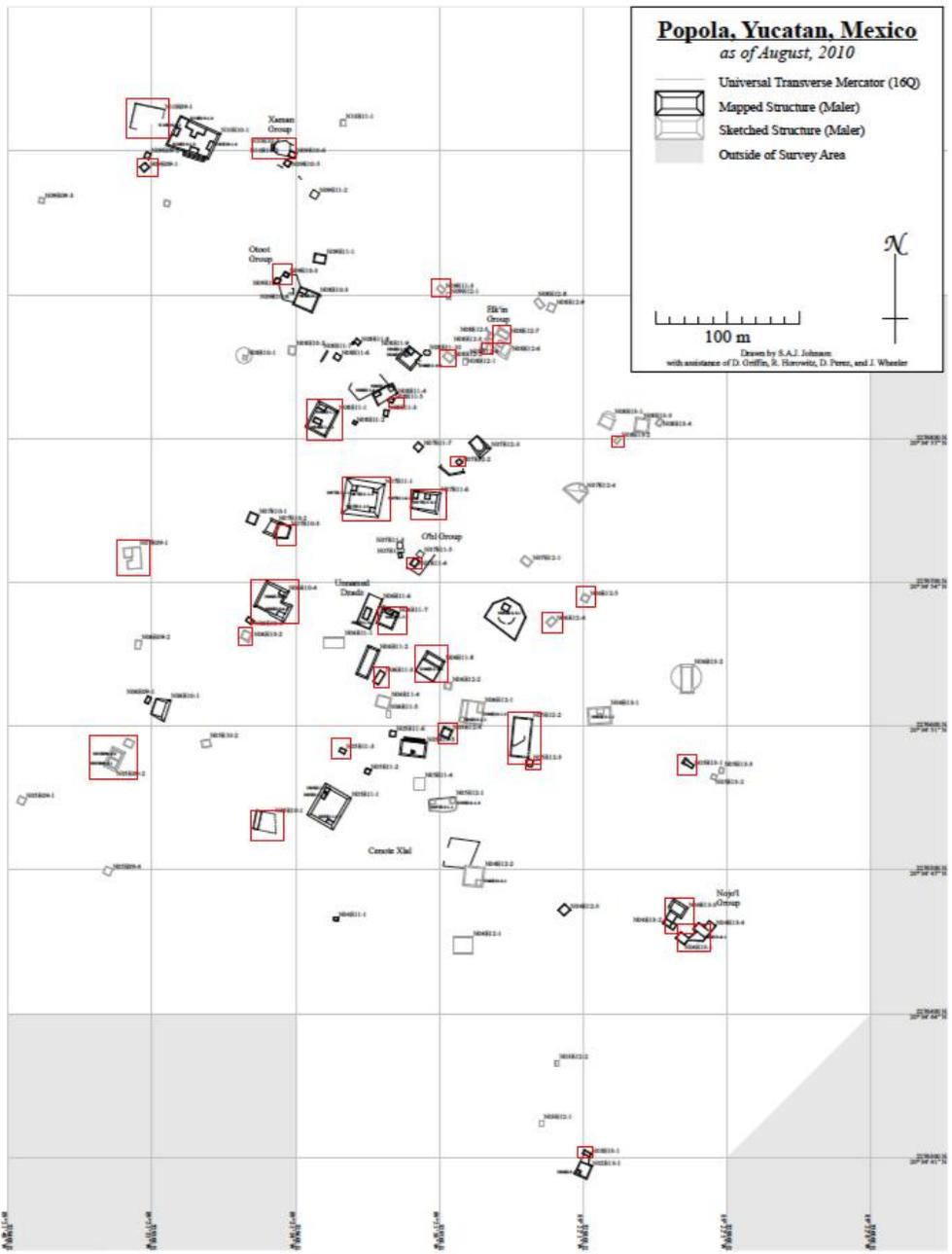
Figure 7.13: Maler-style map of Popolá-Puus Sil with Late Classic occupancy marked (modified from Johnson 2012: 656)

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The Late Classic was the second most common period represented by the transect's structure sample, with 8 structures occupied during that period. MU6-W-3 and MU6-W-4 had only Terminal Classic ceramics, while the other 7 structures and one new one, MU2-E-2, contained Late Classic types such as Arena Red, Yokat Striated, Batres Red, Chumayel Cafetoso, Akil Cafetoso, and Muna Cafetoso. MU2-E-2 is a large, high platform that was constructed on top of a bedrock outcropping. Large boulders that may have been part of the platform base were rolled off and grouped in areas of lower elevation. There is one superstructure on the north side, approximately 7x3.5 meters. MU1-W-15, located approximately 1 kilometer north of the Yaxuná site center, had Batres Red ceramics. Their presence here suggests these Cobá-produced goods were accessible in the general area beyond residents of specific settlements such as Popolá-Puus Sil, Tzacauil, and Yaxuná.

Late Classic Political Organization: The Hinterlands

In contrast to Yaxuná, the hinterlands seemed to experience a population increase or at least population nucleation, with visible natural communities across the area at spots such as Rancho Alegre and Kaan Ha. In some cases, these communities had their own small forms of civic or ceremonial architecture, while in other cases they were organized around *cenotes* or *rejolladas*. These geological features are useful resources but also ideologically significant spaces. Other areas that were under or unoccupied during the Early Classic after Preclassic abandonment were re-inhabited, such as Tzacauil. While settlement is more visible across the landscape during the Late Classic, it does not necessarily mean the population increased. There is increased evidence for people choosing to live in discreet natural communities (spatially defined) during the Late Classic in the Yaxuná hinterlands. Investigation of settlement clusters such as

Kaan Ha or Rancho Alegre could demonstrate whether these communities were reoccupying clusters of settlement originally built during the Late Preclassic, or establishing "new" communities (i.e. communities that did not explicitly engage with an earlier community's architecture and lacked any relationship with previous inhabitants). Locations for which excavation data exist suggest an intensification of settlement in continuously occupied areas (Popolá-Puus Sil) and a reoccupation of previously abandoned settlements (Tzacauil and possibly Xkanhá).

During the Late Classic, none of these smaller communities built their own versions of monumental architecture, such as the Tzacauil or Xkanhá acropolises from the Preclassic and Early Classic period. At Tzacuail, there were not even attempts to utilize existing monumental architecture (Fisher 2019). Kaan Ha, Rancho Alegre, Popolá-Puus Sil, Joya, and X-auil have no monumental architecture (though several sites have public or civic ceremonial architecture). Because all the sites except Popolá-Puus Sil and Tzacauil have only been cursorily investigated, it is impossible to know if the public and ceremonial architecture from these sites dates to the Late Classic or another period (Stanton & Magnoni 2013).

Xkanhá, closest in proximity to the site center, is a different case. Although initial analysis of data from the area dismissed a Late Classic occupation, evolving understandings of the site's ceramic chronology require careful reconsiderations of the evidence. The Xkanhá ceramic material is not available for reanalysis, but it is possible to at least offer scenarios that would fit current evidence. Xkanhá may have been abandoned until the Terminal Classic. Xkanhá may have been lightly settled during the Late Classic, apart from certain sections of Area 1. Structure 4 may have been renovated during the Terminal Classic (the original suggestion was that its dedication dated to the Puuc occupation at Yaxuná and represented an alliance between

Cobá and the Puuc area against Chichén Itzá). Its renovation may actually date earlier, however, within the Late Classic. An earlier date could place its renovation during the expansion campaign of Lady *K'awiil Ajaw* as part of establishing dominion over Yaxuná, or to the period of Puuc affiliation at the end of the Late Classic and beginning of the Terminal Classic, once Cobá had withdrawn. The Cobá-associated architectural style of Structure 2 could also support this scenario. Regardless of the order of events, it shows that Xkanhá, unlike other parts of the Yaxuná area, continued to experience the direct effects of its integration with the Yaxuná polity; those with political power, even if not directly based in Yaxuná, used the area and any followers residing there as a source and symbol of their coercive power. The circulations of ideas, goods, people, and information between people based at Xkanhá and people based in the Yaxuná urban center were more numerous and intensive than the circulations between urban residents and residents of other hinterland areas. Consequently, this area saw much more intensive fluctuations in the wake of Late and Terminal Classic political changes; regime changes had direct impacts on the lives of people working and living at Xkanhá. Xkanhá was abandoned prior to the depopulation of Yaxuná urban center; the people who lived and worked there did not continue at Xkanhá after Cobá and Puuc-affiliated political regimes ended, while settlement in the hinterlands continued.

With the evidence available, there does not seem to be intensive socioeconomic stratification between residents of most hinterland communities. Most excavated contexts demonstrate access to the same general suite of ceramic types indicating participation in the regional ceramic economy and limited amounts of non-local goods, primarily lithics such as chert and obsidian (Fisher 2019; Loya González & Stanton 2013; Johnson 2012). Structure volume varies within and between sites (Joya on average has larger structure volume than

Tzacauil), but not significantly. The majority of structures at Popolá-Puus Sil are on the ground and most platforms had no or only one archaeologically visible superstructures (there may have been perishable superstructures). 68 out of 111 structures had an estimated volume of 25 meters cubed or less (Johnson 2012: 244). The continuity in occupation at Popolá-Puus Sil means that structure volume was likely influenced by occupation longevity and not just socioeconomic stratification. Residents of Tzacauil and Popolá-Puus Sil both had access to non-local goods such as obsidian, although in seemingly smaller quantities than residents of the Yaxuná center (Fisher 2019; Johnson 2012). The transect area was not systematically investigated, but there was a general pattern; most units with chert and obsidian were closer to the Yaxuná center (within 1 kilometer of the North Acropolis) or Popolá-Puus Sil (within 500 meters of the designated site limits).

The evidence supports the assertion that residents of the Yaxuná hinterlands, like those of the urban center, participated in regional ceramics exchange. Arena, Maxcanu, Saxche, Muna Cafetoso, and Batres ceramics were all represented at Tzacauil and at Popolá-Puus Sil. Ceramics from both sites had very few examples of Saxche and Maxcanu ceramics, suggesting that ceramics from the southern and western areas had fewer circulations among the general population outside of the urban center. Muna Cafetoso ceramics from Popolá-Puus Sil primarily came from 2 contexts – N10E10-1, the primary elite structure, and N04E13-2 (Johnson 2012). An interesting ceramic distinction emerged between Tzacauil and Popolá-Puus Sil Late Classic ceramic types; at Tzacauil, Batres Red was far more common than Arena Red, while the trend was reversed at Popolá-Puus Sil. If this trend is an accurate representation of ceramic access in these two areas, it appears that Popolá-Puus Sil had much more ceramic circulation with the Yaxuná area (the likely production area of Arena ceramics) while Tzacauil, located near *Sacbe* 1

as it exited Yaxuná, had greater numbers of Batres ceramics (produced in the Cobá area). As additional data is produced through excavations along *Sacbe* 1 and at Cobá, it will be interesting to note if it supports greater use of Arena or Batres ceramics and if the distribution changes according to the site's proximity to Yaxuná or Cobá.

Conclusion

Overall, the data from the Yaxuná hinterlands for the Late Classic suggests that areas outside of the Yaxuná urban center were not politically integrated but rather tethered through economic circulations during the Late Classic. This is distinct from the Terminal Classic, when the surrounding communities were part of a visible political community. During the Late and Terminal Classic, Xkanhá changed from a residential community to an area with a specialized function; it became an extension of the site center with a unique purpose, rather than an extension that duplicated some urban functions. Late Classic communities in the Yaxuná hinterland appear to be more like Isbell's natural communities (shaped by kinship, proximity, and economic exchange); while several had public architecture, none constructed, renovated, nor utilized previously existing monumental architecture. While Xkanhá was more integrated with the Yaxuná urban center, its use of existing monumental architecture changed with the termination of one pyramidal structure and the conversion of another into an observation tower. This shift could have multiple explanations: the change in political regime at Yaxuná reshaped the sociopolitical imaginary and expression of political identity; the labor required for *Sacbe* 1 left residents with little time or energy for their own monumental expression; or monumental architecture was prohibited in the Yaxuná area as part of its incorporation into the Cobá polity. Late Classic communities in the area continued to participate in regional ceramic trade and in

exchange network for accessing non-local goods. The meaning of some of these circulating items changed; for instance palace-sponsored polychrome, which served as a strategy of self-signification and legitimation; is not as common in the northern lowlands during this time (Bey 2003: 24). Instead simpler mass-produced types such as Arena Red dominated both the elite and non-elite exchange spheres. The shift in the types of ceramics circulating is a shift in ideas and information as well as goods; while many polychromes conveyed images and messages through decoration, types such as Arena Red appeared to be significant in bulk, rather than individual decoration. This change also reflects a shift in circulation of goods; local leaders and followers were using the same types of pottery as compared to the Early Classic, when Yaxuná's leaders used pottery reflecting styles, ideas, and messages common in the southern lowlands and Teotihuacan.

At Yaxuná, the change in political regime resulted in a distancing of political power – 100 kilometers down the road at Cobá. For the Yaxuná hinterlands, whose integration into the polity was already restricted by organization of the economic spheres, settlement for subsistence swidden farming, and lack of strong coercive and surveillance technologies, this move further distanced them from participation in the sociopolitical imaginary of the regime. Those living in closer proximity to *Sacbe* 1 were likely more directly incorporated into the vision of the Cobá polity as they participated in its construction, while those seeking greater autonomy may have moved across the hinterlands in the other direction.

To return to one of the previous case studies, Xunantunich and Yaxuná were both incorporated into other polities during the Late Classic; their trajectories show interesting similarities and differences. There is evidence for local leadership at Xunantunich in the form of a local palace (LeCount & Yaeger 2010), unlike at Yaxuná during this period. However, this

palace was simple and lacked many of the indicators of power commonly seen in a royal court complex; it reflected the relative subordination of Xunantunich to Naranjo, either through alliance or annexation. The leadership at Xunantunich appears to have exercised at least some local power, based on the changes at Chaa Creek. These may have been primarily economic relationships given the prominence of black-slipped pottery, which was in use by commoners and elites at settlements such as Chaa Creek. The Hats' Chaak period was also a time of increasing population in the Xunantunich area and hinterlands. L. Theodore Neff argues that the larger population and annexation of Xunantunich increased political integration and leaders' coercive power. There is evidence of intensified circulations between local elites and leaders at Xunantunich, including the construction of new compounds with specialized architectural details. However, these new groups did not have their own temple-pyramids. Because Xunantunich had its own ceremonial urban center that was updated during this time, it is likely that it served as a unifying space for local leaders and followers from the hinterlands area.

The experience of those living in the Yaxuná hinterlands seems to have been quite different. This area also saw a population increase, with numerous new settlements. These settlements lacked monumental architecture as well, but unlike the Xunantunich area, the Yaxuná urban center was not renovated or in use during this time. Rather than increasing political integration between the newly subordinated polity and its hinterlands area, Yaxuná's incorporation into the Cobá polity as a dependent seemed to decrease its level of political integration. Labor efforts were channeled into *Sacbe* 1. While the cursorily investigated Late Classic settlements in the Yaxuná area may show a different story, the evidence from Popolá-Puus Sil and Tzacauil does not suggest a strong presence of local elites or regular circulations of political ideas and people between leaders and followers during this period. They do show

economic integration in the form of Arena Red ceramics, much like the spread of black-slipped ceramics from Xunantunich throughout its hinterlands area during the Hats' Chaak phase. The relative distance between Cobá and Yaxuná compared to Naranjo and Xunantunich may account for the different impacts of incorporation on each polity. Another factor is the relative position of each site before its incorporation; Xunantunich's incorporation by Naranjo appears to have elevated its regional status, while Yaxuná's incorporation into the Cobá polity signified their loss of political independence and autonomy. The reduced circulations of political goods, ideas, and people within the Yaxuná polity may also signal intentional schizmogenesis. Residents of Chaa Creek and other small settlements actively sought to generate and maintain the political connections with Xunantunich and Naranjo, while Yaxuná followers were less interested in integrating themselves with Cobá.

Chapter 8

The Early Classic
300-600 CE

Between 400 and 600 CE, a divine ruler of Yaxuná and what appears to be his extended family and associates suffered violent deaths, after which their remains were used to reinforce continuity in the rulership tradition through detailed emphases on sacrifice and rebirth. The ruler in Burial 24 was replaced – not through succession upon natural death, but intentionally during his reign – and those who targeted him also recognized his family and associates as part of his regime. The violent death of a ruler and his family is an event that strikes at the heart of the polity by eliminating those who served as its leaders. How did "followers" of the Yaxuná leadership at this time respond to the targeted elimination of their leaders? What effects, if any, did this elimination have on their lives and their participation in the polity? Could individual rulers and regimes be replaced without undermining the stability of the polity, so long as the maintenance of ideological practices and traditions around relationships between divinity and the ruling representative was achieved? In the Early Classic and Preclassic period, we will see that the Yaxuná political regime established a visible presence outside of the site core, where architecture and goods reflected closely knit circulations of ideas and people between the regime's rulers and the residents. Other nearby areas, however, were not as closely integrated into the polity; the disruptive end of the regime did not cause them to "vote with their feet" by seeking out a different Political community and their participation in regional economic exchange continued. These varied experiences reflect the diversity of ideational strategies employed and the uneven integration achieved.

Figure 8.1: Map of northern Yucatán denoting locations discussed in this chapter (modified from Stanton & Ardren 2020: 2)

During the Early Classic, the governing regime at Yaxuná consisted of a form of kingship, conceptually related to the divine rulers of the southern lowlands. The population of the center decreased slightly from Preclassic levels, and the North Acropolis was the space of political and public focus. Just over a kilometer from the Yaxuná center, a new seat of settlement was established. Its architecture and material culture show very close connections with Yaxuná. Other areas of the hinterlands, such as Popolá-Puus Sil, remained relatively stable in population from Preclassic levels. Residents of Xkanhá and Yaxuná participated in long-distance exchange networks while residents of Popolá-Puus Sil participated in regional exchange.

The labor and investment in the Burial 24 tomb and Structure 6F-4 support the likelihood of coordinated and organized efforts following the elimination of the Burial 24 ruler. This work could have been overseen by the perpetrators of the regicide, by their affiliates, or by the followers of the deceased ruler. The emphasis on themes of resurrection, as suggested by the artifacts accompanying the bodies as well as the renovation of Structure 6F-4, indicates that maintaining continuity at the heart of the polity was the goal.

This chapter will begin with an examination of the Early Classic transformative event at Yaxuná through examining the archaeological evidence from Burial 24 and the 3rd phase of construction at Structure 6F-4 generated from the Selz Project excavations. This overview of the evidence will be used as the foundation for a discussion of interpretations of the artifacts and context and their significance to the political history of Yaxuná. A discussion of Cancuen, the site of another mass grave of political elite, will be used to highlight the significance of the Burial 24 context: the focus on resurrection, renewal, and the maintenance of previously-established sources of political legitimacy at Yaxuná. The Burial 23 ruler will be placed in context as part of a tradition of kingship at Yaxuná through a presentation of the ruler's burial

context and its connections with Burial 24. A discussion of the Early Classic archaeological context at Yaxuná will follow: civic-ceremonial construction, ceramic types, settlement patterns, population estimates, and evidence for political elites. Archaeological evidence from the hinterland areas will then be considered, with a particular focus on excavations at Xkanhá and Popolá-Puus Sil to demonstrate the diversity of political integration. Residents of Xkanhá, with much greater circulations of ideas, people, and goods shared with the Yaxuná political regime, was greatly affected by the regime's termination. In Popolá-Puus Sil, however, any consequences of the political transformation are not archaeologically visible.

The Early Classic to Late Classic juncture was a disruptive time for the Yaxuná area. Most hinterland communities maintained stability because of looser integration into the Yaxuná polity; fewer circulations of goods, people, and ideas meant political upheaval had less of an impact on the day-to-day life of people in these natural communities. Certain areas, however, were more intensively integrated due to proximity, economic, and other types of social circulations. These areas suffered devastating impacts, including abandonment and termination.

Death of a Dynasty: The Early Classic Transformative Event at Yaxuná

The archaeological evidence from Burial 24 will be presented here as the basis for interpretation of its context and significance. Selz Project archaeologists excavated this burial. Burial 24 was a tomb placed within Structure 6F-4, part of the North Acropolis triadic group. It contained 11 distinct individuals, whose age and sex varied (Table 8.01). The remains of 3 individuals were identified as male, 4 individuals as female, 1 mature individual whose sex could not be assigned, and 3 pre-adolescent individuals whose sex could not be assigned (Stanton et al 2010: 191-202). Burial 24-13 may not have been a distinct individual (Tiesler et al 2017: 206).

Individuals were arranged and positioned in different ways throughout the tomb. One individual's body was partially burned outside of the tomb, tied into a bundle, and placed on the floor at the southern end of the tomb chamber (24-14). His possible skull (24-13) was placed in a plate next to the bundled remains. The other 10 individuals were concentrated in 2 distinct groups. One group was arranged in a tableau in the southern end of the tomb, while the northern end contained a number of individuals whose bodies were likely tossed in through the upper entrance to the tomb. Remains at the northern end were female and young children, while the remains from the southern end were sexed as male. The tableau included 2 triads – a grouping of 3 seated and tied females at the northern end and 2 seated and tied males at the southern end, along with the bundled remains of individual 24-14.

Table 8.1: Individuals from Yaxuná Burial 24
(information from Stanton et al 2010 and Tiesler et al 2017)

Burial	Assigned Sex	Age/Maturity	Arrangement	Position	Anthropogenic Marks
24-14	Male	Mature Adult	Southern Triad	Bundled	No data
24-7	Male	Over 55	Southern Triad	Tied/Seated	Unhealed hemorrhage
24-4	N/A	12-15 years	Irregular		No data
24-2	Female	20-25 years	None	Extended	No data
24-12	N/A	Fetal-6 months	None	Extended	No data
24-11	Male	Over 50	Southern Triad	Tied/Seated	Unhealed chop marks
24-10	Female	20-25 years	Northern Triad	Tied/Seated	No data
24-6	Female	20-25 years	Northern Triad	Tied/Seated	Possibly
24-5	Female	30-45 years	Northern Triad	Tied/Seated	Possible unhealed chop mark
24-3	N/A	7-9 years	None	Irregular	No data
24-1	Indeterminate	22-28 years	None	Irregular	No data
24-13			On top of 24-14		Possible smoking

Table 8.2: Ceramics from Burial 24 (information from Stanton et al 2010 and Tiesler et al 2017)

Vessel Type	Description
Balanza Black var Cadena Creek	Pedestal base bowl
Balanza Black var Cadena Creek	Cylinder tripod
Tituc Orange	Polychrome vessel depicting figure with Scarlet Macaw outfit
Balanza Black var unknown	Small spouted cup with pedestal base
Balanza Black var unknown	Spouted pedestal base vessel
Dos Arroyos polychrome ceramic figurine	Teotihuacan-style figurine of the Moon Goddess with stepped mountain motif and lazy S motif
Balanza Black	Bolstered spouted bowl with ring base
Balanza Black	Pedestal base cup
Oxkintok Thin Monochrome	Small shallow bowl with 3 carved faces
Maxcanu Buff: Tacopate	Black painted bowl
Hunabchen Red	Small red-painted jar; reworked sherd of Caucel Trickle on Red as lid

Table 8.3: Artifacts from Burial 24 (information from Stanton et al 2010 and Tiesler et al 2017)

Individual	Artifacts
24-14	- White shell crown segments - Jade diadem jewel with quetzal bird profile - Polychrome vessel depicting individual wearing Scarlet Macaw suit - Ear flares - Bone stylus - Polishing/grinding stone - Materials for painting
24-6	- Gutter-spouted cup - Deer bone tube - Bone stylus - Shell headband with jade diadem jewel (trefoil) - Ceramic figurine of Moon Goddess - Shell pelvic pendant
24-2	- Shell pectoral with 3 jade diadem jewels (1 trefoil)
24-5	- Pierced coral pieces - Unfired clay figurine
24-7	- Obsidian blades - Stingray spines - Shell beads
24-11	- Partial stingray spine - Greenstone beads - Shell beads - Bone beads

Attempts at DNA extraction to test the hypothesized familial relationship between these individuals have been unsuccessful (Tiesler et al 2017: 211). Strontium isotope analysis divides the remains into two clusters – one likely local to Yaxuná while members of the other group may have been from an area slightly north of Yaxuná. Individuals 24-1, 24-6, 24-7, 24-11, and 24-13 had strontium isotope values within local levels. Individuals 24-2, 24-3, and 24-5 had strontium isotope values matching the area north of Yaxuná. Individual 24-4 had strontium isotope values slightly higher than local values, and may have come from another part of the northern lowlands or the Petén. Vera Tiesler and colleagues offer several possible interpretations, given that several other burials at Yaxuná have strontium isotope values similar to Individuals 24-2, 24-3, and 24-5. There may have been an alliance between Yaxuná and their place of origin, accompanied by a long-term pattern of migration. An official alliance is supported by the presence of three individuals in a royal tomb, likely members of the royal family. This interpretation is also supported by the fact that 2 of the 3 were women, including one woman who was pregnant or had recently given birth. A marriage alliance between these two locations would explain non-local women marrying into the Yaxuná regime and producing children. The fact that the women were of different ages (one in the 30-45 year range, one in the 20-25 year range) and the other individual was a young child (7-9 years) also supports the likelihood of a multigenerational connection between these two areas. Given the burial contexts of the other 3 individuals at Yaxuná who originated from this area, Tiesler and colleagues also offer the possibility that Individuals 24-2, 24-3, and 24-5 were not related to the royal family but added because they were brought to Yaxuná by force and killed (2017: 62-63). While both possibilities should be considered, the first better fits the evidence given that Individuals 24-2 and 24-5 were buried with prized and specially made artifacts associated with royalty (see below).
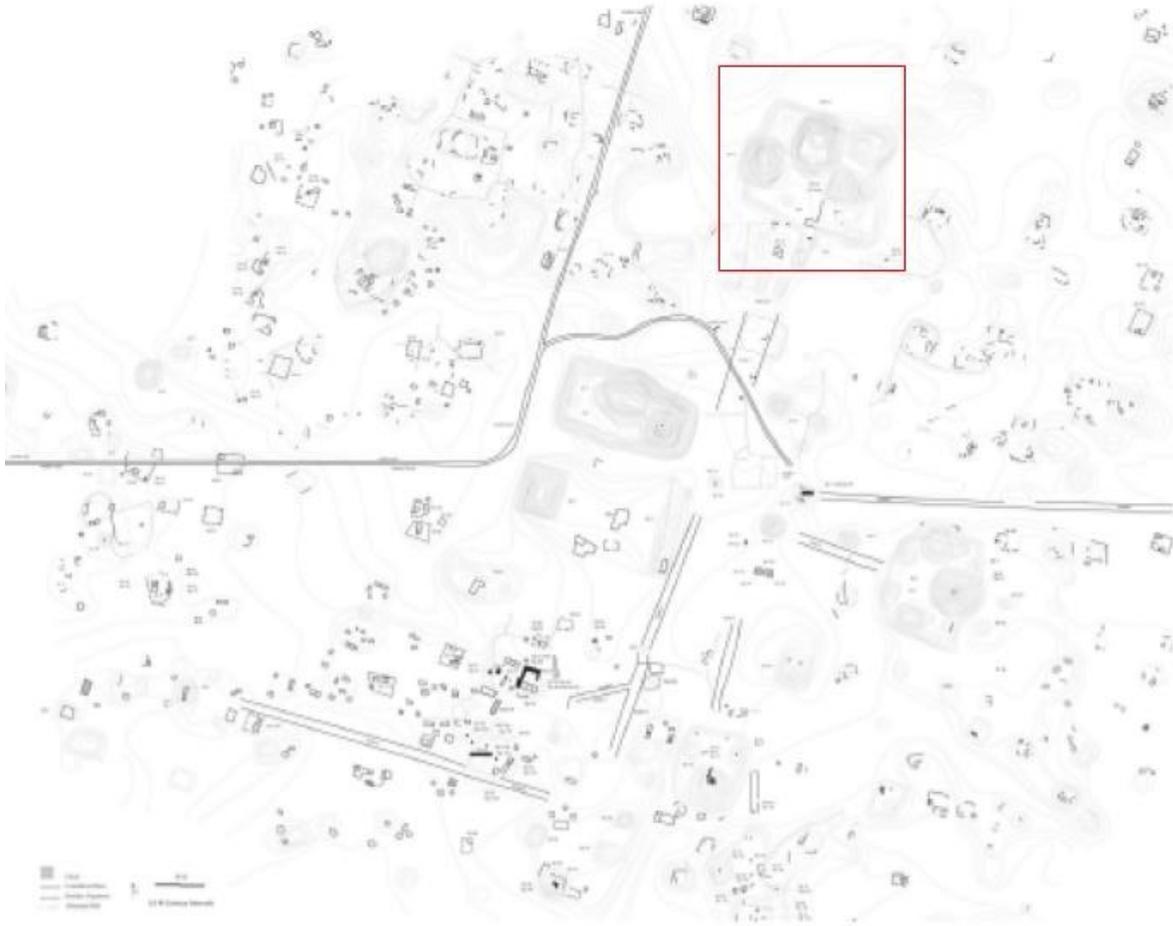
Figure 8.2: A topographic map of Yaxuná showing the location of the North Acropolis and Structure 6F-4 (adapted from Stanton et al 2010: 11)

While it cannot be definitively established that the bodies were deposited in the tomb as one event (rather than the gradual accumulation of family remains over generations), all available evidence supports the analysis that the individuals died and were buried around the same time. The northern group of individuals shared the same decomposition process, supporting the interpretation that they were deposited in the tomb at the same time. The

positioning of the tied and seated remains also demonstrates a simultaneous deposition event.

Finally, 4 of the bodies showed signs of perimortem violence, including fresh hemorrhagic

lesions (Tiesler et al 2017: 211). The accumulation of the bodies in one tomb chamber, as

opposed to the single-occupant tombs of divine rulers throughout the Maya area, also supports

that the individuals died around the same time.
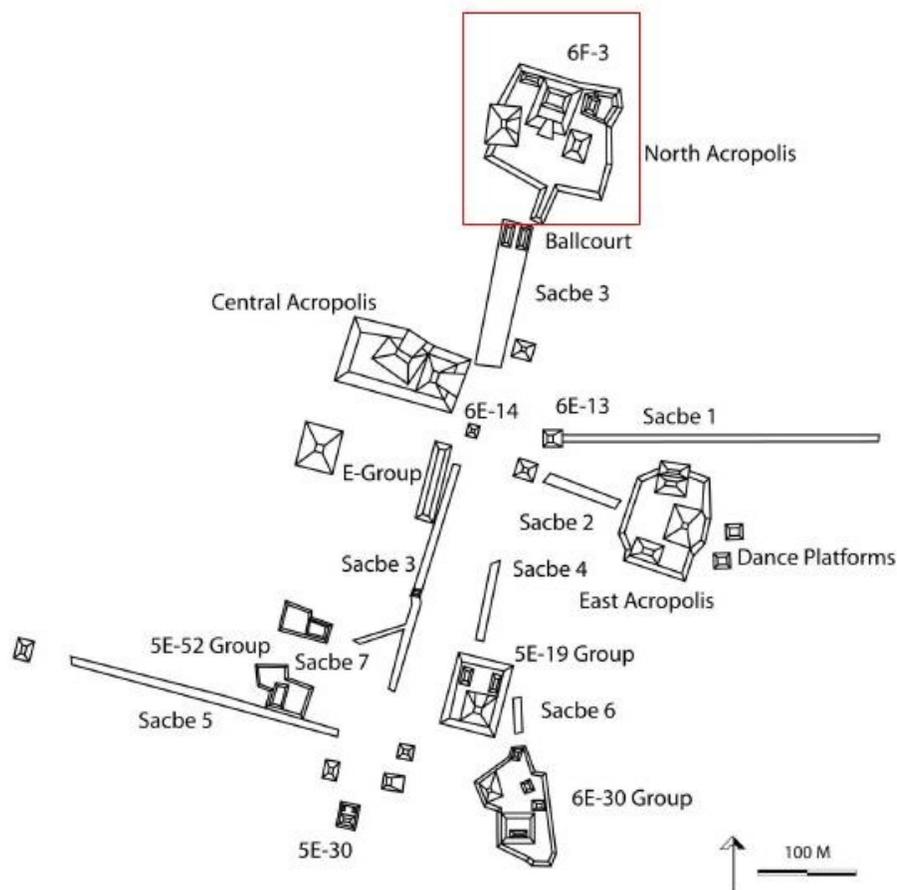
Figure 8.3: A Maler-style map of Yaxuná showing the location of the North Acropolis and Structure 6F-4 (modified from Stanton & Freidel 2005: 229)

Many of the remains were associated with a variety of artifacts embodying pan-Maya

concepts of rulership and divinity. Segments from a white shell crown and a single jade diadem

jewel depicting the profile of a quetzal bird were concentrated in the area of Individual 24-14. A

plate next to the bundle held a skull, a pair of ear-flares, a bone stylus, a polishing or grinding stone, and materials for painting. The plate depicts an individual wearing a Scarlet Macaw suit, an example of the Avian Maize God, and the individual holds a turtle carapace (Tiesler et al 2017: 208-210). Individual 24-6's associated items included ceramic containers such as a gutter-spouted cup, a deer bone tube, a bone stylus, a Teotihuacan-inspired effigy, and a shell headband or crown with a trefoil jade diadem jewel (2017: 211). Near the pelvis was a shell pendant (Stanton et al 2010: 198). Individual 24-2 wore a pectoral made of white shells carved as skulls with 3 jade jewels, one of which is trefoil like the jewel from the headband associated with Burial 24-6. Pierced pieces of coral and an unfired clay figurine possibly representing a rabbit are associated with Burial 24-5 to the north of Burial 24-6 (Tiesler et al 2017: 214). Artifacts found within the remains of Individual 24-7 included obsidian blades, stingray spines, and shell beads (Stanton et al 2010: 194). The bones of individual 24-11 may have been painted with cinnabar; artifacts included beads of greenstone, shell, and bone as well as a partial stingray spine. Besides Individual 24-2, the others grouped in the northern end of the tomb were associated with very few artifacts – mostly small numbers of greenstone beads and flakes and pierced shells (2010: 200-202). The ceramic artifacts from Burial 24 have been the center of controversy for dating and interpreting the impacts of this period at Yaxuná. Many of the types are associated with the Oxkintok Regional Complex, while others seem to be locally made versions of Teotihuacan-style vessels. The tomb containing Burial 24 was built as part of a renovation of Structure 6F-4, the easternmost of the 3 structures making up the North Acropolis triadic group.

Structure 6F-4 was originally built in the Late Preclassic and underwent 2 additional renovation and rebuilding phases before the phase of construction that included the tomb

chamber of Burial 24. The earliest construction is phase 6, dating to the Late Preclassic, during which it was likely a space for public use (Tiesler et al 2017: 202). Phases 5 and 4 were Early Classic pyramids, with terraces and stairways for accessing the elevated terraces (2017: 202). Phase 4 included a masonry superstructure oriented west into the plaza of the triadic group. Phase 4's overall design is difficult to determine because of the extent of removal during the construction of Phase 3. The Burial 24 tomb chamber is part of Phase 3's construction, in a terrace over a frontal range structure that contained a large corbeled-vault chamber, 5 doorways, and a new stairway leading to the North Acropolis plaza (Stanton et al 2010; Tiesler et al 2017: 204). The terrace had 3 distinct sections, with Phase 4's terminated shrine on the summit platform. Burial 24 was placed on the western part of terrace level 4 (Stanton et al 2010). It is a vaulted tomb chamber parallel to the north-south axis of the building. Phase 3 construction was finalized by the placement of two caches dedicating and consecrating the new open summit platform. Cache 2 is a black-painted jar containing ear-flares, collar beads, hair binders, and diadem jewels with a sculptured axe-head jammed into the jar. The axe-head represents the "axing" of the ruler, symbolized by the royal jewels in the jar (Tiesler et al 2017: 215). Cache 3 is a red-painted jar holding a Spondylus plaque and a diadem jewel showing the Tonsured Maize God. Beneath the jar was a large pink shell bead (2017: 215).

The material culture accompanying the burials and within the caches has led Vera Tiesler and colleagues (2017) to interpret the tomb as a performance space. They argue that the purpose of such symbols was to highlight a theme of renewal – in this case the transition from the former regime (the ruler and entourage whose remains make up Burial 24) to a new regime – and claim the beneficial effects of this transition for the well-being of those living within the Yaxuná polity. Their detailed analysis identifies numerous symbols associated both with stories of

resurrection, renewal, and creation in Maya ideology, but also to imagery explicitly associated with Teotihuacan (Tiesler et al 2017: 202-217). They identify the figure painted on the plate associated with Individual 24-14 as a representation of the protagonist in the termination of the Yaxuná regime. This figure is dressed in a Scarlet Macaw suit with Teotihuacan-style tails. In this outfit, he embodies the Maize God who adopts aspects of his defeated enemy, the Principal Bird Deity, after defeating him (Taube 2009). The figure on the plate also carries a turtle carapace, a symbol of the earth from which the Maize God resurrects. Following this argument, an Early Classic regime at Yaxuná was targeted and terminated by an aspiring leader. This new leader drew on ideational strategies – specifically ritual performance using familiar and new ritually charged symbols – to legitimize him as the new leader and create continuity despite the regime change. At the same time, he used his political and economic links to trends beyond the northern lowlands to emphasize the ways in which the followers of the Yaxuná polity would benefit from a new regime.

The transformative event of the Early Classic was the termination of this Yaxuná regime. Vera Tiesler and colleagues identified Individual 24-14 as the ruler, though initially the Selz Project archaeologists identified Individual 24-7 as the ruler. Individual 24-14's association with the marks of rulership such as the shell crown, diadem jewel, its placement in the tomb, and the treatment of the body (partially burned and bundled) led to this shift. The people who were part of his family seem to have suffered a similar fate; the mix of young women, children, and men in the remains suggests that the focus was the family rather than administrators or specialists of the royal court. The perpetrator(s) of this termination had the time and resources to construct an elaborate performance space to commemorate their actions. The context also indicates that the perpetrator(s) invested significant thought and effort in communicating a message through the

construction and organization of the tomb, the placement of the dead inside, and the inclusion of particular items. This message incorporated Teotihuacan-influenced understandings of death, resurrection, renewal, leadership, and relationships with the supernatural, reflecting broader circulations of ideas and goods across central Mesoamerica.

The termination of a ruler's regime through violence against his or her person took place in numerous instances throughout the Maya area during the Classic period. The majority of examples suggest that the body of the ruler was the primary target, but at least one other instance of the ritual termination of an entire ruling family has been recorded in the Maya area, at the site of Cancuen along the Pasión River. However, this may reflect the type of evidence available; most regime terminations have been identified through the epigraphic record, which focuses on the fate of the ruler rather than their family, dynasty, and administration. The site of Cancuen, however, offers an example aligned in status and evidence with Yaxuná. Cancuen is located along the Pasión River and was an important trade route connecting the Petén, highlands, and the south (Demarest et al 2016). During the Late Classic, around 800 CE, Cancuen's architecture and political regime were terminated in a manner very similar to the termination of the Burial 24 regime at Yaxuná. At Cancuen, a minimum of 31 individuals was interred in a cistern at the entrance of the southern royal palace. The ruler and another individual identified as his consort were buried under rubble in another entrance to the palace at the same time.

The context suggests that all the bodies in the cistern were placed there at the same time. The individuals included adults of both sexes (8 identified as male, 6 as female, and 11 as unidentified), adolescents (6 sub-adults), children, infants, and 2 fetuses (Demarest et al 2016: 180). They appeared to be strong and in good health with no pathology; some of the bones exhibited evidence of perimortem blunt-force and sharp trauma likely caused by spears, axes,

and clubs. One individual had been decapitated. The individuals were identified as elite through

several lines of evidence. They were placed in a plaster-lined and red-painted cistern located

near the entrance of the royal palace and fed the ritual water system and a subterranean spring.

The individuals had various forms of cranial deformation, and dental variation and decoration

associated with elite status. Carved artifacts of jade, mother of pearl, and shell accompanied

their bodies, and a capping sample of broken vessels including polychromes found in the cistern

was likely a termination deposit (Demarest et al 2016: 180-181).

The last ruler of Cancuen, *Kan Maax*, was not included in the cistern; he and one other

individual were buried in the entrance of the palace itself. Although bone preservation was poor

in this context compared to the cistern, the ruler was identified from the mother of pearl necklace

he wore proclaiming his name and title as a royal lord (Demarest et al 2016: 182). The burial

included imported vessels, and *Kan Maax* was buried in a headdress of cloth, feathers, and shells

with mother of pearl carved coral fishes and water lilies similar to headdresses that appear on

Cancuen monuments and stucco sculptures (2016: 182). Despite their grave finery, these two

burials did not have a tomb or even a cist; they were buried under earth and the entrance was

covered with rubble and more earth. The entire royal palace was terminated, covering royal

entrances, doorways over 3 meters high, and the entire monumental stairway entrance. At the

ball court partially dedicated to *Kan Maax*, monuments, altars, and stelae were defaced to

remove the faces of rulers. Partial and completed defensive walls from the site, as well as two

unburied male skeletons, also date to this time period (Demarest et al 2016: 183). Arthur

Demarest and colleagues (2016) suggest that political decentralization and economic and

military crises undermined the Cancuen's regime attempts to maintain influence and power over

highland communities through ritual mechanisms, resulting in Cancuen's overthrow and termination by their highland neighbors.

Cancuen provides a direct comparison with the Early Classic context of Yaxuná. Similar to Burial 24, the polity's leaders and associated family met a concurrent violent end. The perpetrators of the violence appear to have treated the individuals with a certain amount of reverence in death: placing them in sacralized locations, including their high-value personal items with them, and organizing and executing monumental efforts to commemorate their interments. There are significant differences however. At Yaxuná, the artifacts and symbols associated with the Burial 24 tomb suggest an emphasis on resurrection (new building phase) while at Cancuen the focus is on termination (covering the building). There is evidence for warfare or military involvement at Cancuen (defensive walls) while no such evidence dating to the Early Classic has been identified at Yaxuná. The evidence from Yaxuná suggests an emphasis on institutional continuity – the replacement of a particular regime, but through a process incorporating the ritual mechanisms of leadership that attempted to maintain the legitimacy required to exercise "power over" the followers. This attempt at continuation rather than rupture of the imagined community would be an investment in the ideological, symbolic, and economic circulations that attracted followers to participate in the imagined community of the Yaxuná polity. The termination of the regime at Cancuen intended to shut down the urban city, the center of the polity, and the home of its patron gods – eliminating a primary space for the sociopolitical circulations that maintained the political community. The termination of the Yaxuná regime focused on removing specific individuals from positions of "power over" while attempting to retain the overall structure, practices, and organization of the polity through renovating and rejuvenating part of its urban center.

To understand the impacts of the termination of the Yaxuná regime, it is necessary to examine the Early Classic within the Yaxuná epicenter. What was happening in Yaxuná leading up to the deaths of its ruler and his family? This section will examine data from the Yaxuná epicenter to discuss political organization and general state of the polity core during the Early Classic.

Political Organization at Early Classic Yaxuná

Individual 24-14 was not the first divine ruler identified at Yaxuná. During the Late Preclassic, the construction of triadic groups and the dance platforms suggests that the foundations of divine rulership had been laid at Yaxuná. Another line of evidence for Preclassic royalty at Yaxuná comes from Cache 2 in Structure 6F-4; the well worn diadem jewels it contained likely dated to the Preclassic (Tiesler et al 2017: 202). Since Yaxuná lacks hieroglyphic records, however, it is to the Early Classic, around 400 CE, when the first clear and indisputable evidence for the practice of divine rulership at Yaxuná dates. Despite the lack of hieroglyphic records, artifacts at Yaxuná are directly and clearly connected to the institution of the divine ruler in the southern lowlands. While elite groups such as 5E-30 in the Preclassic and 5E-50 in the Early Classic may have housed Yaxuná's royal court, no hieroglyphic records means little to no evidence for how the power of the leader – the divine ruler – was organized and administered by other elites to influence urban planning, engineering, labor, access to non-local goods, and participation in long-distance trade networks. Selz Project archaeologists conducted the excavations of Burial 23 and the Yaxuná urban center.

Burial 23 contained the body of a mature male 40-50 years old, in general good health although experiencing the effects of degenerative arthritis (Stanton et al 2010; Tiesler et al

2017). His dental morphology and strontium ratios establish that he was not born and raised in

Yaxuná; contextual and iconographic evidence suggest he may have been from southern

Quintana Roo, perhaps from Dzibanche (Tiesler et al 2017). Burial 23 contained ample

materials identifying its occupant as a divine king in the tradition practiced across the southern

lowlands. Abundant jade, shell, and bone ornaments, specialized ceramic vessels, and the

placement of the body all reference and reinforce concepts of divinity and rulership (Stanton et al

2010; Suhler 1996; Tiesler et al 2017: 190-201). A set of ceramic vessels painted with

references to enemas and a ceramic figure depicting the severed head of a deity were in the

southwest corner of the tomb chamber. Three deer bones with incised decorations were also in

this area; one had a ceramic ring around it and one held a diadem jewel carved with a face and

tripartite headdress. Another incised bone artifact was possibly a weaving batten or the inset

backing of a throwing stick. Archaeologists also uncovered a small pile of cowries and another

of limpets, along with a larger deer cowrie in this area. Three of the limpets were painted red

and there were slices of manatee bone mixed among the shells. There were 3 large jade beads in

the body's hands and several other objects in the groin area. A drumstick made of deer antler

and bone was above the body's head, near a small turtle shell. The individual was wearing

carved Spondylus ear flares. The artifacts were likely arranged in the chamber, followed by the

pouring of white marl slurry in which the bundled body was floated (Suhler 1996; Tiesler et al

2017: 190-201). The body was oriented with its head at the west end (Stanton et al 2010: 169).

The vaulted tomb chamber for Burial 23 used the north and south walls of the Preclassic

structure. Architectural analysis suggests the tomb chamber was built into a segment of a

preserved Terminal Preclassic subsurface labyrinth of a similar style to the Yaxuná dance

platforms. The only tomb entrance was on the eastern side, which faced an antechamber filled in

with white marl. Burial 23 was interred in Structure 6F-3, the northern pyramid of the North

Acropolis's triadic group, during construction phase 5. The evidence for dating Burial 23 to

approximately 400 CE comes from the architectural sequence, iconographic associations, and the

ceramic evidence since no direct radiocarbon dates could be obtained (Stanton et al 2010; Tiesler

et al 2017). Ceramic types from the tomb included Tituc Polychrome: Camichin, Balanza Black,

Caucel Trickle on Red, and Caldero Buff polychrome.
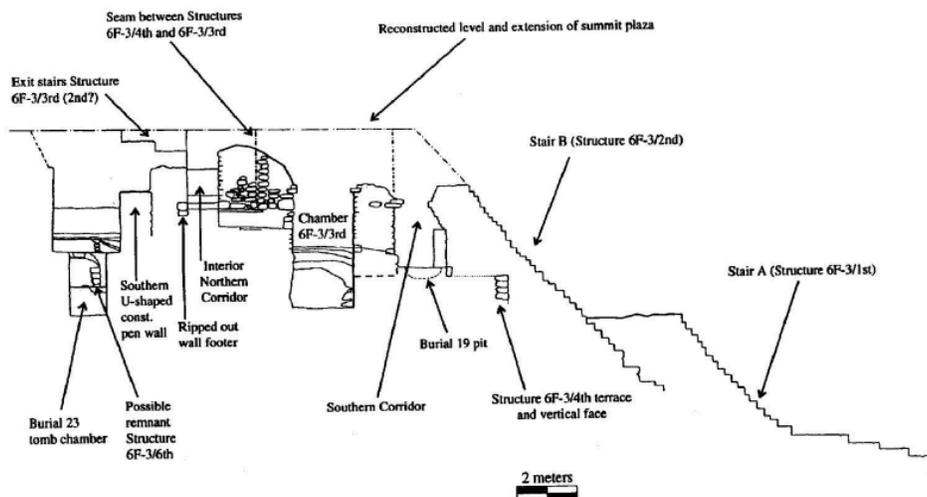
**Figure 8.4: North-south section of Structure 6F-3 showing the Burial 23 tomb
(from Stanton et al 2010: 162)**

The initial placement of the ruler in Burial 23 was not the only time this tomb chamber

was used. Phase 4 construction of Structure 6F-3 culminated in a large multi-terraced pyramid

with a summit plaza over a series of subterranean corridors. During this construction, people re-

entered the Burial 23 tomb chamber to carry out additional activities. They dug out the

antechamber and placed scorched angular stones, a censer fragment, and ash on and near the

body. The stones were placed to the north and south of the body. One rock, placed near the

middle of the ruler's body on the south side, had traces of a small intense fire; a striated water jar

fragment was placed on top of the rock (Stanton et al 2010: 168; Tiesler et al 2017: 188-191).

One of the incised bone artifacts may also be from this time, rather than the initial burial. The

re-entry took place after the body had skeletonized. After the re-entry, builders blocked the

antechamber with white marl and covered the tomb with rubble construction and a plaster floor

as part of the summit platform surface for 6F-3-4 (Stanton et al 2010).
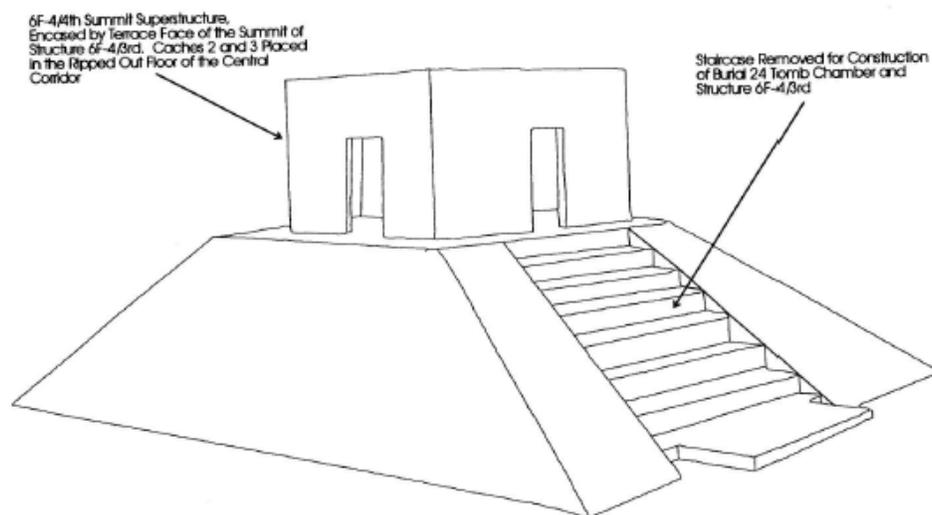
Figure 8.5: Isometric drawing of Phase 4 of Structure 6F-4 showing the locations of Caches 2 and 3 and the area of the Burial 24 tomb (from Stanton et al 2010: 185)

Based on the data above, Vera Tiesler and colleagues offer the following interpretations.

They suggest that Yaxuná's placement along trade routes between the southern lowlands and the

northern coast made it a significant location to control politically. The ruler in Burial 23 may

have been from farther south, sent to establish a new political regime in Yaxuná after its

Terminal Preclassic decline. The ceramic offerings in Burial 23 are of southern lowland styles,

but Tiesler and colleagues note the northern style of the diadem jewels included in his burial, suggesting he navigated the dynamics of both regions, highlighting again Yaxuná's unique linkage of southern and northern traditions. Under the Burial 23 ruler, Yaxuná's polity may have reemerged on the regional stage as a client of a patron polity, an ally of the ruler's former home, or been annexed into the polity the ruler represented. These possibilities will be discussed further once all available data from Early Classic Yaxuná has been presented.
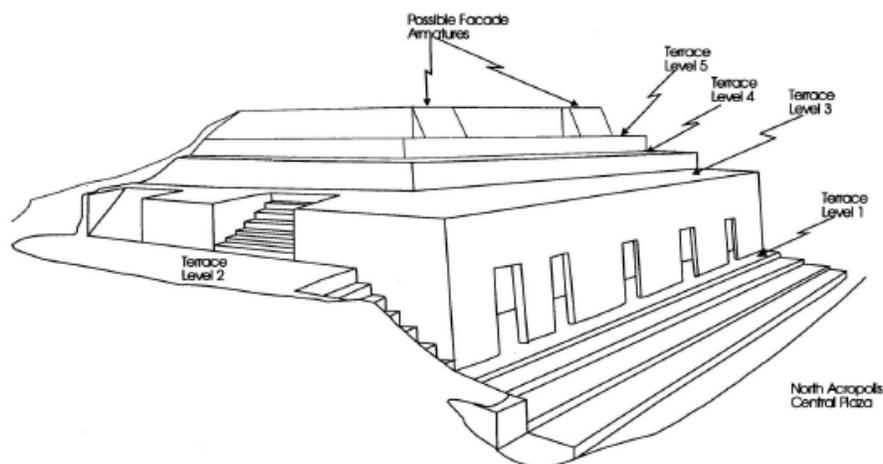
Figure 8.6: Isometric drawing of Phase 3 of Structure 6F-4 showing Terrace Level 4, where Burial 24 was located (from Stanton et al 2010: 185)

The other item of note is that Tiesler and colleagues argue for the possibility that the incised bone artifact, the re-entry ritual, and the perpetrators of the deaths of the Burial 24 individuals are all related. They connect the re-entry with the conversion of the tomb into a space for the practice of the Wite' Naah cult, originally from highland Mexico. This connection is made due the association of fire and water (through the water jar fragment) during the re-entry ritual, as well as a construction pen making the chamber an eastern-facing cleft in the

"mountain" of the pyramid. One of the images on the incised bone artifact is similar to the *ko'haw* plated war helmet, while the *ajaw* glyph is also on the artifact. Tiesler and colleagues offer the possibility that the bone artifact was part of the re-entry ritual and that those conducting the ritual were also the perpetrators of the deaths of the Burial 24 individuals (2017: 194-195). Previously, Travis Stanton and colleagues suggested that the re-entry ritual at Burial 23 was linked to the accession of the individual sponsoring the re-entry (2010: 262). If these interpretations are accurate, the Burial 23 re-entry may have been sponsored and/or conducted by the perpetrator of the Burial 24 massacre as a way of legitimating his accession as the Yaxuná ruler. This individual or faction may have been linked to the southern lowlands. If the skull identified as Individual 24-13 actually belonged to the ruler identified as Individual 24-14, the ruler's strontium isotopes indicated he was local – unlike the strontium isotope values of the ruler from Burial 23. Since rulership in the northern lowlands was generally not dynastic until the Late Classic, it is possible that after the death of the Burial 23 ruler a local faction took over political power at Yaxuná. If the occupants of the tomb were all members of the royal family, it is clear that their primary alliance were north rather than south; the only remains with strontium isotope values possibly from the Petén were those of a 12-15 year old child. All other individuals were local or from north of Yaxuná.

During the Early Classic, Yaxuná's political organization was based around an individual ruler. The context of his burial demonstrates that he drew on some of the same ideological strategies and sources of legitimacy for developing and maintaining "power over" as other leaders across the Maya area – their ability to intercede with and influence the supernatural sphere through ritual performances, which cultivated the perception of shared identity and community between participants and performers. The artifacts in his tomb also point to his

participation in the ritual state economy, through the circulation of specialized prestige goods requiring artisan work. The multilayered styles of his tomb artifacts demonstrate that he was part of a broader community beyond the Yaxuná residential area, with circulations of goods and ideas from the southern lowlands demonstrated in his burial.

The Yaxuná Epicenter in the Early Classic

The Early Classic lasted from 250-600 CE, covering the entirety of the Selz Project's Yaxuná II phase and corresponding to PIPCY's Tepalil phase. From previous research, the Yaxuná monumental core yielded extensive data from this period; identifying the Early Classic in other contexts has presented issues. Differing interpretations of ceramic chronology and settlement during the Early Classic are a result of overreliance on elite contexts within the monumental core to delineate transitions across the site as a whole. The bulk of this data comes from work done by the Selz Project, although the ceramic chronology has been refined through work by members of PIPCY.

The Selz Project divided the Early Classic into 3, then 2 periods (Yaxuná IIa, IIb, and IIc) (Johnstone 2001; Stanton et al 2010). Yaxuná IIc, originally defined by the cessation of polychromes and the introduction of Cetelac Fine Tempered ware, was eventually folded into Yaxuná IIb. Yaxuná IIa consisted of an increase in Usil group ceramics such as Xanaba Red and an influx of polychromes, either locally made or imported from the south (Stanton et al 2010: 38-39). The Selz Project defined Yaxuná IIb by the cessation of Usil group and Sierra ceramics and an influx of western Yucatán ceramic types such as Balanza and Kanachen (2010: 39-41). In analysis of ceramic material from the broader residential zone, Yaxuná IIa and IIb were identified through presence/absence of Usil group and Sierra ceramics; otherwise the 2 phases

were almost indistinguishable (2010: 40). Western ceramic types were found only in

excavations at the North Acropolis (Johnstone 2001).

Table 8.4: Early Classic ceramic types (adapted from Stanton & Ardren 2020)

Ware	Group	Type: Variety
Yucatan Sin Engobe	Oxil	Elote Estriado e Inciso: Elote
Yucatan Lustroso	Maxcanu	Maxcanu Bayo: Maxcanu
		Tacopate Chorreado Sobre Café: Tacopate
	Timucuy	Timucuy Naranja Policromo: Timucuy
Peten Lustroso	Balanza	Balanza Negro: Balanza
	Aguila	Aguila Naranja: Aguila
		Mataha Acanalado: Mataha
		Sacluc Negro Sobre Anaranjado: Sacluc
	Pucte	Chorro Acanalado: Chorro
	Dos Arroyos	Dos Arroyos Naranja Policromo: Dos Arroyos
		San Blas Rojo Sobre Anaranjado: San Blas
		Dos Arroyos Naranja Policromo: Var. Camichin/Bandas
	?	Caldeo Bayo Policromo: Caldero
	?	Especial del Group no Designado: Bayo Policromo Modelado
Usil	Chuburna	Chuburna Café: Chuburna
		Chuburna Especial: Borde Negro
		Catoche Chorreado: Catoche
	Xanaba	Xanaba Rojo: Xanaba
		Caucel Trickle Sobre Rojo: Caucel
		Hool Na Estriado: Hool Na
	Polvero	Polvero Negro: Escamosa
Xcanatun Sin Engobe	Saban	Chancenote Estriado: Chancenote
Paso Caballo	Sierra	Sierra Rojo: Escamosa

PIPCY's Tepalil complex only corresponds to Yaxuná IIa (250-550 CE). Tepalil consists

of the continuation of flaky wares and the Chancenote group, as well as local and imported

polychromes (Stanton & Ardren 2020). Xanaba Red is the most common type of flaky ware.

Ceramic groups identified within the Tepalil complex include Oxil, Maxcanu, Timucuy,

Balanza, Aguila, Pucte, Dos Arroyos, Chuburna, Xanaba, Polvero, Saban, and Sierra.

Johnstone's Yaxuná IIb is folded into the Yulum complex with Yaxuná III. Stanton and Ardren

argue that Yaxuná IIb is equivalent with the Oxkintok Regional complex defined by Carmen

Varela and is consistently identified in contexts with ceramics from Johnstone's Yaxuná III

phase (Stanton & Ardren 2020: 416). PIPCY's Ahal, Tepalil, and Yulum phases all show something of an overlap. The primary ceramics of the Tepalil complex are still Usil and Saban wares; Aguila Orange and Balanza Black replace types from the Late Preclassic such as Havana Club, Dzilam Green, Huachinango, and Carolina. The limited contexts securely dated to the Early Classic and the reliance on data from the monumental core make Early Classic ceramic sequencing difficult (2020: 416). Questions around ceramic sequencing manifest difficulties with dating occupation and establishing economic connections.

The significance of Oxkintok Regional Complex types at Yaxuná has been poorly understood. These types were originally defined as a separate phase, Yaxuná IIb. After further analysis, it was suggested that such types existed almost entirely in the elite funerary context of Burial 24, and therefore did not constitute a distinct phase or sequence in the Yaxuná record. Excavations by PIPCY in the 5E-50 Group, 6E-30 Group, 5E-110, 5E-112, and the North Acropolis midden recovered considerable amounts of ceramics from the Maxcanu, Batres, Kanachen, Kochol, and Kinich groups from this complex (Stanton & Ardren 2017). In these contexts it is almost associated with Arena Red and Chencenote Striated, which are generally classified with the Late Classic Yulum complex. This association suggests that Oxkintok Regional Complex types became part of the Yaxuná material record towards the end of the Early Classic and beginning of the Late Classic.

The presence of Dos Arroyos polychrome and Xanaba Red across the settlement zone suggests that there was substantial occupation at Yaxuná during the Early Classic, albeit reduced from the Late Preclassic (Stanton et al 2010: 259; Tiesler et al 2017: 34). Testing of low-lying residential mounds within the site core of Yaxuná consistently found Early Classic construction, typically the original platform or leveling layer (Ardren 1997: 157). In most cases, these

structures were in use or re-used through the Terminal Classic. Examples of these structures in the site core include Structure 6E-109, 4E-19, 5E-96, 5E-105, 5E-80, 5E-82, 5E-83, 4E-22, 4E-21, and 5F-49 (1997: 158-159). During the Terminal Preclassic and Early Classic, there were significant shifts in maintenance, construction, and significance of architecture in the monumental core. Structures neglected include those in the Central Acropolis, East Acropolis, E-Group, 5E-30 Group, and 5E-19 Group (Collins 2018; Fisher 2019: 113; Stanton et al 2010; Tiesler et al 2017: 34). Rather than channeling labor into maintaining or updating these spaces, focus shifted to the North Acropolis and the 5E-52 and 5E-73 groups (Stanton et al 2010: 259).

Structure 6E-14 is a small radial structure whose final construction phase was in the Early Classic (Stanton 2000; Stanton & Freidel 2005). It was built with megalithic blocks probably quarried from the Central Acropolis and potentially served as an accession building for Yaxuná rulers (Tiesler et al 2017: 36). Structure 6E-14's placement in the middle of the geomantic plan and its megalithic style led to speculation that the transition from the Late Preclassic to Early Classic transition at Yaxuná, with the cessation of monumental architecture, was due to military interference by the people of Izamal (Stanton 2000: 566-568). The megalithic architectural style of Structure 6E-14 is similar to construction at Izamal. A more recent interpretation of Structure 6E-14 is that it served as a tower for accession rituals and served to reinitiate formal leadership at Yaxuná with the arrival of the Burial 23 ruler (Tiesler et al 2017: 35-36). It is the only structure identified in the zone that separates the northern and southern sections of Sacbe 3, the longest north-south intrasite causeway at Yaxuná. Sacbe 3 connected the North Acropolis and the 5E-30 Group during the Late Preclassic; Stanton and Freidel suggest that residents constructed Sacbe 7 during the Early Classic to connect the 5E-52 and 5E-73 groups to Sacbe 3 (Stanton & Freidel 2005; Stanton et al 2010). The 5E-30 Group was abandoned in the Early Classic.

Structure 5E-50 is an elevated basal platform; the mounds and foundation braces covering it comprise the 5E-52 group (Stanton et al 2010: 97-108). Structure 5E-52 likely faced the formal plaza of Structure 5E-50 towards the east stairway. While it was occupied during the Late Preclassic, the group underwent significant elaboration during the Early Classic. This group is firmly integrated into the monumental core design during the Early Classic; it is connected by *Sacbe* 7 to *Sacbe* 3, to the 5E-75 Complex by *Sacbe* 8, and abuts *Sacbe* 5. Structure 5E-52 had a stucco façade stylistically dated to the Early Classic. The façade consisted of white stucco overlaid by red paint and included elements such as lazy S-scrolls and an anthropomorphic face with a tau-shaped incisor and large corner scrolls (2010: 100). The face is associated with the Hero Twins and First Father, as well as the depictions of Early Classic rulers at sites such as Kohunlich. The 5E-52 Group has been interpreted as an elite residence connected to the establishment of divine kingship at Yaxuná. The construction of 5E-50 and its stucco façade is contemporaneous with its connection to the North Acropolis and 5E-73 Group through *Sacbe* 7, the introduction of Petén-style polychromes into the Yaxuná economy, and the use of the North Acropolis for entombing significant ancestors (Burial 23). While suggested as an elite residence, excavations at the 5E-52 Group uncovered few artifacts beyond ceramics, obsidian blade fragments, and a few shells (2010: 97-108).

At some point during the Early Classic, Structure 5E-52 seems to have been ritually destructed and buried. The stucco frieze was found in fragments with sharp breaks and a thick layer of white marl was used to bury the structure. Near the summit of Structure 5E-52, there was a level of dry laid fill below the white marl. On top of the fill was a partial broken Balanza Black vessel. It may have been part of a termination deposit associated with the destruction of the frieze and the deposition of the marl (Stanton et al 2010: 105). The ritual destruction and

burial of Structure 5E-52 was originally dated later in Yaxuná IIa, although radiocarbon samples from a burned portion dated to the second or third century CE and were associated with Late Preclassic ceramics (Stanton et al 2010: 98; Tiesler et al 2017: 36). Structure 5E-52 may have undergone two phases of termination; the first at the beginning of the Early Classic and the second later on in the Early Classic. It is possible that the first termination was associated with the reestablishment of formal leadership and governance during the Early Classic, perhaps to prepare Structure 5E-52 to serve as the royal palace for the Burial 23 ruler. After his death or the termination of the Yaxuná regime from Burial 24, the palace was terminated again, this time by burial in white marl.

The 5E-73 Group's original platform was built during the Early Classic and its stairway faces towards the 5E-50 Platform. It consisted of two elevated platforms and may have also been an extension of the 5E-50 Group (Stanton et al 2010: 61-62). It is thought to have been an extended elite residential complex because of its morphology, midden, and size. However, it shows no evidence of workshops or other elements belonging to a palace economy. *Sacbe* 8 connecting the two further underlines its association with the 5E-50 Group. While complexes constructed during the Preclassic each had their own pyramidal structures, neither 5E-52 nor 5E-73 has one. Travis Stanton and colleagues have suggested that this is because their occupants utilized the pyramids in the North Acropolis as their ancestral pyramidal structures, interring their ancestors (such as the Burial 23 ruler) there as part of establishing a dynasty (Stanton & Freidel 2005; Stanton et al 2010).
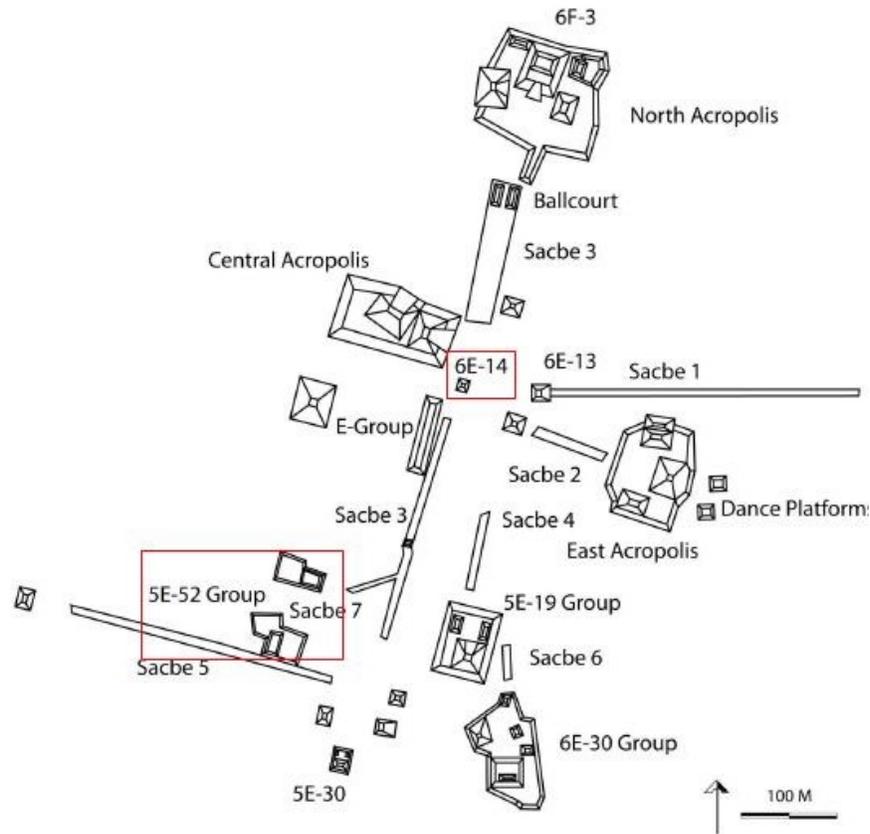
**Figure 8.7: Early Classic structures in the site core discussed in chapter
(modified from Stanton et al 2010)**

The artifacts from the 5E-50 and 5E-73 Groups do not indicate participation in the ritual

economy to the degree expected by a divine ruler. Resources such as obsidian, chert, and

greenstone were found in limited quantities or not at all. This could be due to continuous

reoccupation of these areas. The groups do show a greater investment in construction (requiring

labor) as well as semi-public architecture (the causeways) that directly connect them to the

monumental civic-religious architecture of Yaxuná. The evidence suggests that they were some

type of elite residence, given their position in the Yaxuná cosmogram, their size, and the iconography on the stucco frieze.

The general population of Yaxuná appears to have decreased somewhat leading into the Early Classic, although there was still a substantial population. The construction of 6E-14 in the middle of the geomantic plan hints at political turmoil, but the political organization during this period is unknown. It is also unclear whether Yaxuná would have qualified as a polity during this Terminal Preclassic to Early Classic transition; there is little evidence for the types of activity that serve as a proxy for identifying the presence of leaders who drew on legitimacy to wield "power over" (monumental architecture, access to specialized goods, iconographic associations of divinity, colonization of nearby areas). As the Early Classic continued, however, Yaxuná's political organization began to resemble that of its southern neighbors. A clear distinction emerged between a ruler (the primary leader) and the followers. There may have been rulers prior to the individual in Burial 23, but his status as leader and ability to mobilize "power over" are the first obvious example of this political organization at Yaxuná. This ruler likely lived in a palace complex centered on Structure 5E-52 and directly connected to the site's ceremonial architecture through a causeway. He was able to mobilize the labor to renovate and expand this complex, as well as the renovation of Structure 6F-3 in the North Acropolis. There was robust and seemingly stable settlement in the site epicenter towards the middle of the Early Classic.

It was not long after the death of the Burial 23 ruler that the ruling family in Burial 24 met their end. Some sense of continuity is suggested at least immediately after the death of the Burial 23 ruler. The use of a structure whose renovation he oversaw during his lifetime as his final burial place, with a tomb utilizing previous performance spaces, suggests that both the

memory of the ruler and the administrators or new ruler overseeing his burial continued to exert the necessary "power over" to access the necessary labor and goods for the practices of ritual performance from which ruling legitimacy was derived. His memory was also still alive at the time of the massacre of the individuals in the Burial 24 tomb, since there are suggestive iconographic, artifactual, and temporal connections between the re-entry ritual at Burial 23 and the construction of the Burial 24 tomb. It is unknown if rulership at Yaxuná was hereditary during this period, due to the lack of DNA available for analyzing familial connections between the inhabitants of the two tombs.

The evidence for the period between the deaths of the Burial 23 and Burial 24 rulers suggests that while leadership may have shifted in terms of the regime – the individuals or factions exercising "power over" – the recognized practices, tradition, and processes for deriving legitimacy remained consistent. Yaxuná remained a polity overseen by a ruler, who carried out the ritual performances required for the well-being of the polity's members, participated in the regional ritual economy, and represented Yaxuná in interactions with elites from other parts of the region. The population in the Yaxuná epicenter was stable. Residents of the site core utilized ceramics that had modal ties to Petén polychromes and imports from the Petén, demonstrating their participation in regional networks of exchange – of goods, styles, and ideas that also connected them to the ruler. Structure 5E-52 may have been ritually terminated after the death of the Burial 23 ruler, but a later date is suggested by stratigraphic and ceramic evidence (Stanton et al 2010).

Unlike the Burial 23 ruler, the Burial 24 ruler was locally raised. The individuals who shared his tomb showed genetic connections to the northern peninsula, rather than the southern home of the Burial 23 ruler. The Burial 24 ruler maintains many of the same trappings of rule:

the jade or greenstone royal jewels, the shell headband, and connections to the supernatural. While the Burial 24 context suggests an intentional termination of a ruling regime, similar to that found at Cancuen, there are important differences that highlight the intentions of the perpetrators at Yaxuná. The tableau of Burial 24, the renovation of Structure 6F-4, and the re-entry ritual at Burial 23 suggest that the perpetrator(s) intended to continue the tradition of divine rule at Yaxuná, simply replacing the individual or faction who exercised leadership. If the termination of Structure 5E-52 is associated with these events, it provides further evidence for targeted removal. If this interpretation is accurate, then the perpetrator(s) attempted to use the common source of legitimacy for Maya rulers, maintaining supernatural relationships through ritual performance, to justify the termination of the contemporary regime and establish some type of continuity in leadership. As previously mentioned, the actors may have changed, but the roles, set, and script remained. The new actors relied on the continuity generated by continuing to circulate the same or related traditions, ideas, and symbols through the landscape, economy, and performance.

Further support for this "usurper" theory comes from the analysis of Joyce Marcus (2020). She notes several other examples from the Maya region in which competitors for leadership adopted "foreign" imagery (often inspired by Teotihuacan styles) to enhance personal prestige. This pattern is consistent with Yaxuná, where the Burial 24 tomb contains several artifacts showing the influence of ideas from Teotihuacan. A re-entry ritual in Burial 23 could also have served as the confirmation process for the aspiring new ruler. Evidence from Yaxuná indicates this candidate attempted to evoke connections with "superior" cultures and establish political and moral authority through using Teotihuacan inspired imagery, renovating Structure 6F-4, and conducting a re-entry ritual. Whether or not they were successful in legitimizing their

leadership and establishing continuity can be judged by the state of Yaxuná political organization in the late sixth and early seventh century, during the construction of the Yaxuná-Cobá causeway. They were able to mobilize the labor to renovate Structure 6F-4, but there is little evidence of any other monumental architecture prior to the causeway. It is also possible that the local population ritually terminated Structure 5E-52 as an ultimate rejection of the new leader(s); the burial in white marl may have been intended to preserve the memory of its earlier occupants and render it unfit for occupation by the new leader(s). The complexity of the data from this period at Yaxuná demonstrates that there are many possible interpretations for the political chronology and how it affected Yaxuná's political organization. What does seem to be clear is that while there is often an emphasis on the individual in depictions of the divine ruler in Maya epigraphy, iconography, art, and artifacts, at Yaxuná the institution seems to have been of paramount importance. Leadership may have shifted between various related or unrelated factions, but whether the transition was peaceful, hereditary, or violent the aspiring leaders drew on the same traditions and processes of ritual representation and performance to argue for their legitimacy and authority in wielding "power over" at Yaxuná. They attempted to sustain the imagined political community by continual reference to the institution of divine leadership, rather than the individual occupying the role. These references were one type of circulation between leaders and followers, intended to intensify the experience of political community. Without followers, there can be no leader; an aspiring or new leader must be able to take advantage of existing circulations and/or quickly generate new and compelling ones to solidify the support from followers needed to wield authority.

What do these variables mean for an analysis of integration? For starters, there are two possible variants of integration: integration with a particular regime, and integration with the

institution of leadership. Integration with the institution is necessary even when there are also imagined or explicit connections to a particular regime for any sort of continuity beyond the lifespan of an individual ruler. What is interesting in the case of Yaxuná is how aspiring leaders portrayed themselves to claim legitimacy. When looking at examples from the southern lowlands such as Ceibal and *Ajaw Bot*, this individual's attempts at establishing legitimacy as the divine leader ultimately failed. His base of operations at Ceibal and his stelae were destroyed, and the next known ruler, *Wat'ul K'atel*, neglected the destroyed areas. *Ajaw Bot* was not affiliated with the established Ceibal regime, and did not attempt to affiliate himself with it by using its emblem glyph. At Yaxuná, while the perpetrator(s) symbolically "axed" many of the royal jewels of Yaxuná leaders, they also emphasized resurrection rather than termination of divine leadership through the iconography and organization of the tomb. They accorded the previous ruler and his family a burial that recognized their status as rulers, dressed in their symbols of leadership and placed within a "sacred mountain" in an acropolis. They possibly held a re-entry ritual into the tomb of an earlier ruler, another common method for demonstrating legitimacy. Structure 6F-4 was remodeled, but its renovation placed the Burial 24 ruler and family on a staircase of "eternal performance" (Tiesler et al 2017). What differentiate this new regime from the previous are aspects of material culture suggesting circulations with Teotihuacan, or other Teotihuacan-affiliated polities in the Maya area.

The Early Classic Hinterlands

Xkanhá, the outlying group renovated and reoccupied during the Terminal Classic, had its primary period of construction and occupation during the Early Classic. The majority of the acropolis structures were initially built and occupied during the Early Classic; some were

terminated at the end of that period of occupation, while others were later renovated during the Terminal Classic. The organization and layout were altered during the Terminal Classic, so the Early Classic layout will be described here. This data comes from Traci Ardren's dissertation work at Xkanhá. The patio quads are unique in the region during the Early Classic. Each of the three is slightly different in form and possibly in function. The Structure 12 group is the easternmost in Area 1 and has two rectangular range structures in the north and south joined by two platforms. The Structure 12 group could only be accessed through a narrow passageway from the Structure 13 interior patio or the open range structure in the south. Its use is unclear, although comparative examples in Mesoamerica were used for storing trade, tribute, or tax goods, or for administrative work such as labor organization (Ardren 1997: 58). The Structure 14 group has similarly limited egress and consists of two sets of small rooms across from each other, which are joined by a platform on the northern side, and a c-shaped room on the western side. The rooms are smaller than typical residences and lack ventilation; they may have been storage areas for trade, tribute, or tax good as well. By comparison, the middle patio-quad, Structure 13, opens onto the interior plaza of the acropolis. It is a range structure more similar to typical Maya architecture of the period, with an open side divided into three wide entrances by two columns. Its patio area, which connects it with the Structure 12 and 14 groups, is more restricted; there is one narrow doorway that serves as its entrance (1997: 56-57). Another small c-shaped room, Structure 4, offered a single narrow doorway into the middle patio of Structure 13. The patio-quad groups are the most complicated architecture from the Early Classic, representing a greater investment in labor and maintenance than most of the other acropolis structures (1997).

Area 2 is terraced into two distinct levels; the first level has two narrow entrances, while the second has one entrance into the interior plaza, a small area between Structures 8 and 9. The available access points are more in line with restricted entrances to palace complexes in the Maya area, rather than monumental civic architecture. The lower terrace has a large wall; it was not securely dated to either occupation of the acropolis (Ardren 1997: 95). Area 2 contained four low structures; Structures 8 and 9 are small rooms oriented towards the central plaza, which may have been shrines or receiving areas similar to other rooms associated with palaces in the Maya area. Structures 18 and 3 are simple platforms with stairways that could have held perishable superstructures. These might have served as performance spaces, surveillance outposts, or other shrine-type structures. The structures in this area were also constructed and used during the Early Classic.

During the Early Classic, Area 3 consisted of two to three low connected platforms that could have supported perishable superstructures (Ardren 1997: 103). These were likely residential in nature; during the Terminal Classic occupation, they were covered by Structure 2. Area 4 has a single structure, Structure 11. Structure 11 is the largest structure at Xkanhá and was repeatedly renovated over the course of its occupation. It began as a low terraced platform, but was gradually replaced by larger and more elaborate construction over the course of the Early Classic period; excavators noted several renovation sequences dating to the Early Classic. Structure 11 could be accessed from the interior plaza through an inset central staircase that led to two doorways on its eastern side; the doorways were narrowed at some point during the Early Classic by placing stone blocks on one side of each entrance (1997: 108).
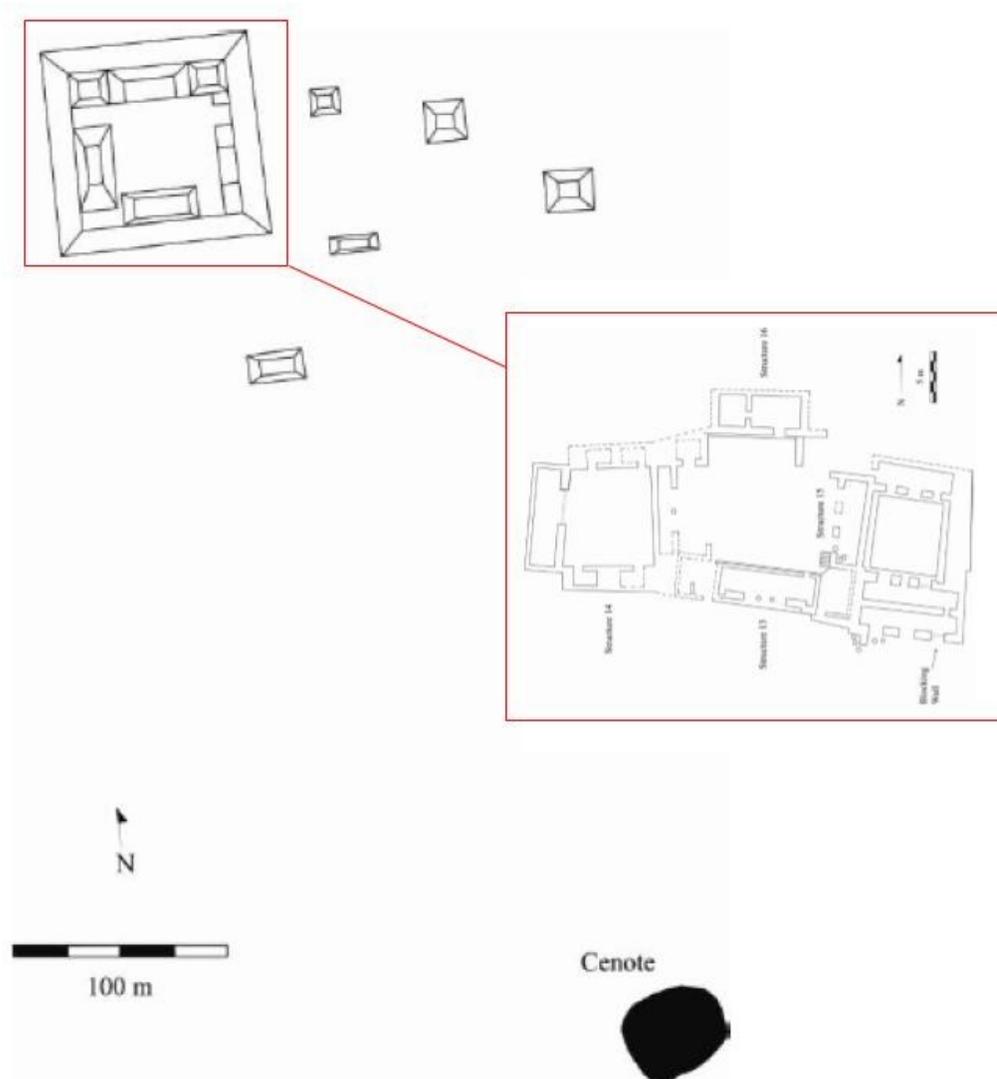
**Figure 8.8: Maler-style map of Xkanhá with the acropolis inset
(modified from Stanton et al 2010: 108-109)**

Area 5 consisted of the residential mounds near the acropolis, which were all on the

eastern side. Survey located very little additional settlement on other sides of the acropolis

(Ardren 1997: 114). Two structures in this area were excavated, dating to Early Classic and

interpreted as residential based on architecture. Structure 6 is a c-shaped building on a low

platform. While there was little evidence of settlement near the acropolis, occupation between the site center of Yaxuná and the Xkanhá acropolis was fairly continuous, and there was some evidence of occupation north of Xkanhá (1997: 31).

Area 1, the area containing the patio-quad groups, appears to have been terminated towards the end of the Early Classic. This termination was preceded by structural changes that further limited access to the patio-quads in Area 1. Structure 12's entrances were sealed off, leaving a single entrance from the interior plaza, a single entrance from the east, and a single entrance into the group's northern room. In the Structure 14 group, the entrance to its c-shaped room was blocked with re-used architectural stone. Smashed and burned ceramic vessels were left on the floors of the Structure 12, 13, and 14 groups. Pulling down the columns destroyed the entrances to Structure 13. Structure 12 was covered with red sterile soil, while red plaster was hacked from the walls of Structure 14. This area was not reoccupied during the Terminal Classic, unlike other parts of the acropolis. While Area 2 was also dated to the Early Classic, it did not have the same signs of termination that Area 1 evinced.

Ceramics excavated from the Xkanhá acropolis received a cursory analysis and are not well published. From the highlighted ceramic lots included in Traci Ardren's dissertation, Structure 13 contained Caucel Trickle on Red, Batres Red, Maxcanu Buff, Tituc Orange polychrome, and Aguila Orange ceramics (1997). From Structure 12, Dos Arroyos polychrome, Chancenote Striated, Sierra Red, and Valladolid Incised Bichrome were recovered (the Dos Arroyos polychrome was the vessel smashed in-situ as part of the structure's termination). Structure 15 had polychrome, Chancenote Striated, Caucel Trickle on Red, and Xanaba Red sherds. In Structure 4, Aguila Orange sherds were recovered. Xanaba Red, an unknown striated type, Maxcanu, Chuburna Brown, Aguila Orange, San Blas Red on Orange, Maxcanu Buff,

Caldero Buff Polychrome, and Tituc Orange polychrome were all recovered from Structure 11 in Area 4.

The initial analysis of Xkanhá's history was that the acropolis was originally built at the beginning of the Early Classic, including the design of the patio-quads. Around 300 years later, towards the end of the Early Classic, these structures were modified for privacy and security by blocking off access through closing and restricting access points. Fifty to one hundred years later, the palace and administrative rooms were terminated and occupation of the acropolis was abandoned (Ardren 1997: 201-202). Later it was suggested that Xkanhá's construction was contemporaneous with Burial 24, linking the Teotihuacan-style patio-quads with the Teotihuacan-associated Burial 24 materials (Stanton et al 2010: 262). However, circulations of ideas and goods between Teotihuacan and the Maya lowlands existed prior to the supposed "entrada" in 378 CE; the adoption of patio-quads as an architectural style is not necessarily limited to after the events of Burial 24. Xkanhá was seen as an outpost built in an environment of increased militarism to strengthen the regime's territorial control of the Yaxuná polity. Architectural sequences in 6F-3 and 6F-4, as well as ceramic chronology have more recently led to the suggestion that the ruler in Burial 23 died closer to 400 CE, while the individuals in Burial 24 were buried between 400 and 550 CE (Tiesler et al 2017). Xkanhá's occupation was dated through ceramics; as the understanding of regional and local ceramic chronology changes, the timing of its construction and occupation may also change. If Xkanhá's patio-quads were in fact directly associated with the Teotihuacanoid aspects of Burial 24 (i.e. if the perpetrators of Burial 24 also oversaw the construction of the Xkanhá acropolis), it suggests a much later construction date for them – towards the end of the Early Classic – and a much shorter occupation period, given the artifacts associated with Area 1's termination.

What is clear is that despite Xkanhá's distance from the site center, it was closely connected in a way settlement throughout other areas of the hinterlands was not. Similarity tests and correlation matrices using Late Classic ceramic types such as Ticul, Tekit, Akil, and Sacalum showed a high correlation between Yaxuná and Xkanhá (r=0.909) (Johnson 2012: 382). Other settlements in the hinterlands, such as Popolá-Puus Sil, had lower levels of correlation (2012: 383). Greater numbers of circulations and in greater intensity connected residents of Xkanhá and residents of the Yaxuná center during the Late/Terminal Classic and Early Classic. This is reflected in economics (ceramic types), styles, and ideas. Most Xkanhá structures are similar to Early Classic Yaxuná structures, with large amounts of boulder ballast and sterile red soil as underlying construction, thick well-polished floors and high-quality stonework (Ardren 1997: 151).

Beyond Xkanhá, the Popolá-Puus Sil area has the greatest evidence for Early Classic occupation. The Pisté-Yaxuná highway survey reported most identified settlements dated to two occupation periods: the Preclassic and the Late-Terminal Classic (Stanton & Magnoni 2013: 43). The hinterlands may have experienced a population decrease during the Early Classic or maintained a relatively stable population like the Yaxuná center. At Popolá-Puus Sil, continuity of occupation is indicated; approximately 44% of tested structures were likely used during the Middle and Late Preclassic, and 41% during the Early Classic (Johnson 2012: 365). The residents of this area do not seem to have participated as fully in certain economic circulations – such as Petén polychrome types – as residents of Xkanhá and the site center. The most common types at Popolá-Puus Sil were Xanaba Red, Yaxcaba Striated, and Tituc Orange Polychrome (2012: 487).
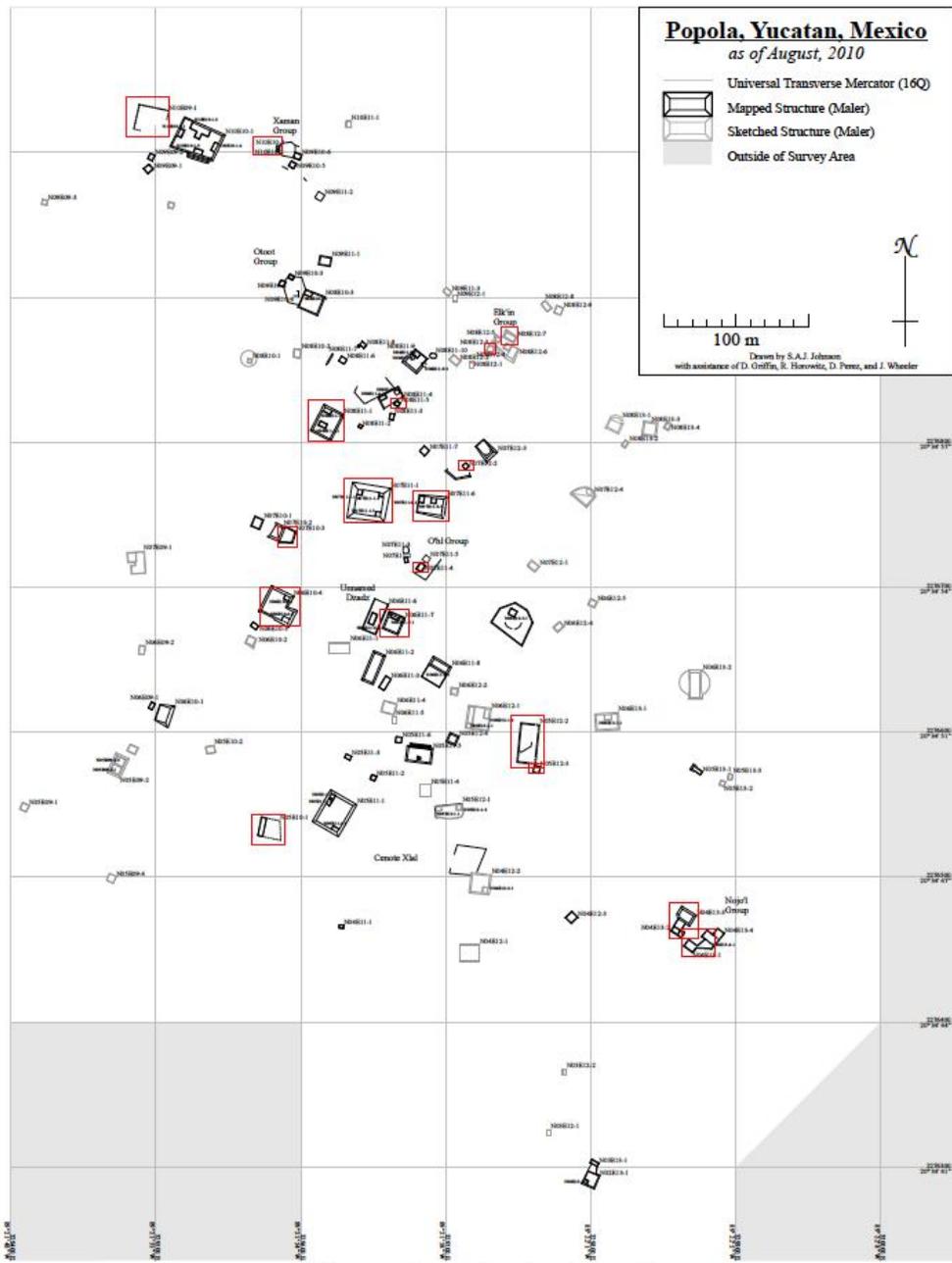
Figure 8.9: Maler-style map of Popolá-Puus Sil with Early Classic occupancy marked (modified from Johnson 2012)

From my own fieldwork, evidence from the transect area anecdotally supports a smaller population (relatively speaking) during the Early Classic than the Late or Terminal Classic. Six structures, all occupied during the Late and Terminal Classic as well, had ceramic types whose period of use included the Early Classic. No diagnostic Early Classic ceramic types were identified in the transect area. Structures 6F-26, MU1-W-15, MU1-W-1, MU1-W-4, MU1-E-17, and MU2-E-2 yielded types such as Sierra Red, Xanaba Red, Chuburna Brown, Chancenote Striated, and Maxcanu Buff. While each of these was in use during the Early Classic, they were also common in preceding periods (in the case of Sierra Red, Xanaba Red, Chancenote Striated and Chuburna Brown) and during the Late Classic (in the case of Maxcanu Buff, Chancenote Striated, and Chuburna Brown). At Structure 6F-26, Sierra Red was found in conjunction with primarily Late Preclassic types. MU1-W-15 had primarily Late and Terminal Classic types in conjunction with Chuburna Brown. MU1-W-1 has perhaps the best evidence from the transect of occupation continuity; it includes Late Preclassic through Terminal Classic types, including Sierra Red and Xanaba Red. The longevity of Sierra Red, Xanaba Red, and Chancenote Striated make it difficult to assign these types as evidence of occupation during one specific period. A larger body of data is necessary to determine if the transect area follows the pattern of Popolá-Puus Sil (occupation continuity from the Middle Preclassic through Terminal Classic) or other parts of the hinterlands (noticeable occupation break between the Late Preclassic and the Late Classic) (Johnson 2012; Stanton et al 2020). What can be noted is that even if the transect area was settled during the Early Classic, its residents did not participate in circulations of the same ceramic goods as the urban center's leaders. The imported and local polychromes found in contexts at the site center are not present in other areas of the transect area. At least one type from the Oxkintok Regional Complex, Maxcanu Buff, was identified at structure MU1-E-17 in

the transect area, indicating some economic integration and participation in a developing regional exchange network beyond the site center. Very small amounts of Maxcanu Buff were also uncovered from 3 different structures at Popolá-Puus Sil (N08E12-4, N05E12-2, N08E11-1).

There are many possible scenarios for the Early Classic trajectory of events that would fit the archaeological evidence. One suggests that the Burial 23 ruler was originally from the southern lowlands, sent to rejuvenate a declining Preclassic trade center. Several generations later a rival group displaced a locally raised ruler. In response, Cobá's ruler (affiliated with the Dzibanche/Calakmul dynasty) defeated and incorporated Yaxuná as a dependent ally or annexed polity (Tiesler et al 2017). Another possibility is that local residents rejected the attempts of the Burial 24 perpetrators to maintain political stability through drawing on themes of resurrection, burying the Early Classic palace to prevent its reoccupation. Xkanhá may have been built during the reigns of the Burial 23 or Burial 24 ruler or perhaps at the beginning of the Early Classic. Lady *K'awiil Ajaw*'s defeat of Yaxuná could be linked to the termination of the Xkanhá acropolis, and explain why only Area 1, site of the patio-quads, was terminated. The sheer number of moving pieces and the shifting nature of the Yaxuná ceramic chronology occlude a clear timeline of events.

Conclusion: Political Organization and Implications for Integration

The dependence on ceramic chronologies rather than absolute dating or hieroglyphic records makes the Early Classic a difficult period to elucidate. When certain events took place in relation to others can completely shift their significance. While the general population of the hinterlands was more loosely linked (tethered) to Yaxuná's political regime, particular areas had

significantly more intensive circulations with the regime. During the Early Classic, Xkanhá seems to have filled this role.

While the political upheaval at Early Classic Yaxuná clearly affected some areas of life, other connections stabilized for residents of the site center and hinterlands areas. Residents of the site center and hinterland areas participated in regional ceramic exchange, with access to Oxkintok Regional Complex ceramics. As noted during the Late Classic, however, there was a significantly lower level of political integration – of circulations and connections – between residents of the hinterlands areas and any sort of leadership or administration in the Yaxuná center. It is likely that the elimination of the Burial 24 ruler was one important factor in the loosened connections between leaders at the site center and followers in hinterlands areas.

The termination of Area 1 at Xkanhá is an important indicator of changing practices of political integration. During the Early Classic, Xkanhá residents were closely affiliated with the political elite of the Yaxuná polity through numerous ideological and economic circulations. During the same period in which violent replacement of the polity's leader took place, the administrative area at Xkanhá was terminated. The hinterland areas that flourished during the Late Classic (in terms of settlement increase and population growth) were those that shared fewer circulations of goods and ideas with the Yaxuná political elite. As more areas were settled (or resettled) during the Late Classic, they avoided the types of monumental expressions that were common at the site center or Xkanhá. Residents of hinterland areas that formerly served as anchors for the Yaxuná polity seemed to turn inward and prioritize their natural residential community over participation in Yaxuná's political imaginary. Areas with fewer circulations, regardless of physical distance, do not appear to have experienced the same effects. They

continued to participate in regional economic exchange, and show settlement growth and maintenance during this period.

Myriad factors contributed to the drastic shift in political organization seen at Yaxuná in the transition from the Early Classic to the Late Classic. The death of the Burial 24 ruler and family was one transformative event. Certain nearby settlements remained stable (defined through consistency in population, settlement, and access to goods) through the leadership transition because they were not as integrated into the Yaxuná political community through circulations of people, ideas, and goods. An area such as Xkanhá, however, which relied on such circulations, was significantly interrupted by the political fluctuations at the center. The abandonment of Xkanhá and the termination of Area 1 reflect its residents' inability to maintain their way of living through leadership changes. The satellite community at Xkanhá demonstrates the maintenance of a political strategy first practiced in the Preclassic; the eventual dissolution of both satellite communities perhaps offered lessons for later Yaxuná leaders.

Chapter 9

The Preclassic
1000 BCE – 300 CE

Based on the available archaeological evidence, Yaxuná metamorphosed into a polity during the Late Preclassic. The first evidence for settlement comes from the Early Preclassic, while it is likely that mobile populations occupied the area during the Paleoindian and Archaic periods. During the Late Preclassic, the first clear signs of differentiated leaders and followers can be identified: elite residences, urban planning, monumental architecture, socioeconomic stratification, sedentism, increased population, public ceremonies focused on specific actors, and incipient signs of divine rulership. This chapter will examine the archaeological evidence for Yaxuná's development into a polity during the Late Preclassic as a foundation for the polity's transformative moments during the Classic period. The Preclassic and Early Classic political regimes, both likely built around the institution of divine rule, used similar mechanisms of integration by sponsoring satellite communities that replicated the core's monumental architecture. The visibility of this architecture, as well as the presence of residents who engaged in regular and consistent interactions with Yaxuná leaders, may have served to "extend" the regime's reach during this time. However, this intensity of circulations does not appear to have exceeded the bounds of the satellite communities. The Preclassic context and insight into Yaxuná's development into a polity provide important background to how the Yaxuná polity and its various regimes navigated the transformative events of the Classic period. This chapter draws on data from the Selz Project at the Yaxuná site center, Ryan Collins' work at Yaxuná E-Group,

Scott Johnson's work at Popolá-Puus Sil, and Chelsea Fisher's work at the hinterlands site of Tzacauil.

Paleo-American through Middle Preclassic

Prior to the Middle Preclassic, scholars of Yaxuná must use regional evidence to ruminate on human occupation in the area. Humans likely arrived in Yucatán during the Late Pleistocene, but Paleo-American and Archaic period evidence is sparse (Andrews & Robles Castellanos 2018: 16). Most archaeological evidence comes from the Pacific coast and highlands; additional evidence has come from Belize (2018). Paleo-American remains in Yucatán have been primarily identified in underwater caves and *cenotes* (2018; Tiesler et al 2017: 27). Andrews and Robles Castellanos speculate that more Paleo-American and Archaic sites could be located along the open coast due to the extension of the coastal plain prior to 3000 BCE (2018: 29). The lack of archaeological evidence for a Late Archaic population in Yucatán has led scholars to propose that the appearance of agriculturalists with ceramics during the Middle Preclassic is due to migration, rather than population continuity (2018: 30; Tiesler et al 2017: 27).

The Early Preclassic is often defined by the first widespread use of ceramics across Mesoamerica (Collins 2018: 68). There is very little evidence for Early Preclassic occupation in the northern lowlands, although it is extremely likely that mobile populations lived across the peninsula during the Archaic and Early Preclassic (Brown & Bey 2018; Fisher 2019: 88). Preclassic ritual centers may have been founded on Archaic settlements, clearing earlier traces of occupation (Brown & Bey 2018; Fisher 2019: 88). The Cobá lake system yields evidence of forest clearance from 1650 BCE (Leyden 2002). The development and implementation of

agriculture is not well understood; it is likely that mobile and sedentary populations coexisted for much of the Early and Middle Preclassic and may have jointly created Middle Preclassic ceremonial centers. Prior to 1000 BCE, our understanding of settlement at Yaxuná is fragmentary and incomplete.

Middle Preclassic

The earliest data from Yaxuná's monumental core comes from a midden in the E-Group plaza (Collins 2018). The midden pre-dates the construction of the first plaza floor and contained unmixed pre-Mamom ceramics. Thus far, this is the only area at Yaxuná where such a deposit has been uncovered. This pre-Mamom complex, lasting from approximately 1000 to 900 BCE, has been designated as the Early Laapal by PIPCY (Stanton & Ardren 2020). It includes four ceramic types, including several established with the Tzubil collection. Huchim Burnished Rosy, Chel Burnished Buff, Kanxoc Unslipped, and Hunuku Brown Burnished Wash are the four types that make up the Early Laapal complex (Collins 2018; Stanton & Ardren 2020; Stanton & Collins 2017). Over the three levels from which these ceramics were excavated, changes in each level suggested a transition towards Early Nabanche characteristics (Collins 2018: 125).

Most archaeological evidence of the Middle Preclassic comes from Yaxuná's E-Group. An E-Group complex contains 5 buildings: a western radial pyramid, central open plaza, eastern range structure, and northern and southern structures sometimes replaced by natural features such as hills or caves (Collins 2018: 121). The radial pyramid and range structure were often built with astronomical orientations and were likely used for rituals involving the passage of time and the agricultural cycle.
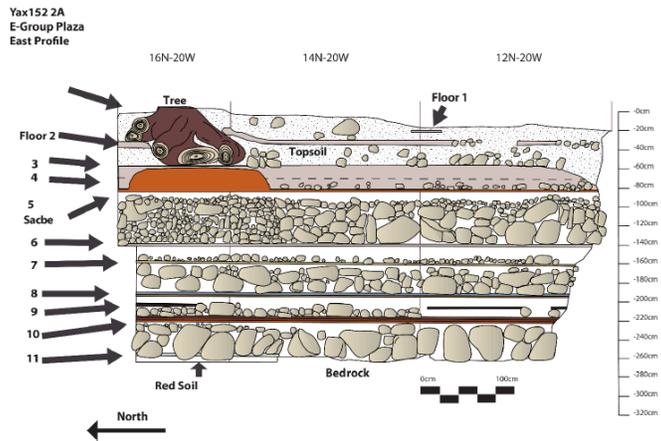
Figure 9.1: Profile drawing of E-Group plaza stratigraphy showing the different floor phases (from Collins 2018: 156)
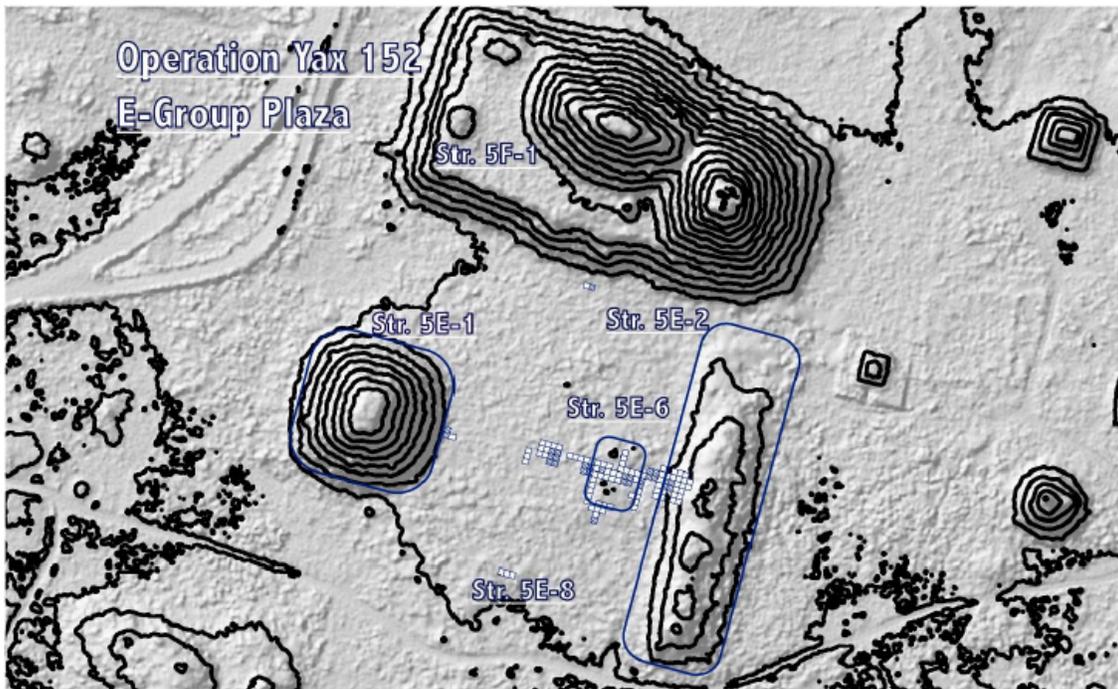
Figure 9.2: Lidar image of E-Group, plaza, and excavations conducted in Operation 152 (from Collins 2018: 155)

During the Early Laapal phase, people chose an even depression in bedrock to clear, modify the nearby outcrops, and place earthen floors (2018: 187). The first 3 floors of what became the Yaxuná E-Group plaza were laid during the Late Laapal complex, from 900 to 650 BCE (Collins 2018). Late Laapal is thought to be a transition from pre-Mamom sphere ceramics to Mamom sphere, given its mix of groups. Ceramic groups present include Joventud, Kin, Chel, Kanxoc, Hunuku, Huchim, and Dzeal (Stanton & Ardren 2020). There are limited vessel forms, mostly composed of large short-necked jars (Stanton et al n.d.). The prevalence of large short-necked jars has been suggested to support communal consumption rather than private (Collins 2018; Stanton et al n.d.). Three separate floors were laid for the E-Group plaza, from the earliest thin floor of sascab, followed by a layered compacted earthen floor, and finished with a fragmentary surface with high levels of carbon and ash (Collins 2018: 127). The plaza was at least 60 meters by 40 meters in size during the Late Laapal. There is no evidence of permanent or semi-permanent architecture, but landscape modification did take place. The area was extensively cleared, including beyond the physical floor itself. Bedrock outcrops were also modified, one of which served as the plaza boundary (2018: 186). Several rough limestone tools were placed in a bedrock aperture, which was marked and revisited throughout the course of the plaza's use. In addition to ceramics, other artifacts from this period include limestone lithics, poor quality chert, and geometric beads of limestone, marine shell, and ceramic (2018). There are no currently known residences dating to this time period, which could indicate a reliance on perishable structures or a more mobile population that maintained the plaza as a periodic gathering space.

The E-Group plaza at Yaxuná is the first example in the area of an organized space used for social integration of a population. The people using it may have still been mobile (practicing

gathering and hunting and moving on a seasonal basis) or more sedentary. The plaza may have served as a discrete space for circulations of people and items that would not interact on a daily basis. If activities such as exchanging goods, marriages, healing rituals, religious ceremonies, and adjudicating disputes took place in the plaza, they would have established new social connections and the dissolution, maintenance, and reinforcement of previous connections (Tiesler 2017: 28-29). The evidence as a whole suggests an egalitarian community with equal investments in creating the local landscape (Collins 2018: 188). The techniques used for clearing and creating earthen floors are not specialized, meaning all could participate in the organization of this significant space. The beads made of various materials are not restricted to certain areas, but are widespread throughout the construction fill of the plaza. The placement of bedrock offerings within the earliest construction episodes may have been a forerunner of contemporary *milpa* dedications to delineate the E-Group plaza as "domesticated" space distinct from wilderness (Fisher 2019; Stanton et al n.d.). It is possible however, that organizing the design, construction, and maintenance of a collective space like the plaza required leaders of some type (Tiesler et al 2017: 29). For the first time, people designated the site as a meaningful space, but its occupants could not be classified as a polity. If the population was mobile, such a group typically exercises relatively equal amounts of "power to" in their ability to maintain autonomy, making it difficult for an individual or small group to exercise "power over" in an organized manner. Incipient signs of leaders may have been present during the Laapal phase at Yaxuná, but political development and stratification emerged at Yaxuná during the Hok'ol complex.

The Selz Project designated the period from 650-300 BCE as their first established ceramic period, Yaxuná Ia (Johnstone 2001; Stanton et al 2010). They found that Yaxuná Ia

paralleled Early Nabanche material at Komchen and Dzibilchaltun, while also sharing attributes with Mamom ceramics from the Petén and Belize (2010: 35). PIPCY classifies Yaxuná Ia as the Hok'ol complex, noting that while it fits within the Early Nabanche complex there are some distinct elements at Yaxuná (Stanton & Ardren 2020). The most common forms are still short-necked jars, and an increase of everted-flat bottom bowls as well as occasional spouted vessels (Collins 2018: 128-129). These vessels were likely used for storing liquids, cooking, and serving.

No house mounds date to this period, likely due to reliance on perishable construction materials but Middle Preclassic ceramics recovered from surface collection and test units suggest a considerable population (Fisher 2015; Stanton et al 2010). There are two residential areas in the Yaxuná core that have evidence of occupation during the Middle Preclassic (Stanton & Ardren 2005). The 5E-19 and 6E-30 Groups built at the southern end of the site's north-south axis both contained Middle Preclassic ceramics. The 6E-30 Group in particular contained Dzudzuquil and Joventud ceramic deposits. The 6E-30 Group was a structure cluster arranged around a plaza on an irregular platform, oriented north (Stanton et al 2010: 255). Prior to its construction, the bedrock was cleared and a layer of fill containing non-local chipped chert, malachite fragments, broken ceramics, and shell reduction flakes placed (Fisher 2019; Stanton & Magnoni 2014). *Sacbe* 6, a short north-south causeway with unsealed deposits from the Hok'ol complex, lines up directly with structure 6E-31 in this group. The association of this structural cluster with a form of public architecture led the Selz Project archaeologists to speculate that it was a descent group ancestor shrine (McAnany 1995; Stanton et al 2010: 255). The spatial organization of these two groups and *Sacbe* 6 is consistent with later more explicit geomantic plans of the monumental core, suggesting continuity over time (Stanton & Freidel 2005; Stanton

et al 2010). It also may be indicative of emerging leadership, demonstrating that one particular

kin-based faction was gaining power (Stanton et al 2010: 256). Within the 5E-19 Group, an

approximately 10 meter tall structure dates to the Middle Preclassic, aligned with *Sacbe* 4.

During this time, the E-Group plaza expanded in size and floors were now made of

sascab, rather than earth or clay (Collins 2018: 129). The plaza's users carved a large cross into

the floor. The first architecture in the E-Group area dates to this period, consisting of low

platforms, stone foundations, and postholes from pole and thatch construction. At the end of the

Middle Preclassic, the E-Group plaza extended to its full size and monumental architecture made

of stacked masonry blocks reaching 2 to 4 m in height was constructed (2018: 129). A small

circular foundation along the east-west axis likely served as a platform or stage and was

associated with a polished fragment of magnetite mirror (2018: 196). The initial E-Group range

structure, 5E-6, was gradually reduced in height while a new range structure, 5E-2, was raised.

Artifacts recovered from the E-Group during this period include crystals, low-quality chert and

limestone lithics, and limited quantities of exotic materials such as greenstone, magnetite, and

obsidian (2018: 201). Yaxuná's E-Group is the northernmost known outside of the southern

lowlands, suggesting its builders had long-ranging ties beyond the local area. Yaxuná's E-Group

may have been built by migrants from the southern lowlands, or been an attempt by northern

lowland Maya to establish affinity with southern lowland sites (Tiesler et al 2017: 29).

During the first part of the Middle Preclassic, monumental core of Yaxuná became

significant for a group of people living in the area. The paucity of settlement evidence from this

period has led some to propose that this population was mobile – moving seasonally, practicing

primarily gathering and hunting, and building temporary shelters. It is also possible that there

was a sedentary population whose archaeological remains decomposed or were built over in

ensuing periods. This location was a natural access point between the southern Maya area and the Yucatán coast, with access to marine resources. Communally the people in the area altered the landscape and infused it with meaning, creating a shared sacred space that could be easily maintained and used by the whole population. As time passed, some people may have more permanently occupied the area, while mobile groups continued to interact with them and joint maintenance of the landscape was practiced. The lack of burials, house mounds, and certain ceramic forms indicates that during the Middle Preclassic, the majority of people in the area around Yaxuná were still transitioning to sedentism (Collins 2018: 194-195). It is likely that local developments as well as migration from southern areas contributed to these changes. The E-Group plaza may also hold evidence of this transition to sedentism. The bedrock offerings from the earliest plaza floors could have been dedicatory, similar to planting ceremonies practiced to christen new *milpa* areas (Stanton et al n.d.). The *kan* cross carved in the plaza floor at the end of the Middle Preclassic is also interpreted as part of this tradition. Knowledge of time and seasons (exemplified by E-Group architecture) became increasingly important during the transition to agriculture, and people with that knowledge might have leveraged it for elite status – possibly the occupants of the 6E-30 Group (Tiesler et al 2017: 30).

Over time, a kin-based group may have gained prominence, as demonstrated through incipient public architecture, preferred location, and access to nonlocal goods in the 6E-30 Group. The presence of non-local goods such as greenstone, magnetite, and obsidian indicate that the people occupying Yaxuná were part of long-distance trade networks. The non-local goods at Yaxuná during the Middle Preclassic came from a more comprehensive range of areas than during the Late Preclassic. Relatively high numbers of Petén-area ceramics dating to the Middle Preclassic also support the interpretation of Yaxuná as a node for pan-peninsular trade

(Tiesler et al 2017). The participation of the Yaxuná population in regional and interregional trade was likely a catalyzing factor in its development as an urban center and as a polity; residents' abilities to pull wide-ranging resources into Yaxuná promoted innovation and socioeconomic inequality (Collins 2018: 203-204).

Table 9.01: PIPCY Yaxuná ceramic chronology (information from Collins 2018: 151-152)

Time Period	Previous Ceramic Complexes	New Ceramic Complexes	Common Ceramic Groups
1000-900 BCE		*Early Laapal*	Chel Kanxoc Huchim Hunuku
900-650 BCE		*Late Laapal*	Joventud Kin Chel Kanxoc Hunuku Huchim Dzeal
650-300 BCE	Yaxuná Ia	*Hok'ol*	Joventud Dzudzuquil Pital Ucu Achiotes El Llanto
300 BCE-0 CE	Yaxuná Ib	*Ka'nal*	Sierra Flor Ucu Zapatista Saban

The 6E-30 Group represents the first indicators of socioeconomic and political stratification at Yaxuná. Its occupants had access to non-local goods, an established (likely multigenerational) extended residence, and proximity to the second example of public architecture (*Sacbe* 6) at Yaxuná. The labor required for expanding the E-Group plaza,

constructing the first monumental architecture, and initiating urban planning at Yaxuná may have been collectively organized, or may have been overseen by the residents of the 6E-30 Group. The shifts towards sedentism, political complexity, and socioeconomic stratification during the Middle Preclassic resulted in the development of the Yaxuná polity during the Late Preclassic.

During the Middle Preclassic, people also occupied the areas that became the sites of Popolá-Puus Sil, X-Panil, Tzacauil, Chan, Kaan Ha, Ketzil, and Ikil (Fisher 2019; Tiesler et al 2017). As at Yaxuná, there are no residences firmly dated to this period; the evidence comes from small amounts of Laapal and Ho'kol phase ceramics in these areas, suggesting a more mobile population using perishable housing. The lack of any public architecture on par with the E-Group, its plaza, or *Sacbe* 6 supports the interpretation that the area that became the Yaxuná monumental center was already a place of social, economic, and political significance for occupants of north-central Yucatán. The center was the materialization of a shared political, social, spiritual, and economic community for the population of north-central Yucatán during the Middle Preclassic. In particular, the E-Group and its plaza would have served as an integrating space; unique to the area, it required labor to create the plaza, lay the floors, and build the structures. The E-Group also drew on shared spiritual and cultural values around time, seasons, astronomical events, and exotic goods. While Yaxuná was not yet an established polity, emerging leaders were beginning the process of using spiritual and cultural values and economic opportunity as ideational mechanisms for attracting followers from the surrounding area. Followers from the area made the decision to invest in the emerging elites of Yaxuná. This decision was likely influenced by leaders' long-distance associations with the southern lowlands

and northern coast, their multigenerational residential ties, their knowledge and practice of agriculture, and the landscape's history as a significant communal space.

The Late Preclassic at Yaxuná

During the Late Preclassic, Yaxuná became a polity. While there is no definitive evidence for the practice of divine rulership at Yaxuná during the Late Preclassic, there is secondary evidence. The ruling regime at Yaxuná may have been a divine ruler, a council, or a kinship-based group; while its exact form is unknown, what is clear is that there were established leaders with considerable political, economic, and social power during this period and an extensive population of followers. The archaeological evidence from the Late Preclassic clearly qualifies Yaxuná spatially and politically as a polity. Settlement in the surrounding area also offers insight into how Late Preclassic regimes centered at Yaxuná interacted with the area's population and to what extent the surrounding area was integrated into the Yaxuná polity.

Ceramic analysis by the Selz Project combined the Late and Terminal Preclassic at Yaxuná under the Chicanel inventory and with strong ties to the Late Nabanche complex (Stanton et al 2010: 37). PIPCY divided the Chicanel sphere into two complexes at Yaxuná - the Late Preclassic Ka'nal and the Terminal Preclassic Ahal. The Ka'nal complex is distinct from the Ahal in the quantity of Flor group ceramics and the greater variety in the Sierra group (Stanton & Ardren 2020). Vessel forms recovered from the E-Group changed, with less everted lips added to more vessel shapes and jars and flat-bottomed bowls are more restricted to unslipped groups (2018: 130; Stanton et al n.d.). New forms, classified as basins and buckets, are observed and may have been used for storage and fermentation. These forms indicate that residents of the area had fully transitioned to sedentary agriculture during the Late Preclassic.

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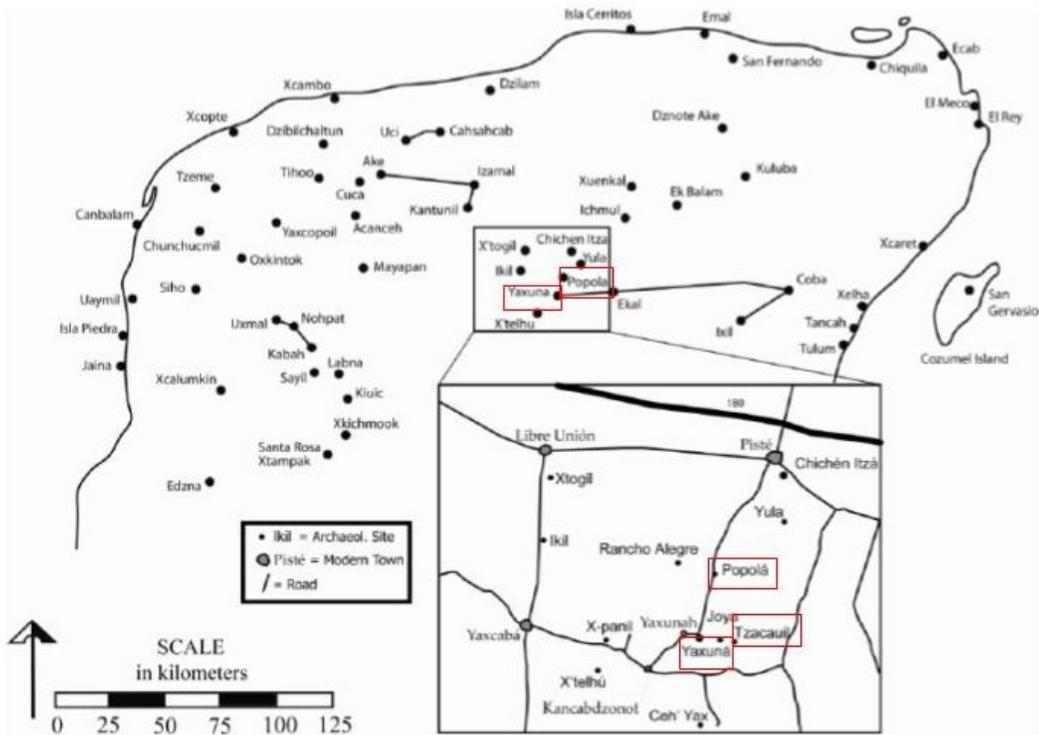
Figure 9.3: Map of northern Yucatán denoting locations discussed in this chapter (modified from Stanton & Ardren 2020: 2)

Late Preclassic settlement in the Yaxuná core was extensive; the site seems to have its largest population in history during this period (Stanton et al 2010). Apsidal structures and chich mounds were used, but the most popular form of architecture seems to be large boulder-lined platforms built around bedrock outcrops with stone foundations for multiple perishable superstructures (Fisher 2019; Stanton et al 2010). Spatial organization is consistent with low-density settlement, including the maintenance of open space between and around residential platforms (Fisher 2019). Boulder-lined platforms are found in clusters throughout the residential core, including associated with *rejolladas* (Stanton et al 2010). These platforms are noticeably spatially distinct from Late Preclassic monumental architecture, although their locations show

preferential proximity to the monumental core and sediment-rich areas rather than water sources

(Fisher 2019: 106). Chelsea Fisher noted loose clusters of Late Preclassic residential platforms

in discrete areas of the site, including northwest and southwest of the E-Group and near the

modern-day Yaxunáh Campamento (Stanton & Magnoni 2017).
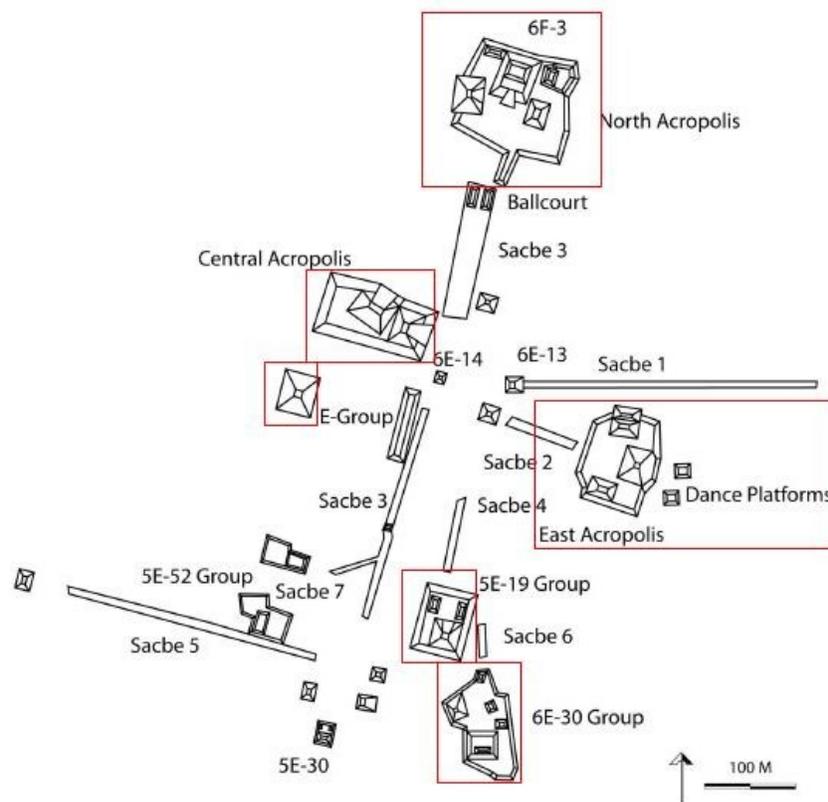
Figure 9.4: Map of Yaxuná monumental core with Late Preclassic architecture (from Stanton & Freidel 2005: 229)

The Late Preclassic is perhaps the greatest fluorescence of monumental architecture in

Yaxuná's history. During this time, labor erected the triadic groups of the North, South, and East

Acropolis, added specialized features to the E-Group, constructed multiple intrasite causeways,

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built the dance platforms, and invested in elite architecture. Like El Mirador and other Preclassic centers in the southern lowlands, Yaxuná exhibited political and economic strength through its monumental works. Stratification continued at Yaxuná, as elite factions demanded and directed labor, perhaps as tribute (Stanton et al 2010).

Multiple triadic groups were built during this time. A triadic group is a Late Preclassic monumental form found in the northern and southern lowlands. They consist of a raised flat platform with stairs topped by a principal superstructure, flanked on either side by smaller structures or groups of structures (Fisher 2019; Hansen 1998). The North Acropolis and East Acropolis were constructed during the Late Preclassic; the Central Acropolis may have a Middle Preclassic structure, but reached 21 m in height and was covered in dressed monolithic stones like architecture from the Mirador Basin during the Late Preclassic (Tiesler et al 2017: 32). The North Acropolis was built over a cave; when the roof's cave collapsed it was used as a midden during the Classic period (Stanton & Marengo Camacho 2014). Based on iconography from well-preserved Late Preclassic complex facades, Richard Hansen argues that triadic groups are a type of royal architecture that came to be associated with the deity GI and divine rulership in the Classic period (Hansen 1998; Tiesler et al 2017: 32). Two smaller architectural groups also followed the triadic pattern, the 5E-30 and 5E-19 Groups (Fisher 2019). They may have served as elite residences during the Late and Terminal Preclassic (Stanton & Ardren 2005; Stanton & Freidel 2005; Stanton et al 2010: 257). These triadic complexes were incorporated into the geomantic plan through the construction of causeways (Stanton & Freidel 2005). The construction of *Sacbe* 3, the primary north-south axis of the core, took place during the Late Preclassic. *Sacbe* 4, connected to the 5E-19 Group, may also date to this period.

The East Acropolis and associated *Sacbe* 2 define the eastern axis of monumental architecture during the Late Preclassic (Stanton & Freidel 2005). Behind the East Acropolis are two Late Preclassic platforms with a series of internal corridors arranged in a quatrefoil plan, with rooms at each of the four cardinal directions (Stanton & Freidel 2005; Suhler 1998; Tiesler et al 2017). On the other side of *Sacbe* 3, Floor 6 of the E-Group plaza was altered with four incised line features (Collins 2018: 227). An incised circle on the eastern side of the plaza was placed above concentrated burning, primary deposits, and the circular platform mentioned earlier. A set of incised lines in the form of squares marking the east-west axis may have been associated with a standardized unit of measurement and served as the blueprint for a *sascab* walkway on Floor 5 (2018: 230). The incised *kan* cross on Floor 6 previously mentioned also dates to this period. The plaza floors during the Ka'nal phase were made of *sascab* mixed with red soil to create a reddish hue, with a thin floor layer over dry core fill (2018: 230-232). Similar rose-colored floors were excavated at the 5E-19 and 6E-30 Groups. The construction episodes at the E-Group plaza occur within a 200-year period indicating rapid growth (2018: 130). Like the 5E-19 Group, the E-Group plaza reflects higher consumption of non-local specialized materials such as greenstone, obsidian, and marine shell.

The 5E-19 and 6E-30 Groups, originally occupied during the Middle Preclassic, remained occupied through the Late Preclassic. Structure 5E-19 was modified from its Middle Preclassic form into a triadic group (Tiesler et al 2017: 32). *Sacbe* 4, which runs parallel to *Sacbe* 3, may also date to this period. The construction phase for 5E-19 during this period had a large ballast of core fill and rose-colored *sascab* floors, very similar to the E-Group plaza (Collins 2018: 193). The 6E-30 Group and 5E-19 Group appear to have inspired the form of the 5E-30 Group, constructed during the Late and Terminal Preclassic at the southern end of the

north-south axis (Stanton et al 2010). The 5E-30 Group may represent a shift of elite residential and ritual focus during the Terminal Preclassic and into the Early Classic (2010: 257). It rests at the end of *Sacbe* 3, potentially supplanting the 6E-30 and 5E-19 Groups in Yaxuná's geomantic plan. These spatial and architectural shifts could be indicative of changes in power dynamics between the residents of each group.
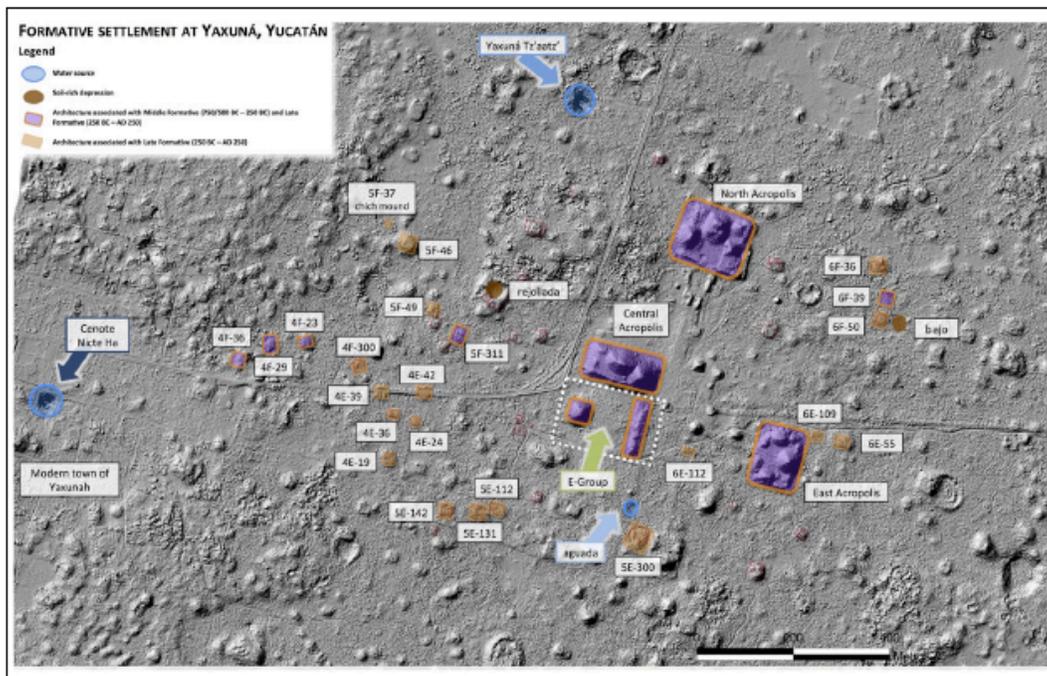
**Figure 9.5: Preclassic settlement in the Yaxuná monumental core
(from Fisher 2019: 104)**

During the Late Preclassic, investment in space and place over the Yaxuná monumental core is paramount. The population became increasingly sedentary and primarily agriculturally based during this time. Kin groups began investing in larger, longer-lasting residences to establish a multigenerational presence on distinct areas of land, in some cases associated with specific resources such as *rejolladas* (Fisher 2019: 101; Stanton et al 2010: 257). Some of these kin groups may have exercised leadership in the community, and the dynamics between them

may have shifted over time. What is clear is that several different residence groups made explicit claims to monumental architecture through physically connecting their residential spaces to public architecture using causeways.

The Late Preclassic is characterized by an expansion of monumental architecture at Yaxuná. The physical labor required for such an endeavor in a short period of time supports the increase in settlement and population at Yaxuná during this period. The site's monumental core is fully formed, with clear organizational principles. The site's north-south and east-west axis are developed into a cruciform or *kan* cross shape, corresponding to an orthogonal urban layout (Collins 2018: 235-236). The shift in from the bedrock aperture to the incised cross in the E-Group plaza, and later to Structure 6E-14 as the center of the site reflects careful civic planning and execution. The replication of the quadripartite principle is indicative of a collective memory and shared ideological understanding of the landscape. The architectural hallmarks of the Late Preclassic are consistently applied in various contexts; monumental architecture such as the East Acropolis and residential spaces such as the 5E-19 Group are both triadic groups, while the *kan* cross is reflected in the East Acropolis dance platforms and the overall organization of the monumental core (Stanton & Freidel 2005). This consistency suggests strong social connections of one type between residents of the core. As previously noted, however, spatial distancing between non-elite and monumental structures may be indicative of growing stratification. This consideration leads to the question of rulership during the Late Preclassic.

The occupants of Yaxuná remained linked in unique ways to the southern lowlands. Shared ceramic affiliations with Petén ceramics were strong in the Late as well as Middle Preclassic. The updates and maintenance of the E-Group during this period show continued use and knowledge of evolving traditions in the southern lowlands. The presence of non-local

resources such as greenstone, marine shell, and obsidian indicate residents continued to participate in trade networks involving northern and southern occupants of the Maya area. The construction of triadic groups, both in monumental and elite residential architecture, is another connection to the Late Preclassic southern lowlands, where this architectural style was common. The dressed monolithic blocks used for the Central Acropolis are the same style as architecture in the Mirador basin area (Hansen 1998; Tiesler et al 2017). This incorporation of cultural and stylistic traits from the southern lowlands was likely rooted in a combination of cultural transmission through trade, imitation, and migration.

The Genesis of a Polity: Yaxuná in the Late Preclassic

The clearest method for identifying polities has been through epigraphy; unfortunately, the lack of written records at Yaxuná precludes this possibility. However, during the Late Preclassic it is clear that Yaxuná meets the spatial and political parameters for classification as a polity. The exact nature of Yaxuná's ruling regime during the Late Preclassic is unclear, but the archaeological evidence shows a clear dichotomy between leaders and followers in the Yaxuná epicenter, with leaders able to draw on material sources of power such as mobilizing labor and access to non-local resources. Given the continuity in elite settlement from the Middle Preclassic, it is also likely that Yaxuná's Late Preclassic leaders drew on their multigenerational ties to the landscape, knowledge of local agricultural conditions, and their participation in creation and maintenance of the E-Group as a place of collective ritual as sources of ideational power.

During the Late Preclassic, Yaxuná is the only site of its size in north-central Yucatán; its population and concentration of monumental architecture illuminate its spatial classification as a

polity. Yaxuná's residential population during this time was larger than at any other point in its history. As a site center, Yaxuná was also distinct in north-central Yucatán during this period because of its cluster of monumental-civic-religious architecture. No other site in the area had as much monumental architecture or as large a population during this time. Late Preclassic Yaxuná meets the definitions of urbanism for the Maya area: it had the largest population in the area, a higher population density than any surrounding areas, complex socioeconomic stratification, and participated in long-ranging trade and cultural networks. The geomantic organization of Yaxuná during this time – the placement of *sacbeob* and triadic group construction – identify the epicenter as the likely location of specialized economic, administrative, Political, and religious functions. It is clear that during the Late Preclassic, the Yaxuná epicenter was the home base of the people who performed religious, administrative, and political functions. The elite residences at the 5E-19, 6E-30, and 5E-30 groups demonstrate that people with access to significant economic and social resources were able to incorporate their homes into the geomantic plan, connecting them with highly visible monumental architecture such as the North Acropolis and the E-Group.

The 6E-30 Group suggests that certain kin-based groups invested early in agriculture and sedentism at Yaxuná. This investment enmeshed them more securely in the trade networks and ceremonial significance at Yaxuná. These kin-based groups may have assumed increased responsibility for maintenance and organization of the local ritual landscape and economic networks, providing them with sources of material and ideational power on which they could draw in establishing themselves as leaders during the Late Preclassic. As the ritual landscape grew beyond the plaza and the E-Group to include the North, Central, and East Acropolises and the dance platforms, elite residents built themselves into Yaxuná's sacred geography by adding

causeways that connected them directly to these important sites. They also remodeled their

residences into triadic groups, further reinforcing their direct connection to monumental

architecture.

Table 9.1: Evidence for Yaxuná as a Late Preclassic Polity

Polity Markers	Late Preclassic Evidence at Yaxuná
Urbanism	• Largest population in area • Greatest population density in area • Largest cluster of monumental architecture in area • Socioeconomic stratification
Socioeconomic stratification	• Unequal access to valued resources and specialized goods (greenstone, obsidian, marine shell) • Unequal labor requirements for residential architecture • Discrete spatial organization – particular residential groups built in proximity to monumental architecture
Ability to mobilize labor	• Monumental architecture: 3 large triadic groups, dance platforms, E-Group and plaza, Sacbe 3 and 4
Access to non-local resources	• Valued resources in higher concentrations at 5E-19, 5E-30, and 6E-30 Groups • Increased amounts of obsidian, marine shell, and greenstone present at site
Leadership	• Proximity of certain residential groups to monumental architecture (6E-30 and 5E-19) • Separation of other residences from monumental architecture • Multigenerational residence in 6E-30 and 5E-19 Groups • Platform and triadic groups as places of public and more private ritual performance

Leaders are those who exercise "power over" and the first clear signs of that power are

present in the Late Preclassic. While the early plaza and E-Group showed signs of more

collective organization and construction, the ability to mobilize and direct large amounts of labor

is clearly present in the Late Preclassic. The Central Acropolis, North Acropolis, and Central Acropolis were built during this time, as well as further updates to the E-Group and its plaza, the dance platforms, and multiple causeways. This monumental architecture also provided new spaces for ritual performances. The dance platforms, 6E-53 and 6E-20, have labyrinth-like passages of chambers and tunnels through which performers could appear and disappear, or within which more private rituals could take place (Stanton et al 2010; Suhler 1996). Their exteriors were stucco models of mountains and a symbolic hearthstone was cached in the floor of 6E-53, connecting them to the cosmogram of the path between the underworld and the sky. The ability to mobilize labor, access diverse high-value resources, and an emphasis on ritual performance were all parts of Late Preclassic leadership at Yaxuná. The exact form in which Late Preclassic regimes were organized – single rulers, kin-based ruling groups, councils, royal courts, and divine rulers – remains unclear.

Richard Hansen's argument for triadic groups as royal architecture, as well as incipient signs of concepts associated with Early Classic kingship, leads Vera Tiesler and colleagues to assert that by the Late Preclassic Yaxuná was ruled by a king (Tiesler et al 2017: 33). If kingship existed in the Late Preclassic it may have been elective rather than hereditary, or may have consisted of a council of elites (2017: 33-34). The triadic groups may have represented different contemporary factions who cooperatively or competitively constructed their own monumental architecture to be maintained by their kin group. The evidence from Yaxuná strongly supports the concept of Late Preclassic monumental architecture as a representation of the First (Green) Three Stone Place, associated with the apotheosis of the GI watery sun god who is related to divine kingship during the Classic period (Freidel 1993; Hansen 1998; Stuart 2014; Taube 1998; Tiesler et al 2017). While the Late Preclassic regimes at Yaxuná may have been early

forerunners of the divine rulers clearly present in the Early Classic, there is simply not enough evidence to say for certain. While Yaxuná clearly functioned as a polity, its precise political organization during the Late Preclassic is currently unknown.

Beyond the Core: The Hinterlands in the Preclassic

In understanding Yaxuná as a polity, it is also necessary to understand its hinterlands or surrounding area. While the epicenter was the locus of political activity, the residents of the surrounding area would have participated in the activities that materialized the polity: construction of monumental architecture and attendance at ritual and ceremonial performances. This participation generated the connections that facilitated integration and established the imagined community, beyond the daily interactions between residents of the Yaxuná center. The clearest example from the Late Preclassic of connections between the Yaxuná urban core and hinterland residents is at the site of Tzacauil. Chelsea Fisher's extensive excavations at Tzacauil provide the most thoroughly documented example of Late Preclassic political integration in the Yaxuná polity.

Outside of the Yaxuná monumental center, settlement increased and the population grew during the Late Preclassic. Survey, surface collection, and excavations in caves and *cenotes* in the Yaxcaba area consistently revealed Middle Preclassic ceramics, but in small numbers and not securely tied to structures. For example, at Tzacauil it appears that Middle Preclassic ceramics surface in Late Preclassic structures as construction fill from middens, removed from primary context (Fisher 2019: 165). As occupants of the area transitioned to agriculture in the Late Preclassic, there is increasing evidence of small settlements or hamlets in the area around Yaxuná. While reflecting the area's growing population, these settlements are small and

primarily residential, without the socioeconomic stratification or monumental architecture found at Yaxuná. As at the Yaxuná epicenter, the people who built the first stone houses in this area may have been descendants of those who visited the area and participated in gatherings at the plaza for generations before sedentism. This pattern is evident at Tzacauil, where the acropolis and the earliest and most elaborate house group have the greatest numbers of Middle Preclassic ceramics (2019: 167). Two house groups at Tzacauil and the dance platforms at Yaxuná were also the sites of cached Middle Preclassic vessels, which served to materialize connections between the land, ancestors, and descendants (Fisher 2019; McAnany 1995; Stanton et al 2010).
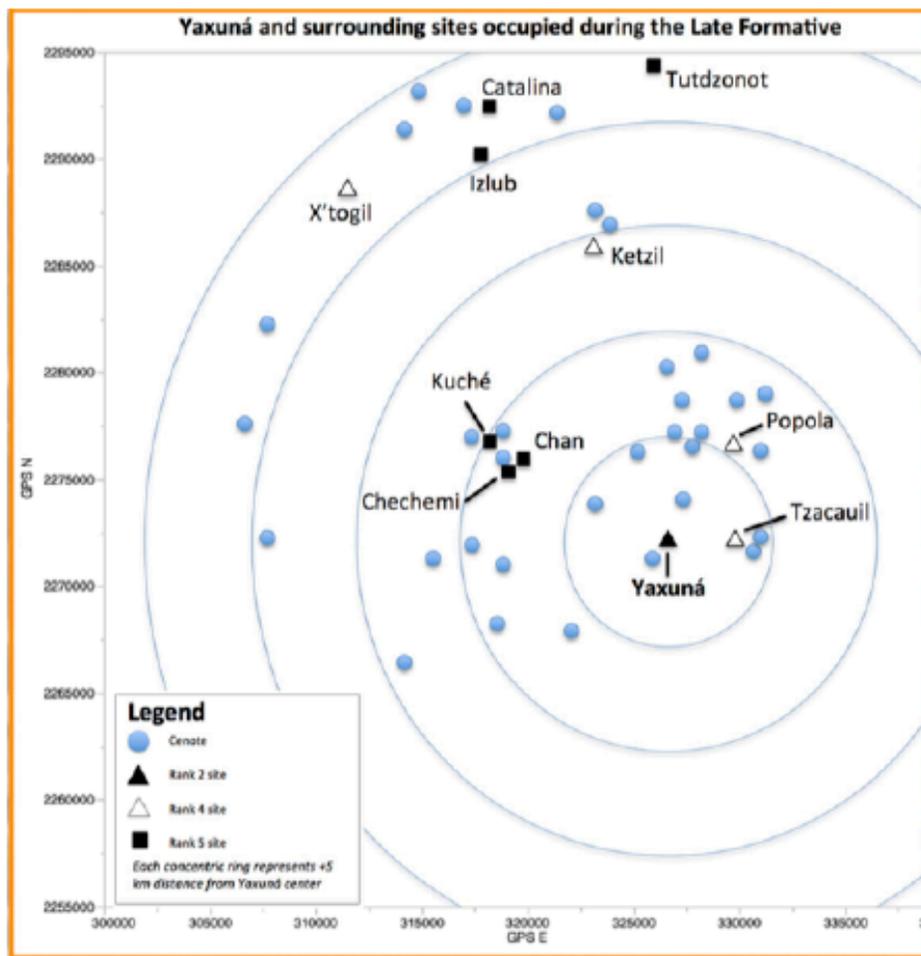
Figure 9.6: Late Preclassic sites in Yaxuná hinterlands (from Fisher 2019: 110)
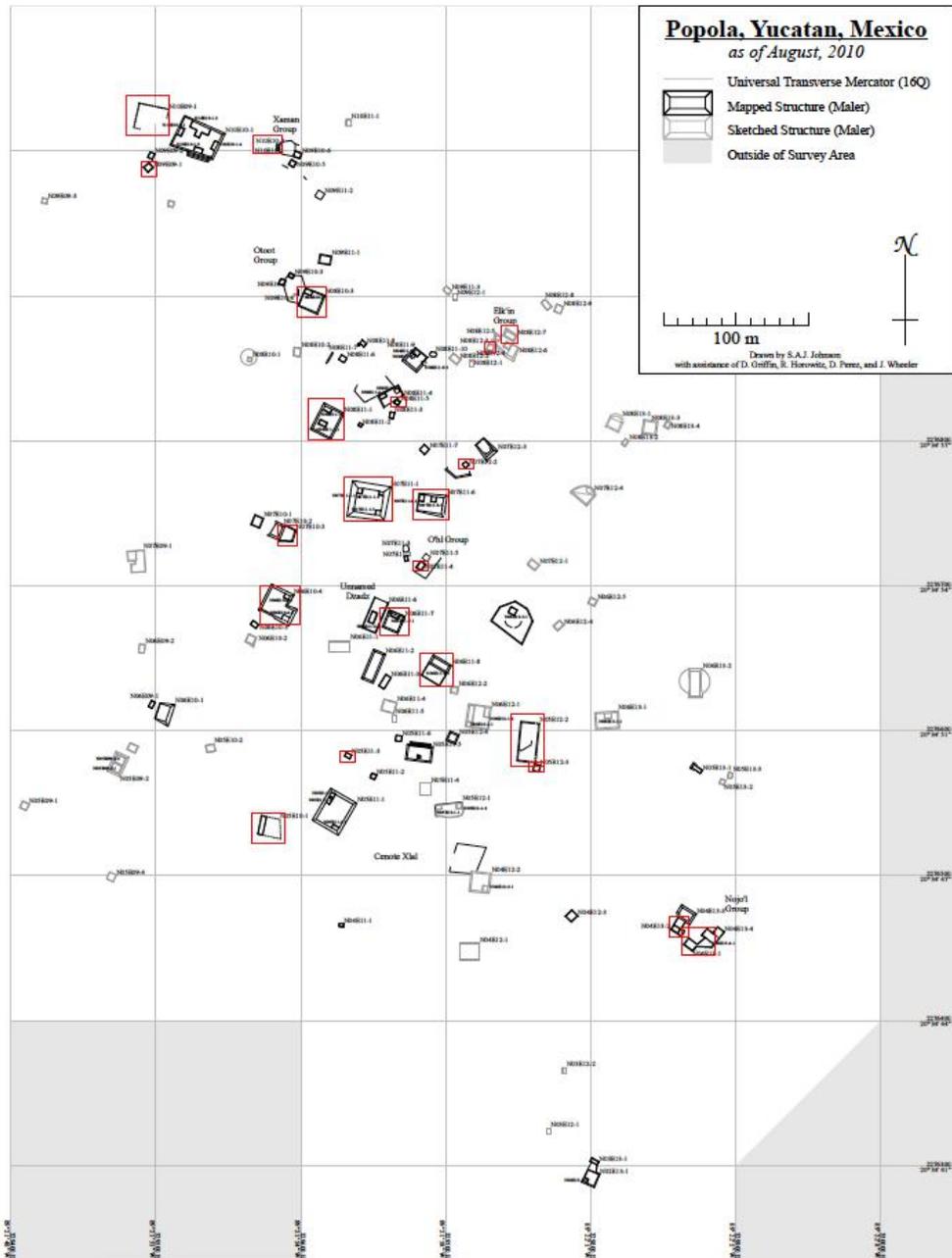
Figure 9.7: Maler-style map of Popolá-Puus Sil with Early Classic occupancy marked (modified from Johnson 2012: 656)

At Popolá-Puus Sil, 46% of tested structures yielded Middle Preclassic ceramics, while approximately 34% of tested structures yielded Late Preclassic ceramics (Johnson 2012). Since these ceramics were recovered through surface collection and test units, it is impossible to say if they were in their primary contexts or came from construction fill. One of two completely excavated structures at Popolá-Puus Sil was occupied from the Middle Preclassic onwards, while the second showed primarily Classic-period occupation (2012). Three structures from the transect area - 6F-26, MU1-W-1, and MU1-W-4 – had ceramic types from the Preclassic. All three of these structures are within 500 meters of the Yaxuná urban center; no Preclassic ceramics were recovered from contexts located farther. These three structures had an impressive variety of different Preclassic ceramic types, including Flor Crema, Mateo Red & Cream, Saban Unslipped, and Alex Orange, as well as ceramic types common during the Preclassic and Classic periods (Xanaba Red, Sierra Red, Chancenote Striated, and Chuburna Brown). There were at least two structures identified by Travis Stanton as likely dating to the Preclassic due to construction style, although no ceramics were recovered (personal communication).

The first permanent settlement at Tzacauil was established during the Late Preclassic, but it is clear that certain areas at Tzacauil saw repeated semi-sedentary occupation and use during the Middle Preclassic, including the bedrock outcrop that became the base of the Tzacauil Acropolis. The Late Preclassic constructions in these areas contained large amounts of Middle Preclassic ceramics as fill. While often discussed in relationship to Yaxuná, Tzacauil is defined as a distinct site; there is unoccupied land between the two (Hutson et al 2012).

The Tzacauil Acropolis is the only other noted example of Late Preclassic monumental architecture in the Yaxuná area. It is a triadic group built on a large bedrock outcrop with a stairway on the western side from which the Tzacauil *sacbe* leads. The amount of Middle

Preclassic ceramics found in the fill could be a sign that the bedrock outcrop was a significant repeated gathering space for mobile populations; like the E-Group plaza at Yaxuná, it could have been used annually or seasonally as a meeting place (Fisher 2019: 171). The few numbers of Late Preclassic ceramics incorporated as fill suggest that the acropolis was constructed at the beginning of permanent settlement in the area. It was renovated twice, around the time of the transition to the Terminal Preclassic (2019: 172). The Tzacauil *sacbe* runs west towards Yaxuná but is incomplete; it ends about halfway between the two sites. The causeway was initially interpreted as an unsuccessful attempt by Tzacauil residents to co-opt political authority from Yaxuná elites (Hutson et al 2012). In this interpretation, leaders at Tzacauil and Yaxuná were competing for political clout, and the Tzacauil acropolis and causeway were meant to attract followers. Another interpretation is that the causeway was ritualizing a circuit incorporating Yaxuná, the Tzacauil acropolis, and the nearby Joya *rejollada* (Fisher 2019). In this case, the causeway was built to facilitate movement to the Yaxuná E-Group and other significant points on the local landscape – reaffirming boundaries, ownership claims, and spiritual connections (Marcus 1993; Roys 1957). The *sacbe* has not been excavated, but its association with the acropolis makes a Late Preclassic date very likely. Construction at Tzacauil peaked during the Late to Terminal Preclassic transition and the residential community was abandoned shortly after; the unfinished *sacbe* may have been a casualty of this abandonment.

At least six of the nine house groups at Tzacauil were constructed and occupied during the Late to Terminal Preclassic. Their locations show the priorities of the early occupants: access to arable sediments and proximity to the acropolis (Fisher 2019). Tzacauil residents built the same type of boulder-lined platforms common in Yaxuná and the surrounding area during the Late Preclassic. They also practiced similar spatial organization, with platforms organized in

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loose clusters near monumental architecture and open space between clusters. Soil analysis shows that residents were likely practicing infield cultivation as well as *milpa* farming. They intensively used the spaces they occupied for cultivation and situated their residences intentionally in areas that were best for it. In doing so, they communicated the lasting nature of their land claims and their investment in the space. Their actions showed the longevity of their connection; they placed their residences in spaces with the agricultural potential to support their kin groups, improved those spaces through clearing stones and soil enhancement, and materialized their community through the construction of the Tzacauil acropolis. (2019: 359-362). All Late Preclassic house groups are oriented towards the path of the Tzacauil causeway and have similar artifact assemblages: more ceramic bowls than jars, maize processing equipment, and tools made from local limestone. Any economic differentiation seems to have been expressed architecturally; some house groups were larger or showed more refined construction techniques than others (2019: 365-367).

The relationship between Preclassic residents of Tzacauil and Yaxuná has been interpreted in several ways. Scott Hutson and colleagues argued that leaders living at Tzacauil (possibly the residents of the longest-occupied and largest house group) attempted to become players for political authority at Yaxuná (2012). In this interpretation, the Tzacauil acropolis was an attempt to create a ritual performance space that would attract followers to Tzacauil rather than Yaxuná, thereby integrating leaders and followers at Tzacauil rather than Yaxuná. Following their argument, the Tzacauil *sacbe* was a symbol of inclusion, intended to physically link the center and periphery and facilitate the movement of people between them (Ringle 1999). Hutson and colleagues also consider the possibility that Tzacauil was a country estate for Yaxuná's leaders, a minor center facilitating elite control of labor and goods, or a secondary

center administering the eastern hinterland (Blanton et al 1993; Hutson et al 2012). Ultimately the significance of the triadic group and its associations with early rulers in the Maya area lead them to conclude that Tzacauil inhabitants were actively pursuing political power during the Preclassic, and drawing on ideational sources of power related to creation, the birth of maize, and ritual performance (Hutson et al 2012).
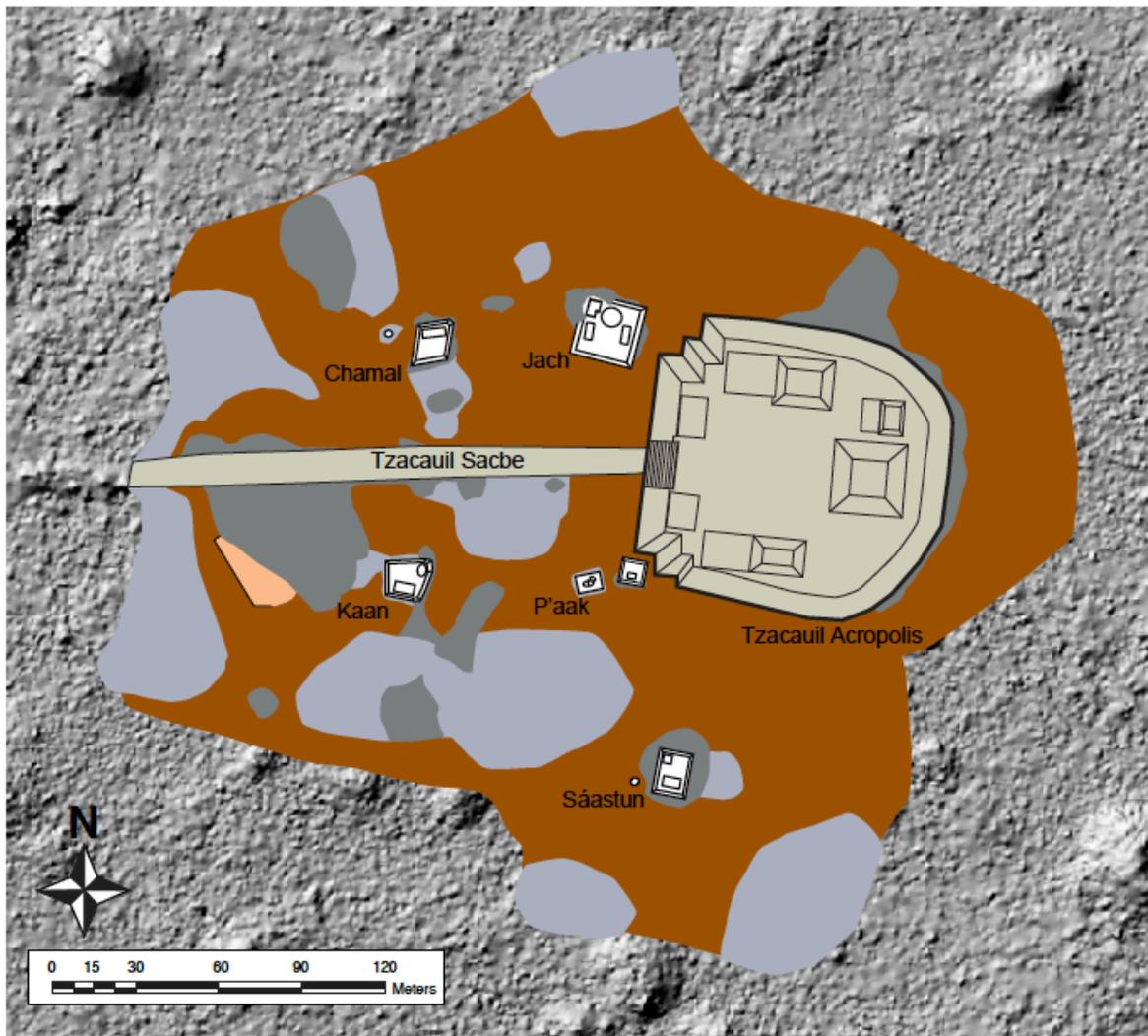
Figure 9.8: Map of Tzacauil during the Preclassic (from Fisher 2019: 136)

While Hutson and colleages viewed Tzacauil's residents as actively competing for followers from Yaxuná, Chelsea Fisher argues that Tzacauil was a "planned, intentional, and coordinated act of colonization" by Yaxuná's leaders or a disgruntled political faction (2019: 371). The construction of the Tzacauil acropolis at the very beginning of permanent settlement supports the idea that it served as an anchor for a new population, as does the orientation of all house groups towards the acropolis and later the causeway. Fisher suspects that given the lack of previous permanent settlement in the area and other triadic groups, residents of the Yaxuná epicenter supplied the knowledge and possibly the labor to build the acropolis. Local leaders, who derived their authority and legitimacy from connections to Yaxuná's leaders, may have lived at the acropolis or the largest house group (2019: 371). In this interpretation Tzacauil was a graft of Yaxuná – an attempt to replicate the strategies of agriculture, performance, place-based investment, and construction of a ritual landscape – that successfully drew followers to the leaders occupying the Yaxuná center.

The Polity in the Preclassic: Integration or Tethering?

The Preclassic data from Yaxuná and its surrounding area offer excellent insight into the discussion of political integration. As leaders and followers gathered at Yaxuná, coalescing into a polity, their sources of power, strategies for securing authority and legitimacy, and ability to generate and maintain connections took shape. Based on the available evidence, it appears that much of the surrounding area was tethered to Yaxuná rather than tightly integrated. Residential communities made up the bulk of social and material circulations, although greater numbers of people were drawn to living in closer proximity to Yaxuná's monumental core. This greater residential proximity enabled residents to more readily participate in the social, ritual, and

economic life of an urban center, but only on occasion. The lack of Preclassic monumental architecture at other sites in the Yaxuná area suggests that the site epicenter was responsible for fulfilling the need for large-scale gatherings. If the evidence for investment in place-based agriculture from Tzacauil is extrapolated, people were also affirming their connections to the area and laying the foundation for multigenerational residence. Residents' daily lives were not likely affected by the local leaders, but they would have experienced periodic labor requirements and potentially subsistence contributions as part of a tribute-tax system. Preclassic leaders lacked the surveillance and coercive mechanisms for exerting further "power over" their followers; followers had perhaps less "power to" leave than they did when most people were mobile gatherer-hunters, but dispersed settlement and the low population density facilitated ease of movement.

Tzacauil, however, shows that some hinterland areas were more tightly integrated and their fortunes bound with the rise and fall of Yaxuná leaders. The abandonment of Tzacauil may have coincided with the population decrease in the Yaxuná center at the end of the Terminal Preclassic or may have been associated with a shift in leadership from one elite faction to another at Yaxuná. The replication of a triadic group, the similarities in residential architecture and agricultural strategies, and the partial construction of a causeway attempting to link the two sites demonstrate the importance of the relationship between Tzacauil and Yaxuná – at least to Tzacauil's occupants. Climate variability during this period may have also affected the type of place-based agricultural investment evident at Tzacauil (Fisher 2019: 376). Cessation of occupation and construction at Tzacauil took place at once; house groups were abandoned, the *sacbe* was left only partially finished, and no additional renovations were undertaken at the acropolis. This suggests an intentional and coordinated abandonment of the site, just as its

founding appeared to be coordinated with the building of the acropolis. The integration of Tzacauil with the Yaxuná polity in contrast to the rest of settlement in surrounding areas supports Fisher's argument that Tzacauil was an intentionally planned colonization, planned and executed if not also populated by people from the Yaxuná monumental core.

Economic circulations appear to have been fairly localized at Tzacauil, given the similarity of artifact assemblages from each household. Preclassic residents at Tzacauil used primarily local limestone for tools; their participation in broader lithic exchange was limited. Economic differentiation was expressed primarily through architecture volume. Residential groups had similar "aesthetic and organizational" sensibilities and were oriented in the same direction (Fisher 2019: 267). Circulations between Yaxuná and Tzacauil residents also shaped spatial organization at Tzacauil; residents of both areas built "dispersed boulder-lined basal platforms, loosely aggregated into clusters and oriented around focal points of monumental complexes (2019: 268). Material and ideological circulations related to ritual and political aspects of society appear to be intensified compared to other parts of the Preclassic landscape. Tzacauil's acropolis and *sacbe* were planned and built by people who were familiar with the organization of space and monumental construction at Yaxuná. However, their *sacbe* and acropolis also replicated unique features of Yaxuná, creating redundancy in the political and ritual landscape. Over the course of Tzacauil's occupation, its residents may have become less integrated with residents of the Yaxuná center; they had their own monumental architecture for ritual practice and showed little evidence of economic differentiation (de Montmollin 1989). If the Tzacauil *sacbe* was built towards the end of its occupation, however, it suggests that residents continued to intentionally facilitate circulations between themselves and those living at the Yaxuná center. It is also possible that if Tzacauil was an intentional colony of Yaxuná, its

acropolis was built expressly for performances by political leaders from the center and only utilized during visits.

The evidence from Preclassic Tzacauil suggests individual household autonomy – the residents of each household were practicing the same set of subsistence activities to support themselves. Slight differences in architectural volume and style demonstrate that residents of some groups had more sophisticated knowledge and perhaps more labor and resources for construction. While Tzacauil residents were a residential community whose spatial proximity enabled them to interact daily, the primary evidence for cooperation and collaboration lay in the causeway and the acropolis. Chelsea Fisher contrasts this with occupation at Tzacauil during the Late and Terminal Classic, when collaborative efforts are more visible in economic than ritual spaces (Fisher 2019: 370).

While the evidence is open to many possible interpretations of political and economic dynamics between the two, what is clear is that circulations between residents of Yaxuná and Tzacauil served to integrate the leaders and followers to a greater degree than any other example from the Yaxuná hinterlands. The Tzacauil acropolis and the *sacbe* towards Yaxuná, as well as the shared pattern of settlement, indicate that residents of both locations shared a common sociopolitical imaginary. This sociopolitical imaginary, reinforced by economic, social, and ideational circulations, was strong enough to lead to a shared trajectory at the end of the Preclassic. As Yaxuná decreased in population and its leadership structure shifted, Tzacauil residences were abandoned and a civic project was left unfinished.

The Terminal Preclassic at Yaxuná

The Terminal Preclassic has been associated with the Ahal complex established by PIPCY. Many ceramic groups present in the Late Preclassic continued into the Terminal Preclassic, but new ceramic groups with distinct attributes were also introduced (Stanton & Ardren 2020). Xanaba Red was the dominant type of Yaxuná during this time, but ceramics from other parts of the northern lowlands such as Huachinago, Havana Club, Dzilam Green, Alex Orange, and Carolina were present in smaller quantities. While distinguished through ceramics, most of the other data from Yaxuná combines the Late and Terminal Preclassic and is discussed in the Late Preclassic section. It is clear that this period at Yaxuná saw its largest residential settlement, significant investment in monumental architecture, the development of governance, and participation in regional economic networks. The 5E-19 Group's rise to prominence in the site layout suggests its residents increased in significance during this period. The geomantic plan of the monumental core also shifted; from the E-Group plaza, it moved to Structure 6E-14, a radial pyramid located in the open space between the two portions of *Sacbe 3* (Collins 2018; Stanton & Freidel 2005).

The Terminal Preclassic to Early Classic transition at Yaxuná is murky; by the beginning of the Early Classic, it is clear that much of the monumental architecture in the site core was no longer maintained and falling into disuse. It is similarly difficult to identify at which points the Yaxuná population decreased, but by the third or fourth century CE both trends are well in effect (Tiesler et al 2017: 34). Yaxuná may have been a victim of the Preclassic "collapse" noted at El Mirador, its satellite cities, Cerro Mayo, and Yaxnohcah. During this period, these early polities appear to have experienced Political collapse, population decrease, and cessation of monumental architecture programs (Hansen et al 2002). If Yaxuná was closely linked to El Mirador and other

southern lowlands polities, its Terminal Preclassic regime may have been affected by losing trading partners, reducing their ability to mount large construction programs and ritual performances. Their ability to attract followers would have also suffered under these circumstances, perhaps accounting for the population decrease seen within this time.

Conclusion: Integration in the Time of Kingship

The Preclassic history of Yaxuná is necessary background for understanding its ruling regimes, transformative events, and evolution as a polity during the Classic period. During the Preclassic, Yaxuná developed the urbanism and political complexity to be classified as a polity for the first time in its history. There are clear leaders and followers, identified through differential access to material resources and ideational privileges. Monumental architecture and performance spaces throughout the epicenter demonstrate that leaders were able to command labor (possibly as part of a broader tribute-tax system) and compel allegiance through ritual performance.

During the Preclassic, the first clear example of political integration also comes to light. As early as the Middle Preclassic, the space that eventually became the Yaxuná monumental core served as a gathering place for building community and generating social and material circulations among participants. The organization and maintenance of this communal space may have created opportunities for emerging leaders to test out how to attract followers. Curating ritual space, environmental knowledge, and multigenerational land claims were likely early sources of authority for emerging leaders, while their descendants derived legitimacy from their kinship ties. As occupation at Yaxuná became more permanent rather than seasonal, the blurred lines between leaders and followers crystallized and were more explicitly defined, as leaders

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were distinct in economic access and proximity to ideational power (closely located to monumental architecture). Leaders were able to exercise "power over" as seen in building programs, however most followers continued to exercise considerable "power to" vote with their feet. The transition to agriculture resulted in a decrease in that "power to" during the Late Preclassic as people invested more time and energy in specific places, establishing multigenerational land ties. Although this is the pattern seen in Tzacauil, it is worth investigating in other parts of the Yaxuná area that do not have associated monumental architecture to see if this pattern of land investment is present across the landscape, or if it is confined to a group closely tied to Yaxuná residents. While sedentism may have somewhat decreased followers' ability to vote with their feet, it is clear that most of the Yaxuná area did not have such direct interaction or connections to the Late Preclassic Yaxuná regime; most people lived in small dispersed settlements with no monumental architecture and without access to the resources available through the Yaxuná elite trade networks. Even the occupants of Tzacauil, linked to Yaxuná through their own triadic group and causeway, had minimal or no access to non-local valued goods such as greenstone and obsidian (Fisher 2019).

Chapter 10

Discussion & Conclusion

The site of Yaxuná provides a unique case study for the ancient Maya culture of Central Yucatán. Its distinct identity is visible in the material culture and architecture. The comprehensive understanding of its culture history is possible due to the decades-long research of the Selz Project and PIPCY, providing an incredible opportunity for a diachronic examination of the lifespan of a polity, even in a case with no hieroglyphic records. PIPCY's focus as a regional archaeological project has also provided a wealth of information for the area as a whole, not just the urban site center. These factors make Yaxuná an excellent case for examining ancient Maya political integration. Additional work may further clarify some of the murky points of chronology and provide insight into under-investigated area communities.

As discussed throughout this dissertation, I looked for archaeologically visible traces of the circulations of people, ideas, and goods relating to the political imaginary between leaders (members of the regime occupying the site center) and followers (the rest of the area's population) to evaluate the extent of political integration. I chose those moments in which leaders were displaced (transformative events) in order to assess if their displacement significantly disrupted those circulations. In all, there were three transformative events I examined: the massacre of the ruler and his family during the Early Classic, the incorporation of Yaxuná into Cobá's sphere of influence during the Late Classic, and the rise of Chichén Itzá into an urban power during the Terminal Classic. I also provided a discussion of the Preclassic in order to provide context for Yaxuná as a polity.

Table 10.1: Transformative events at the Yaxuná polity and their effects

Period	Transformative Event	Archaeological Evidence	Hinterland Effects
Early Classic 500-600 CE	Massacre of the ruling family	Burial 24	Depopulation or abandonment of closely affiliated colony (Xkanhá**)**
		Artifacts related to supernatural ideas of divine rule	Limited investment in monumental or civic ceremonial architecture (6F-3 and 6F-4)
		Re-entry of Burial 23	Reduced labor participation from hinterlands residents (limited renovations of civic architecture)
Late Classic 600-700 CE	Cobá incorporates Yaxuná into its sphere of influence	Cessation of local monumental architecture construction	Greater number of "natural" communities across the hinterlands area with limited public architecture
		Sacbe 1	Participation in local and regional ceramic economies
		Stela 1	Limited investment in or use of monumental or civic-ceremonial architecture
		Arena Red ceramic distribution	

Table 10.1 continued: Transformative events at the Yaxuná polity and their effects

Period	Transformative Event	Archaeological Evidence	Hinterland Effects
Late-Terminal Classic 700-850 CE	Spread of Puuc influence across northern lowlands	Puuc style architecture and iconography at local and regional elite structures across the northern lowlands	Increased interaction between leaders and followers at regional centers
	Cobá's regional power declines	Cehpech pottery	Shared understanding of administration, leadership, and sources of authority
		Population growth	Greater visibility of political community for hinterland residents
		Hieroglyphic records, and monumental architecture at Puuc sites	Circulations of goods and ideas (and possibly people) between the Puuc area and the Yaxuná area
		Lack of hieroglyphic records and monumental architecture programs at Cobá	
		Death of Lady *K'awiil Ajaw*	

Table 10.1 continued: Transformative events at the Yaxuná polity and their effects

Period	Transformative Event	Archaeological Evidence	Hinterland Effects
Terminal Classic 850-950 CE	Depopulation of Yaxuná	Yaxuná residential abandonment of site center	Regional centers become small hamlets
		Limited Sotuta ceramics	Increased urban population at Chichén Itzá and affiliated settlements
		Lack of new public architecture	Hinterland residents participate in Chichén Itzá's political economy
	Chichén Itzá as dominant regional polity	Increased population at Chichén Itzá	
		Hieroglyphic records of ruler based at Chichén Itzá	Disappearance of local leaders/elites

During the Preclassic, Yaxuná first developed into a polity with an urban center. The

Yaxuná site center served as a communal gathering space for the area's population since at least

the Middle Preclassic, as research at the E-Group has shown. The first signs of sustained

sedentary settlement in the area also date to the Middle Preclassic, and their lack of public

architecture suggests that all in the area used the E-Group and developing Yaxuná center. The

ritual significance of this area continued as new forms of political leadership developed, likely

influenced by other divine rulers across the Maya area. Yaxuná lacks dynastic records, but

evidence suggests similar understandings of ritual leadership. There is clear socioeconomic

stratification between residential groups in the site center, with residents of the 6E-30, 5E-19,

and 5E-30 Groups distinguished from the rest of the Preclassic population through their

proximity to monumental architecture, their size, and their access to non-local goods. The scope

of monumental architecture built during the Preclassic shows the ability to mobilize large labor forces; all three acropolises, as well as numerous triadic groups and internal causeways were built during the Middle and Late Preclassic. The presence of socioeconomic stratification and monumental architecture is evidence of the existence of leaders and followers at Preclassic Yaxuná as well as the circulation of ideas around leadership. The geomantic landscape was a contested and collaborative space in which leaders demonstrated their "power over" through harnessing labor for its construction, while followers exercised their "power to" influence the pace and quality of the work. Both groups shared the experiences of performances and ceremonies in these spaces, as well as how their layout directed the daily movement of people living in and visiting the site center.

Circulations of people, goods, and ideas between the Yaxuná site center and the hinterlands are most visible at Tzacauil during the Preclassic. Tzacauil's own version of monumental architecture required familiarity with Yaxuná, to the point that the same architects or masons might have designed both. The unfinished *sacbe* also highlights the interaction between Tzacauil and Yaxuná. While Tzacauil's residents may have been competing with Yaxuná for followers, I agree with Chelsea Fisher that the site likely served as a colony or graft – an extension of the Yaxuná regime's political authority into the hinterlands area. Because of the greater intensity and volume of circulations between the two, Tzacauil's colonization ended with Yaxuná's Preclassic "collapse." This is further evidence of how political integration varied across the landscape; occupation of Tzacauil ended while at Popolá-Puus Sil, the residents continued living in the area.

The difference in the trajectory of the two settlements highlights a recurring theme throughout the history of Yaxuná; economic integration in the form of participation in regional

exchange and labor networks was a more persistent form of imagined community than political integration over time. In part, this is because it involved more consistent circulations of goods needed for daily life. Early on in its history the residents of Yaxuná show evidence of involvement in long-distance trade networks, with various goods from the Petén uncovered in Preclassic structures. Several scholars of Yaxuná suggested that the settlement's position on the landscape established it as an important trade center. This history also corroborates the heightened importance of economic integration over political integration. The circulation of goods catalyzed Yaxuná's prominence in the local and regional landscape; it is no surprise that it remained a defining element of the growing imagined community. Participation in the trade network also facilitated circulations of ideas and people; Preclassic architecture such as the Yaxuná E-Group and triadic groups are unique in the area but well known in the Petén.

Political integration, on the other hand, relied on circulations between the regime and the followers. As the regime changed, especially if a dynastic system with an established transition was not in place, those connections would have to be renegotiated. The residents of Tzacauil were closely integrated with one regime at Yaxuná; when that regime ended, the Tzacauil colony was also abandoned. Tzacauil was distinct from other area settlements in emulating the monumental architecture of the Yaxuná site center by building an acropolis and *sacbe*.

By the end of the Early Classic, Yaxuná was clearly a polity whose regime used some of the same strategies for legitimacy and authority that are known from the southern Maya area. At least two individuals served as leaders – divine kings – during this period. Based on the evidence from Burial 24, these kings had royal courts that included family members. When the king died, followers' labor was used to build them pyramid tombs as spaces to create tableaux communicating messages about power, legitimacy, ritual, and authority. The contexts were very

different for each of the leaders known at Yaxuná. The earlier ruler seems to have died from natural causes; the Burial 24 ruler, however, was eliminated along with his family and court. Despite the different contexts, the people who carried out their interments dedicated time and labor towards designing spaces that emphasized the relationship between leadership and divinity and the theme of resurrection. Whoever buried the murdered ruler, whether it was the perpetrators, a rival faction, or surviving members of his own administration, was able to mobilize labor for the pyramid tomb. Shortly after, however, monumental construction ceased at Yaxuná and only resumed with the *sacbe*. This change supports a shift in leadership at Yaxuná and different priorities.

While labor and resource investment shifted to different types of construction, previously significant civic-ceremonial spaces remained visible on the landscape, even if not maintained. The Early Classic and Preclassic both show evidence for a political regime operating under the practices and principles of divine rule. For this particular political strategy, the establishment of a hinterlands base could mediate the difficulties posed by lack of surveillance, transportation, and technology capabilities. These smaller versions of secondary centers may have had local personnel who duplicated some of the minor leadership roles from the Yaxuná center, as seen through the adoption of civic-ceremonial architecture such as acropolises and temples, causeways, and possible administrative structures. Conversely these spaces may have been used primarily by the site center's administration for appearances in the area to reinforce the sense of political community among residents.

During the Early Classic and Preclassic, certain concentrations of settlement were closely linked to the site center through ideas and goods. Tzacauil was linked to Yaxuná through its *sacbe* and acropolis during the Preclassic, while Xkanhá was linked to Yaxuná through its

acropolis, civic-ceremonial architecture, and access to prestige goods. Other concentrations of residential settlement, such as Popolá-Puus Sil, do not show intensified connections to the political administration of the site center. They did not replicate the types of civic ceremonial architecture found in the site center and were not as linked into the prestige economic networks overseen by political elites. Although not more rural in terms of population or residential density, these spaces were not as integrated into the urban center as Tzacauil or Xkanhá. This is in part due to distance (Popolá-Puus Sil is at least 2-3 kilometers farther from the site center than Tzacauil), but the Terminal Classic evidence demonstrates that distance did not preclude their integration under a different political regime. Early Classic and Preclassic rulers at Yaxuná, however, lacked either the means or the interest in more closely integrating Popolá-Puus Sil's residents into the polity's community. The first residents of Xkanhá and Tzacauil may have come from the Yaxuná center, as Chelsea Fisher suggests, making these settlements intentionally planned colonies. Another possibility is that these residential communities already existed and actively sought deeper and intensified connection with the polity. In this case, followers would have used their "power to" help solidify mechanisms of "power over" in their immediate area – although their intention may have been to position themselves as leaders.

The Early Classic transformative event similarly reveals the differing levels of integration. There is no sign of Early Classic disturbance at Popolá-Puus Sil, and the increase in structure use during the Late Classic is indicative of a growing population. At Xkanhá, on the other hand, a significant area of the acropolis was terminated. There is conflicting information on whether there is any evidence of settlement during the Late Classic at Xkanhá (based on presence or absence of Arena Red ceramics), but Area 1 was not reoccupied (Ardren 1997; Loya González & Stanton 2013). Xkanhá's integration with Yaxuná – the greater number of and more

intense circulations that connected its residents with the residents of the site center and the political regime it hosted – made Xkanhá vulnerable to the impacts of political upheaval at Yaxuná. Residents of Popolá-Puus Sil, sheltered by distance and fewer ideological circulations with the site center, did not experience the same significant shifts; the continued existence of their community was not contingent on the stability and maintenance of the Yaxuná political regime.

The comparison of evidence across different time periods at Yaxuná reiterates that ancient Maya societies utilized various forms of political organization. Each type of political organization, and likely the individual regimes over time, used their own strategies for generating and maintaining the circulations that held together the polity – the political imaginary. The political regimes of Preclassic and Early Classic Yaxuná, working from pan-Maya understandings of leadership, divinity, and ritual performance, functioned along a spectrum of integration. They maintained close ideological and economic circulations with particular hinterland settlements, while others functioned more autonomously. While closer affiliation paid off in prestige and economics for the residents, it also made them more vulnerable to political instability at Yaxuná. Tzacauil in the Preclassic and Xkanhá in the Early Classic were both depopulated and abandoned in the wake of political upheaval at the site center, while more loosely integrated settlements such as Popolá-Puus Sil retained residents. The Yaxuná polity practiced diverse forms of integration, which provided a range of options for the area's residents and the "power to" exercise some decision-making over their participation in the political community.

The evidence from the Preclassic and Early Classic periods suggest that at Yaxuná, political regimes based on a form of kingship focused on closely integrating one particular area

of hinterlands settlement as a strategy for establishing and reinforcing leadership in the area. This type of minor secondary center could serve as a flagship for the leadership regime in Yaxuná. Differences in integration across time and space reveal that different political regimes used varying strategies to generate and maintain the circulations required for attracting followers. The majority of area residents likely lived their daily lives without interference from leaders, but life at Tzacauil and Xkanhá was a different experience.

The Early Classic to Late Classic transition at Yaxuná is muddy due to the dependence on ceramic chronology for dating. During this time, Oxkintok Regional Complex ceramics are first seen in use in the Yaxuná site center. This economic network spread beyond the Yaxuná site center into the transect area and Popolá-Puus Sil. Political integration, however, was more uneven. While the Preclassic to Early Classic Political transition retained many of the same ideas and practices around power, legitimacy, and authority, the changes at the end of the Early Classic significantly shifted the foundation for leadership in Yaxuná. During the Preclassic and Early Classic, the regular, intensive circulations of ideas, goods, and labor between the leaders and local followers shaped the Yaxuná site center. These circulations extended to some areas beyond the site center, although the lack of transportation, communication, and surveillance infrastructure made it impossible to establish a presence in every community. The Yaxuná court's violent deaths interrupted those political circulations, while permitting the economic and local community connections to thrive. This political interruption coincides with a vacuum in the Yaxuná site center, a growing hinterlands population that prioritized the natural community, and one major construction incorporating Yaxuná as a satellite community.

The Late Classic was a time of limited political community; the leader was located days of travel away from most of the area residents. Unlike during the Terminal Classic, there is no

clear base for local administration. The hinterlands area reflects this emphasis on "power to" through the establishment of new communities, increase in population, and the types of communities built. Ideas related to power and authority were not expressed through architecture in these local communities, suggesting that their residents were linked more by daily life, economics, and kinship.

As political rumblings of the Terminal Classic began, Yaxuná's hinterlands experienced another change in political organization. Shortly after the death of Lady *K'awiil Ajaw*, *Sacbe* 1 fell into disuse and there are two possible references to warfare involving Cobá (Guenter 2014: 417). A new political regime came to power at the Yaxuná urban center, and integrated hinterland communities in new and direct ways. In this case, incorporation into a larger political community had direct effects on the site center and hinterland areas. The sheer amount of material culture connecting the Yaxuná area to the Puuc tradition suggests there may have been greater investment in authority and legitimacy of the leaders propagating these ideas and goods and/or more effective circulation of those ideas and goods among the general population. While *Sacbe* 1 is clear evidence of some shared circulations, it did not effectively incorporate many of the communities in the Yaxuná hinterlands, especially to the north. Although they participated in regional ceramic exchange, specifically with Arena group ceramics, there is limited evidence for how their daily lives might have been affected by Yaxuná's incorporation into another polity beyond possible labor contributions to *Sacbe* 1. During the Terminal Classic, Yaxuná's regimes politically integrated the area through circulation of ideas and people. For the Late Classic, the circulation of goods and perhaps labor tethered the communities of the surrounding area rather than a sense of shared political community. Since Yaxuná was in a sense an outpost of the Cobá polity, it did not exercise enough legitimacy and authority to bind any surrounding communities.

When authority was based at Yaxuná in the form of a local ruler during the Preclassic and Early Classic, the regime was able to extend its power beyond the site center and into the following areas, increasing its visibility and transforming the landscape with material evidence of its "power over" nearby residents. This minimal affiliation is also evident in the population stability and growth from the Late Classic to the Terminal Classic. Because Yaxuná's political incorporation had little effect on the daily lives of area residents, the end of that political regime did not interrupt the stronger bonds of neighbors, kin, and trading partners that dominated during this time. This is in sharp contrast to the Terminal Classic, when the effects of the regime change rippled across the entire landscape, depopulating settlements across the region. Whether stimulated by military or economic action from Chichén Itzá (or driven by both), transforming the political organization of Yaxuná caused tremendous change throughout the area. People's daily lives changed – where they lived, if it was a rural or urban environment, the types of tools and dishes they used, the markets they attended, and the activities in which they engaged.

The structure and organization of the Yaxuná polity changed drastically over the period of time the site center was occupied, therefore the type and extent of political integration also varied greatly. In characterizing degrees of political integration along a spectrum, my analysis leads me to place Terminal Classic Yaxuná at one end, followed by Preclassic Yaxuná, Early Classic Yaxuná, and finally Late Classic Yaxuná. The Terminal Classic has the most evidence of circulating ideas about power, politics, and leadership across the regional landscape in the numerous panels and monuments with shared iconography. This time period is also the first time that the transformative event – leaders vacating the Yaxuná site center – also significantly transforms the lives of followers through relocating them from the area around Yaxuná, likely closer to the Chichén Itzá urban center. Preclassic Yaxuná and Early Classic Yaxuná are very

near each other on this spectrum and could switch places with additional evidence. I give Preclassic Yaxuná the second spot because its satellite center, Tzacauil, extends farther into the hinterlands than Xkanhá, and because the volume of monumental architecture built in the site center is significantly greater. It is also clear that if Preclassic Yaxuná experienced a brief "collapse" like other sites, whatever regime change took place did have some effects on the hinterlands area, given the decreased settlement into the Early Classic. Early Classic Yaxuná has the clearest evidence of leadership and "power over" at the site center, but that "power over" does not seem to have been felt much beyond that area. By this point, the longevity of occupation meant that residential networks, kinship networks, and economic networks maintained the stability of the hinterlands area, even in the face of a violent massacre directed at the polity leader. This is even truer during the Late Classic, when a general absence of those exercising "power over" at Yaxuná meant that communities relied on those networks as the primary connectors of the shared social imaginary. Even as many new communities were established and the population increased, these communities did not invest time and labor in altering their landscape to reflect recognition of a shared political imaginary.

Final Thoughts

The presenation of data in this dissertation proceeded from the Terminal Classic to the Preclassic. While this might seem counterintuitive, it reflects the way in which archaeological evidence is uncovered as we dig from later to earlier. Because each transformative moment is temporally distinct, this progression also helps to avoid evolutionary tautology. While the events of earlier periods affected later life at Yaxuná, especially through the landscape and monumental architecture, the centuries and in some cases millennia between various events make it

problematic to draw direct connections. Numerous factors shaped the type of regime and therefore political integration throughout Yaxuná's long history.

I began this dissertation with 3 goals: evaluating the extent of political integration at Yaxuná throughout its existence as a polity, providing a comprehensive discussion of the history of Yaxuná that incorporates the work of the Selz Project and PIPCY, and evaluating the efficacy of lidar as a survey tool in Central Yucatán. By analyzing data from the site center and the hinterlands to identify circulations of ideas, goods, and people between areas occupied by leaders and areas occupied by followers, I found that the extent and intensity of circulations varied over time. The type of regime, population and settlement of the hinterlands, and the proximity of other urban centers affected the political integration of the Yaxuná polity. The Terminal Classic had the greatest level of political integration while the Late Classic had the least political integration, based on the archaeologically visible circulations noted between the Yaxuna site center and the hinterlands settlements. The data generated from my investigations of the transect area and Kopchen highlighted several interesting points. The transect area showed the significance of economic circulations, which sometimes communicated political ideas in terms of access to items from the prestige economy and iconography on pottery. Kopchen's patterns of ceramic use support the Terminal Classic shift towards Chichén Itzá of the hinterlands area, perhaps accelerated by the abandonment of the Yaxuná site center and collapse of that regime. The transect area offered the opportunity to evaluate patterns of integration outside of discrete "sites" – natural communities. Kopchen provided a fascinating look at the area beyond Popolá-Puus Sil and closer to Chichén Itzá, unique among the other hinterland sites covered in this dissertation.

Two archaeological projects and over 30 years of work at Yaxuná and the surrounding area have produced a wealth of data for analysis and interpretation. In the process of writing this

dissertation, one of my goals was to merge the original archaeological work and data published by the Selz Project with the updated interpretations shaped by added context from PIPCY's work. Thus far, most publications have focused on isolated periods of Yaxuná's history (such as the Late to Terminal Classic transition) or on particular archaeological topics (such as mortuary practices and human remains, ceramic chronology, and lidar) (Stanton & Marengo Camacho 2014; Stanton & Ardren 2020; Stanton et al 2020; Tiesler et al 2017). In writing this dissertation, I attempted to match updated interpretations with the published data, while addressing significant changes such as ceramic chronology and how it transforms the culture history of Yaxuná written by the Selz Project. At the moment this dissertation was written, there has not been a publication that attempts to synthesize these various sources to create a coherent presentation of the overall culture history of Yaxuná using data from the Selz Project and PIPCY. My goal, in part, was to provide a compilation of those sources in an easily accessible narrative discussion. The bulk of the data used for this culture history comes from the hard work of other members of the Selz Project and PIPCY, specifically Travis Stanton, Traci Ardren, Charles Suhler, Justine Shaw, Dave Johnstone, David Freidel, James Ambrosino, Aline Magnoni, Sara Dzul, Chelsea Fisher, Ryan Collins, and Scott Johnson.

My final goal was to test the efficacy of lidar as a survey tool in Central Yucatán. As previously discussed, the initial application of lidar to the Maya area was heralded as a revolutionary adaptation that could virtually eliminate onerous and time-consuming tropical survey. As more projects have received funding to apply lidar in their regions, however, it has become clear that while lidar is an important complementary tool, it cannot always replace ground survey. The recent climate and its effect on vegetation as well as the topography of the area will affect the level of insight lidar is able to offer. In addition, depending on the area of

investigation, lidar may miss necessary information. As I noted in the methodology chapter, since I was focusing on a hinterlands area in which the majority of structures were minimally elevated foundation braces, lidar missed a significant number of structures I recorded through ground survey. PIPCY's lidar collaboration demonstrated important considerations for ensuring the most useful and fruitful results for other archaeological projects considering implementing lidar survey of their area of study.

On a final note, I will suggest ways in which I would have expanded my research if possible or that others could further investigate this question in the future. I would implement a comprehensive survey for as many of the hinterlands settlements as possible in order to establish their full territory, identify the total of number of structures, and estimate their population. I would suggest a broader test unit program to establish chronology for many hinterlands settlements that is conducted systematically rather than opportunistically for better chronological control and consistency. This program would improve our understanding of the occupation history for each of these hinterland areas, identify participation in regional and local economic networks, and identify the extent of prestige goods' presence outside of the Yaxuna site center. As PIPCY continues to work at Yaxuná, I hope they will continue to refine the Yaxuná chronology through additional C-14 dating samples and further study of preserved ceramic stratigraphy, which will assist in clarifying the order of certain events in the Early, Late, and Terminal Classic. A return to Xkanhá for test unit excavations could provide new insight, since the ceramic chronology has changed drastically since 1997 and the loss of the Xkanhá ceramics means no reanalysis has been possible. Continuing to compare the 2014 and 2017 lidar may help illuminate areas with less visibility from 2014. I hope that future project archaeologists might undertake an official survey, surface collection, and test unit excavation program at Kopchen,

given the bounty of ceramics recovered through opportunistic surface collection and the location

of the site between Popolá-Puus Sil and Chichén Itzá.

Appendix A

Lithic Finds

Provenience	Material	Mass (grams)	Length (mm)	Width (mm)	Thickness (mm)	Type
YPT 337A	obsidian	<1	14	8	2	Medial blade
YPT 333A	obsidian	<1	7	2	1	Distal blade
YPT 330A	chert	<1	25	9	3	Flake
YPT 331D	chert	10	39	20	13	Nucleus
YPT 331A	chert	4	24	15	10	Flake
YPT 331A	chert	3	22	16	7	Blade
YPT 331A	chert	<1	18	10	7	Debitage
YPT 326A	chert	31	63	37	15	Tool fragment
YPT 334A	chert	4	28	18	9	Flake
YPT 334A	chert	3	20	12	10	Debitage
YPT 334A	chert	4	15	15	15	Nucleus
YPT 328B	quartz	31	29	41	20	Tool
YPT 330A	chert	5	31	19	7	Flake
YPT 330A	chert	7	36	22	8	Flake
YPT 333B	chert	<1	12	13	4	Flake
YPT 328A	cinnabar/red stone	10	26	24	16	Fragment
YPT 328B	chert	5	35	17	13	Flake
YPT 334B	groundstone	35	29	36	19	Tool
MU6-E-2	limestone	19	54	21	15	Blade
YPT 333B	rock	13	28	22	21	Rock
YPT 333B	rock	<1	19	13	6	Rock
MU8-E-2	chert	<1	22	20	5	Flake
MU8-E-2	chert	20	74	31	9	Bifacial point
YPT 336B	chert	74	36	46	34	Nucleus
YPT 336B	chert	76	46	56	25	Nucleus
N05E-11-1	chert	100	53	53	37	Nucleus
YPT 331D	chert	<1	24	15	7	Flake
YPT 331D	chert	<1	17	7	5	Debitage

Appendix B
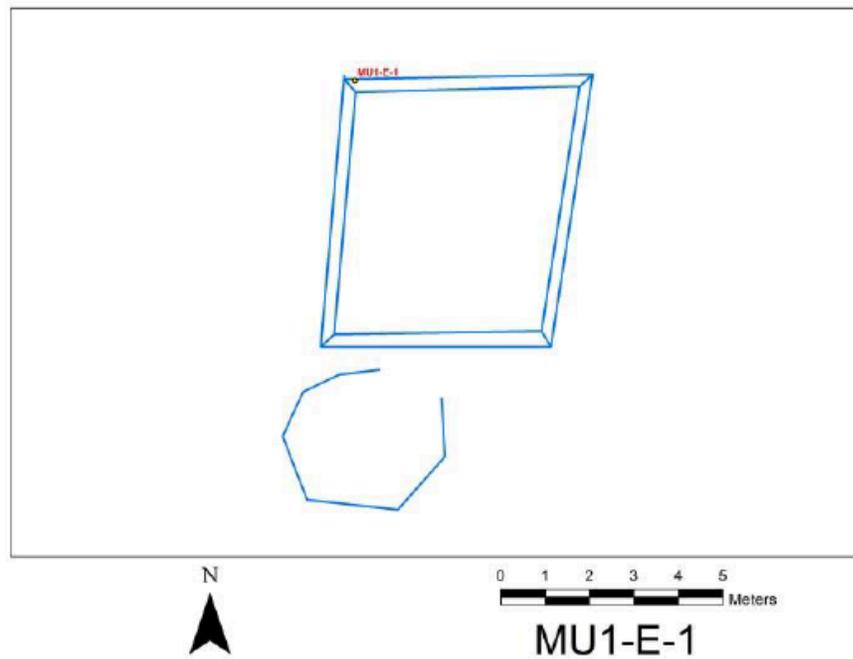
MU1-E-1

MU1-E-1 is a relatively small two-part structure located 5-8 meters northeast of 6F-27. It consists of a small quadrangular foundation of huge boulders and bedrock outcroppings, with a circular foundation ring at the southwest corner.
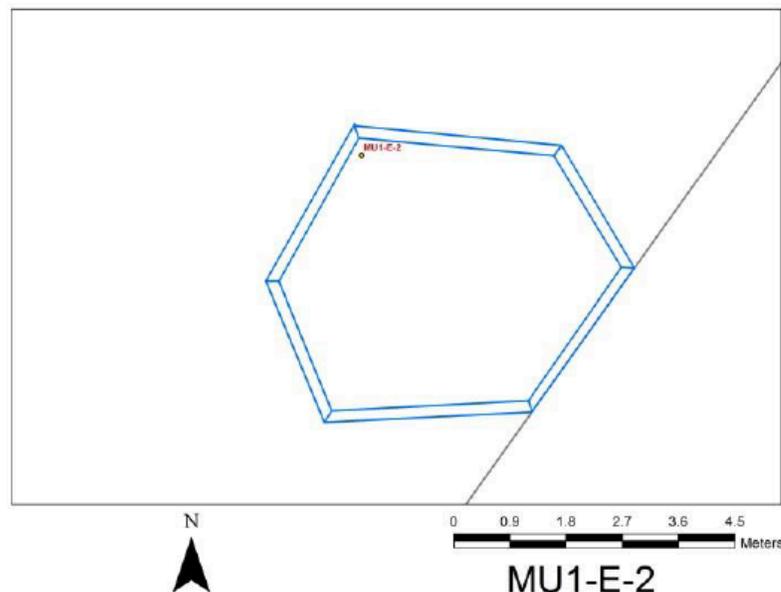
MU1-E-2

MU1-E-2 is a small semi-circular foundation ring, approximately 4.5 m in diameter and slightly elevated above the ground

N

0   3   6   9   12   15
Meters
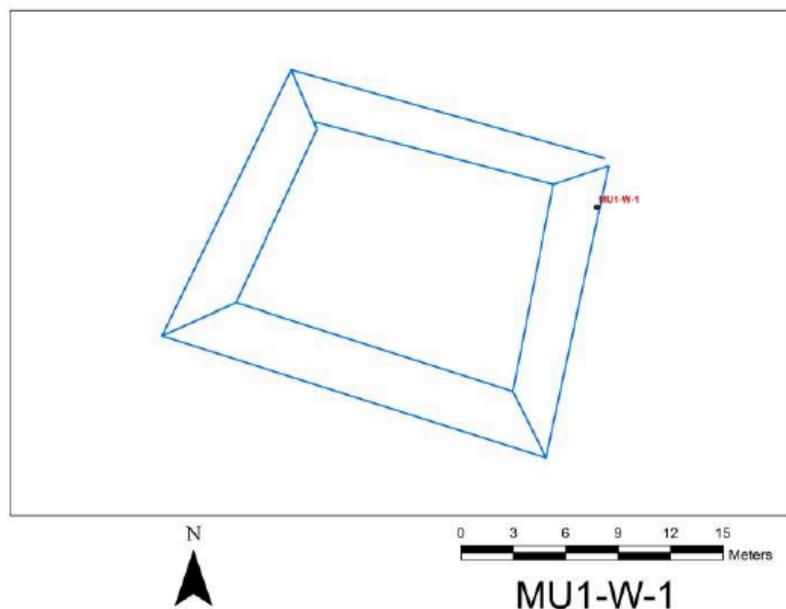
MU1-W-1

MU1-W-1 is a larger quadrangular platform (approximately 19 m x 22 m) just outside the western edge of the transect. The northeast side of the platform is built into a bedrock outcropping that levels off at the same height. This platform is located in an area that had recently been burned and planted as part of a milpa, so while traces of superstructure walls were noted on the eastern part of the platform, they could not be drawn. The south side of the platform has a partially intact staircase.

N

0   0.65   1.3   1.95   2.6   3.25
Meters
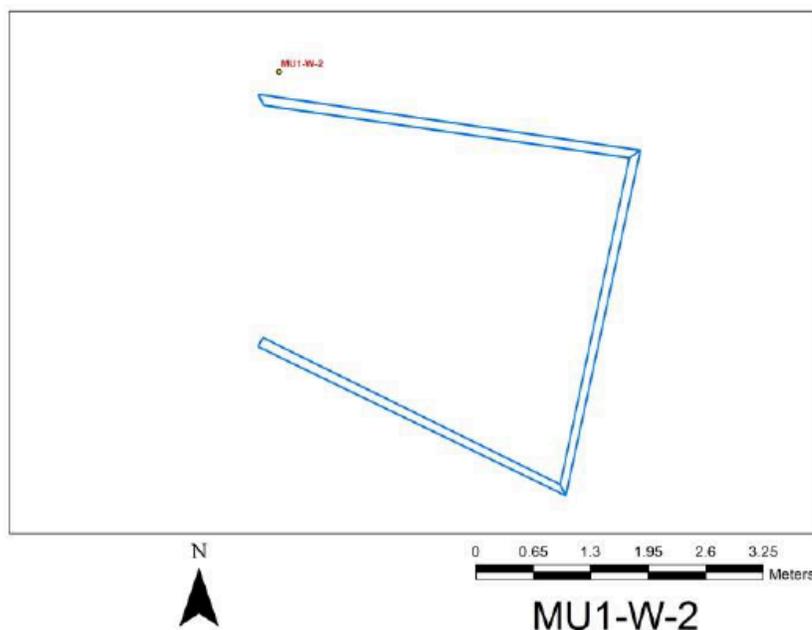
MU1-W-2

MU1-W-2 is located partially in the brecha path and just to the west. It is a small semi-quadrangular foundation ring that was not fully enclosed, and consists primarily of large boulders on the surface of the ground.

MU1-E-3 is low rectangular platform (approximately 8 m x 5 m). The north and west wall alignments of

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this structure are particularly visible and well-preserved.
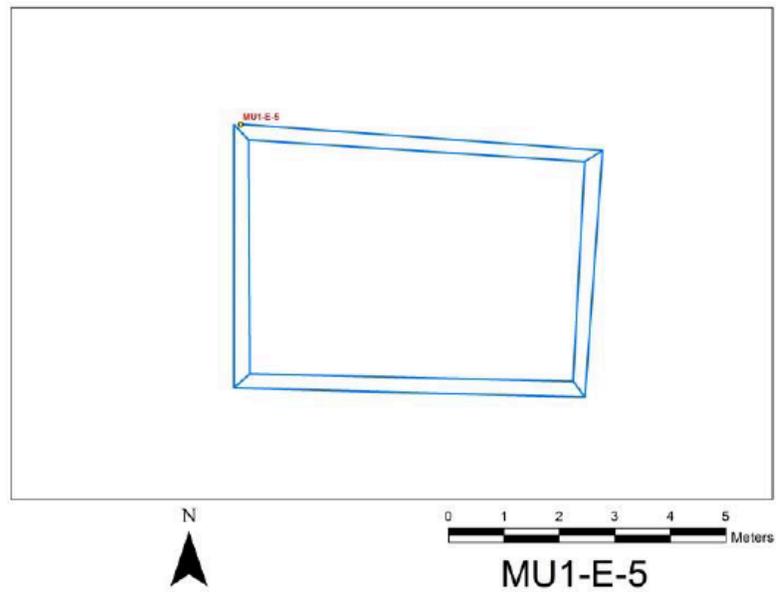
MU1-E-5

MU1-E-5 is a small, low rectangular foundation (4.5 m x 7 m).
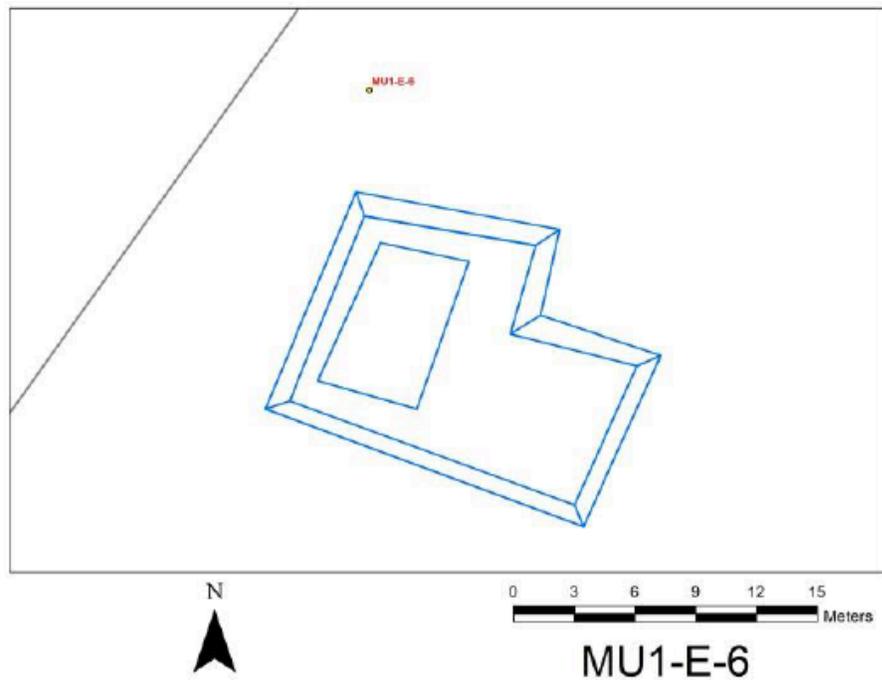
MU1-E-6

MU1-E-6 is a larger quadrangular platform (17 m x 13 m) with an 8 m x 4 m superstructure on the west side.
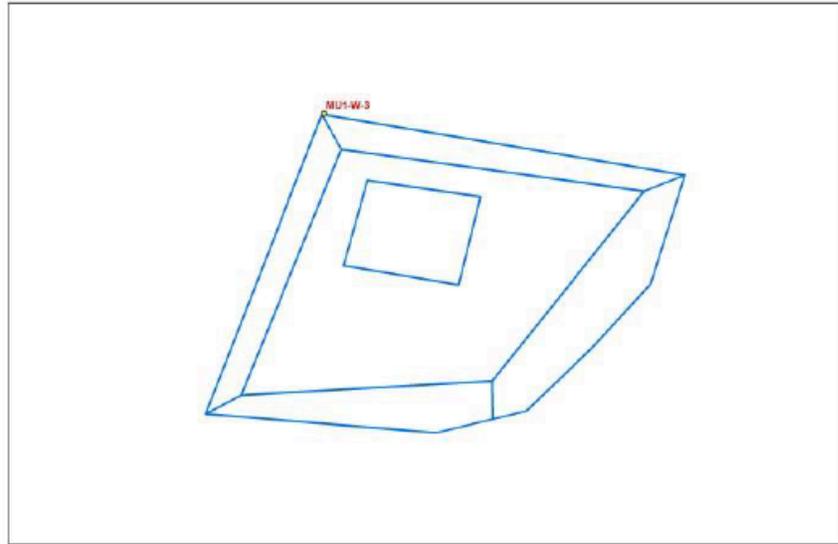
MU1-W-3

MU1-W-3 is west of a sascabera. The structure consists of a quadrangular platform that takes advantage of a natural rise to the south to form that boundary. One possible superstructure (3 m x 4 m) was recorded on this platform.
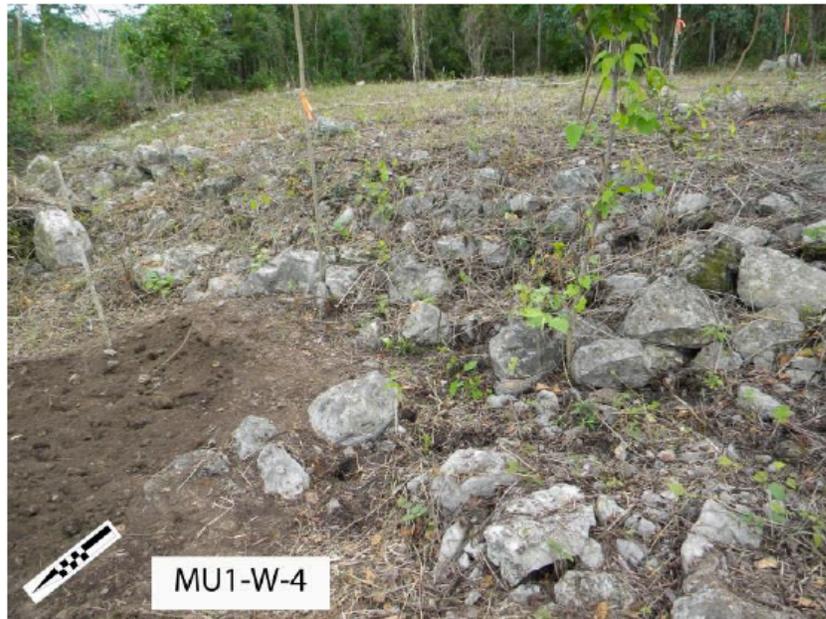
MU1-W-4

MU1-W-4 is a large low platform whose east side is built on a low bedrock outcropping. The platform retention wall is somewhat uneven and is not continuous. However, on-platform there are numerous architectural features of note. Near the center of the platform are numerous parallel stone alignments, formed from finely-cut stones. There are three potential square superstructures on the platform, but all of them are less than 2 m x 2m in size and do not rise above the level of the platform. Two superstructures are near a possible entrance to the northwest, while the other is to the south. In addition to these features, there were numerous metates on and off the platform, as well as three different column fragments.
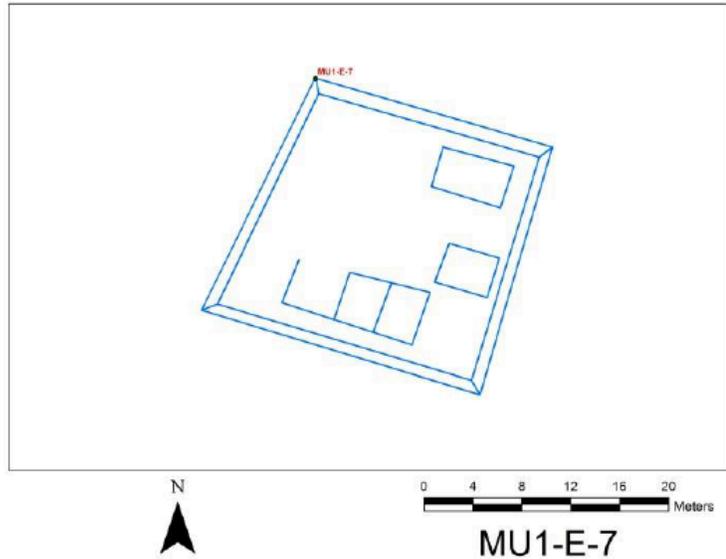
MU1-E-7

MU1-E-7 is a large square platform. The platform is retained by an alignment of large boulders around the entire structure. The platform holds five different superstructures; one on the northeast side, one on the east, and three connected superstructures on the south side.
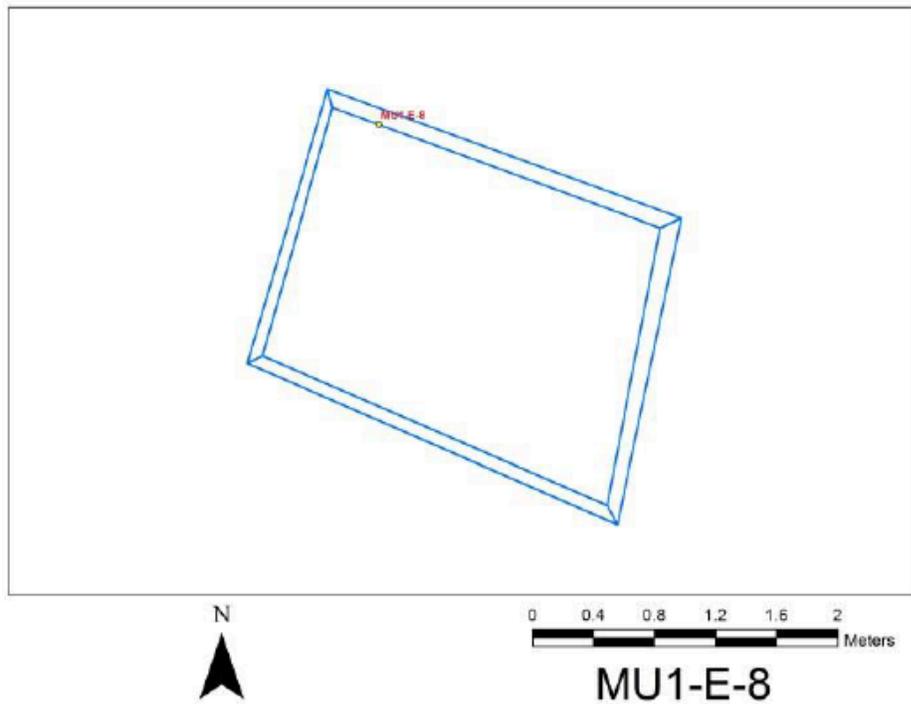
MU1-E-8

MU1-E-8 is a small quadrangular foundation located northwest of the albarrada (wall).

MU1-W-5 is a small low square foundation (1 m x 1 m).
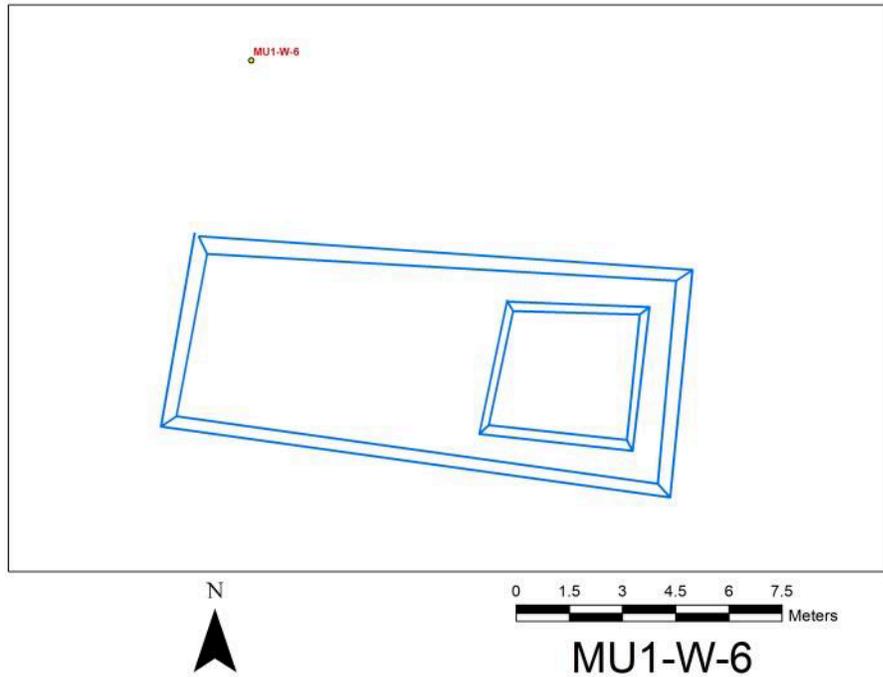
MU1-W-6

MU1-W-6 is located in an area that was planted as part of a milpa. It is a rectangular platform (approximately 8 m x 14 m) with a 4 m x 4 m superstructure on the east side. It was not always possible to identify all the superstructures or the extent of the structure in milpa areas.
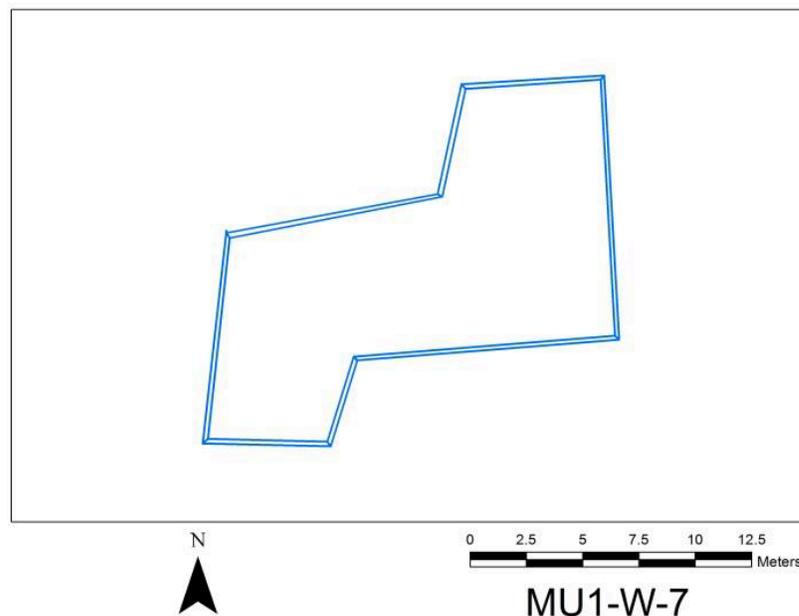
MU1-W-7

MU1-W-7 is another structure located in an area planted as a milpa. It is a large but low platform that projects slightly south in the southwest corner and slightly north in the northeast corner.
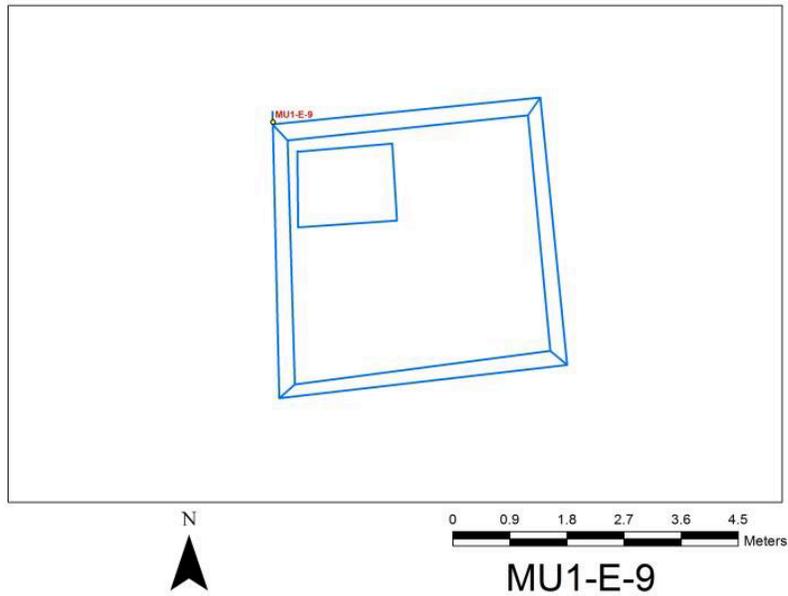
MU1-E-9

MU1-E-9 is a small quadrangular low platform with a single tiny superstructure in the northwest corner.
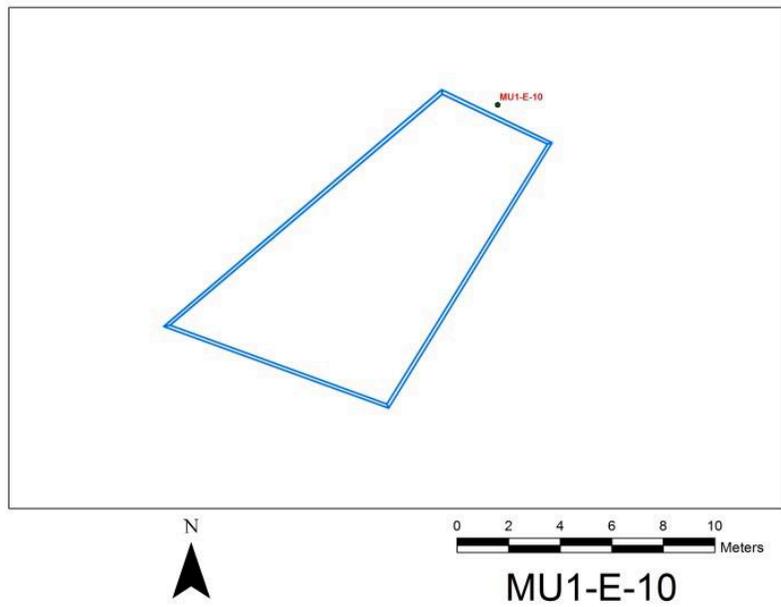
MU1-E-10

MU1-E-10 is a rectangular foundation whose west side is a bedrock outcropping. It may be divided into two parts by a possible wall line.
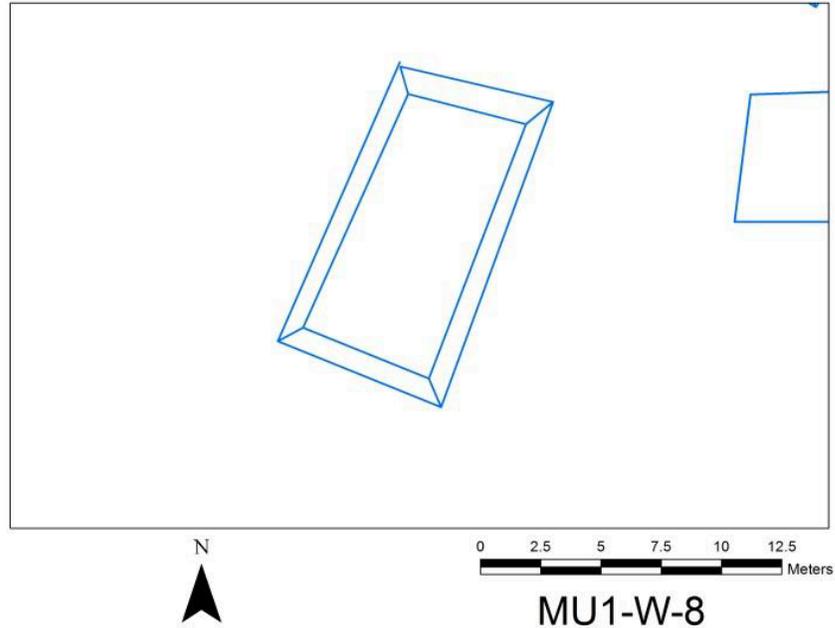
MU1-W-8

MU1-W-8 is a quadrangular platform approximately 1 m in height. It was also located in the milpa, so additional features could not be discerned.

MU1-W-9 is a small square (4 m x 4 m) foundation located in the milpa area.

MU1-W-9
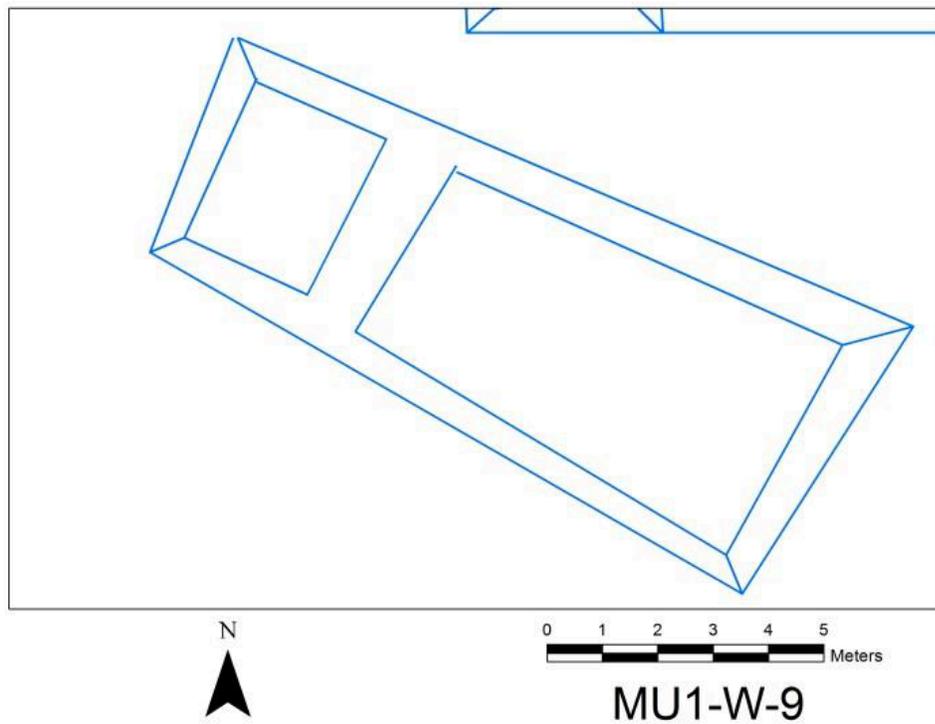
MU1-W-10 is a low rectangular platform (12 m x 4 m) with two superstructures. The longer superstructure (9 m x 3 m) is on the east side of the platform, while the smaller square superstructure is to the west.
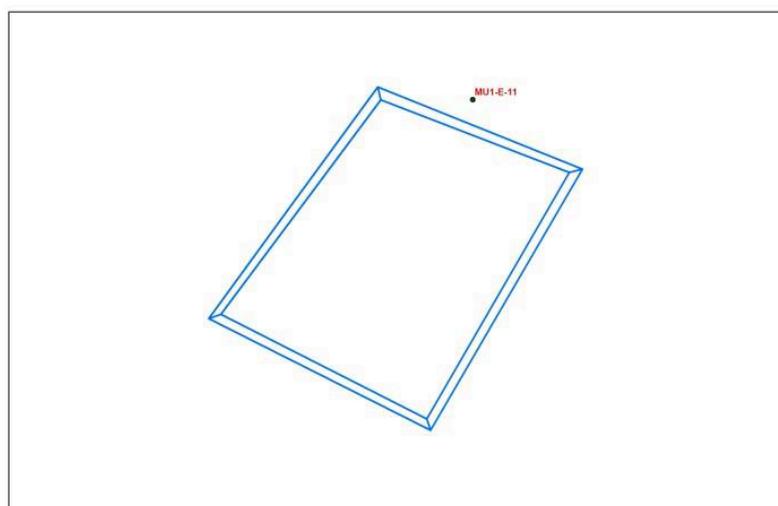
MU1-E-11

MU1-E-11 is a parallelogram shaped low foundation with built onto bedrock on its east and south sides.
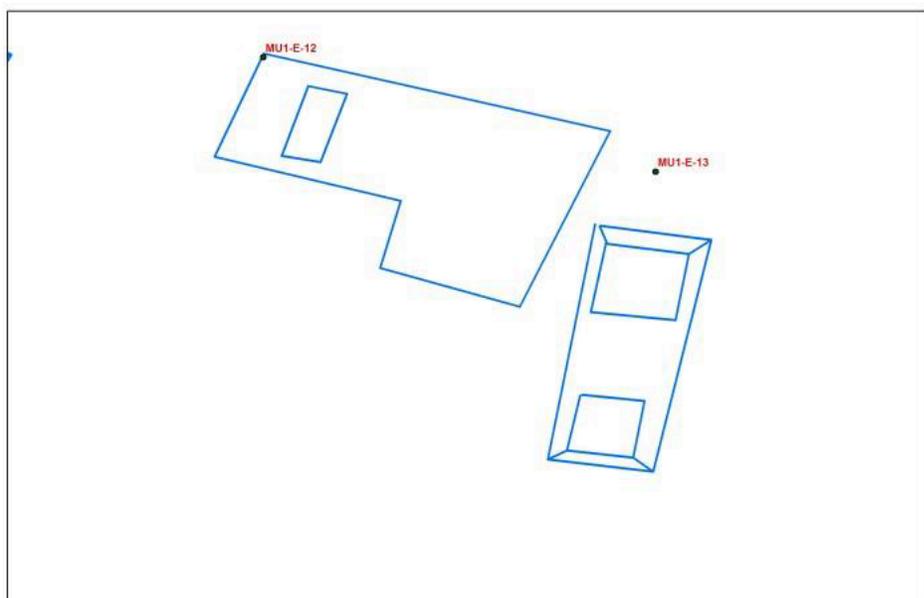
MU1-E-12 y MU1-E-13

MU1-E-12 and MU1-E-13 may compose one larger structure, but were recorded as two separate structures. MU1-E-12 consists of a low quadrangular platform with two possible superstructures on its west side. Its east side may connect with MU1-E-13. MU1-E-13 is a low platform with one well-preserved superstructure on the north side and one possible superstructure on its south side.
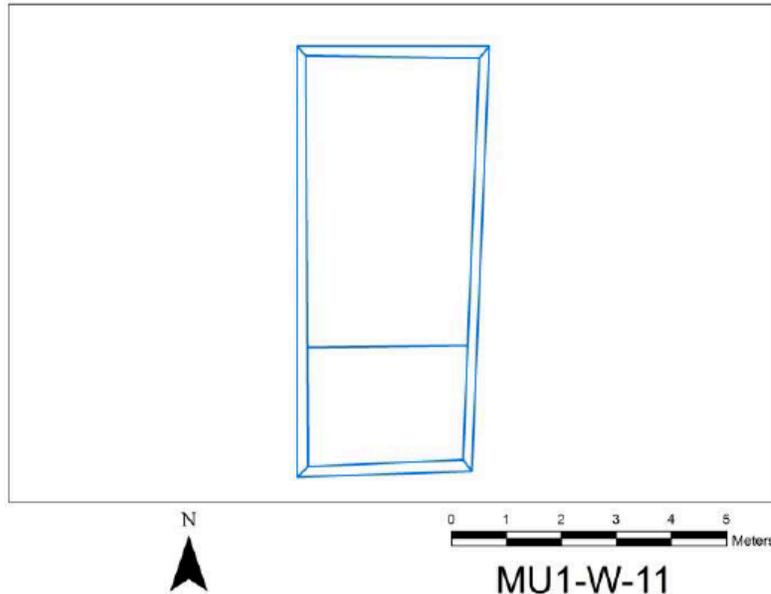
MU1-W-11

MU1-W-11 is a semi-rectangular low foundation brace divided into two rooms. It has a base of medium-sized stones.
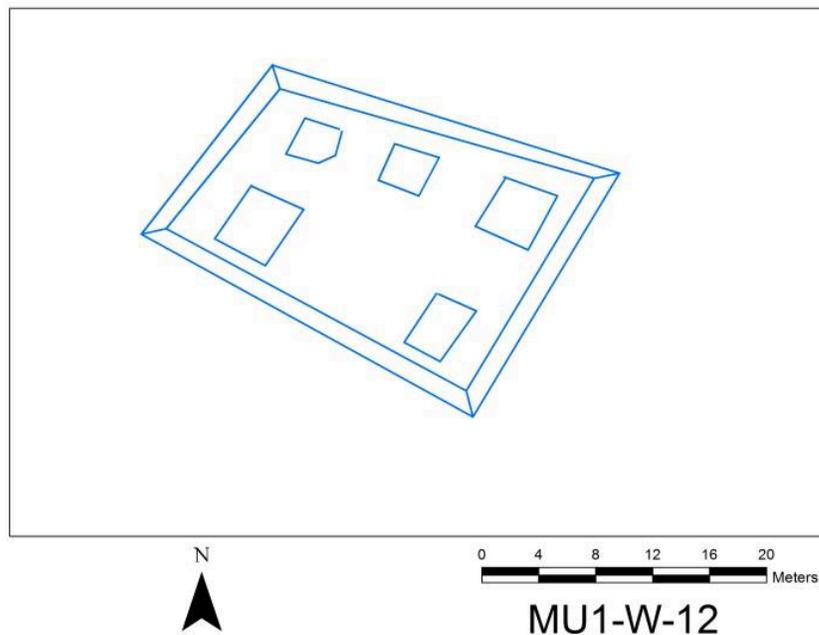
MU1-W-12

MU1-W-12 is a large high quadrangular platform with five superstructures recorded. The base is primarily composed of large boulders, with some faced stones. It is built on a bedrock rise that is higher in the north, while the south side of the platform is more built up. There are three superstructures across the north side of the platform, with two more at the southeast and southwest corners. This platform was one of three large platforms within 100-150 meters of each other.
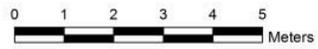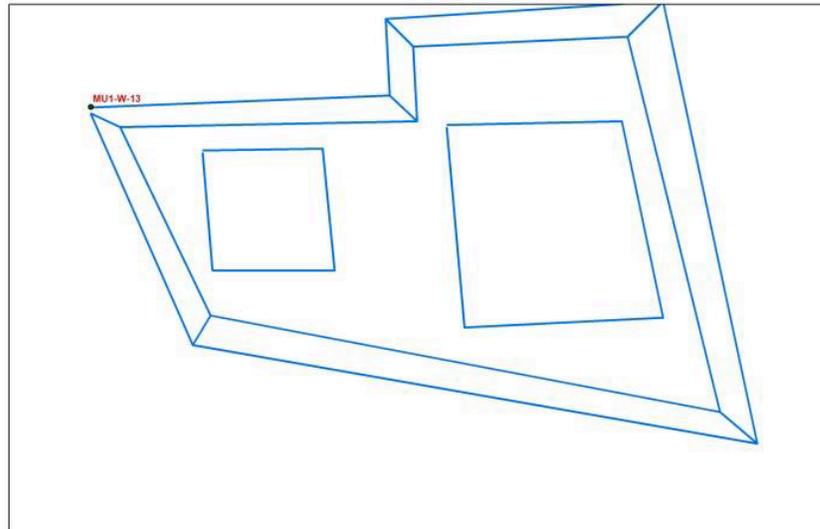
MU1-W-13

MU1-W-13 is an L-shaped platform whose north side was built onto a bedrock outcropping. Two superstructures, one on the eastern side of the platform and one to the center, were recorded.
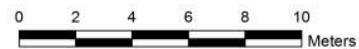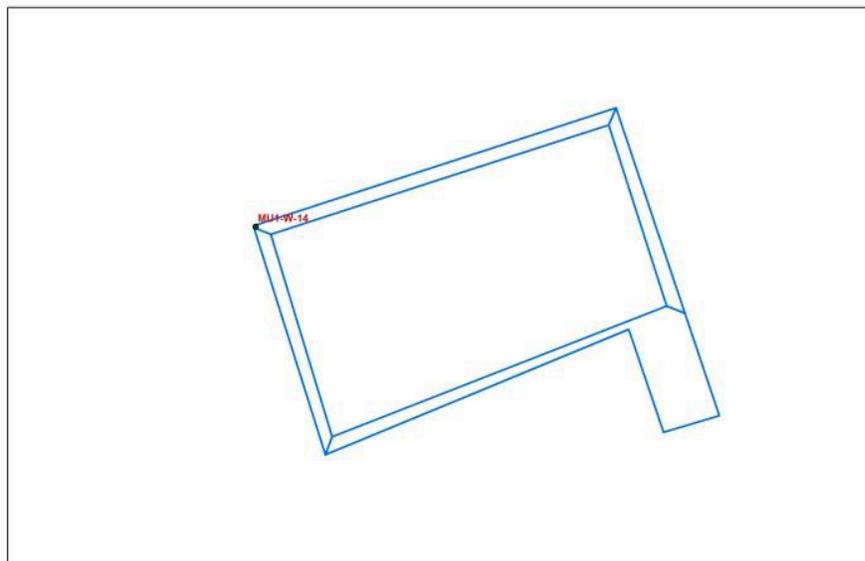
MU1-W-14

MU1-W-14 is an L-shaped low platform with bedrock outcroppings throughout and a rise to the east side.
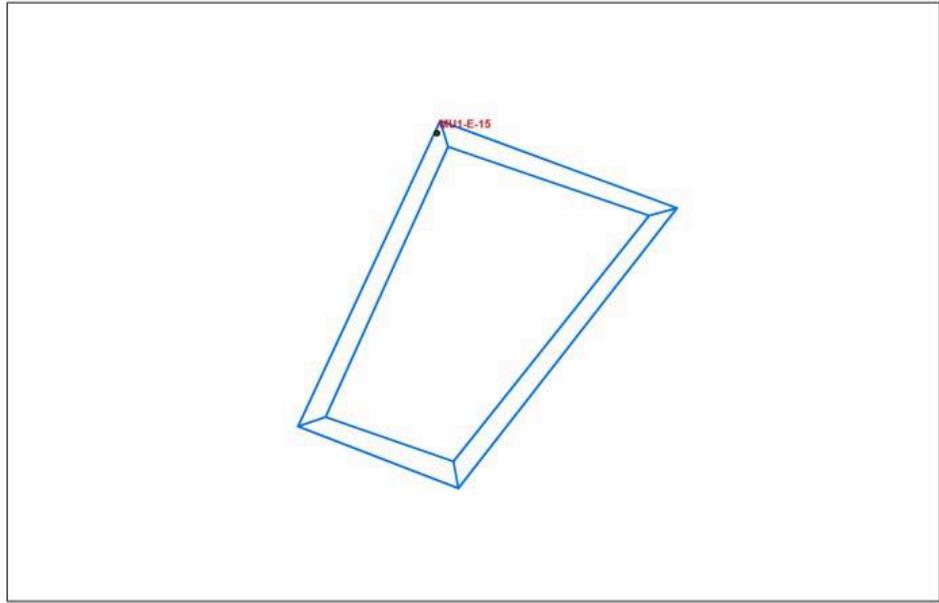
MU1-E-15

MU1-E-15 is a rectangular low foundation built into bedrock along the south end.
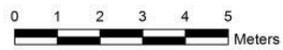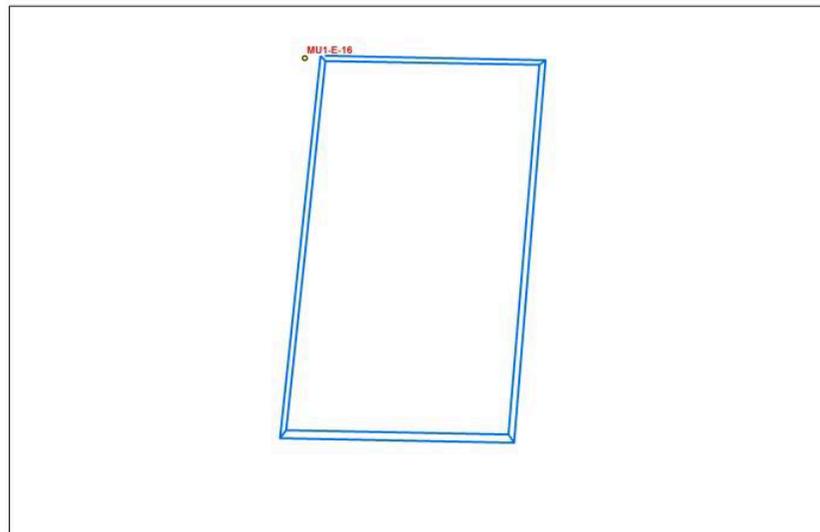
MU1-E-16

MU1-E-16 is a rectangular (10 m x 5 m) foundation brace with no visible superstructures.
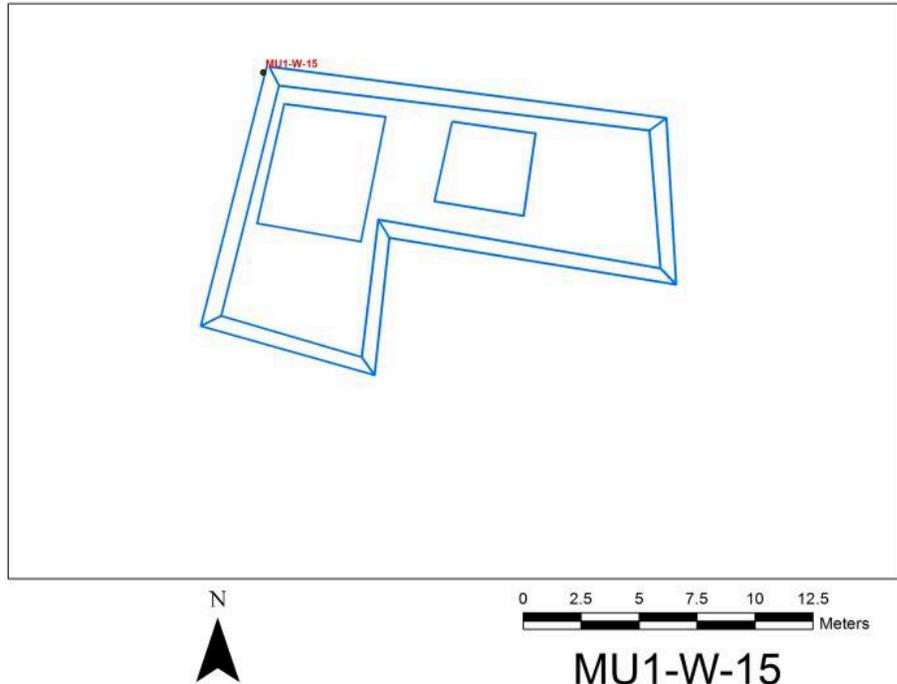
MU1-W-15

MU1-W-15 is technically west of the transit area. However, before the transect area was established, preliminary test pits were done in several locations, including at the structure that was designated MU1-W-15 (YPT302). MU1-W-15 is an L-shaped platform built into a bedrock outcropping. It has two square superstructures, one 5 m x 5 m and the other 3.5 m x 3.5 m.

MU1-B-1 is a large high platform with two levels built on bedrock outcroppings. The southwest part of the platform is built to a height level with the bedrock in the southeast. There is great deal of architectural collapse in the southwest. The northern part of the platform is built 0.5 m higher than the southern level of the platform. Level 1 (south) has one superstructure and Level 2 (north) has three superstructures. At least half the height of the platform is from the bedrock outcropping it is built on. On-platform there is one metate. This is the third of three platforms (with MU1-W-12 and MU1-E-17). This platform was surface collected and two test pits (YPT305) were also excavated. This structure was designated MU1-B-1 because the central brecha cut immediately through it.
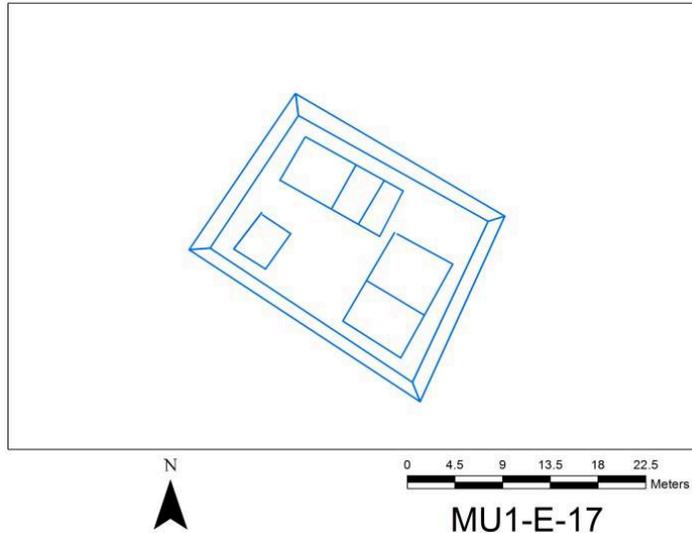
394

MU1-E-17

MU1-E-17 is the second of the three large platforms within 100-150 meters of each other (MU1-W-12 and MU1-B-1 are the other two). It is constructed on top of a bedrock outcropping and measures approximately 24 m x 20 m. There are three large joined superstructures in the northwest part of the platform, two superstructures in the southeast area of the platform, and one superstructure near the southwest corner of the platform. The preservation of the southwest corner of the platform indicated that it had been stepped, with several sequential smaller layers placed one on top of another.

MU1-E-18

MU1-E-18 is a roughly quadrangular shaped foundation brace. It is located less than 10 meters from MU1-E-15 and there is a metate between the two structures. After few sherds were recovered from test pits in the area, this structure and MU1-E-15 were surface collected with better results.

MU1-E-19 is a larger square platform (18 m x 18 m) with three superstructures. Two superstructures are located in the northern part of the platform, and superstructure is located near the southeast corner. There is a metate or pila off the southwest corner of the platform. This platform was surface collected in addition to YPT311, which was excavated on its southern end.
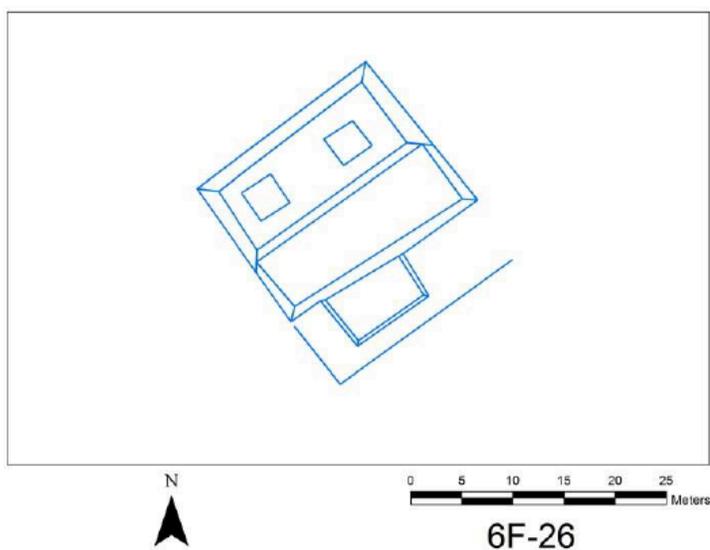
6F-26 was recorded on the map made by the Selz Project. It is a large high quadrangular platform with several levels. The south side is the lowest level, and they ascend from there. Many of the stones used in its construction are faced. There is a bounded rectangular area on the structure's south end that encloses Level 1. Level 3 has two superstructures. Like many of the other large platforms in the area, 6F-26 is constructed on top of a bedrock rise that contributes to its size. There is a cluster of four metates in the southeastern corner, where YPT300 was placed. This platform was surface collected by other members of PIPCY.
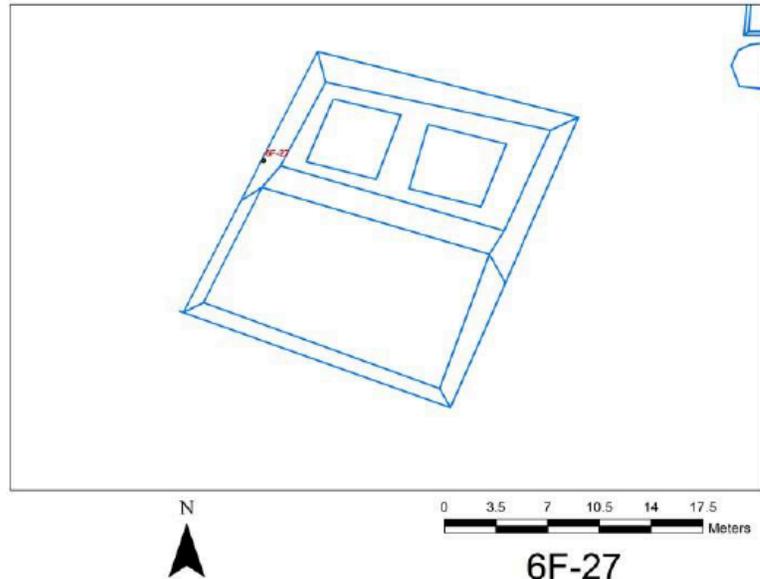
6F-27

6F-27 was also recorded on the map made by the Selz Project. It is a large platform with two levels. The first level is approximately 1-1.5 m high and does not hold any superstructures. The second level is the northern part of the platform and is partially constructed on a bedrock rise. This level has two superstructures (approximately 5 m x 5 m).
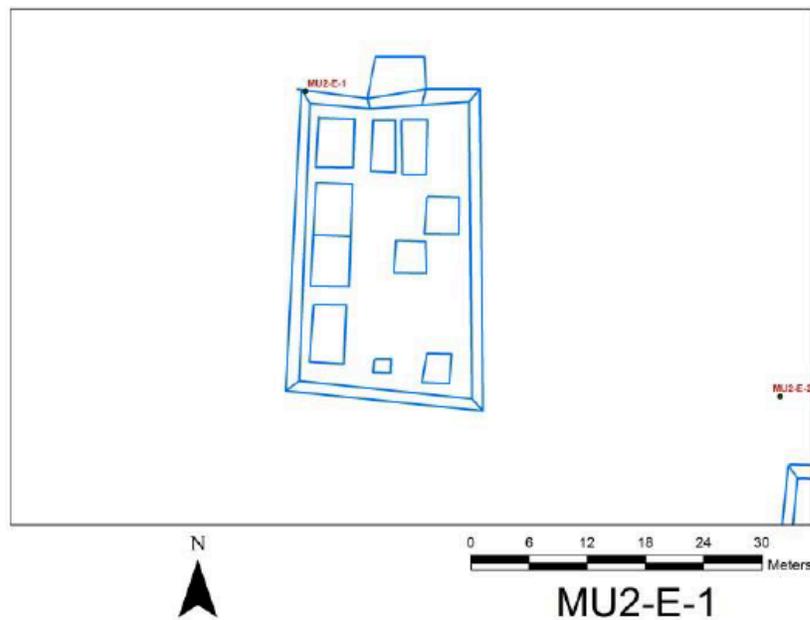
MU2-E-1

MU2-E-1 is a long, high rectangular platform. Its north end is built into a bedrock outcropping. The south end is more built up, but the platform has a gradual rise to the north because of the natural topographic rise. The platform base is constructed of large boulders, some of which are planar. This platform has ten recorded superstructures, some with extremely well-preserved and visible wall alignments. There are three superstructure bases to the north, two joined along the western side, another long independent superstructure near the southwest corner, two more superstructures along the south side, and two on the eastern side of the platform. Two metates on the eastern side of the platform, within 5-8 meters of each other, were also recorded. In addition to the two test pits on the west side, this structure was surface collected.

397
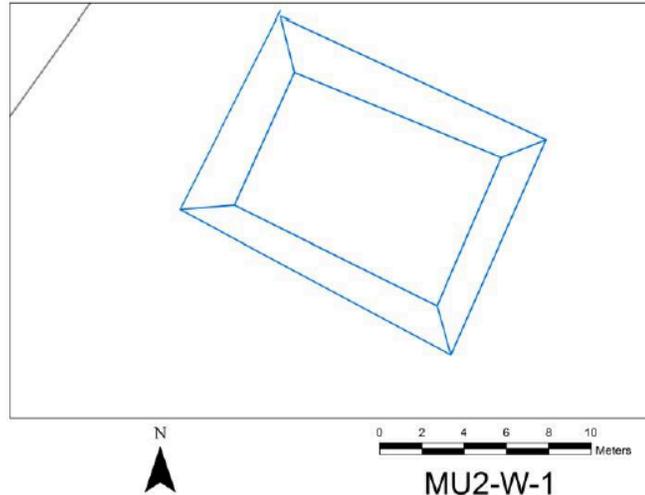
MU2-W-1

MU2-W-1 is a large, high platform located in an area that was planted as milpa. The platform is roughly square (13 m x 13 m) and 2.5 m high.

MU2-W-2, MU2-W-3, y MU2-W-4
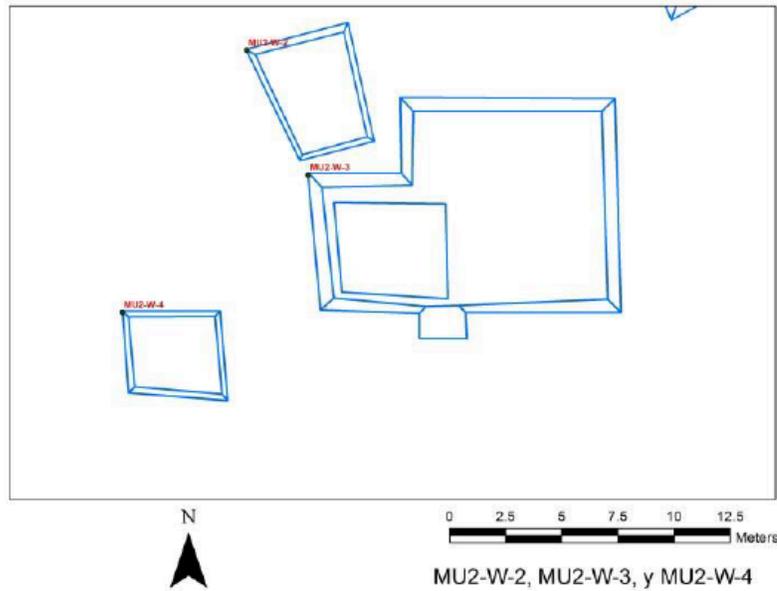
MU2-W-2 is part of a group of structures located west of the brecha in MU2. MU2-W-2 is a small, semi-square foundation ring located less than a meter from MU2-W-3. They may be part of the same structure, but were given different designations because of a depression between the two and the lack of a visible connecting wall line.

MU2-W-3 is a larger, slightly higher platform east of MU2-W-2 with one superstructure in the southwest corner. It is polygonal in shape rather than quadrangular. It is less than a meter south of MU2-W-7. Most of the eastern side of the platform blends into a bedrock rise. Like MU2-W-2, this platform yielded a great deal of surface material.

MU2-W-4 is a small semi-square foundation brace with a metate at the northeast corner. It appears to be distinct of MU2-W-3, which is northeast of its location. It was constructed on a bedrock rise. The east, south, and west wall lines are well-defined, but the north wall line is difficult to identify.
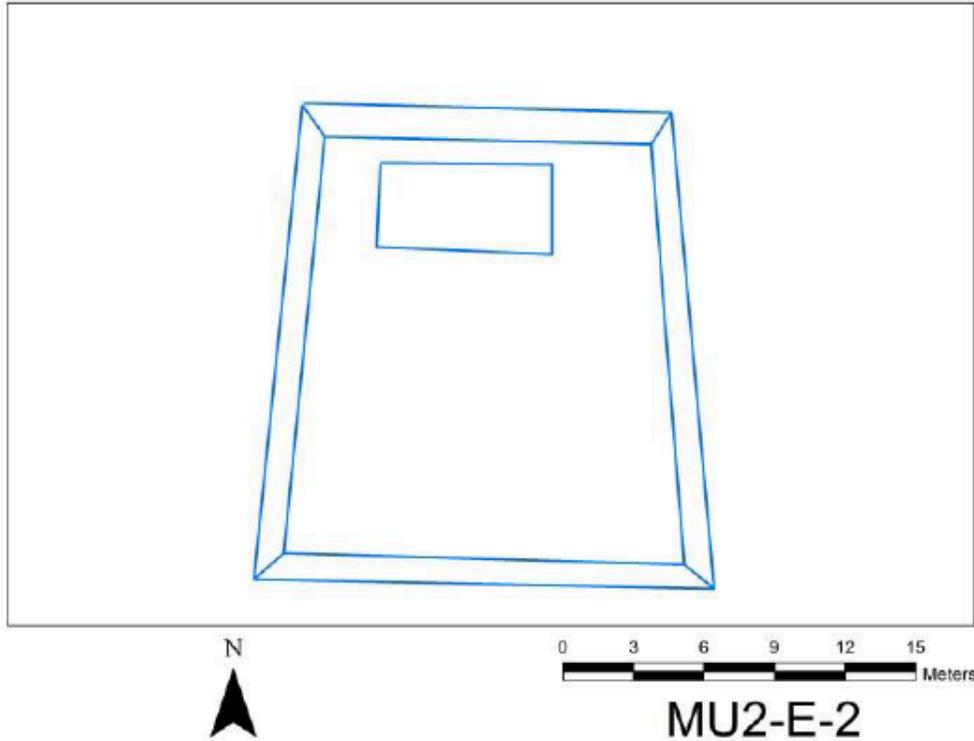
MU2-E-2

MU2-E-2 is a large high platform that was constructed on top of a bedrock outcropping. Large boulders that may have been part of the platform base were washed or rolled off, and grouped in areas below the bedrock hill. There is one superstructure on the north side, approximately 7 m x 3.5 m. In addition to two test pits, this structure was surface collected.

MU2-E-3 is a small semi-circular, slightly raised foundation ring.
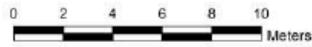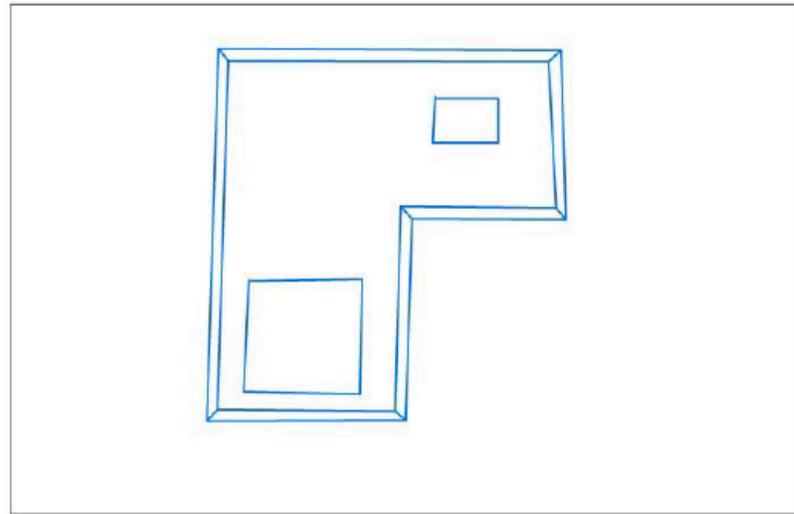
MU2-E-4

MU2-E-4 is an L-shaped low platform. This platform was constructed to the side of a geological feature – a long, raised bedrock hill. A possible entrance route was recorded on the east side of the platform. One superstructure was recorded in the south part of the platform, and another on the eastern branch of the platform.
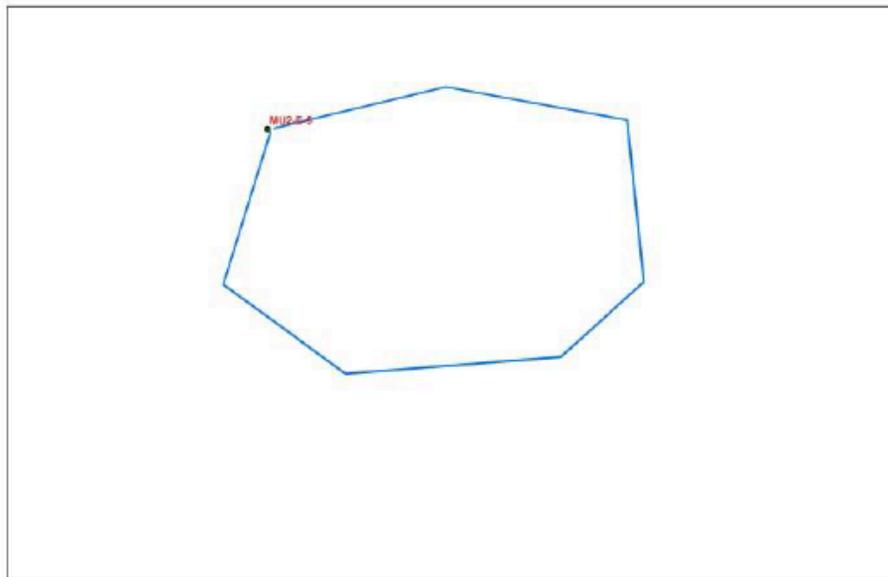
MU2-E-5

MU2-E-5 is located approximately 15-20 meters from MU2-E-4. It is a small foundation ring constructed from large boulders, with two stone alignments continuing beyond the boundaries of the foundation. One alignment continues for approximately 2 meters to the south, and one for approximately 2 meters to the north. The north alignment includes a metate.

400
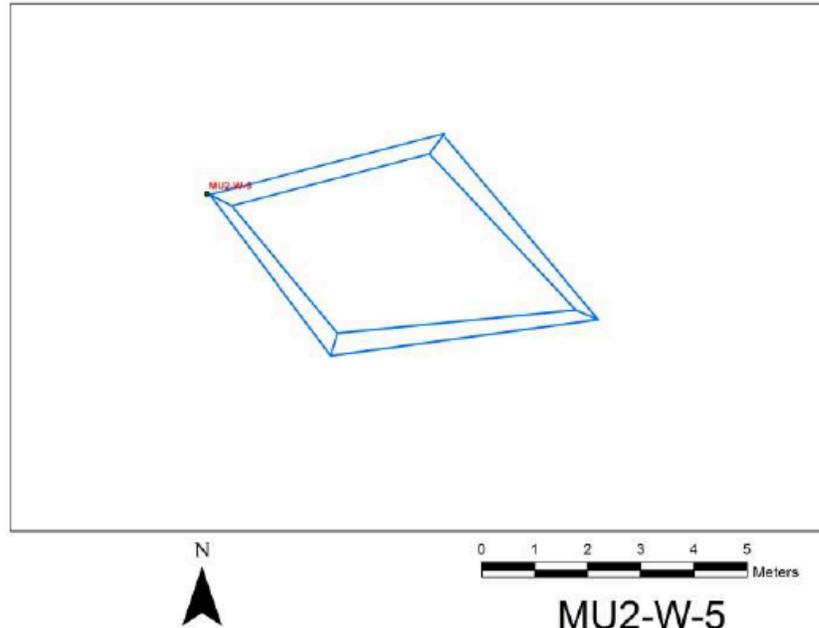
MU2-W-5

MU2-W-5 is a very small semi-rectangular foundation brace located adjacent to a bedrock outcropping. There is more collapse on the east and west sides. Despite numerous test pits in this area, very little cultural material was recovered.
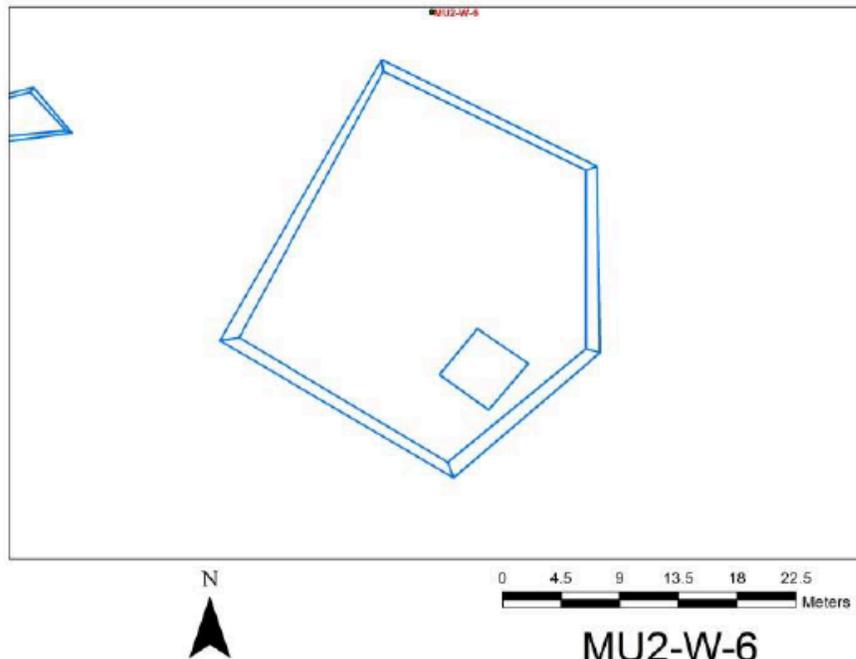
MU2-W-6

MU2-W-6 is a long low platform built up onto a bedrock outcropping. It is located at the edge of an area planted as a milpa. The burning created many loose stones, which made it difficult to identify possible superstructures. This platform is within 5 meters of MU2-W-5.
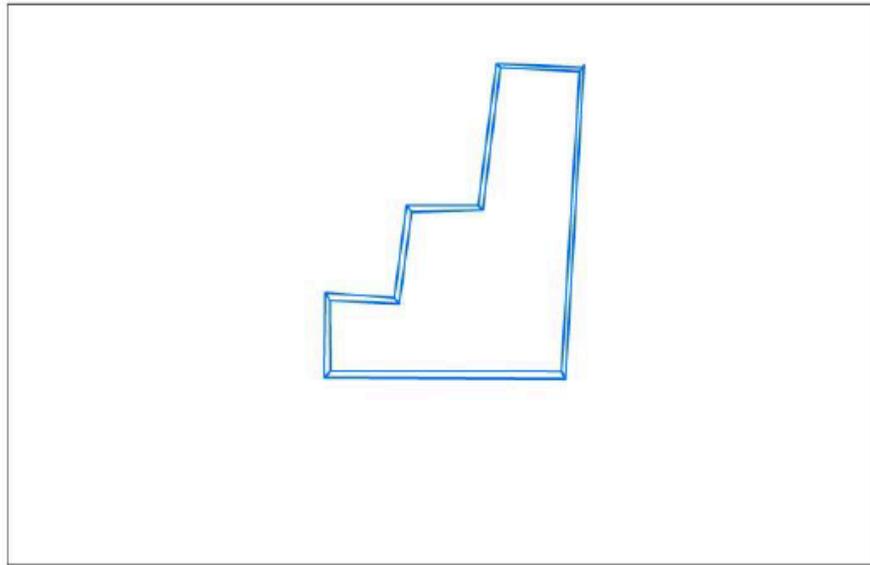
MU2-E-6

MU2-E-6 is a low polygonal platform built along a bedrock outcropping. Numerous planar stones were used in the base. The numerous loose stones made it difficult to identify any possible superstructures.
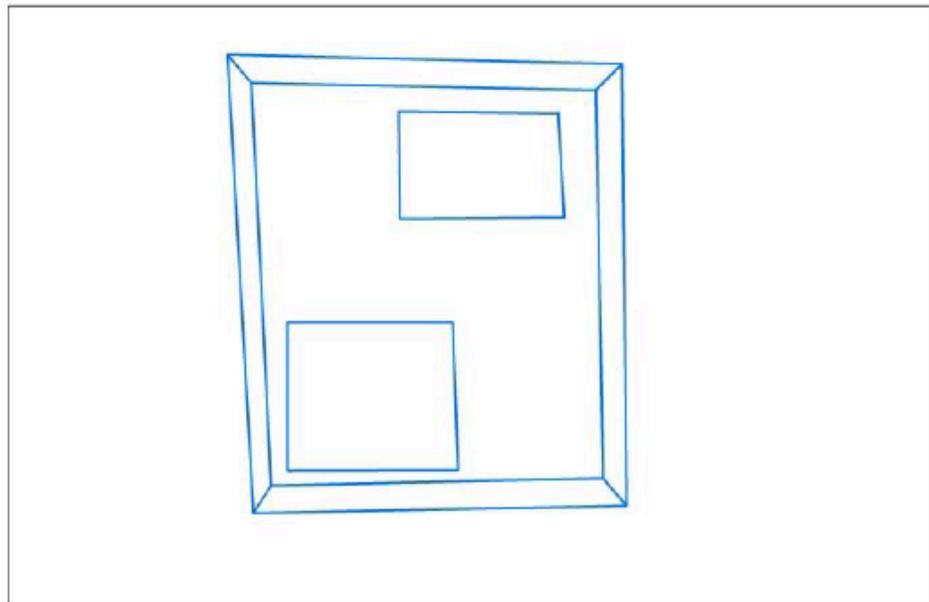
MU2-E-7

MU2-E-7 is a quadrangular platform whose east side is built against a bedrock rise. Two superstructures were identified, one in the southwest part of the platform, and one in the northeast part of the platform. Both superstructures have well-preserved wall alignments. The base is constructed of large stones with a great deal of collapse.
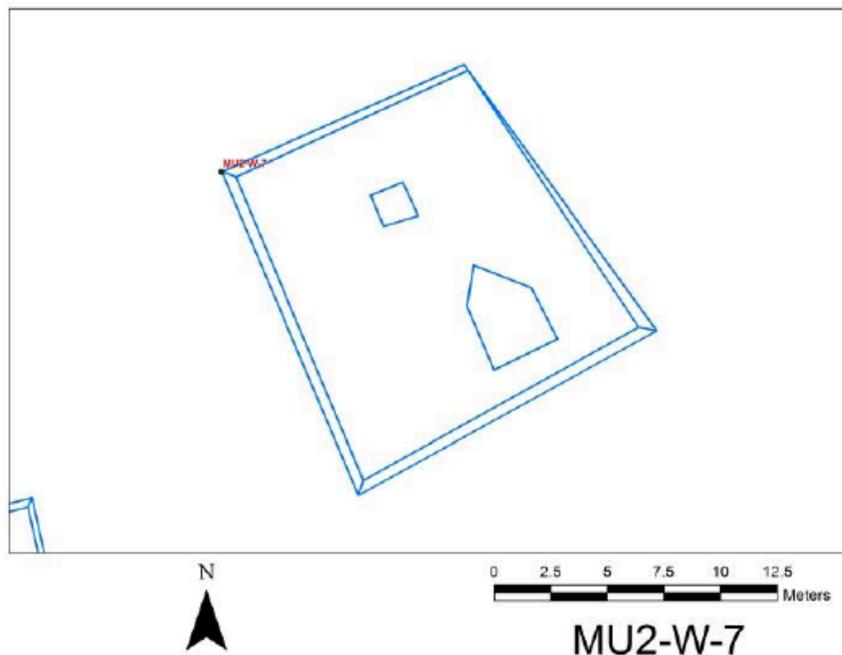
MU2-W-7

MU2-W-7 is a semi-rectangular low platform that is part of the group composed of MU2-W-2, MU2-W-3, and MU2-W-4. Its north and east sides are constructed along bedrock outcroppings that level out.   It is less than a meter north of MU2-W-3. Two possible superstructures were identified. One is in the southeast corner, and the other is 4.5 m northwest of the first, in the middle of the platform.

MU2-W-8 is a small low square foundation brace (4 m x 4 m). It is surrounded by bedrock outcroppings and the soil was shallow (10 cm of depth)

MU2-E-8 is a possible structure identified in an area planted as milpa. The thick undergrowth and numerous bedrock outcroppings complicated confirmation.
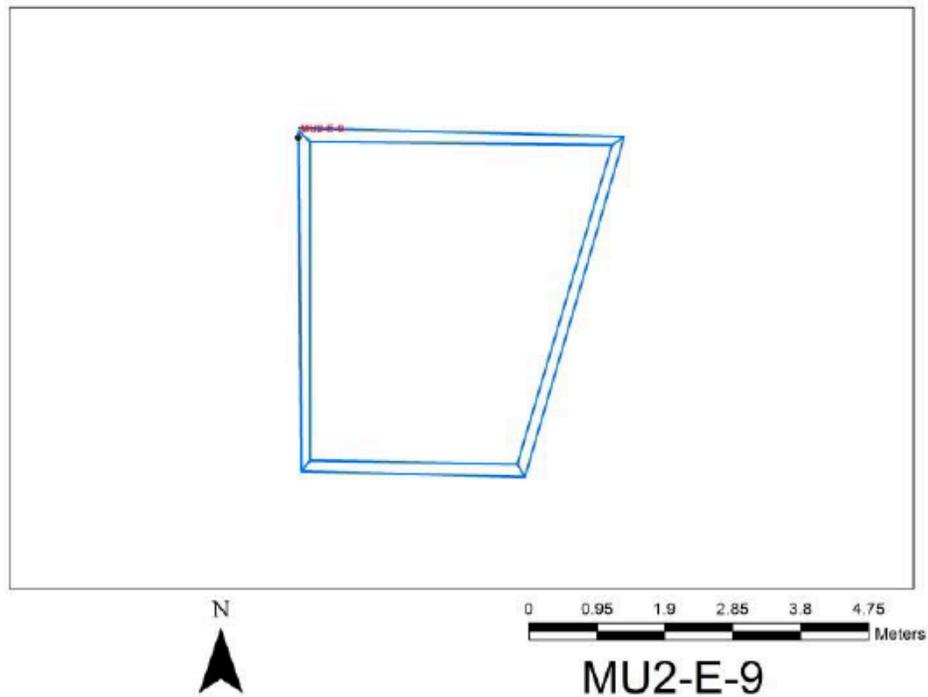
MU2-E-9

MU2-E-9 is a small semi-quadrangular structure 1.5 m west of MU2-E-6 and composed of smaller stones.
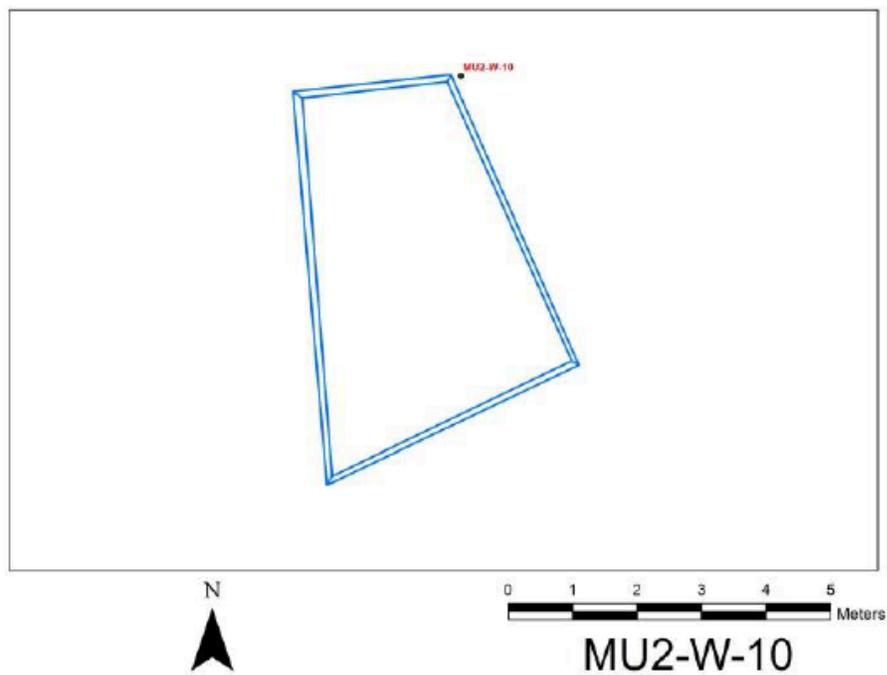
MU2-W-10

MU2-W-10 is a low, semi-rectangular platform with a poorly preserved base but many faced stones. It is located in an area with numerous bedrock outcroppings, and is west of MU2-W-11 and northeast of MU2-W-8.

MU2-W-9, MU2-W-12.1, MU2-W-15, MU2-W-16
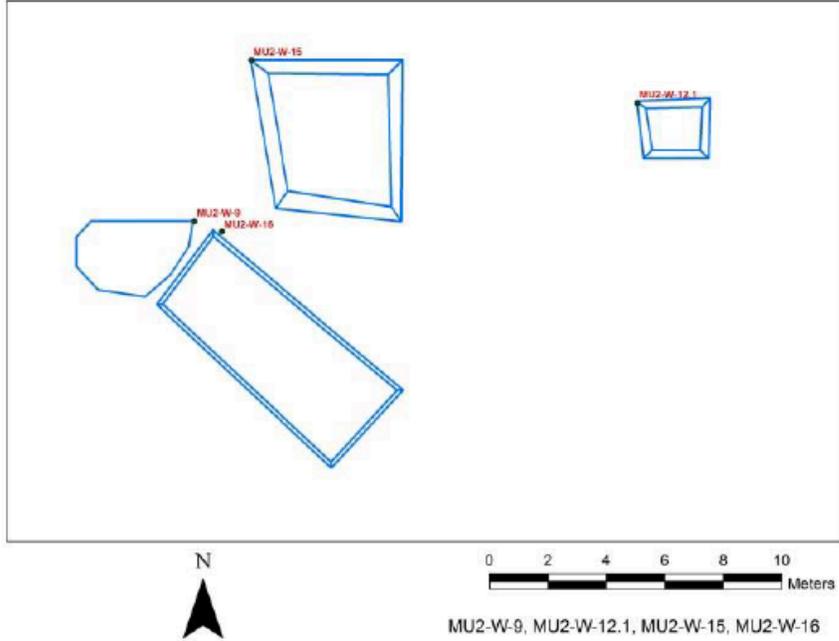
MU2-W-9 is a small circular foundation ring on top of a small hill. It is approximately 15 meters of MU2-W-12.

MU2-W-15 and MU2-W-16 are located within 5 m of each. They are also within 15 m of MU2-W-12, to the south of this platform. MU2-W-15 is a small square foundation (4 m x 4 m) on top of a hill.
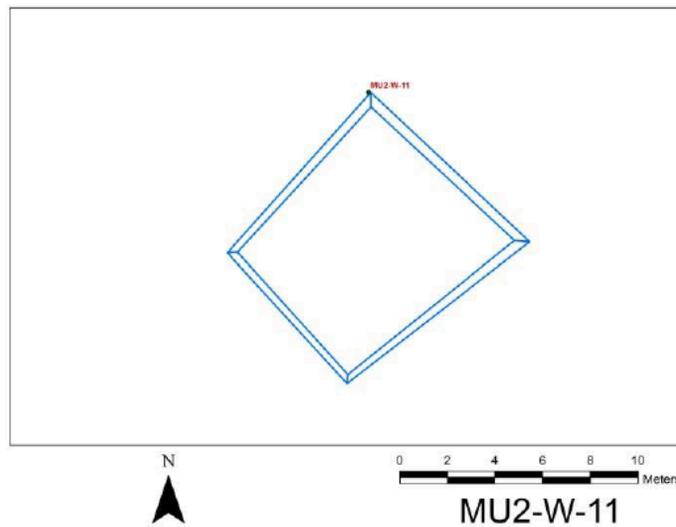
MU2-W-11

MU2-W-11 is a foundation less than five meters from MU2-W-10 and 10 meters from MU2-W-8.
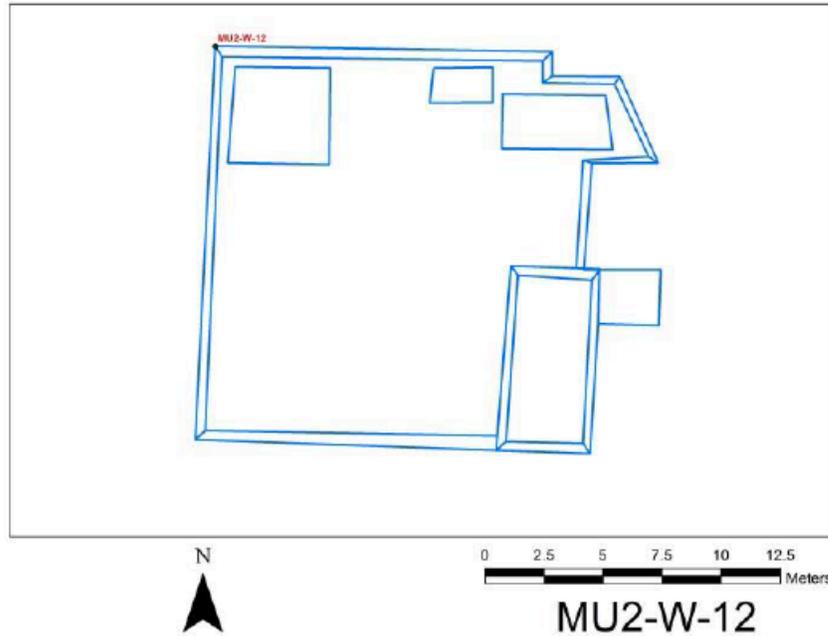
MU2-W-12

MU2-W-12 is a rough platform that was created by leveling a series of hills and bedrock outcroppings. A possible entrance on the north side was recorded, flanked on either side by possible superstructure foundations. The base continues to the east and southeast, but is built directly into bedrock on the west. 8-10 meters south of the possible northeast superstructure is a larger, well-defined superstructure. There is a metate on-platform northwest of the larger superstructure. To the southwest is a higher hill with two possible rectangular foundations.
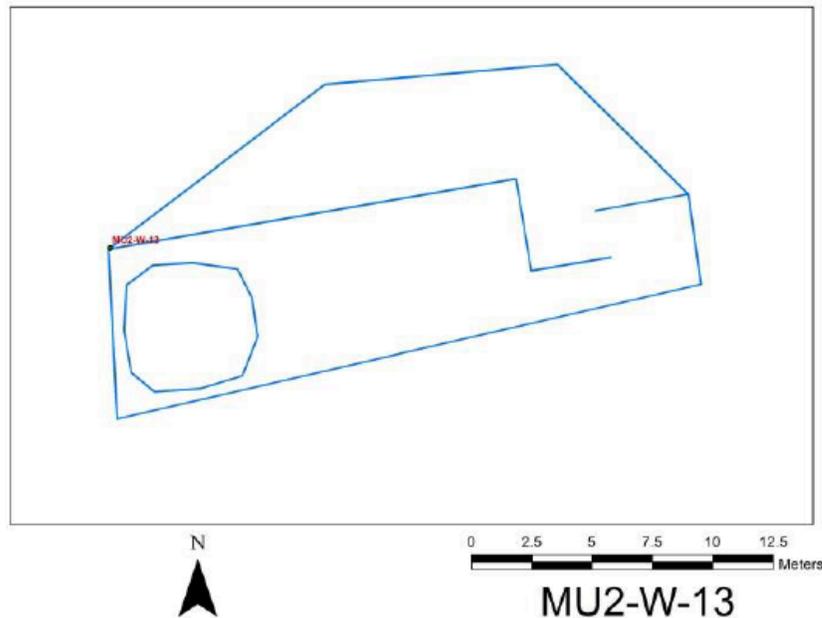
MU2-W-13

MU2-W-13 was first recorded as small circular foundation ring with a diameter of 6.5 m made up of large boulders. On further investigation, the foundation ring was revealed to be part of a larger architectural feature. It is located on the west side of a very low quadrangular platform whose north side is expanded and bounded by an alignment of stones. MU2-W-13 is located due north of a large geological feature that looks like a long limestone hill.

406
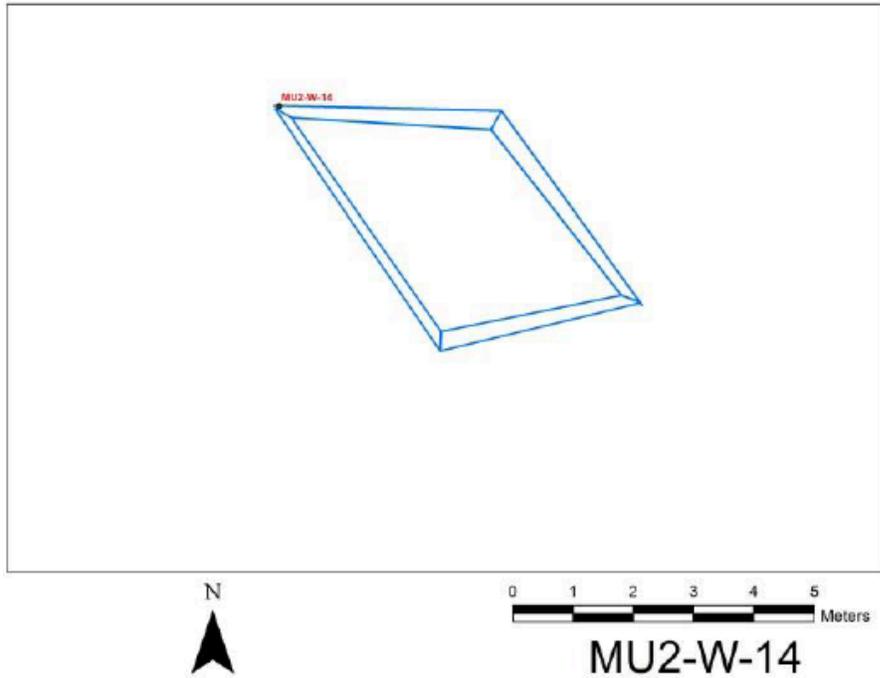
MU2-W-14

MU2-W-14 is a small foundation on top of the large geological feature.

MU2-W-16 is a low rectangular platform divided into three roughly equivalent parts. It is on top of a higher hill, near MU2-W-12 and MU2-W-9.
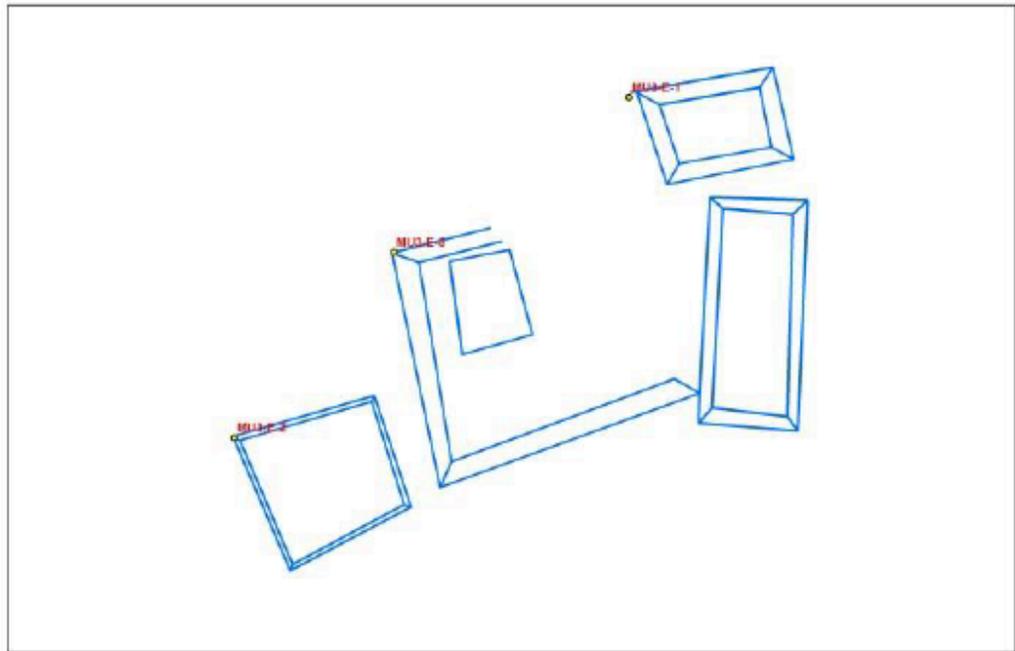
MU3-E-1, MU3-E-2, MU3-E-5

MU3-E-1 is a small raised platform (1.5 m height) on a low hill. It is constructed mostly from medium-size rocks.

MU3-E-2 is a small semi-rectangular foundation on top of the large geological feature, and located 8-10 meters from MU3-E-1.

MU3-E-5 is a semi-L-shaped construction. It is built up in the north and northwest areas above the hill in order to be level with the higher bedrock outcropping to the south. There is no defined base to the east; the platform blends into the hill. Two possible superstructures, the larger mostly collapsed, were identified. MU3-E-5 is located approximately 5 m from MU3-E-1.
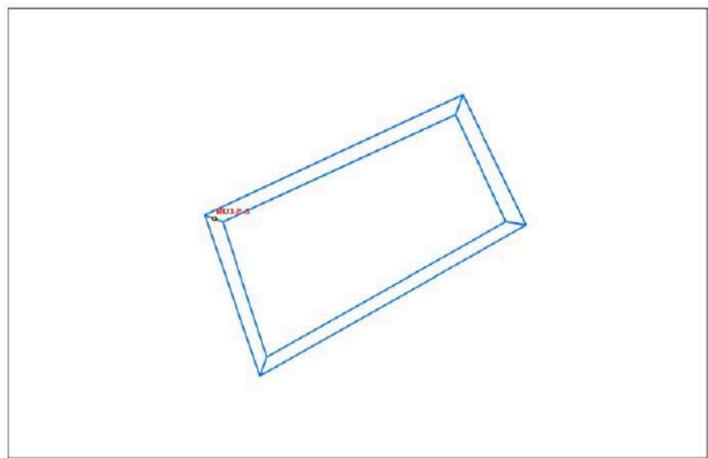
MU3-E-3

MU3-E-3 is a small rectangular foundation brace (3 m x 2 m).
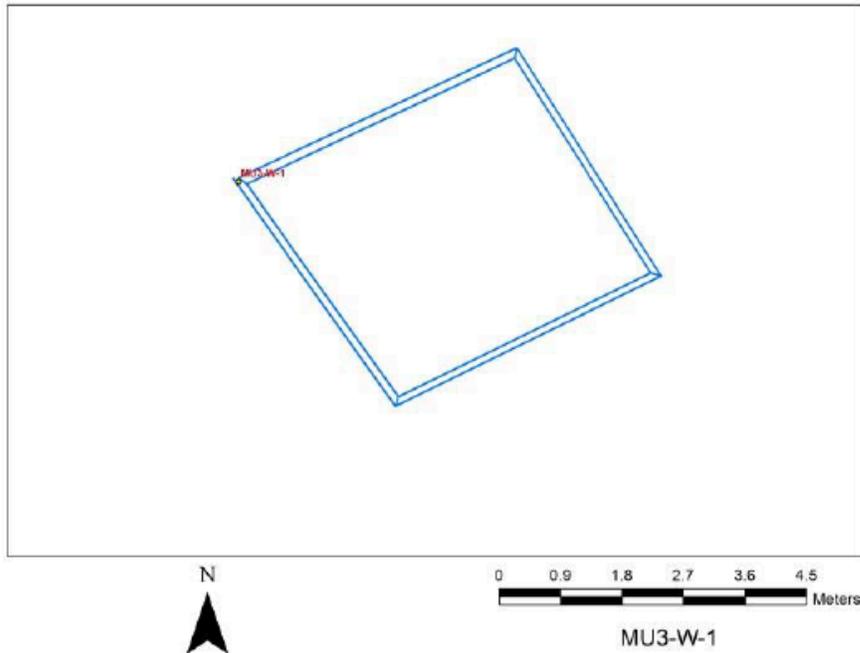
MU3-W-1 is a small low square foundation brace (4 m x 4 m).
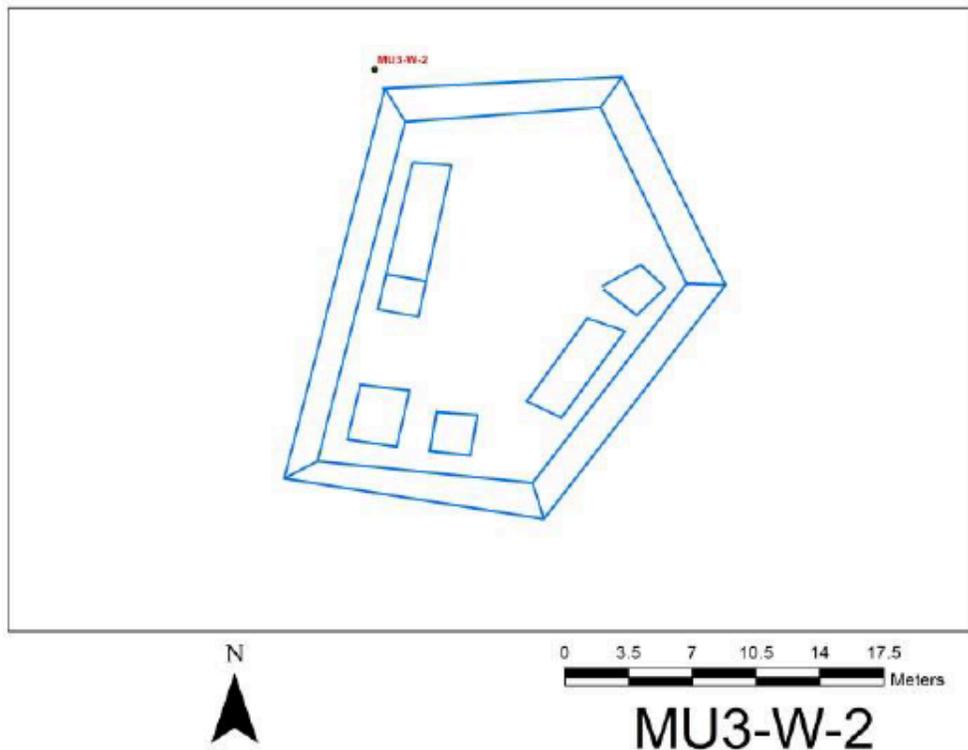
MU3-W-2 is a large platform that levels out to the east of a bedrock outcropping. It is the largest structure located north of MU2. There are two possible entrances: a sloping ramp on the north side of the structure and a possible staircase on the east side. It is built up more to the east in the south. There are numerous possible superstructures, including several that are sunken in near the edge of the structure base. The amount of collapse makes it difficult to locate the base of the platform. All of the superstructures seem to cluster around the edge of the platform, leaving the center open.

409
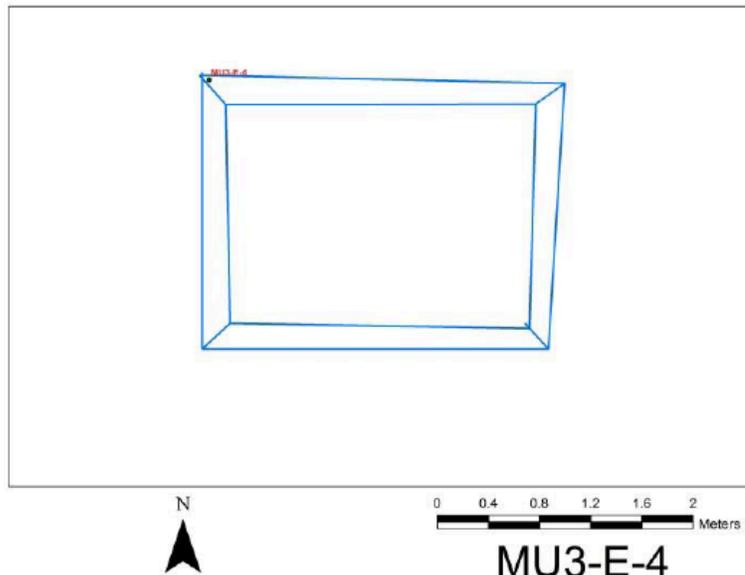
MU3-E-4

MU3-E-4 is a tiny semi-rectangular foundation ring with bedrock to the south. The foundation contains some larger stones.
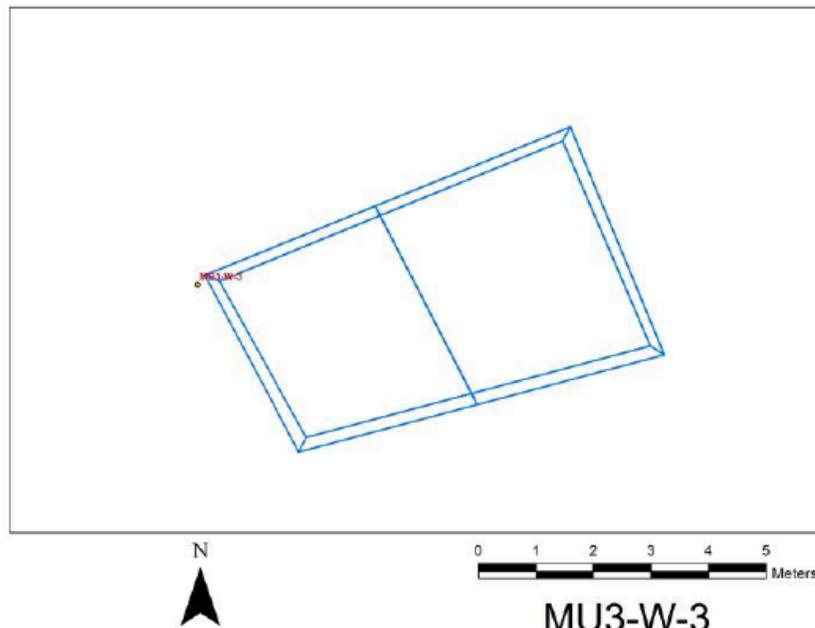
MU3-W-3

MU3-W-3 was constructed by roughly leveling a bedrock outcropping. It is quadrangular with rough stones and poorly preserved wall alignments. There is a partial platform base south of the bedrock outcropping with a small superstructure on top.

We were unable to investigate MU3-W-4 beyond taking a GPS point to locate it. There are bees kept nearby, and attempts to clear it roused the bees and made it dangerous to continue working in the area.
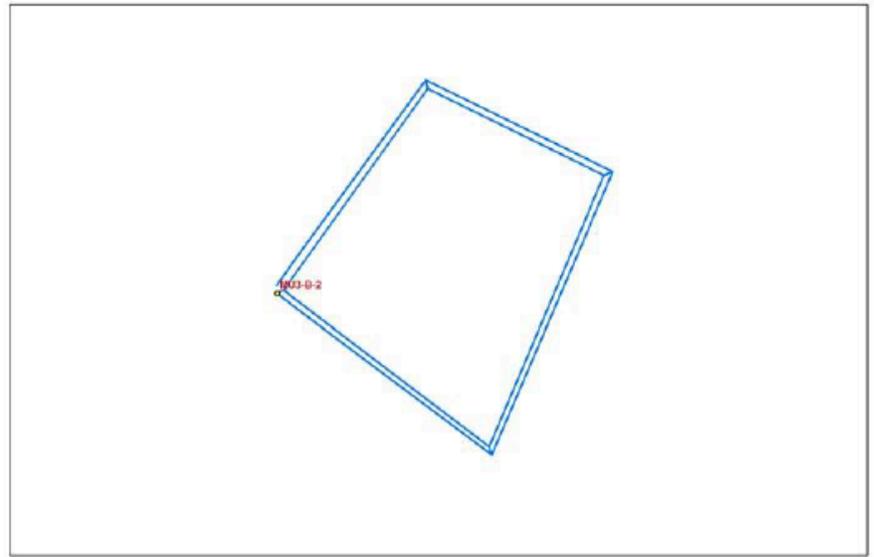
MU3-B-2

MU3-B-2 is a small square foundation of rough unfaced stones (4 m x 4 m). It is constructed on top of a large hill.
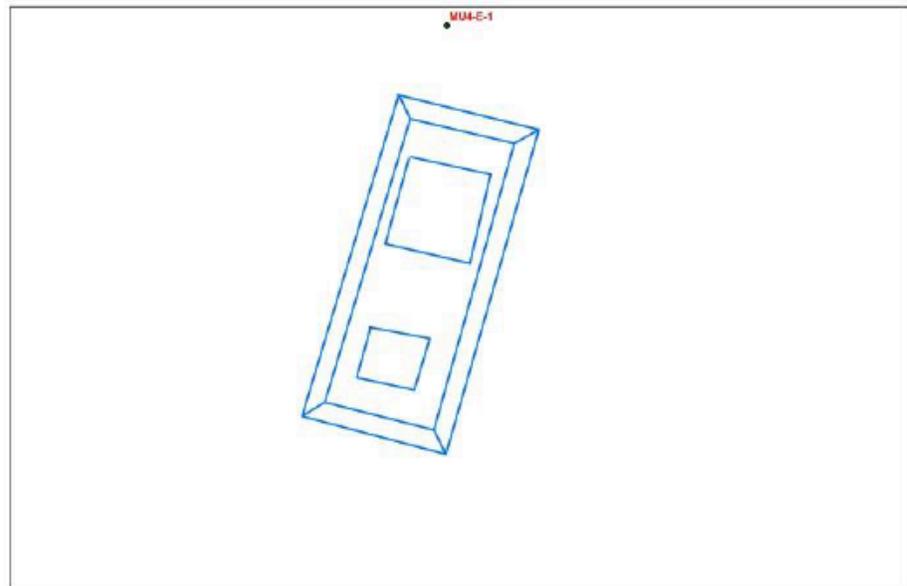
MU4-E-1

MU4-E-1 is the last structure that was identified in the transect before reaching the boundary between the ejidos of the two towns. It is a high platform built into a hill. Two square superstructures, one on the north side and one on the south side, were built on top of the platform.

411
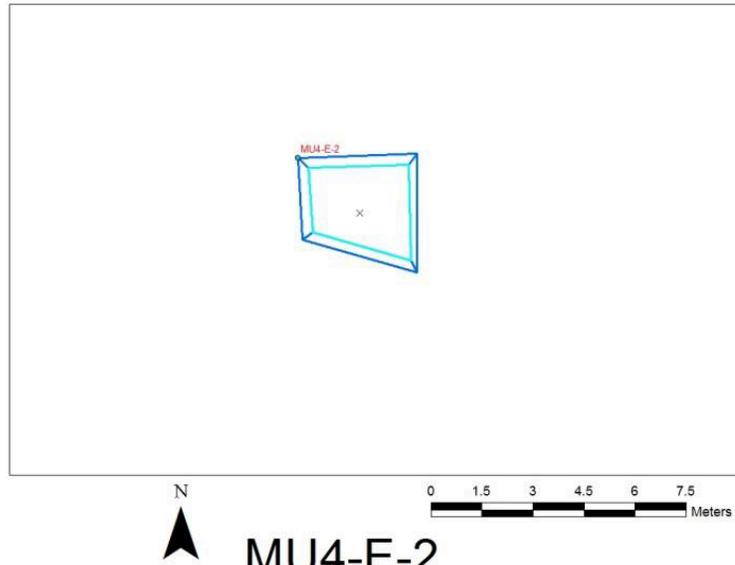
MU4-E-2

MU4-E-2 is a small mound on a natural rise (with possible cultural modifications). No sherds were recovered through surface collection or excavation. MU4-E-2 is set on the east edge of the rise. It is approximately 40 cm high and is constructed primarily of stones 40-50 cm in diameter, with a few larger stones near the corners. There is some collapse off the larger hill on the east side.
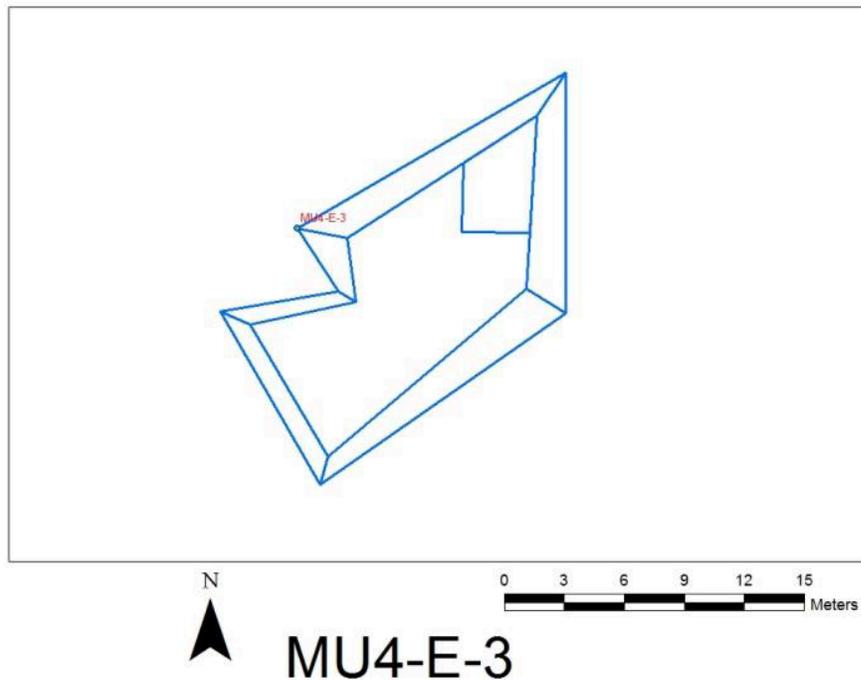
MU4-E-3

MU4-E-3 is a large basal platform on top of a natural hill that may have been culturally modified. The platform holds at least one visible superstructure. It is the largest cultural structure encountered in the transect within the Popolá ejido. MU4-E-3 is primarily constructed from rough stones 50-70 cm in diameter, although the south border is marked by larger boulders on top of bedrock outcroppings. The elevation of the surrounding area is lower on the north side, and more platform collapse is visible in this area. While a large platform, the alignments and stones used are rough – there is no visible cut or shaped stone or unique refined architectural elements. Immediately west of the recorded superstructure (MU4-E-3.1) is a possible entrance ramp, oriented north.
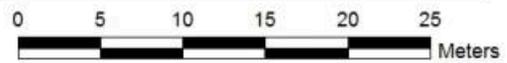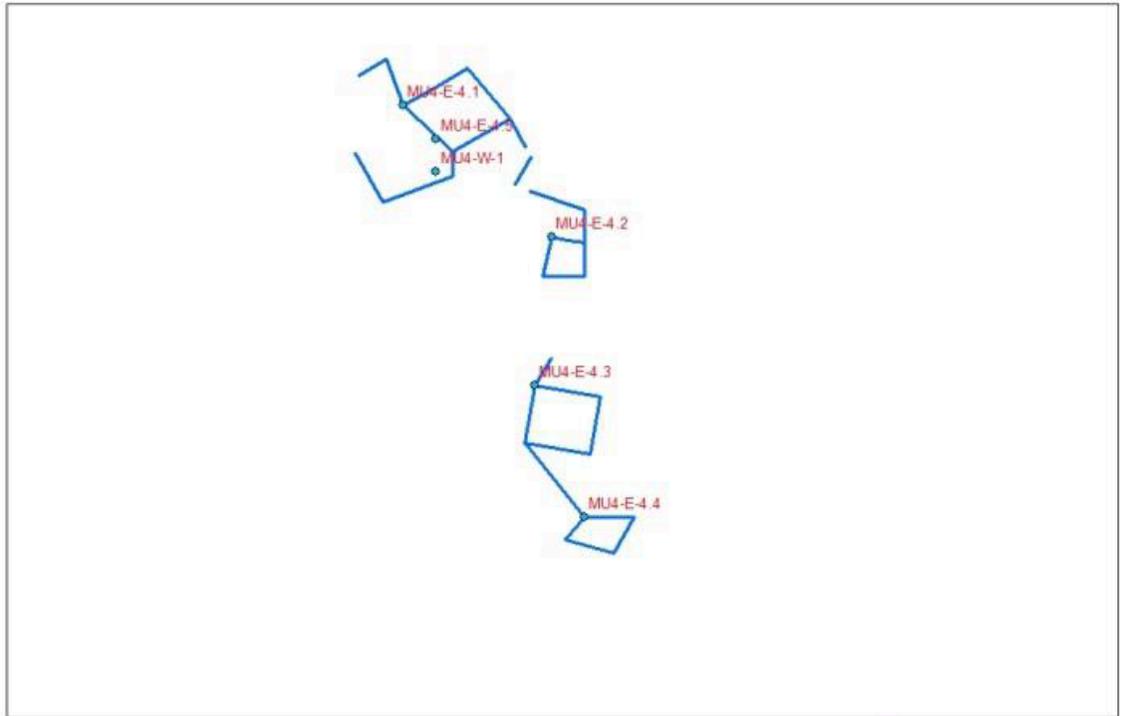
Grupo MU4-E-4

MU4-E-4 is a rough platform with five recorded structures built directly on bedrock outcroppings. Alignments continuing off the recorded foundations indicate that the surrounding area was culturally modified to serve as a rough platform for the foundations. MU4-E-4.1 to MU4-E-4.4 run north to south, while MU4-E-4.5 is directly west of MU4-E-4.1. MU4-E-4.1 is a semi-rectangular foundation with several courses of stone (possibly collapse), most of which are 40-60 cm in size. Several sherds were recovered from the surface within MU4-E-4.1. Approximately 4-5 m south is MU4-E-4.2, which is a small circular foundation ring made up of stones 40-50 cm in size. Three meters south is MU4-E-4.3, a semi-rectangular foundation whose northern and eastern alignments are set on higher ground. MU4-E-4.3 primarily consists of stones 30-50 cm in size, with a fewer larger stones (70-80 cm). Two to three meters south is MU4-E-4.4, a small semi-rectangular foundation partially set on exposed bedrock and made up of stones 40-60 cm in diameter. MU4-E-4.5 is not a fully enclosed foundation – while there is a clear alignment in the west, and the eastern wall is shared with MU4-E-4.1, the south edge is shaped by bedrock and the west wall does not meet the north wall. It suggests a more open area, rather than a four-walled enclosed structure. Southwest of MU4-E-4.5 is a north-south alignment 6 meters long that may have served as a platform border.
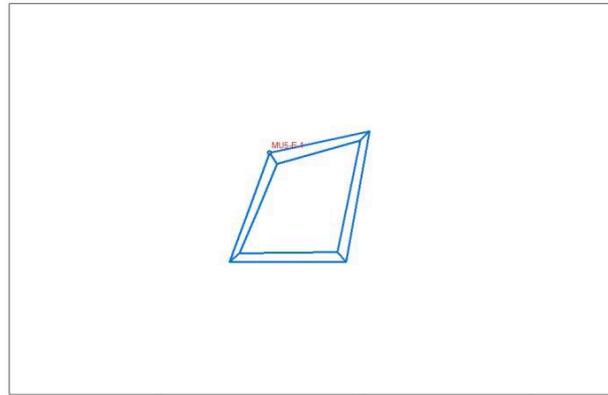
MU5-E-1
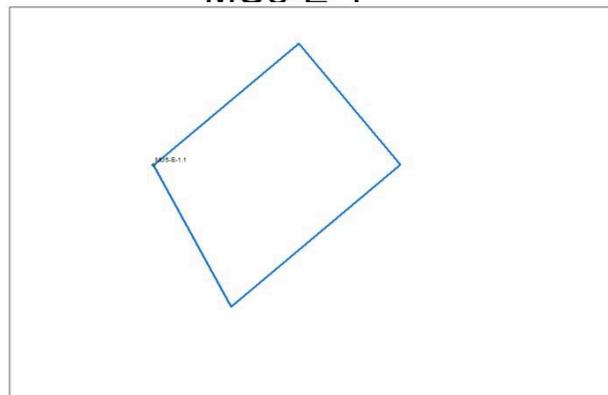
MU5-E-1.1

MU5-E-1 is a small rubble and sediment mound on top of a natural rise that may have been culturally modified. It consists of alignments of stone 20-40 cm in size, with one large boulder to the side. One meter north of the collapse from MU5-E-1 is a semi-circular foundation of stones 30-60 cm in size (MU5-E-1.1).
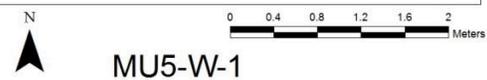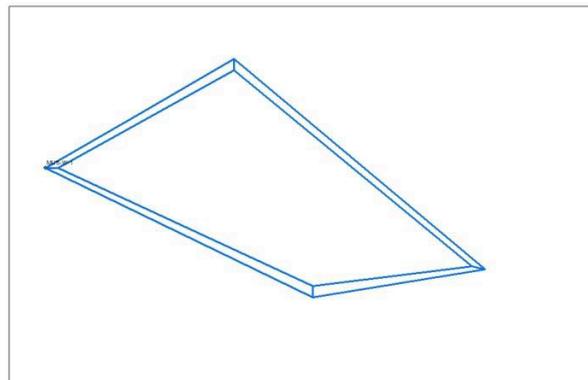
MU5-W-1

MU5-W-1 is a small, slightly raised semi-rectangular foundation near MU5-E-1. There are clearly visible alignments on the west and east. Both MU5-W-1 and MU5-E-1 are set in a naturally elevated area.
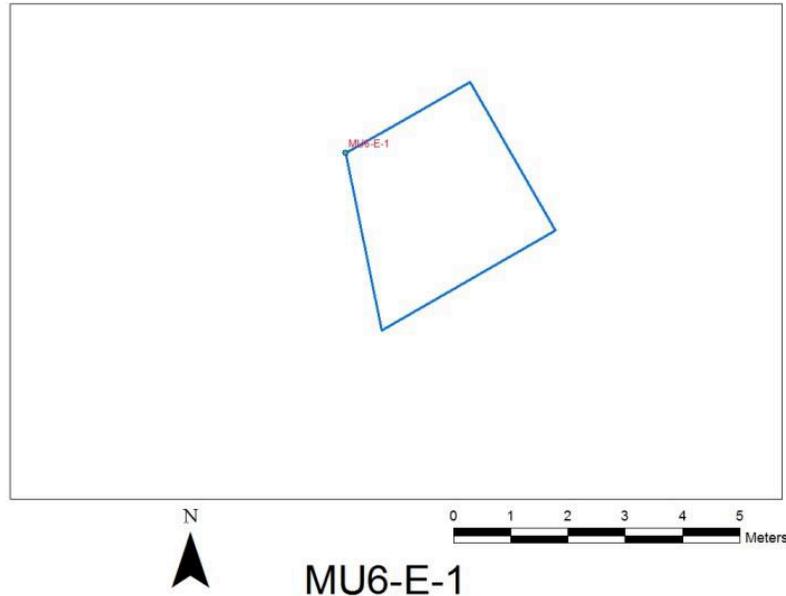
MU6-E-1

MU6-E-1 is a small rectangular foundation in an area of bedrock. The eastern and southern alignments are clearest, incorporating several large (40-60 cm diameter) boulders. The west side is partially demarcated by bedrock and there is a downward slope to the north.
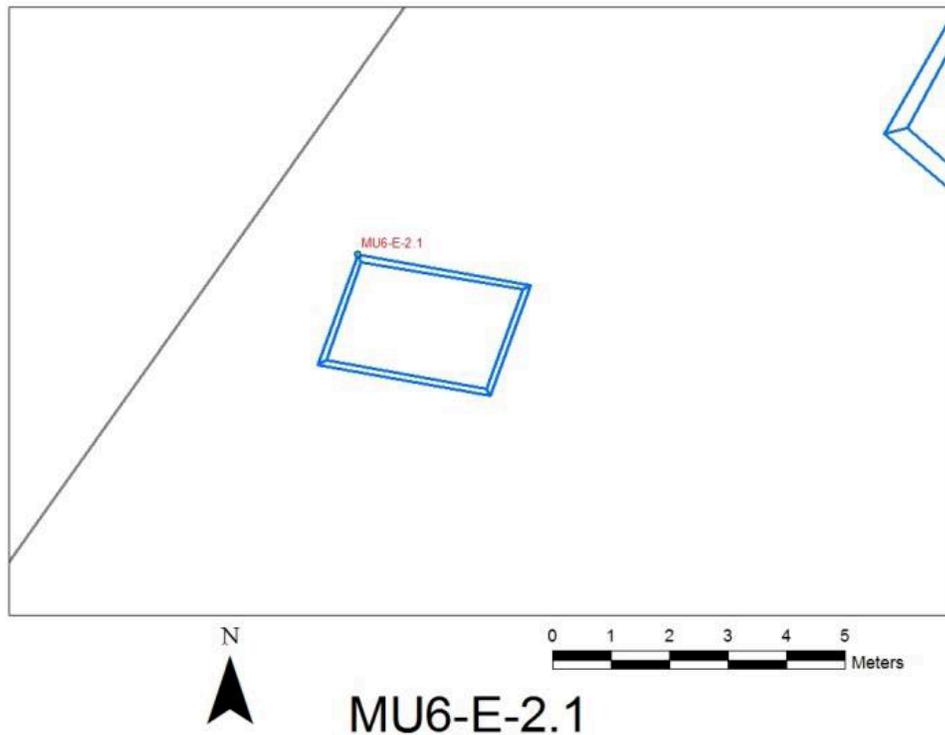
MU6-E-2.1

MU6-E-2.1 is a small mound rising 10 cm off a natural feature. It consists of small (10-20 cm) rubble grouped together to form a small mound. It is located approximately 3 m W of MU6-E-2.2 and 8-10 m SE of MU6-E-2.3. Although the mound gives it a rounded appearance, it is likely semi-quadrangular.

N
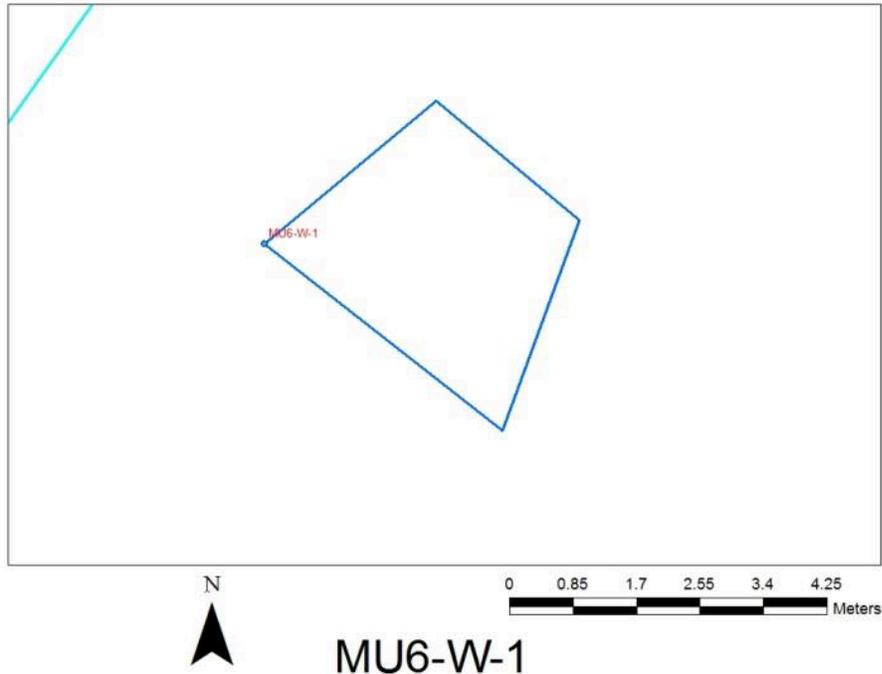
MU6-W-1

MU6-W-1 is a small semi-quadrangular foundation brace with alignments of stones 50-80 cm in diameter and smaller rubble on top and to the side. There is a 70-80 cm boulder delineating the NE corner.

N
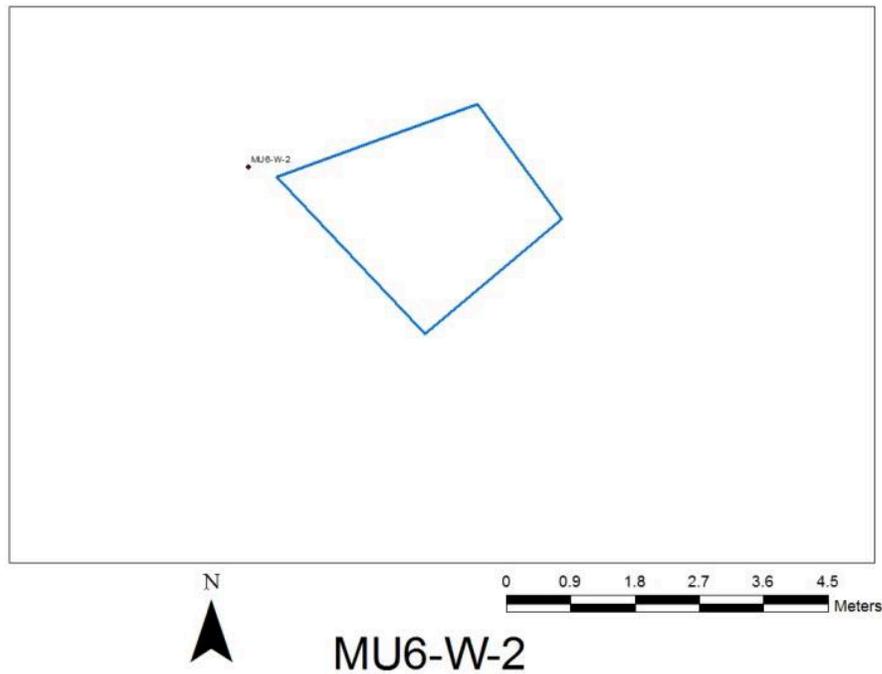
MU6-W-2

MU6-W-2 is a small square possible foundation with alignments in the east and west of roughly shaped stone. There are non-continuous alignments in the north and south.
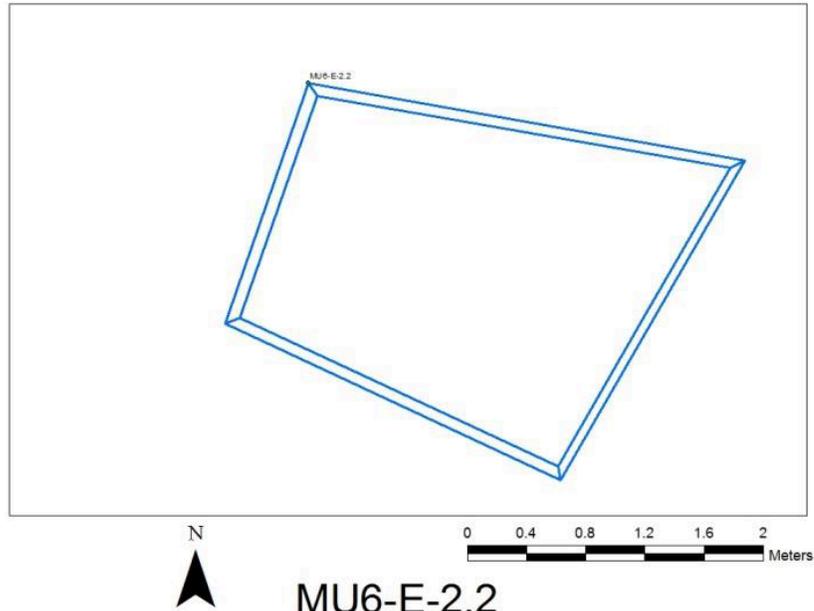
MU6-E-2.2

MU6-E-2.2 is another small mound rising approximately 10 cm off the large feature. It also consists primarily of small rubble, but there are clearer alignments on the west and north sides. It is rectangular in shape.
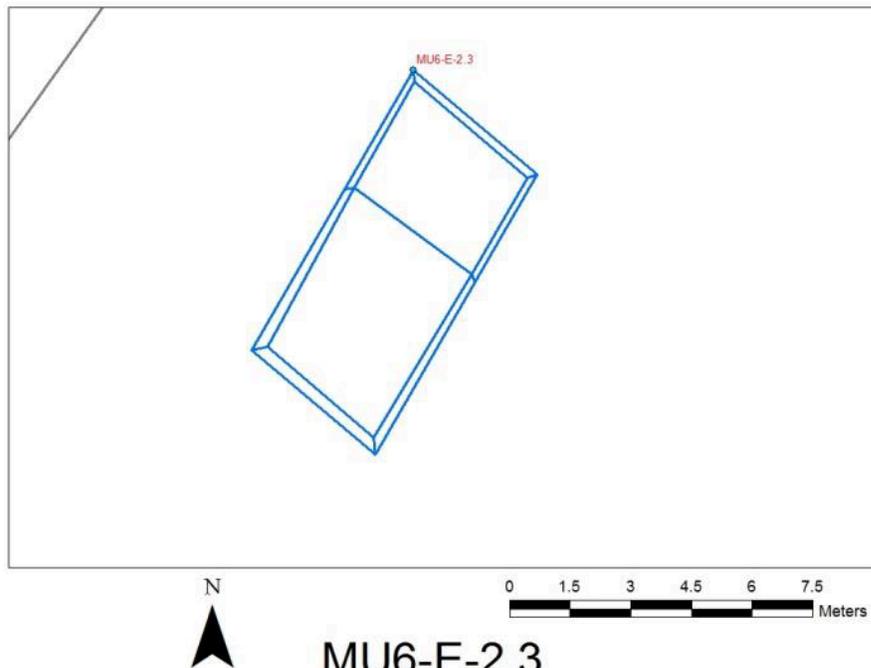
MU6-E-2.3

MU6-E-2.3 is larger than MU6-E-2.1 and MU6-E-2.2. It is rectangular in shape and rises approximately 20 cm in the northern half and 40 cm in the southern half. It mostly consists of rubble, with larger rocks forming alignments in the south and southeast. The northern half consists of larger rocks (20-40 cm in diameter).
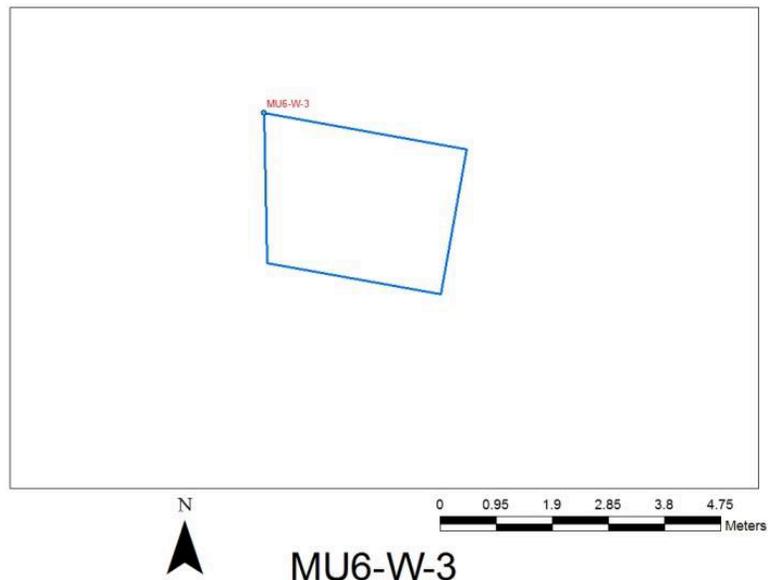
MU6-W-3

MU6-W-3 is a small foundation immediately north of a huge grouping of rocks (2-3 m in diameter), with a slope along the east side that leads to the summit of the rocks, which is 1.5-2 m high. They are piled rather than organized in any recognizable architectural configuration. The foundation slopes downward to the west and up an earthen ramp. It is made up of rocks 50-70 cm in diameter.
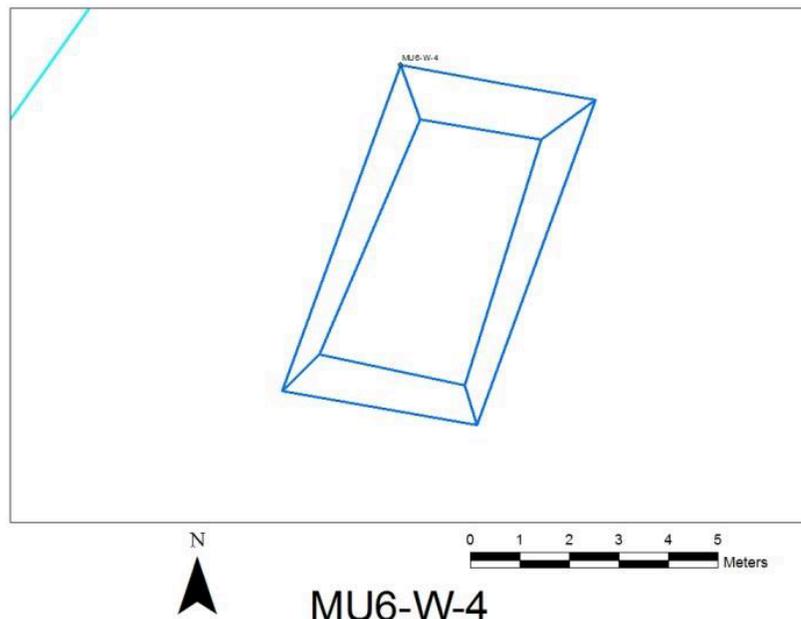
MU6-W-4

MU6-W-4 is a rectangular platform set on a large, high hill. It appears to be partially built on bedrock in the south, with larger rocks 40-70 cm size set on top and visible in collapse at the edge. The elevation of the surrounding area is lower on the east side; therefore the platform is built up more on this side. Along the west side are additional bedrock outcroppings and some large boulders (1 m or more), which continue to the north. The rest of the platform consists of rubble and smaller rocks.
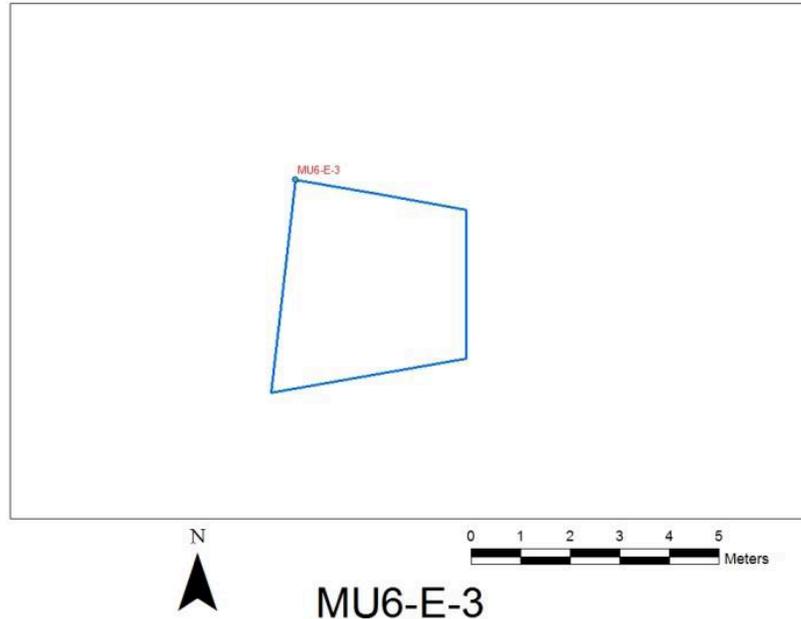
MU6-E-3

MU6-E-3 is located approximately 50 m west of the MU6-E-2 group. It is a small, semi-rectangular foundation constructed above bedrock. There is a great deal of collapse, possibly from multiple foundation braces. The eastern alignment includes several stones with (presumably shaped) planar faces. Most stones are 40-50 cm in diameter.
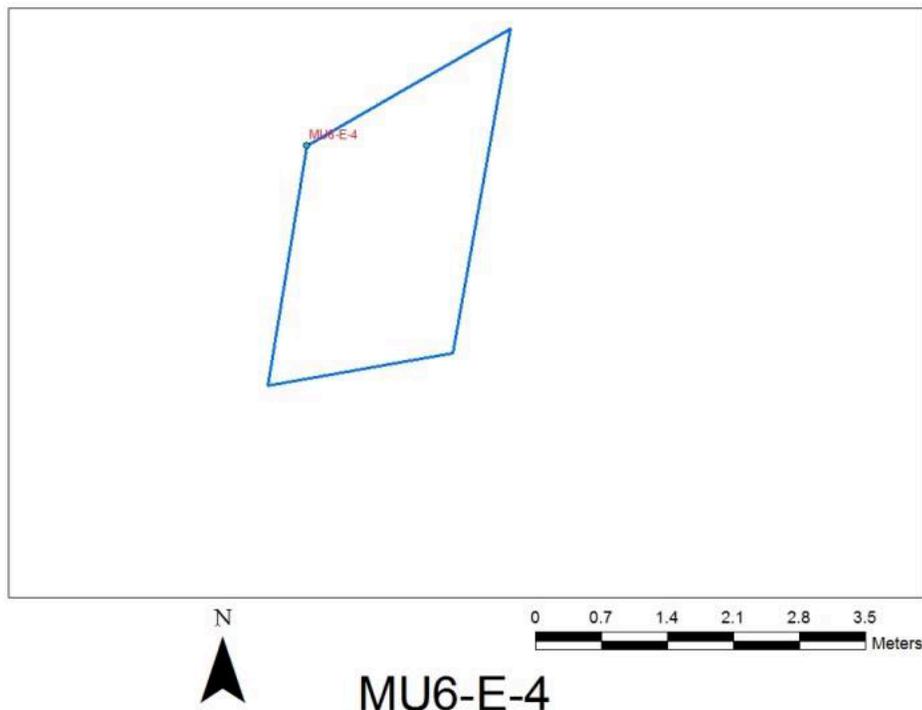
MU6-E-4

MU6-E-4 is a possible semi-circular foundation. The interior of the possible brace appears to be mostly bedrock, but there are alignments along the west and north and modified stones with planar faces set in place.
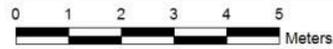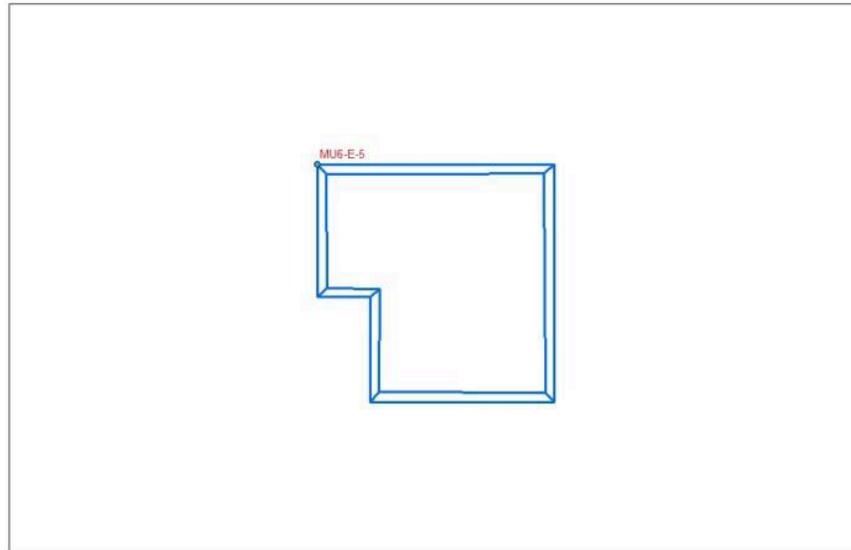
MU6-E-5

MU6-E-5 is a small raised platform with a clear alignment in the south, and semi-clear alignments on the west and east. It consists primarily of rough unshaped stones 30-40 cm in diameter, with bedrock outcropping to the west. The mound itself is mostly sediment; it is not a foundation constructed directly on bedrock like many other structures identified.
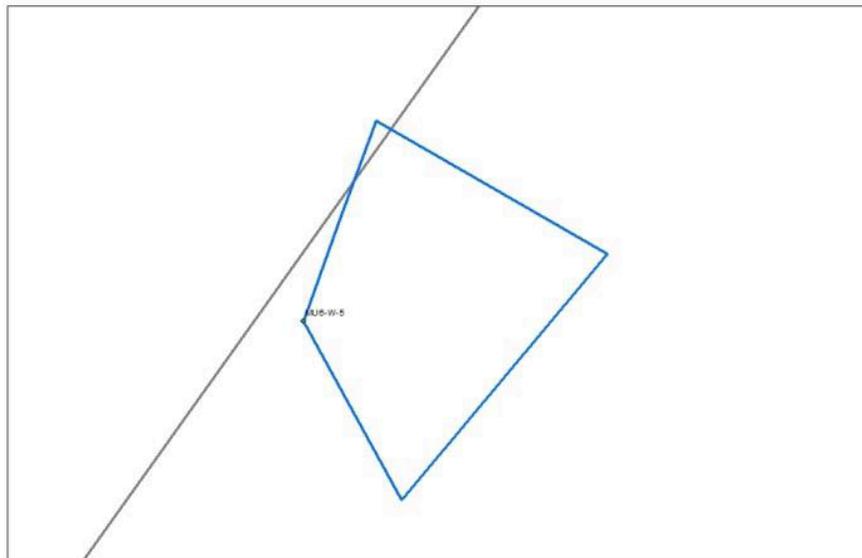
MU6-W-5

MU6-W-5 is a small teardrop-shaped feature in the west edge of the transect. The east consists of multiple courses of stone (possibly collapse). Some stones are shaped, including a few stones with at least one planar face, while most are rough and 50-80 cm in diameter. The west side comes to a sharp edge consisting of 3-4 large stones (80 cm – 1 m in diameter) with two flat faces.

MU6 Rasgo
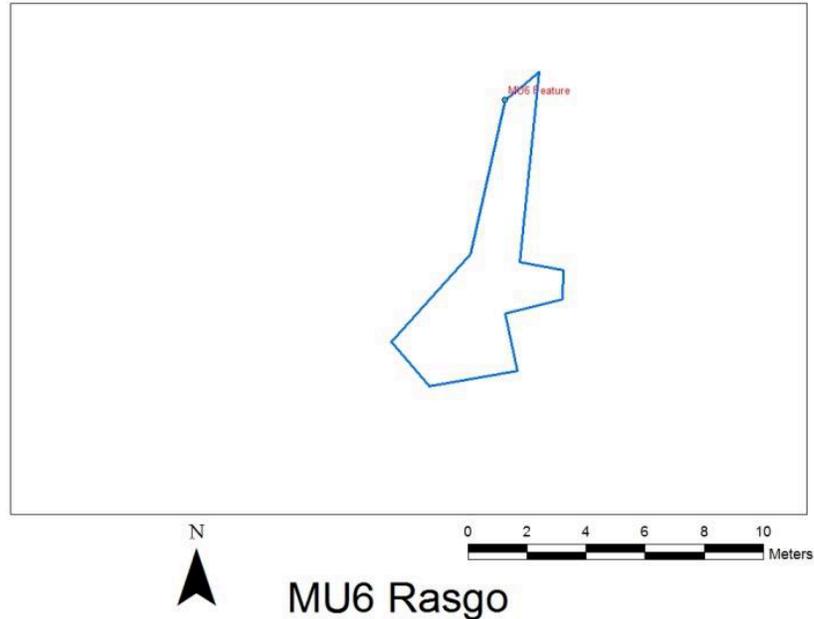
The MU6 Feature is a long feature that does not appear to be a structure but is a cultural feature. It is a low construction oriented north, consisting of rubble piled directly over bedrock. It is widest in the south and narrows as it continues north. There is another pile of large stones (50-80 cm) east of the south end.
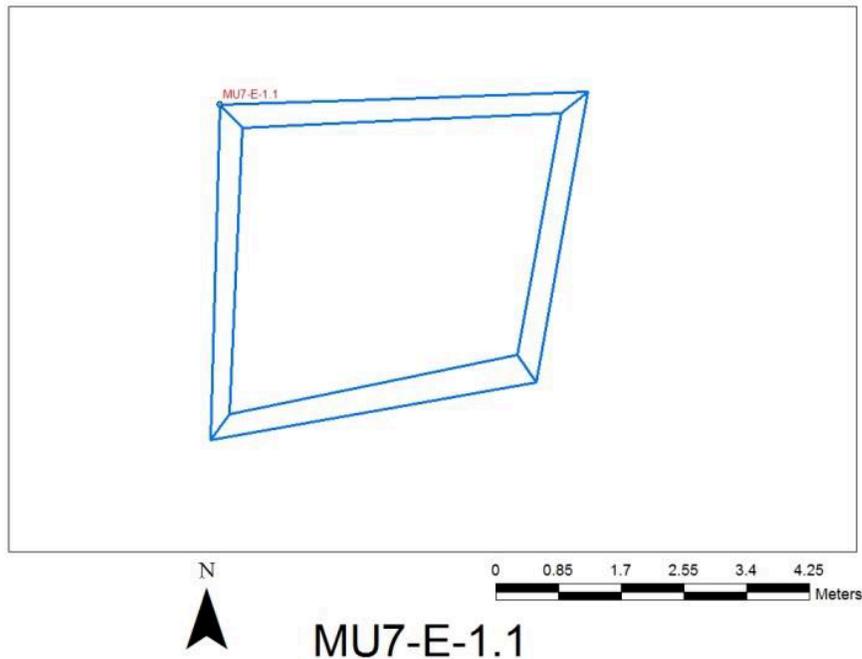
MU7-E-1.1

MU7-E-1.1 is a rectangular mound with clear alignments in the north, south, and west. There may be interior and exterior courses, while the rest consists of rubble. It is raised 30-40 cm off the ground. The exterior alignment consists of stones 40-70 cm in diameter. The south end meets a bedrock outcropping.
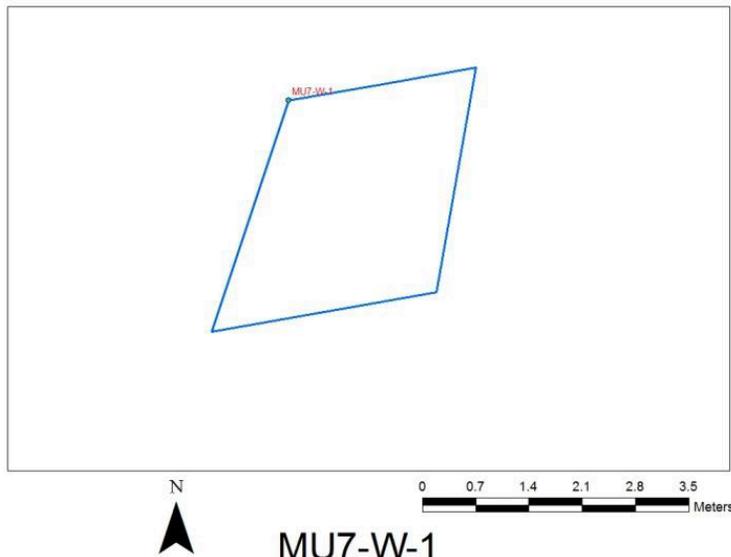
MU7-W-1

MU7-W-1 is a small rectangular foundation on top of a natural rise (possibly culturally modified). It has visible alignments on the north, east, and south and is made up of stones mostly 30-50 cm in diameter.
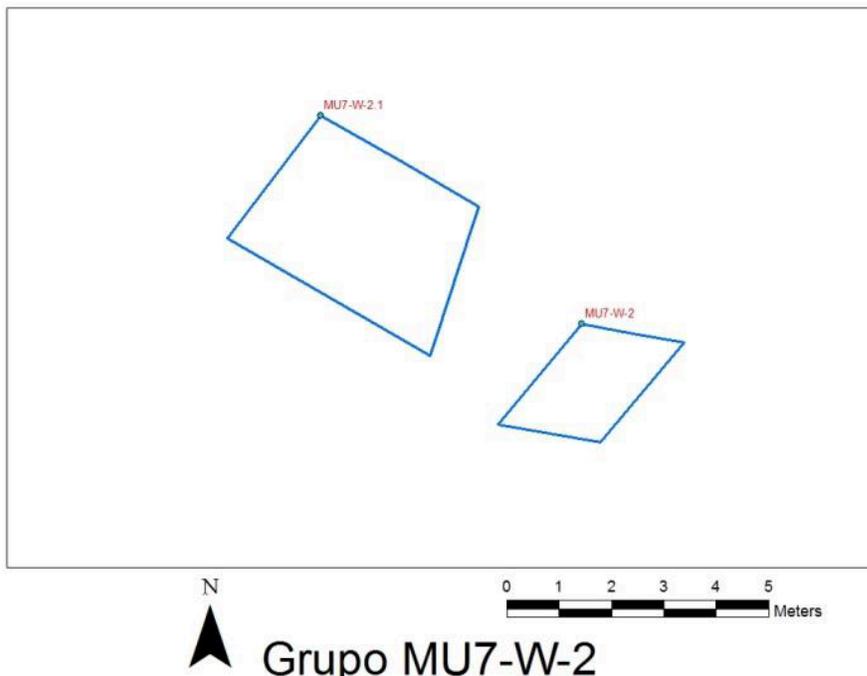
Grupo MU7-W-2

MU7-W-2 is a rectangular foundation with multiple alignments along the north built on a bedrock outcropping. It mostly consists of rough stones 40-70 cm in size, with several stones 70-80 cm in size inset in the NW corner.
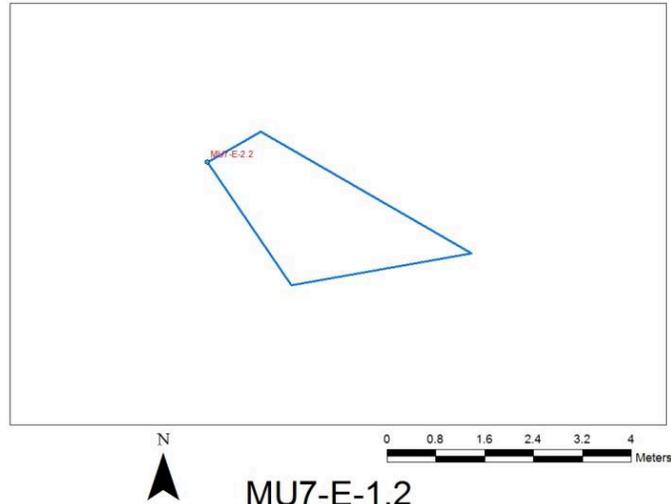
MU7-E-1.2

MU7-E-1.2 is a small irregularly shaped mound mostly composed of rubble. It slopes slightly downward to the east, where a few stones may have been removed. There are alignments visible in the north and south. It is located on top of an enormous bedrock hill, approximately 3 m from MU7-E-1.1.
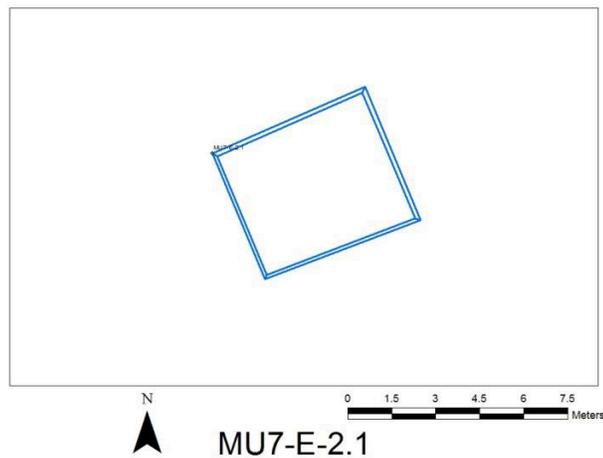
MU7-E-2.1

MU7-E-2 is a mix of small rubble mounds and interesting features. MU7-E-2.1 is the largest mound, located southeast of the others. It consists primarily of rubble (20-40 cm in size) with a few larger stones making up the outer alignment. Due west is an area of rubble without a discernible shape, which was not given a designation. Further west and slightly north is MU7-E-2.2. It is also a rubble mound, although the central portion consists only of elevated sediment with no stones. In the NE and NW corners of MU7-E-2.2 are two larger stones, but all others are 20-40 cm in size. To the east of MU7-E-2.2 is MU7-E-2.3, a rubble mound that terminates in the north in a bedrock outcropping. Its southern end is more visible with a greater number of stones, mostly 20-50 cm in size. MU7-E-2.4 is approximately 3 meters east of MU7-E-2.3. Its southern end terminates in a bedrock outcropping. MU7-E-2.4 is built of larger stones (30-50 cm in size). MU7-E-2.2, 2.3, and 2.4 are long rectangular mounds while MU7-E-2.1 is closer to a square. West of MU7-E-2.4 is a large boulder (1.5 m in size) lying along the western edge of the mound. Northwest of this boulder is a group of shaped stones, including cut stones. There is a grouping of several faced stones in the NW corner of MU7-E-2.4, some loose and some partially buried beneath sediment. They form a rough rectangle on the western side of MU7-E-2.4, within which YPT332A was placed. That excavation uncovered one faced stone of similar size. In addition to the cut and shaped stones, there are several large irregularly shaped boulders immediately south. Southeast of MU7-E-2.3 is a circular pile of rubble with large bedrock outcroppings in the south. In one piece of possible bedrock, a circular depression with a raised border was shaped.

MU7-E-3

MU7-E-3 is a possible foundation or feature with a clear alignment to the north made up of shaped stones with planar faces (40-60 cm in diameter). The alignments are partially estimated due to lack of visibility. It is built partially on bedrock outcropping in the east, and the downward slope to the west has resulted in collapse of the eastern alignment. Less than 1 m north are 3 large stones (1-1.5 m), two of which have at least 1 planar face but no visible carvings.
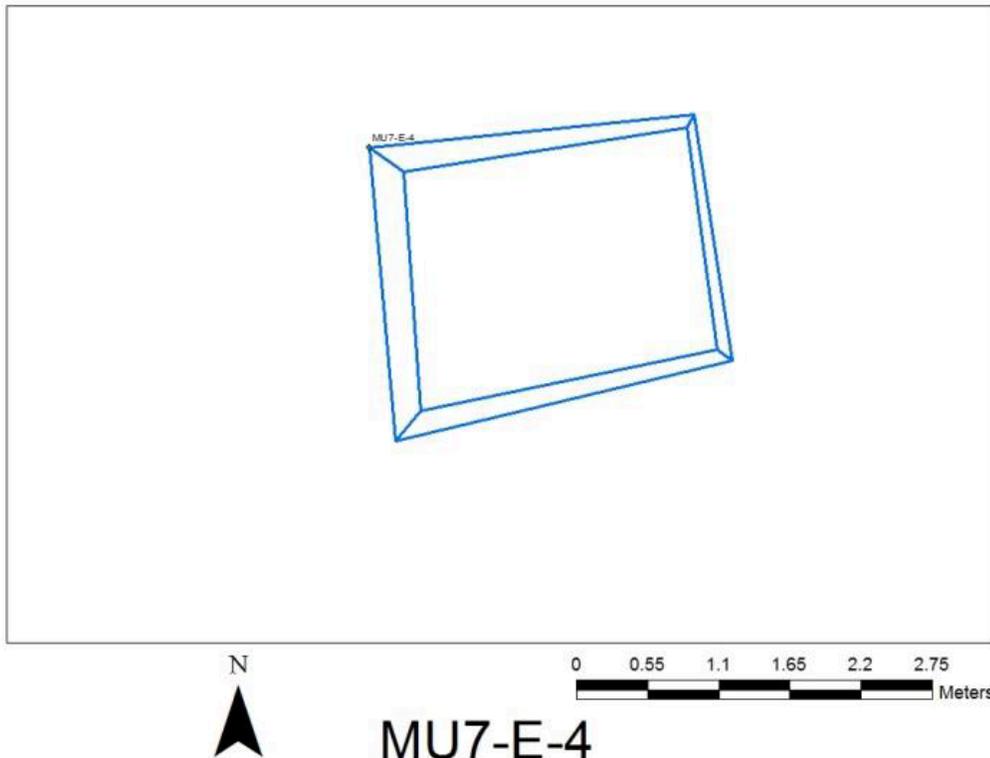

MU7-E-4

MU7-E-4 is a small mound near the MU7-E-2 group, built up higher in the northwest and sloping downwards to the southeast. There are some larger stones in a visible alignment along the western areas of the mound, while the lower end to the east consists primarily of smaller rubble. To the northwest of MU7-E-4 is a bedrock outcropping, which seems to contribute to the elevation differences in the west and east.
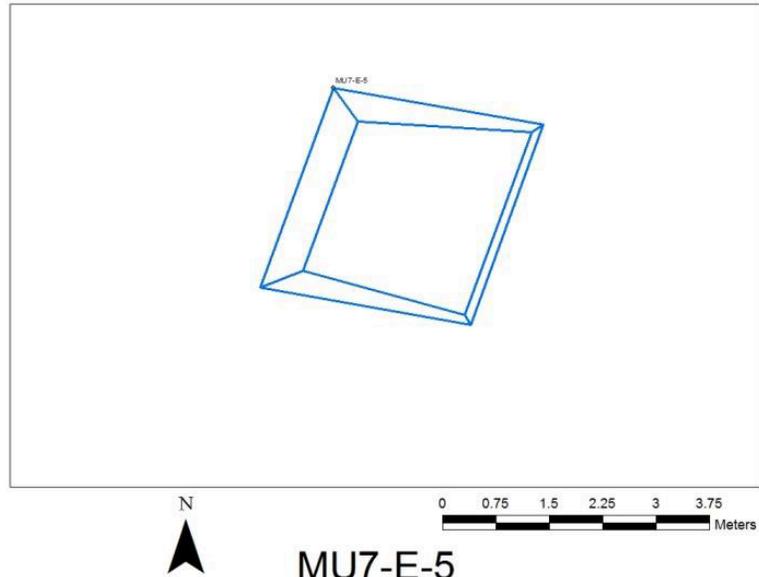
MU7-E-5

MU7-E-5 is a small mound on an elevated area of bedrock. The surrounding area is lower to the east, therefore it is built up more on that side (75 cm above ground level). The mound is formed from rubble, though there are larger stones (50-80 cm in size) in the exterior alignments.

Grupo MU7-W-2
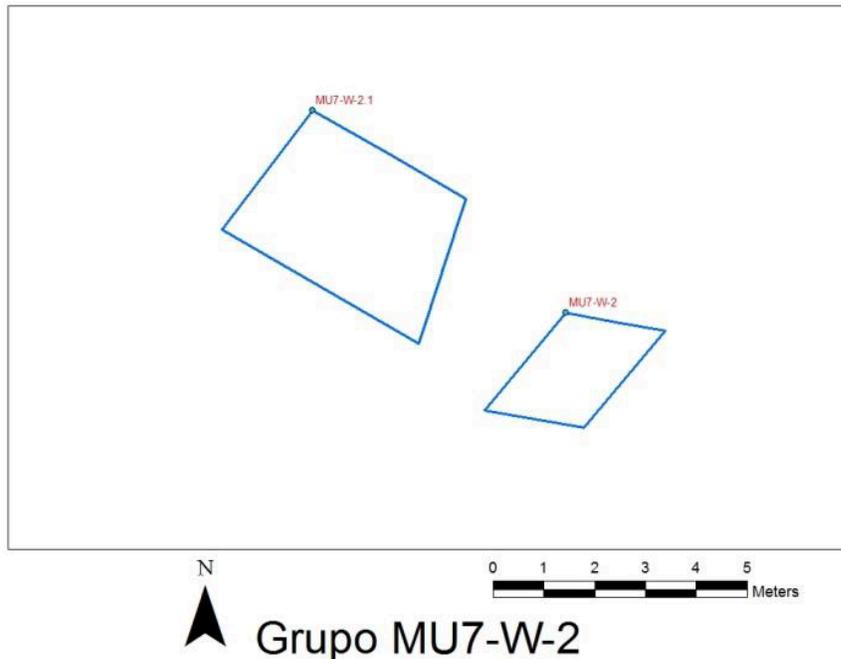
MU7-W-2.1 is two meters east of MU7-W-2 and is a mounded square foundation. It is made of larger rough stones (40-60 cm in size), some shaped and mostly inset.
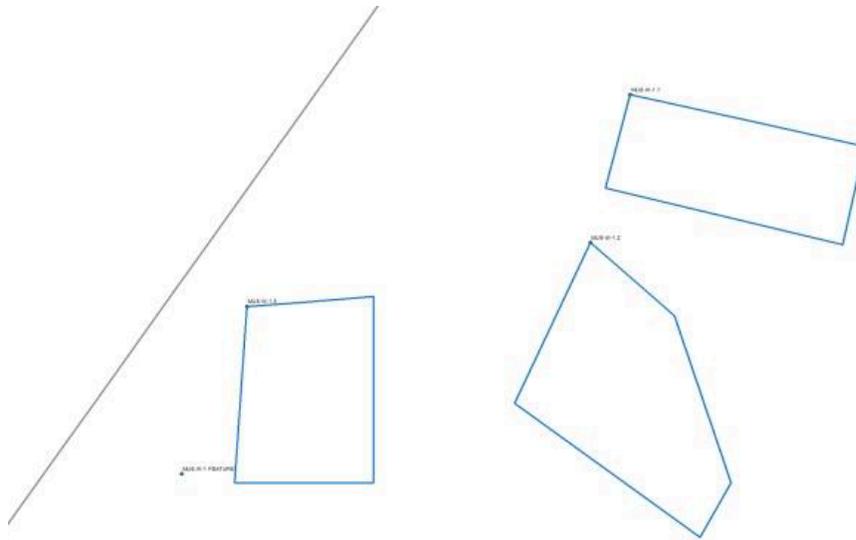
Figura 8.68: Plano de la MU8-W-1.

MU8-W-1 is an interesting group of features located near a large and steep rejollada. MU8-W-1.1 appears to be a mixed bedrock-stone foundation with questionable alignments that appear to fade in with bedrock or large inset boulders. In other areas, there are groupings of stones (40-60 cm in diameter) on the surface. The interior also contains numerous stones of similar size, possibly collapse, which creates the difficulty in identifying clear exterior alignments.

Less than a meter south there is a clear semi-rectangular alignment that runs north and west, forming a clear corner (MU8-W-1.2). The north alignment ends after 2 m, while the west alignment eventually turns the corner south. There is an interior circular feature of collapsed large stones, most 30-50 cm in diameter. The stones in the exterior alignment are 70-90 cm in diameter; some are inset and others appear to be set on the surface.

Within a meter to the west is another alignment of flat inset stones running north-south, and approximately 2.5 m W, parallel of this alignment, is another one with multiple levels and possible collapse (MU8-W-1.3). Between these two alignments are numerous semi-buried stones, which have planar surfaces facing upward. There are less-visible alignments to the north and south.

Southwest of MU8-W-1.3 is a shorter alignment labelled the MU8-W-1 feature. It also seems to be made up of multiple courses of stones or collapse. This feature is within 6-8 meters of the edge of the rejollada.
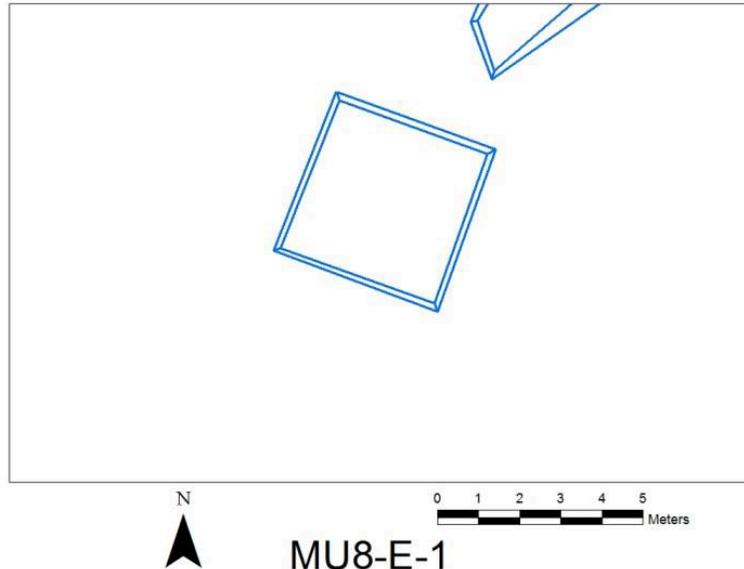
MU8-E-1

MU8-E-1 is a rectangular foundation primarily consisting of large stones, some of which are modified into a more uniform rectangular shape. In the north alignment there is one stone with an additional course (two rectangular shaped stones stacked one on top of the other). Most of the other stones are less intentionally shaped. There are also multiple courses in the south alignment. Most of the foundation stones are 60-80 cm in size. Some collapse, including shaped and faced stones, is visible within the foundation alignments.
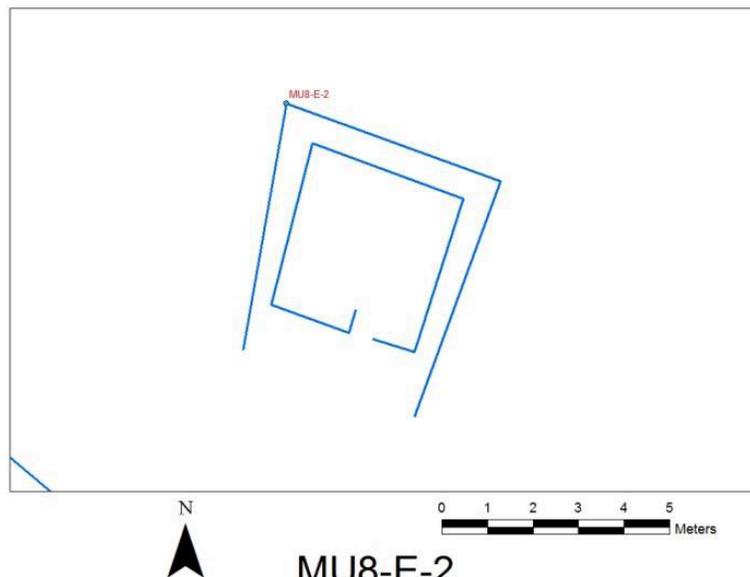

MU8-E-2

MU8-E-2 is a small square foundation with a surrounding brace or wall line. The exterior wall line, which creates a slightly elevated base for the foundation above the hill on which it is built, is made of rougher stones 50-90 cm in size. It is mostly visible along the west and north. The foundation consists of large upright boulders (1-1.5 m in size) with planar faces and stones 70 cm – 1 m filling in the gaps between. There are shaped and roughly cut stones visible in the collapse on the west side. In the southwest there are two levels of stone visible (stones 60-80 cm in size piled on top of larger boulders). There is a significant amount of collapse along the western side of the foundation but not in the east. There is a visible entrance oriented SW in the direction of MU8-E-6, with the south alignment turning north to form an opening. MU8-E-2 is built on a bedrock outcropping approximately 2 m high, with MU8-E-6 and MU8-E-4 to the south and MU8-E-1 to the southwest.
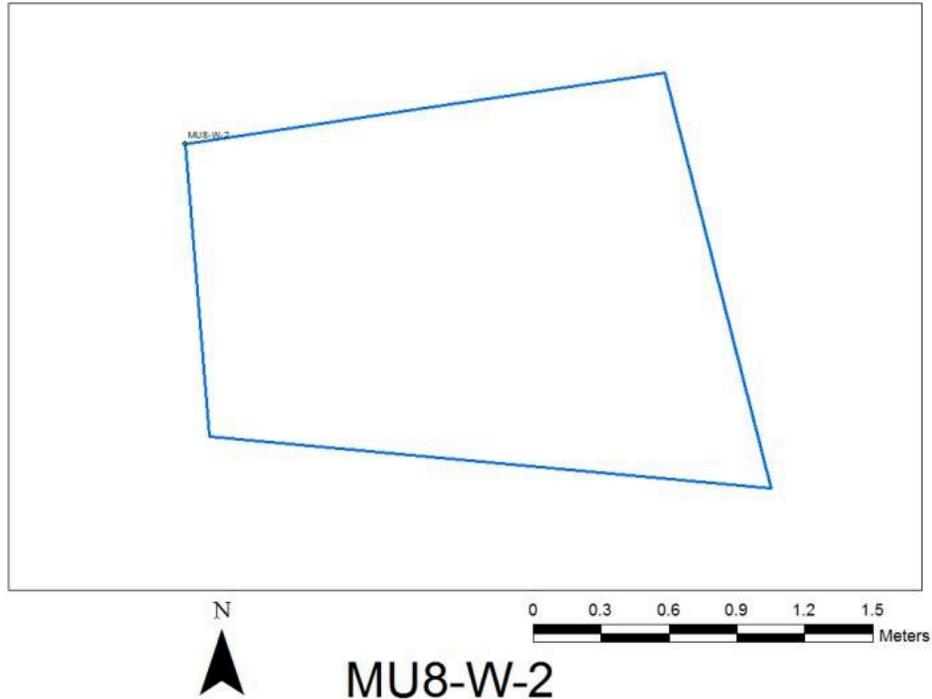
MU8-W-2

MU8-W-2 is mostly shaped out of large (1-2 m) boulders, especially along the east side. There is an interior alignment of smaller stones dividing the exterior foundation. To the north, there is collapse of smaller stones outside the alignment.
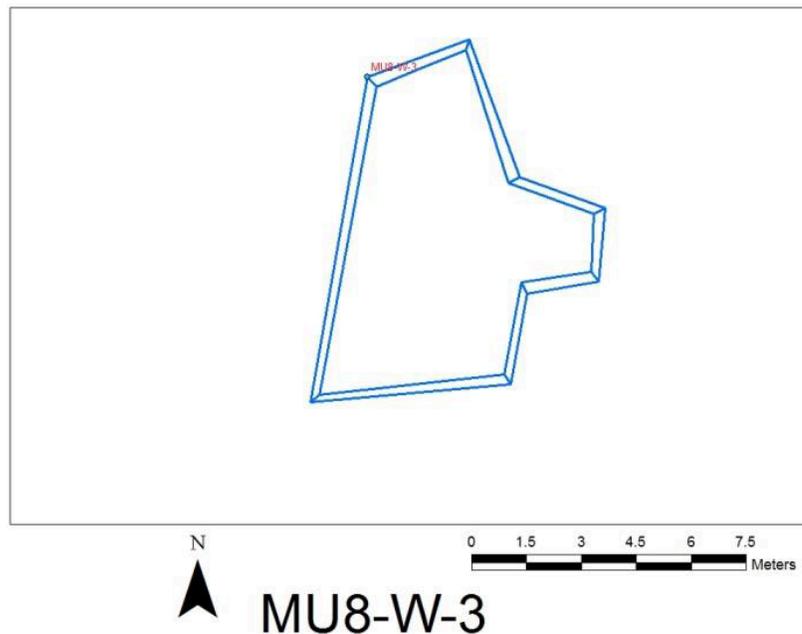

MU8-W-3

MU8-W-3 is a low rubble platform outlined by aligned inset stones 40-60 cm in size. It is rectangular with an additional square protrusion in the southeast. MU8-W-3 consists of a mix of rough and shaped stones. On-mound is a small collapsed area with several shaped stones visible.
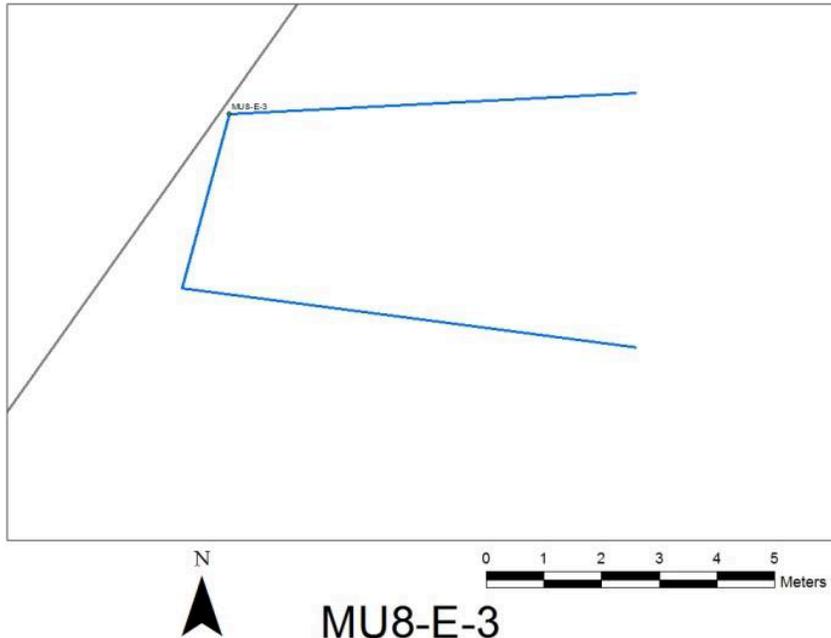
MU8-E-3

MU8-E-3 is a semi-rectangular alignment of stones that is open to the east side facing MU8-E-1. Its exterior alignments consist of stones 80 cm – 1.5 m in size, including a large upright stone with 2 planar faces in the northern alignment. The southeast edge consists of several broken metates. There is a mix of shaped and faced stones with rougher stones. There are some smaller stones in the interior area.
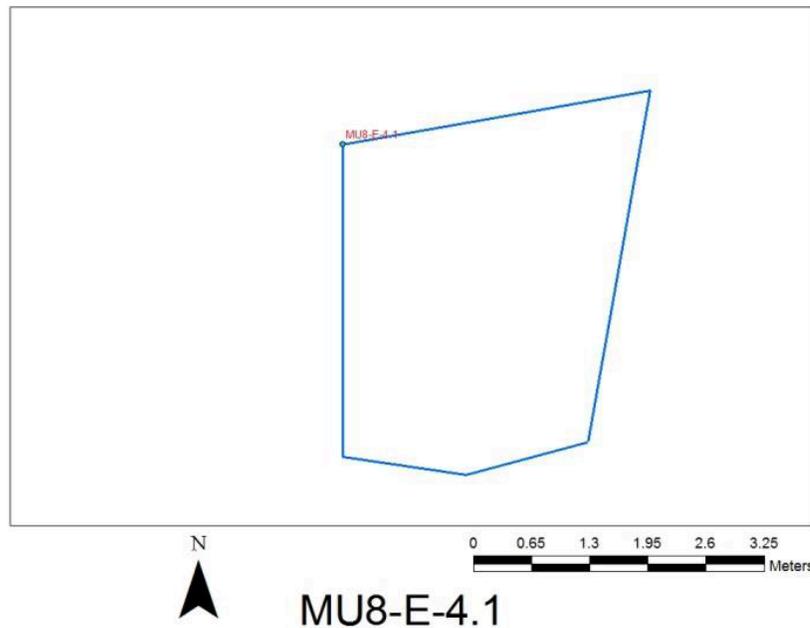
MU8-E-4.1

The MU8-E-4 group consists of three foundations within 2-3 meters of each other in a triangular formation pointing north. MU8-E-4.1 is constructed from a mix of large boulders (80 cm – 1 m in size) and slightly smaller stones (60-80 cm in size). The NE, SE, and SW corners are all marked with large upright boulders, while the east side also consists of large boulders (not placed upright). There is some evidence of additional collapse, including faced stones, uncovered in YPT337A immediately to the east of the foundation.
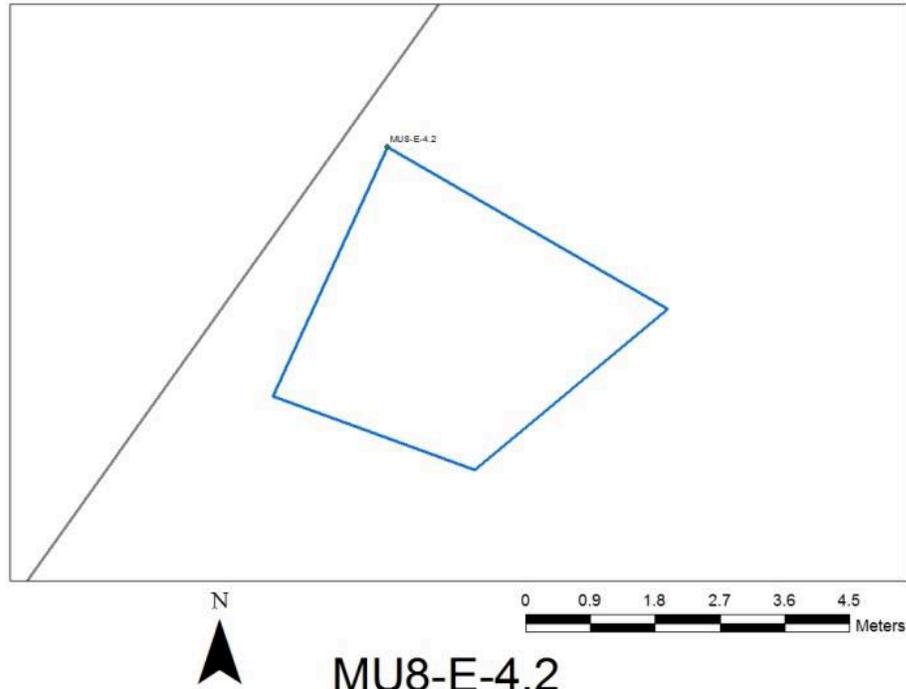
MU8-E-4.2

MU8-E-4.2 is a semi-rectangular foundation 3.5 m east, made up of stones 40-60 cm in size, some shaped. The north alignment contains two large stones, and the western half consists of collapse 20-40 cm in size while the eastern half is covered in rubble.
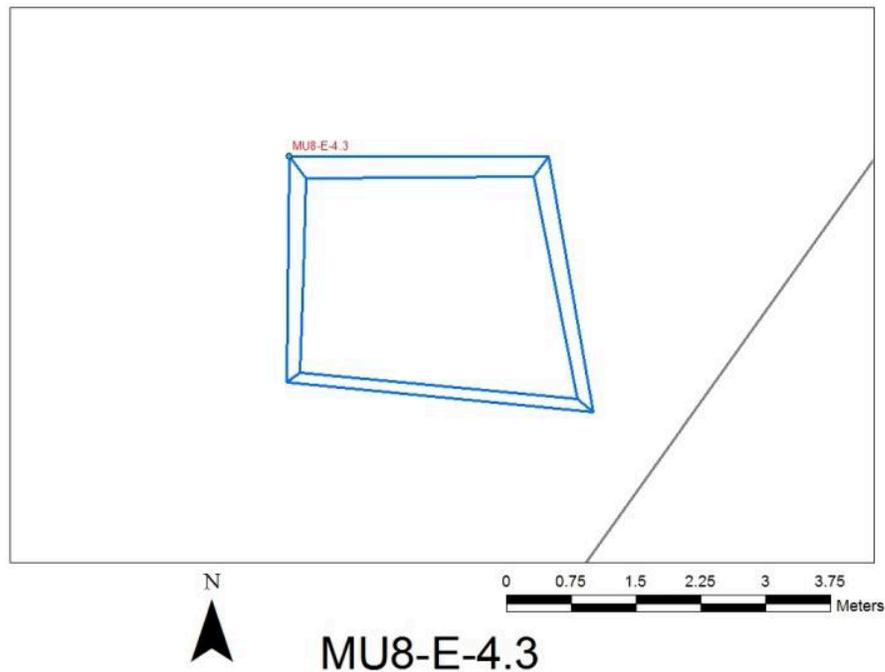

MU8-E-4.3

MU8-E-4.3 is 1.5 meters NE and is set on a slope with higher elevation to the north. The north alignment consists of large upright stones with two planar faces, while the stones in the eastern alignment are 40-60 cm in size and inset. The west alignment consists of several large boulders, while the southern edge is mostly rubble. The interior area is covered in small rubble.
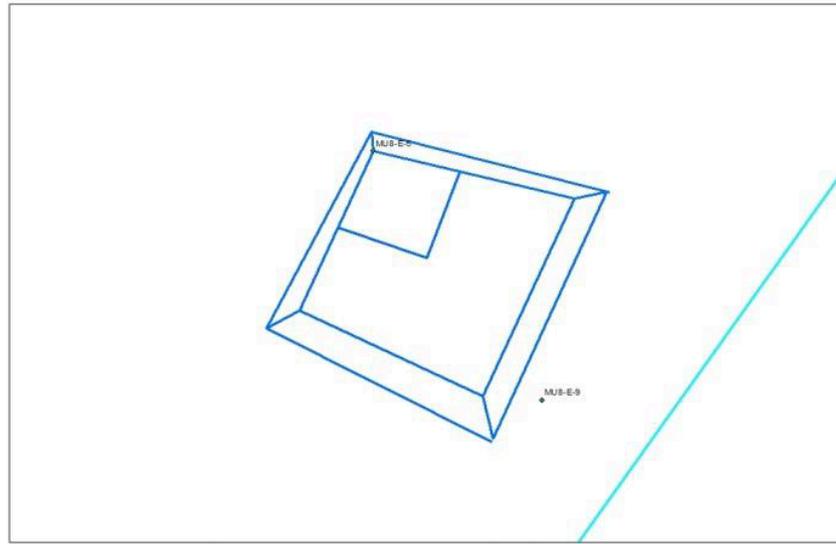
MU8-E-5

MU8-E-5 is a small platform on a natural rise (possibly culturally modified) built onto bedrock outcropping in the south. There is a sharp decrease in elevation in the NE corner, resulting in the slump of the mound and some collapse in that area. The western and northern sides have clearer alignments of stone 40-50 cm in size, while the east edge is not as well-defined and sits on an additional bedrock outcropping. The south end is quite steep because it is built along the edge of the natural rise. MU8-E-5 contains a foundation on the basal platform (MU8-E-5.1).
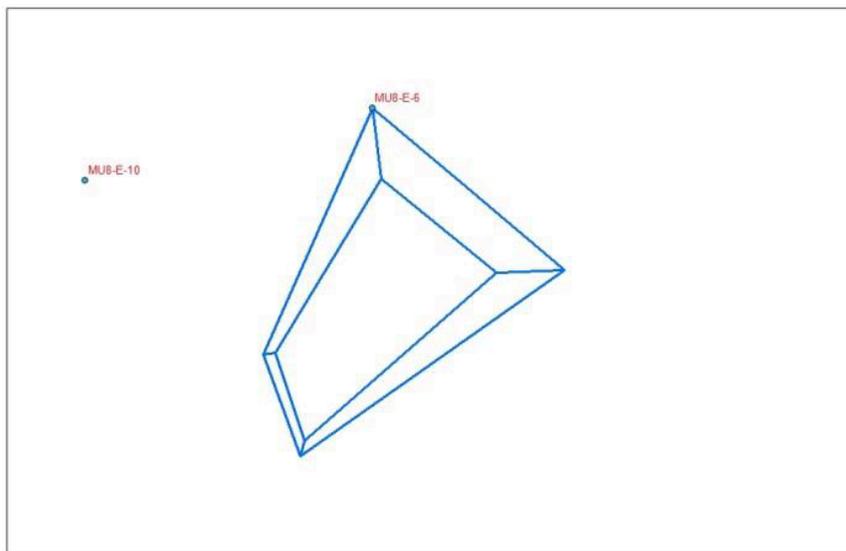
MU8-E-6

MU8-E-6 is a small rubble mound 1 m NE of MU8-E-3. It is located off the bedrock hummock holding MU8-E-2, but is partially built into a slightly lower area of bedrock. The north part of MU8-E-6 is 1 m higher than the south part. It is semi-quadrangular but appears almost triangular in shape, and mostly lacks clear alignments.
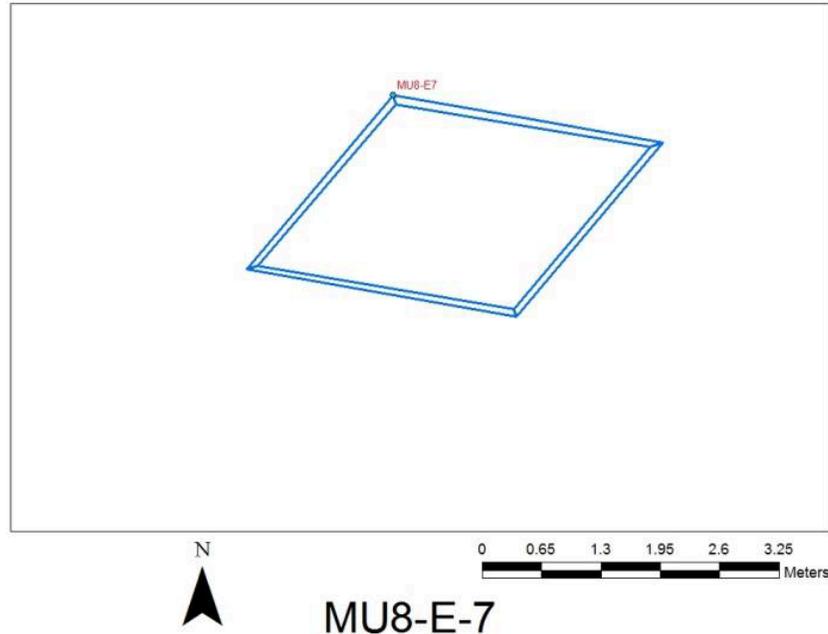
MU8-E-7

MU8-E-7 is a small semi-rectangular foundation mound mostly made of rough stones 30-50 cm in size. There is a teardrop-shaped area of stones 20-30 in size and lined by stones 40-50 cm in size along its western edge to the south of MU8-E-7.
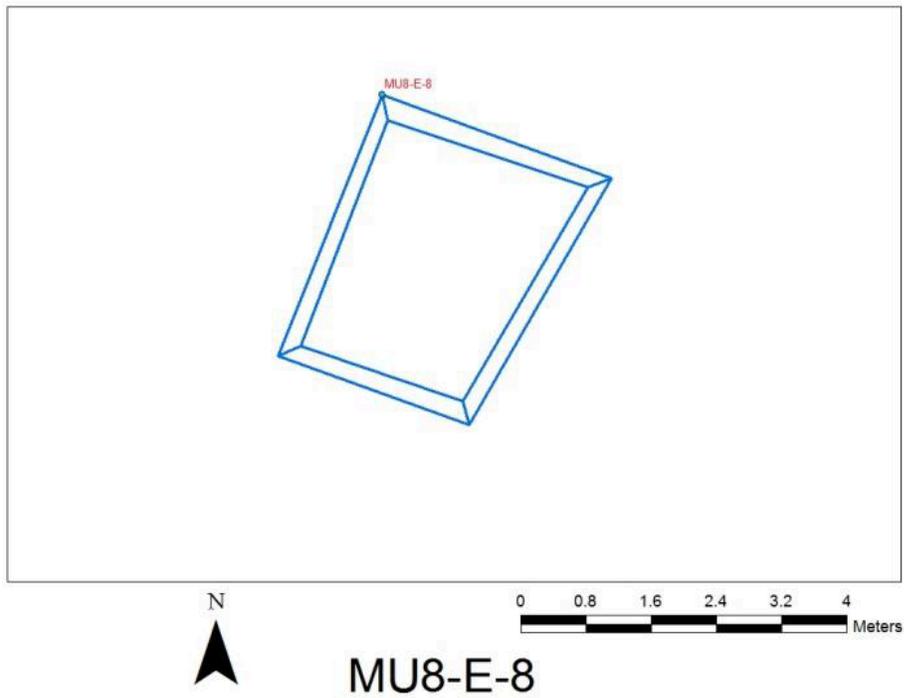
MU8-E-8

MU8-E-8 is a small mound of rubble. It contains an alignment of larger stones with multiple levels along the east. There is 1 large boulder and a few stones 40-50 cm in size to the north. Half a meter north of the mound is a pile of 3 large boulders.
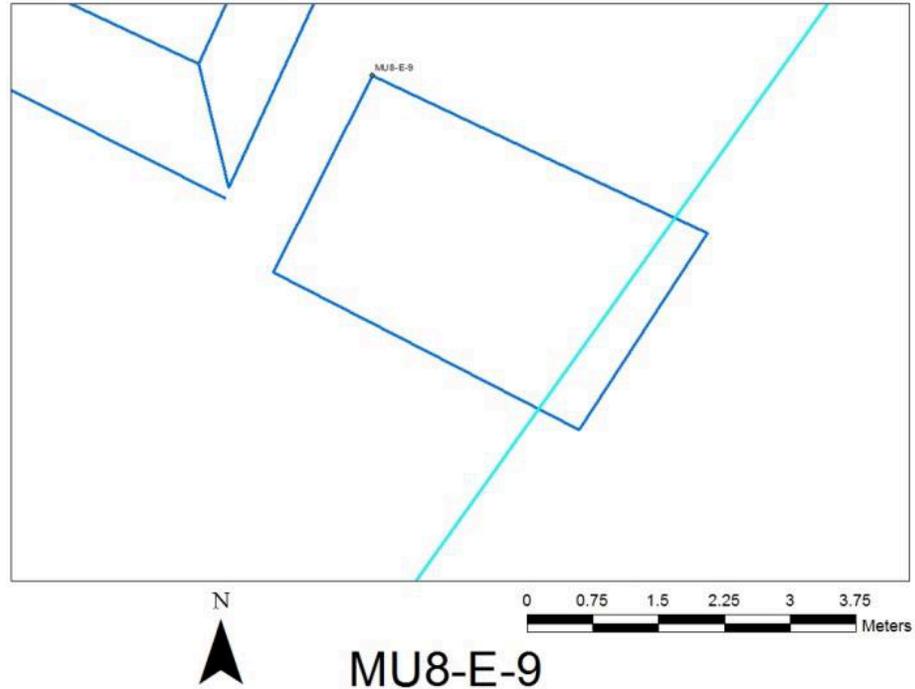
MU8-E-9

MU8-E-9 is a rectangular foundation 1 m east of MU8-E-5. The east and west sides consist of rocks 50-80 cm in size with multiple courses of stone visible. The northern alignment contains several upright stones with 2 planar faces.
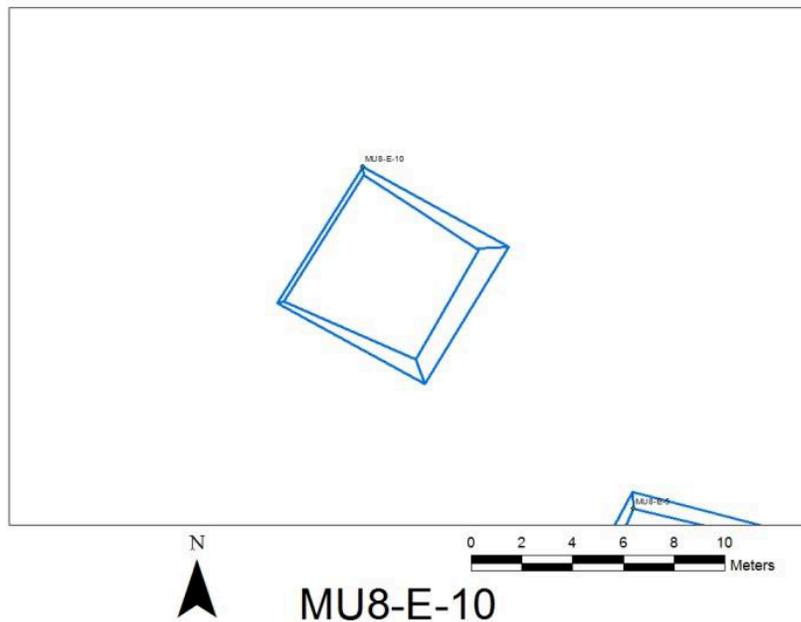
MU8-E-10

MU8-E-10 is 6-8 m west of MU8-E-5 and is located on a slope, with higher elevation in the east. It is a semi-rectangular foundation made of rough stones and several large boulders. There are multiple courses of stone visible in the eastern alignment. East of MU8-E-10 there may have been additional boulders added to the natural rise to create a platform. There are exterior alignments of stone in the south, west, and north, which have formed a small elevated basal platform to hold the foundation.
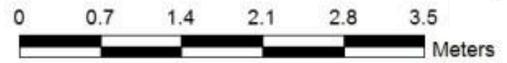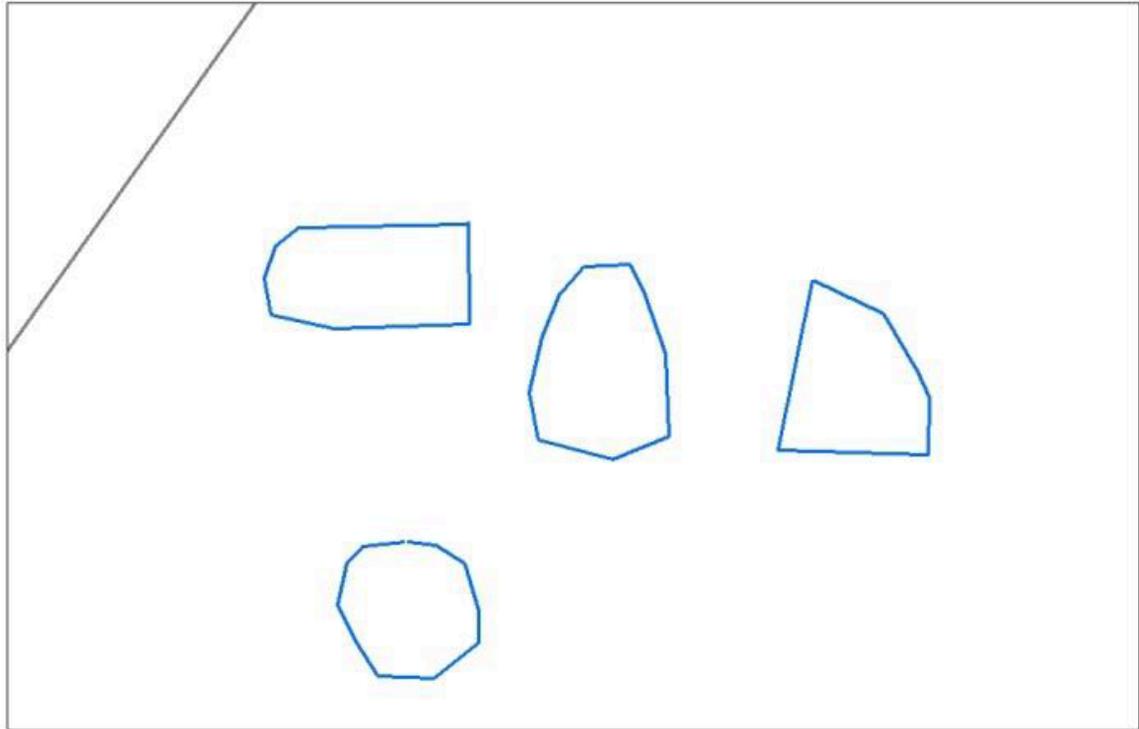
MU8-E-11

MU8-E-11 is a collection of tiny mounded circular alignments east of MU8-E-9.

N05E11-1 is a large rectangular basal platform made from cut, shaped, and rough stones 70 cm – 1 m in size. Several possible superstructure foundations, primarily around the edges of the platform and in the NE and SE corners were noted. The interior platform surface is almost entirely clear of stones.

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