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### UNIVERSITY OF CALIFORNIA, SAN DIEGO

Reconstructing Households: The Excavation of Structure 45 at Lubaantun, Toledo District, Belize

## A Thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts

in

Anthropology

by

### Kiri Louise Hagerman

Committee in charge:

Professor Geoffrey Braswell, Chair Professor Guillermo Algaze Professor Paul Goldstein

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The Thesis of Kiri Louise Hagerman is approved and it is acceptable in quality and form for publication on microfilm and electronically.

Chair

University of California, San Diego

For my mother and father-

Thank you for everything.

Signature Page	iii
Dedication	iv
Table of Contents	v
List of Figures	vii
List of Tables	ix
Acknowledgements	X
Abstract of the Thesis	xi
Introduction	1
Maya Household Archaeology: History and Theory	5
What is a Household?	6
Why Study Households?	8
How do we Investigate Households?	15
Case Studies from the Maya Area	23
Lubaantun and the Excavation of Structure 45	36
Methods	38

The Excavation of Structure 45	40
Cultural Materials	49
Architecture	52
Discussion	56
Conclusion	61
References	87

# LIST OF FIGURES

Figure 1. Map of Belize	68
Figure 2. Norman Hammond's Site Map of Lubaantun	69
Figure 3. Plan View of Units and Structure 45 After Excavation	70
Figure 4. Plan View of Structure 45 with Feature Numbers	71
Figure 5. Profile of the South-facing Wall of Structure 45	72
Figure 6. Profile of the East-facing Wall and the Eastern Stairblock	73
Figure 7. Profile of the Terraces on the Western Slope of Platform 84	74
Figure 8. Profile of the East-facing Wall of the Phase I Superplatform	75
Figure 9. Profile of the North-facing Wall of Structure 45	76
Figure 10. View of Phase I Construction After Excavation	77
Figure 11. Profile of the Test Pits Excavated Inside Structure 45	78
Figure 12. Plan View of Structure 45 After Consolidation	79
Figure 13. Profile of the East-facing Wall and the Stairblock after	
Consolidation	80

Figure 14. Profile of the South-facing Wall and the Stairblock After	
Consolidation	81
Figure 15. Profile of the North-facing Wall and the Stairblock After	
Consolidation	82
Figure 16. Two Fragments of a Louisville Polychrome Cylinder Vase from	
Lubaantun	83
Figure 17. Examples of Ceramic Sherds Typically Found at Lubaantun	84

### LIST OF TABLES

Table 1: List of architectural	features	85	ý
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#### ABSTRACT OF THE THESIS

Reconstructing Households: The Excavation of Structure 45 at Lubaantun, Toledo District, Belize

by

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Master of Arts in Anthropology

University of California, San Diego, 2011

Professor Geoffrey Braswell, Chair

The study of households or domestic groups is of relevance to the study of human cultures around the world as they are ideal locations for studying a complex range of behaviors across all socioeconomic strata. The exploration of households in archaeological contexts reveals valuable information about the nuanced functioning of society that is not always apparent from the excavation of monumental and public architecture. The following thesis presents a discussion of household archaeology in the Maya area, and the results from the TRIP excavation of Structure 45—a low, Late/Terminal Classic residential platform—at the site of Lubaantun, Belize. Extensive vertical and horizontal excavation was employed in order to explore the building, occupation, and use history of this structure. Excavation revealed that Structure 45 was an elite residential platform composed of four major phases of construction, and in antiquity most likely supported a perishable superstructure. Ceramic and lithic evidence suggest that it was the locus of food consumption activities but few activities related to food preparation or storage.

#### Introduction

During the last several decades in the field of Mesoamerican archaeology, interest has been growing in the discipline of household archaeology, particularly in the Maya region. The concept of the household or domestic group is of universal relevance to the study of human cultures around the world and its importance is continually gaining recognition by archaeologists. The physical remains of ancient households are ideal locations for studying a complex range of private and social behaviors including but not limited to production, consumption, social identity and reproduction, gender divisions, organization of labor, status, and so on. In addition to being able to study a range of different behaviors, household archaeology also facilitates a comprehensive analysis of society across all socioeconomic strata.

In this thesis I will present a discussion of household archaeology in the Maya area, and the data and conclusions drawn from a field season of excavation at the site of Lubaantun. Excavation focused on a low structure— Structure 45—near the ceremonial core of the site, the purpose of which was to determine the function, and occupation and use-histories of the structure, as well as how it articulated with the other nearby structures on the platform and the rest of the site. I will argue that the architectural and material cultural evidence recovered from this excavation support the conclusion that the excavated structure was a Terminal Classic elite residence that was engaged in few

suprahousehold production-related activities but instead was the locus of consumption activities. Examples and case studies of previous household archaeological projects in the Maya area will be included for the dual purpose of demonstrating the significance of household archaeology to Maya studies and also to support my own conclusions on the excavated structure.

The excavation of Structure 45 at Lubaantun in the spring and summer field season of 2010 was part of the ongoing Toledo Regional Interaction Project (TRIP) that is concerned with understanding the nature of the sociopolitical organization, political economy, and inter-site interaction in the Toledo region of Belize. Little is known about what form exactly these interactions took or the level of sociopolitical integration among sites. Similarly little is known about the particular social organization and lifeways of the inhabitants of these individual sites—Lubaantun being one of them. Although Lubaantun has been a location of archaeological exploration for the last century, only in the past fifty years has archaeological investigation at this site been conducted with the goal of exploring questions about its sociopolitical organization, construction and occupation history, and its place in a network of regional and even interregional interactions.

During this most recent TRIP field season, a team of four archaeologists from the University of California, San Diego led by Professor Geoffrey Braswell, excavated at the Late to Terminal Classic Maya sites of Lubaantun and Nim li Punit in the southern Toledo district of Belize (Figure 1). The project was concerned with excavating and consolidating two previously unexplored structures within the site core: Structures 34 and 45. Structure 34 is located within the ceremonial core of Plaza IV, while Structure 45 is located to the northeast just outside of the ceremonial core and is the structure that will be focused on in this paper. Previous survey and excavation of Lubaantun was conducted by Norman Hammond (1975), who on the site maps accompanying his publication identifies Structure 45 as a ballcourt. Our excavation of this structure revealed—to our surprise—that it was not, in fact, a small ballcourt but rather an elite residential structure.

The site of Lubaantun is an ideal candidate for exploration using household archaeology for a number of reasons. First, as I will cover in more detail later, Lubaantun has been the subject of a number of archaeological investigations that have focused on the monumental constructions in the core of the site and left the more peripheral structures virtually untouched. Household archaeology, therefore, is an ideal and necessary approach to forming a comprehensive view of the ancient site. Second, a ceramic chronology and a tentative building chronology have already been developed for the site by Norman Hammond (1975), which facilitates the relative dating of any excavated structure. Third, the available information on Lubaantun reveals that there were major discrepancies between this site and many others in the Maya region in areas such as architecture and mortuary treatment. Household archaeology is an optimal method for exploring these differences on a more microscopic level, thereby answering questions related to daily practice that are difficult or impossible to answer by excavating exclusively monumental and civic architecture. The use of household archaeology, therefore, is critical not only to investigating the history and function of particular structures, but also to understanding the site of Lubaantun as a whole.

In order to provide background for the discussion of the excavation and history of Structure 45, I will divide this thesis into sections designed to explore various topics relevant to the pursuit of household archaeology. The first section covers the theory and frameworks that have developed concerning household archaeology. The second section provides a series of case studies that highlight various aspects of Maya household archaeology, which will provide a backdrop against which the discussion of the excavation of Structure 45 will take place. The final section covers the excavation of Structure 45 and my interpretations of it. The result is a better understanding of Maya household archaeology in general, but specifically what it is able to tell us about the ancient occupants of this structure and Lubaantun.

#### Maya Household Archaeology: History and Theory

Fundamental to the study of any ancient society is the field of household archaeology. Household units are important loci of a spectrum of human activities and interactions worldwide, many of which leave residue that can be studied through archaeology. In recognition of the crucial importance of households to archaeological study, the field of household archaeology has arisen in recent decades to take advantage of the wealth of data household units can provide. Where we were once concerned with exclusively monumental constructions and precious artifacts as a discipline, we now are continuing the progression of recognizing alternate modes of inquiry. Even within the subfield of household archaeology, recent decades have witnessed a similar expansion in area of focus. Not only palaces and elite residences are excavated, but also the humblest dwellings and lived-in areas are paid equal attention, as they are now recognized to be key sources of information on the activities and materials associated with the ancient cultures archaeologists study. The information we obtain from household architecture and artifact assemblages speaks to a number of different areas of interest, such as economic production, consumption, social reproduction and identity, differences in status, among others. All of these topics are critical to the functioning of a society and must be explored in order for us to truly understand the societies with which we work.

Wilk and Rathje (1982) argue that the household is not an archaeological find but an anthropological concept. "Archaeologists do not excavate households; they find the material remains of dwellings. The household itself is a unit of economic and social cooperation that does not necessarily live under a single roof, though it often does" (Wilk and Rathje 1982: 620-621). In this definition their purpose is to make clear the difference between the social relationships and activities from the building where they took place, as the term household has frequently been used in the literature to refer to both phenomena. Ashmore and Wilk (1988: 6) later define the household as "a social unit, specifically the group of people that shares in a maximum definable number of activities, including one or more of the following: production, consumption, pooling of resources, reproduction, coresidence, and shared ownership." Ashmore and Wilk's treatment of a household is refreshingly inclusive, since they allow for a wide range of variation, recognizing that not all households will appear the same, nor include the exact same number and types of functions. These vast differences can be found within the same society, and commonly even within the same socioeconomic stratum. The way people form relationships with one another is always individual and subject to change. While these variations make household archaeology problematical, for these reasons it is all the more important to study and understand them.

Even before households were recognized as an important area of focus in the archaeological record, their basic presence and importance were an undisputed social fact of both ancient and modern cultures alike. Familial units of nuclear or extended, and real or fictive kinship have been the building blocks of society for millennia, encompassing a range of important social, reproductive, and economic functions. Although size, shape, and composition are variable from culture to culture and across time, certain aspects are unchanging. "[The] world has the potential to bring innovation into dwelling spaces but the dwelling spaces also provide the security through which we learn to negotiate acceptable relationships with these new ideas, and to formulate and test our own" (Allison 1999b: 1). Given that their importance was acknowledged for so long, it is a wonder that household archaeology did not completely get off the ground until the 1980s.

Not only was the social importance of households agreed upon, but their physical presence was undeniable. Early archaeologists around the world took notice of the expansive, sprawling areas littered with the remains of ancient houses, yet their eyes and trowels were drawn to the more glamorous palaces and temples. For the most part, house mounds went unexcavated. If dealt with at all they were usually used for their role in estimating the socio-economic complexity of a given site or region (Allison 1999b: 1). Settlement surveys arose after the recognition that house mounds could be counted and a population estimate calculated based on density multiplied by a standard constant of people

per household. This method, however, is only useful in comparative studies, and for more specific knowledge of the households themselves, a more exploratory approach is required.

#### Why Study Households?

Given all the extant definitions for processes and functions that combine to create a household it is not surprising that Wilk and Rathje (1982) would argue that one is not able to excavate them. As archaeologists, all that is left to us are the physical remains of infinitely more complex and varied social practices. Excavation of a dwelling or a series of dwelling units and their associated structures, middens, and activity areas gives us clues as to the lives of the people who resided there and what activities they were occupied with on a daily basis. No amount of cultural materials can provide a complete picture of something as complex as human interaction. Nevertheless, the goals of household archaeology are to understand the organization and functioning of these social and physical units as best we can through the archaeological record. By understanding these aspects of household units we gain knowledge that is useful to the study of society as a whole, and the other social orders and practices in which household units participate but do not exclusively constitute.

The study of households is not only important to society-specific research but also to improving archaeological theory in general. Wilk and Rathje (1982) argue that further development of household archaeology and the

creation of associated models will serve to bridge the mid-level theory gap in archaeology. Since its inception, archaeology has suffered from a disconnect between the lines of evidence we encounter on the ground and the higher theories that comprise our models and theoretical frameworks. Raab and Goodyear (1984) discuss the differences between higher-order theoretical frameworks and the common lower-order empirical studies, which include most archaeological investigations. Lacking theories and models that could connect these two ends of the spectrum, the field of archaeology suffered from unsatisfactory interpretations that either added little to the corpus of knowledge or failed to connect data to relevant issues. Household archaeology, therefore, serves in some part to mend this gap by providing models that interpret archaeological data at a smaller and more local level, and the sum product of which can be integrated into higher-order frameworks of social functioning and change. The mid-range theory gap, however, is present in household archaeology too, and further attention must be paid to this lacuna if theory in this field is to progress.

Household archaeology has been gradually recognized as being of key importance in studying ancient societies because in theory it is able to provide a more comprehensive view of society; that is, household archaeology is able to study a wider range of behaviors than other sources that are available to archaeologists. Since the decipherment of the Maya writing system, some have tried using texts in order to study various aspects of ancient Maya society.

Although epigraphic texts do yield important information on some topics such as ritual and political events, as well as rulers and their actions, they virtually ignore the majority of the population. Textual material emphasizes elites while archaeological evidence allows the study of a greater percentage of the population (Allison 1999b). Although evidence for the lower strata of society can be difficult to locate in certain environments, the importance of doing so using combined survey and excavation is critical to a fully-developed understanding of society formation and functioning. While textual evidence is often biased in favor of elites, household archaeology in essence is not, and therefore is a powerful tool available to archaeologists.

Similarly, ethnohistory has been important to archaeologists working in the Maya area for almost a hundred years, however many ethnohistoric sources also focus mainly on a small portion of the population and many archaeologists still feel uncomfortable using ethnohistorical information alongside their archaeological data (Marcus 1983). For these reasons, the only way to get a truly comprehensive picture of ancient Maya life and society is to focus on what our archaeological data tells us, and augment this data when appropriate, with epigraphic and ethnohistoric information. In theory, due to its ability to explore the full range of socioeconomic strata, household archaeology should be one of the archaeologist's most important modes of inquiry.

Household archaeology is capable of providing much information about the past, but not all questions that archaeologists and anthropologists are

interested in asking can be answered with the data at hand. We must tailor our research design, therefore, to topics and questions that are answerable given the state of the archaeological record in which we work. '[The] investigation of household activities, their spatial distribution and their changing temporal patterns are appropriate levels of inquiry for the nature of the archaeological record" (Allison 1999b: 6).

One of the most important activities that are concentrated at the household level is consumption of various foods and goods. Our interest in economic production, however, has a tendency to obscure the equally important acts of consumption that are easy to miss due to preservation biases in the archaeological record. Yet the archaeological record cannot bear the full responsibility; the past actions of humans are even more destructive to the evidence we as archaeologists hope to encounter. Periodic cleaning of the home and activity areas and secondary deposition of refuse in harder to locate areas makes the study of consumption difficult to pursue.

Typically, the most important areas of study in relation to household units are food production and consumption as households were the most frequent loci of food preparation, storage, and consumption. Patterns in these activities shift due to a number of important factors, therefore, these activities cannot be assumed to have taken place in the same locations and the same ways across time and different areas. Even within a site, household activities related to food might be very different based on status, household size, and the types of food being used. These topics can be studied through the archaeological record in a number of different ways. Middens contain not only the food refuse from households such as plant remains (seeds, pits, etc.) and animals bones, but also the artifacts that would have been used to prepare and serve the food such as groundstones, lithic cutting tools, and ceramic vessels used for preparation, presentation, and storage (Hayden and Cannon 1983, Lentz 1991). The quality and quantity of these markers of food treatment vary from household to household and site to site, and are especially dependent not only on social practice but also patterns of deposition and preservation.

Many studies have been done in the Maya area that have demonstrated a relationship between socioeconomic status and food practices. Studies utilizing human skeletal analysis (including both paleopathology and isotopic studies) have shown that different groups of the population had differential access to certain foods, providing better nutrition for an elite segment of the population that is reflected in the general health and stature of the skeletons (Haviland 1967, Cucina and Tiesler 2003). Similarly, patterns of preparation and consumption vary according to status. There is evidence that certain residences in larger household units were responsible for a disproportionate amount of food preparation while in other structures in the same group there is little to no evidence of preparation. Inversely, some structures appear to have been the primary locus of consumption. To add further confusion to this already complex topic, in some cases there is evidence that food preparation did not

occur in residential structures at all but rather took place in ancillary structures both on and off the residential platform (see Hendon 2009). Nevertheless, activities related to food are the most fundamental occupations of humans, and evidence for them are frequently located in and around residential structures, both those that are attached to larger household units and those that stand alone.

In addition to activities related to production and consumption, gender is also frequently studied at the household level. In fact, households have traditionally been perceived to be the arenas that yield the best evidence of gendered division of labor because—correctly or incorrectly—the home has traditionally been viewed by western scholars as the woman's domain, and women were assumed to be all but invisible anywhere else in the archaeological record. Clearly this view is heavily influenced by the traditional gender lines drawn in Western society, but nevertheless the focus of gender archaeology on the household is pronounced. Conkey and Gero (1997) state that increasing interest in gender archaeology has led to the discovery of women in a number of different crafts outside of the home that were previously thought to be exclusively male. While this expansion in scope of inquiry and evidence is laudable, the fact remains that women are still predominantly associated with domestic activities and crafts that would have physically taken place within or near the household such as ceramic and textile production, food preparation, and certain domestic ritual activities (Conkey and Spector 1984). The household, therefore, can be a valuable source of information and artifacts pertaining to

women and their activities, although we must be cautious about assigning gender to objects and activities without sufficient evidence. Unfortunately this has sometimes been taken to the point of the exclusion of men from consideration in the area of households. Clearly men and women were equally active and important agents in the household, and should be studied accordingly with the vast body of data amassed on households and settlements. While important, gender archaeology is only one approach of many directed towards repeopling the past. A number of other approaches also contribute to this exploration of ancient households and the individuals who inhabited them, mortuary archaeology being one of the most important.

Generally speaking, household units and residences are the ideal areas in which to study burials and mortuary remains in many areas of the world, but particularly in the Maya area do we find extensive evidence of interments under residence floors and under household plazas (Ardren 2002a, Hendon 2009). Mortuary evidence is an excellent source of data on ancient individuals and society. Generally it can be divided into two categories, each with their own strengths: architecture and cultural materials, and skeletal remains. Mortuary architecture and associated offerings or other cultural materials are relevant to most of the topics that archaeologists are interested in pursuing, such as wealth and status, social organization and stratification, political economy, craft production, gender, identity, and so on. Skeletal remains can also contribute to these topics, as well as questions about diet, nutrition, and demography.

In order to study households, we must be able to correctly identify them in the archaeological record. Many structures and built areas in Maya settlements were not domestic in nature, and yet there are parallels between the artifact assemblages found in these types of architecture and residential structures. This had led some archaeologists to propose a set of criteria that can be used to identify household units based on their architectural and artifactual attributes. Fernández identifies some commonly expected traits of residences and households in the Maya area, which are roofed areas, manos and metates, benches, domestic ceramics, storages areas or containers, burials, evidence of water storage or containers for carrying water, and evidence of food, among others (Fernández 2010, see also Brown and Sheets 2000). Ideally all these indicators would be present, but in most situations they are not, having been cleared away under various circumstances. Identification of household units, therefore, can be complicated and in some cases impossible to prove with available evidence. Ashmore and Wilk's (1988) definition of households that was discussed earlier is relevant again here in order to emphasize the possible differences that archaeologists might find between households. The criteria discussed by Fernández (2010) are excellent examples of what may be contained in a household assemblage, but we must allow for the possibility that few or none of them may be present in certain contexts. Regional and sitespecific cultural traditions as well as location could easily influence patterns in

some of these domestic markers—benches and water storage vessels, to name a few—while patterns of deposition, which shall be discussed below, also play a role in the artifact assemblage found by archaeologists.

As interest in household archaeology grew, it became apparent that there was a need for a better understanding of how the archaeological assemblages we are left to find have formed as a result of both the human and natural environments. As processual archaeology was developed and gained supporters in the 1960s, scholars took an interest in house-floor assemblages and what they thought they could reveal about the socioeconomic and demographic characteristics of ancient populations (LaMotta and Schiffer 1999). Variability in these assemblages was viewed as a simple indication of different practices that took place in structures. Yet since the 1970s a more focused effort has been made to identify additional factors and processes that contribute to the formation and variability in house-floor assemblages. LaMotta and Schiffer (1999) have synthesized data from a number of different studies in an attempt to create a model that encompasses the full life of a structure, including the events that are a part of the habitation and use, abandonment, and post-abandonment phases of a structure. All of these processes can be easily divided into two general categories: processes of accretion that "result in the deposition of objects within a domestic structure, and depletion processes [that] either (a) remove objects from archaeological deposits within a house or (b) prevent

objects once used within the domestic structure from being deposited at their location of use" (LaMotta and Schiffer 1999: 20).

Deposition of artifacts occurs in two distinct stages: primary and secondary deposition. Primary deposition is the initial deposition of artifacts in the archaeological record in their area of use by either being intentionally discarded or lost (LaMotta and Schiffer 1999: 21). Secondary deposition involves the cleaning up of activity areas and the primary deposition of objects found in them, and the subsequent re-deposition of these objects in middens, fill, tofts, and other areas of discard (LaMotta and Schiffer 1999, Hayden and Cannon 1983). In an ethnographic study of 79 culture groups, Murray (1980) discovered that in all these societies the areas of activity around the household were periodically cleared and cleaned, which has important ramifications for the study of house-floor assemblages. Murray's findings are not surprising (as this is behavior we ourselves regularly practice), but they are unfortunate since we are painfully aware of how much information we lose due to such practices. Clean floors, although safe for residents, are barren of information to archaeologists. Associated middens are therefore important loci of artifact deposition and sources of information on household practices.

Primary and secondary deposition occurs during occupation of a structure, but there are additional processes related to the development of artifact assemblages that occur closer to or during the abandonment of the structure. *De facto* artifact deposition and curation behavior both affect the

formation of the artifact assemblage, although the former is a process of accretion while the latter depletion (LaMotta and Schiffer 1999). De facto deposition involves abandoning all objects (even those that are still usable) within a structure or its immediate surrounding area, and curation behavior is the transference of certain objects to the new settlement, structure, or area of activity. Objects that are curated typically are believed to have been small and easily transportable, extremely valuable, or difficult to reproduce or reacquire. Theoretically it should be quite simple to determine which of these processes took place by studying the artifact assemblage. An assemblage comprised of exclusively broken and unusable tools and objects was probably leftover from curation, whereas if a good amount of valuable or usable objects are found, then it could be an example of de facto deposition. Obviously *de facto* assemblages are ideal, but rare. Fequently even assemblages that have been reduced by curation behavior will still yield enough information to deduce what types of activities occurred in that structure and whether it was a residence, an ancillary storage or cooking house, or perhaps a non-residential ritual structure. Due to the higher frequency of locating artifact assemblages in or around architecture, archaeologists frequently concentrate on built areas, and households are typically excellent places to begin.

Excavating architecture is an important method of inquiry into the lives of ancient people. Architectural assessment is often used to collect information on ethnicity, wealth, and status, among other things. Ethnicity is reflected in the

archaeological record in a number of ways including architecture, cultural materials such as ceramics, and mortuary evidence, all of which are commonly found in the household setting. Noticeable differences in these markers when compared to surrounding residential groups and sites in the region may lead archaeologists to interpret them as an ethnic enclave or at least of different ethnic origin (Becker 2009, Smyth 2009). Additionally, spatial patterning of architecture can reveal either adherence to or deviance from cultural norms, which can also reveal information about the ethnicity of at least the initial builders and perhaps later residents as well.

Architecture is often used as a gauge of wealth and power in that it reflects how much labor and resources an individual or family can command. The working assumption is that people of higher status and socioeconomic position will be able to muster enough labor to build more impressive residences than is normally possible. Architecture is a very prominent and commonly utilized way of displaying wealth and prestige, and for these reasons architecture can be a very good indicator of the social status of the residents. This ties into what Carmean (1991) argues for the construction history of Sayil in the Yucatan. She hypothesizes that larger and more elaborate residences actually belonged to "first-founder" families who were the first settlers in an area and were able to control the land and its productive resources, thereby amassing wealth for themselves over generations. The size of a structure, therefore, may not be due only to the wealth of a family, but also the length of time the structure was occupied, as size also reflects the wealth and architectural additions over an extended length of time.

Allison (1999b) cautions, however, that the investigation of architecture reveals general concepts of spatial patterning, but may reveal less than we think about the individuals who lived there. We cannot assume that the residents of a structure or household unit were the people responsible for building and furnishing it. Frequently residential groups were built by an ancestor, but occupied for many generations afterwards. Architecture can also be reoccupied after abandonment; therefore the burials and cultural materials we find may not all belong to the original occupying lineage. This information is still important to interpreting past human activities and the occupation and use history of the structure, but can severely complicate the overall picture.

An additional word of caution must be given regarding the use of residential architecture in interpreting ancient society. A single residence or household compound should not be assumed to represent society as a whole. A vast range of differences and variation exist within sites—let alone regions that make it impossible to generalize from a single example. In response to previous work that had been done on what were supposedly rural commoners, (see the discussion of Webster and Gonlin 1988 in the following section), Marcus (2004) draws attention to an area where our sampling bias may negatively skew our perception of ancient reality. She writes that "although some Mayanists assume they are working on commoners when they dig low

house mounds, even this strategy may not bring to light the humblest forms of architecture: simple wattle-and-daub houses with thatched roofs, built directly on the soil" (2004: 262). She raises an excellent point in that in our archaeological investigations we may unwittingly be ignoring a large portion of the population who have left much less easily identified traces than stone architecture. If we are to make household archaeology a comprehensive and inclusive study of ancient household units, then we must make a concerted effort to represent all socioeconomic groups in our research. Lohse and Valdez (2004) have taken a large step in this direction with their edited volume on Maya commoners, but there is still much work to be done. Unfortunately, the sampling bias exists for reasons that are hard to combat. In many regions in the Maya area, structures that are not built in stone will not survive for a century, let alone millennia. Residences built of wattle-and-daub, adobe, or wood will decompose in the moist environments of Belize and Guatemala long before they are found by archaeologists. Additionally, household artifact assemblages are difficult to locate if there is no architectural indication that is easily visible to archaeologists on the surface. Finding areas affected by this type of settlement, therefore, becomes highly problematic, and it is likely that the vast majority of the ancient Maya remain invisible to archaeologists. Nevertheless, as household archaeology progresses, our focus should be on improving methodologies that will remedy these current lacunae in our research.

Clearly, the study of ancient household units and domestic spaces is an extremely complex pursuit given the many ways household units are both formed and later explored. What is equally clear, however, is the absolute need for the field of household archaeology as it provides a unique perspective on many facets of ancient individuals and society. A multitude of different indicators can be used to explore ancient household units archaeologically, including architectural excavation and analysis, material culture remains, and mortuary analysis. All of these complementary approaches provide a comprehensive view of the functioning of ancient household units and all the social and productive practices they include. The following section highlights a few archaeological projects in the Maya area that have put these theories to practice and have utilized household archaeology as an investigative technique.

#### **Case Studies from the Maya Area**

The following projects were conducted in the Maya area and all demonstrate different approaches to the study of various questions regarding household archaeology. They provide excellent examples of the types of questions that can be asked of household archaeological data, and the corresponding answers that researchers arrive at. I will begin with one of the oldest studies in the Maya region that paid careful attention to household units, and paved the way for future researchers.

In their project in the Belize Valley, Willey, Bullard, Glass, and Gifford (1965) combined a variety of techniques in order to explore the land use, subsistence patterns, population densities, and social organization of the Preclassic and Classic population in the area. Willey et al. stress the importance of using a variety of approaches in attempting to investigate such a disparate range of questions, and accordingly used regional and site surveys coupled with extensive horizontal and vertical excavations of structures in pursuit of them. Their analysis of artifacts is also extensive, and while they do propose tentative historical scenarios based on their data, they are appropriately cautious in their attempts at filling in the historical record.

The main questions that Willey et al. (1965) explore through their study are as follows: how the ancient Maya in the Belize Valley related to their natural environment, what the nature and functions of their structures were,

what form communities took, and how they related and compared to one another in terms of size, spacing, and form. All of these questions tied into the overarching goal of understanding ancient Maya sociopolitical organization. In pursuit of these problems, Willey et al. undertook a massive investigation of the Belize Valley in the area around Barton Ramie, including limited exploration of nearby sites such as Baking Pot and Spanish Lookout. Their survey was designed to locate and identify different structures in the area (focusing on domestic and ritual structures) for the dual purpose of mapping and finding suitable areas for excavation (Willey et al. 1965: 15). Many of the mounds they excavated were residences, and so much of their evidence is domestic. Their excavation of house mounds was conducted chiefly for the purpose of establishing a local ceramic chronology through stratigraphic analysis, but also for identifying the function of the underlying structures, understanding the building phases, and recovering burials and all associated artifacts.

Thus, Willey and his colleagues are able to make some broad general claims about material culture and population dynamics in Barton Ramie and the surrounding area in the Belize Valley. The valley was settled in the Middle Preclassic by people who were familiar with the general Mesoamerican traditions of pottery, residential construction types, stone-grinding, and a maizeheavy subsistence pattern (Willey et al 1965: 569). Willey et al. suggest that during the early phases of occupation, the social environment was of a more egalitarian nature—perhaps adhering to a cargo system-like method of sociopolitical organization—than was present during the later periods where ceremonial centers emerged along with individuals who, through their burials are interpreted to be of higher rank or wealth. On a related note, they remarked on a general trend observed when analyzing the recovered human remains: between the Middle Preclassic and Terminal Classic periods, there is a general and progressive frailty found in the human remains. This is interpreted by the authors to be the foreshadowing of an impending food supply crisis in the Terminal Classic/Postclassic periods. Overall, Willey and his colleagues perceive a general trend of population growth, site expansion, increasing social, political, religious complexity, increasing craft technology, and declining physical stature and health over the course of occupation in the Belize Valley. Household archaeology was fundamental to virtually every conclusion drawn from this project, especially in establishing ceramic chronologies and identifying population trends (both through architectural analysis and analysis of human remains). These domestic contexts provided loci rich in artifact deposits that not only allowed the project to identify regional changes in ceramic technology, chronology, and sociopolitical complexity, but also provided a more particular understanding of individual households and their social and productive practices. Although the term "household archaeology" was not in use during the time of this project, and the authors no doubt would have described much of their work as being the archaeology of domestic contexts, this serves as a clear example of a tradition of domestic archaeology (of both elites and commoners) existing before the self-conscious invention of

the label "household archaeology." Long before the subdiscipline of household archaeology was recognized, Willey et al. were excavating domestic contexts in the Belize Valley, and applying their findings to both local and broader regional understandings of Maya society in this time period.

Julia Hendon's work in Copan (2009) takes a different approach to household archaeology in that it is focused on understanding the daily activities of the residents of certain residential groups. Activities and actions are one of the hardest parts of human behavior to study through the archaeological record, because frequently our actions don't leave noticeable traces, especially ones that endure over the millennia. Hendon is interested in comparing residential sites that are close together, but whose residents were engaged in quite different activities. There has been a tendency in archaeology in the past to compare sites to one another, or regions even, but to focus less on the internal differentiation within sites. Household archaeology works to fill this lacuna in archaeological research since its scale of focus can be narrowed so that minor differences in occupation, wealth, identities, and activities in residential groups and within sites can be recognized and brought to the fore (Hendon 2009).

In her excavation and study of a number of residential groups in the urban core of the Copan Valley, it became clear that three major clusters of social and productive action were of main importance in the daily lives of the residents there: crafts, storage, and feasting (Hendon 2009: 119). Hendon asserts that by studying the architecture, and the cultural artifacts in contextual association with it, one is able to develop a clear picture of how the urban Maya at Copan were spending the majority of their time. Through this she is able to identify her three major categories of activity.

Hendon recovered a number of different tools throughout excavation associated with a range of different types of craft and production. Bone tools in the forms of needles, pins, and brocade picks, and ceramic spindle whorls and weights indicate that some of the residents of Groups 9N-8 and 9M-22 in the Sepulturas zone were occupied with sewing and weaving. In Structure 110B of Group 9N-8, many artifacts associated with shell working and production were found. Differing practices between households in terms of storage also emerged through Hendon's analysis of the excavation. Based on the distribution and frequency of storage vessels and associated artifacts, Hendon concluded that the smaller residential groups (9M-22 and 9M-24) used ancillary platforms behind or next to the primary residences, which supported perishable structures used for storage. Group 9N-8, on the other hand, used rooms within their primary dwellings for storage. Hendon identifies Group 9N-8 as a "powerful noble house" and suggests that the difference in storage practices between this group and the other two under consideration are a product of differences in social status, which are manifested through more and less conspicuous forms of storage (2009: 121).

Studying the distribution of different functional types of pottery shed light on Hendon's third area of activity: feasting. She finds that certain structures in a patio or residential group were the locus of feasting activities based on the presence of fine serving vessels and a complete lack of artifacts associated with any other types of craft, production, or storage. While these structures—usually the larger or dominant ones—show evidence of feasting to the exclusion of other activities, they nevertheless do not monopolize all foodrelated activities, meaning that evidence for food production and consumption is still found in other structures besides the dominant one. Perhaps their was a division of labor and responsibilities within household units that took the form of subordinate structures and patios within the greater household being responsible for contributing food and drink to the feasts held by the dominant structures (Hendon 2009: 121). Interestingly, Hendon argues that based on the excavation of smaller groups such as 9M-22 it appears that these residents were perhaps even more eager to "participate visibly in status enhancing feasting activities... [than] residents of larger, wealthier households" (2009:121).

Additionally, differences in residential architecture, patio layout, and associated artifacts leads Hendon to conclude that factors important to social identity such as wealth and rank were crosscut by important social houses (Hendon 2009: 122). Earlier work conducted by Hendon (1991) at Copan led her to propose that lineages and descent groups may have played an even more important role in Maya social organization than the mere elite versus commoner distinction. "The hierarchical nature of Maya society can be explained in large part by the existence of these ranked and stratified status lineages...At the same time, the elite are members of social groups that also contain people of lower rank...[and] their primary loyalties may have been to their immediate status lineage and its larger maximal lineage or clan rather than to their fellow elite or to the ruler" (1991: 913).

This approach has been gaining support in recent years as scholars have begun to consider the possibilities that Maya social organization was more complex than we might have imagined and instead of simple rank distinctions, the Maya were organized into "nested descent groups crosscut by differences in rank" (Hendon 1991: 913).

Hendon's work on household units at Copan has important implications for household archaeology in other sites within the Maya area as it reveals new information about organization, cooperation, and specialization within domestic groups. She demonstrates that individual residences are often part of a larger household unit, and may have different functions or responsibilities than other members of the group. Clearly, if we are to achieve a comprehensive view of ancient households, excavation of a single residence may be insufficient in many cases as it will only reveal a fraction of the total activities that went on in the household. Hendon's study in Copan of individuals and activities at the household level reveals a tremendous amount of social complexity that simply cannot be accessed using survey or by excavating monumental architecture and is an excellent step in the ongoing process of re-peopling the past.

Although Hendon's excavations at Copan were concentrated near the Main Group and therefore representative of urban residential groups, other archaeologists working at Copan have concentrated their efforts on more peripheral—or rural—groups. Webster and Gonlin (1988) were interested in studying rural household groups in the Copan Valley that had been identified during several surveys because they felt that working in these peripheral areas would provide a better chance of locating and studying commoner households. Webster and Gonlin felt there was a lacuna in household archaeology at Copan (and in the greater Maya area as well) as it always focused on urban and elite residential groups, excluding rural or peripheral groups. Their excavations of eight rural groups in the Copan Valley was conducted for the following purposes: (1) to undertake the systematic exposure of rural architecture in order to contribute to the general body of knowledge on rural domestic sites; (2) to obtain a sample of peripheral sites in the Copan Valley that could be compared to excavated urban sites in order to test core/periphery variation; and (3) to use the data from these rural excavations for comparison with other similar sites in the Maya Lowlands (Webster and Gonlin 1988: 172).

All but one of the eight sites had been located during previous surveys of the Copan Valley. Each of the sites had only a single or a few visible mounds, and was an average distance of 11 kilometers from the core of Copan. Excavation not only included the complete exposure of architecture but also a great deal (sometimes as much as 80% of the total excavated area) of peripheral

space around the structures since much household activity took place outside of the primary residential structure either on the platform or the nearby plaza (Webster and Gonlin 1988: 173). Additional outward trenching from the site core was also conducted in order to expose possible hidden structures. Both archaeological and ethnographic work has proven that the area around structures was frequently used for a range of productive and consumptive activities; however, it is unfortunately often ignored by archaeological investigations that are intent on exposing architecture. Webster and Gonlin, on the other hand, devoted the majority of their efforts to excavating these peripheral areas in order to develop a comprehensive understanding of the activities of these rural residents. Additionally, they conducted trenching operations in an attempt to locate other residential or ancillary structures, which also helped develop a more complete understanding of the domestic life at these rural sites.

Excavations revealed that rural domestic architecture was very similar to its urban counterpart in that it largely consisted of clusters of stone platforms that once would have held perishable superstructures. For the most part, the platforms were well-constructed out of cut stones—although there appears to be a range in the quality of construction between different groups—and a few of the groups consisted of a small number of platforms gathered around a central plazuela or courtyard in a typical Maya residential arrangement. The artifact assemblages contained the ceramics, lithic blades, and groundstones that are typically expected in domestic contexts. Some contexts even yielded exotic materials such as green Central Mexican obsidian and an iron ore mirror that are rare at Copan (Webster and Gonlin 1988: 177-178). Despite their trenching for burials in the residential platforms, very few burials were found, especially considering the lengthy occupations experienced by many of the structures.

The spatial arrangements and features of architecture along with recovered cultural materials were used to identify all but one of the platforms as domestic structures—they were either residences or ancillary cooking and storage structures near the residential platforms—and commoner domestic structures at that. Their conclusion, however, that these sites were the residences of rural commoners seems to be in direct opposition to their remark that the household assemblages they recovered were very similar to the assemblages they recovered from domestic groups within the urban core of Copan during previous field seasons (Webster and Gonlin 1988: 184). Without access to all the data they used it is difficult to comment on the credibility of their conclusions, but similar architecture and artifact assemblages should suggest similar function and perhaps similar status. Marcus's (2004) critique which was discussed above—is apt in that she addresses how their sampling bias might be affecting their interpretation of the data. While their efforts at trenching and test pitting in order to expose buried structures are laudable, the fact remains that there could indeed be an entire stratum of residential architecture that has disappeared (or which they failed to locate), but which would have belonged to commoners.

This raises the critical question of how do we know if we are working with elites or with commoners? Archaeologists in the Maya area often reference the presence of elaborate or large stone architecture, polychrome and imported ceramics, green-stone and jade, imported and non-functional objects, among other correlates as evidence of elite status. However, surveys by Willey (1965) have shown that some of these "elite" indicators, such as polychrome ceramics, appear in the material record amongst presumed "commoner" residences. Elites are typically defined and identified in the archaeological record through their access to luxury goods, both in life and in death. When these correlates are present in what we would otherwise assume to be non-elite contexts, we must reevaluate our preconceptions. The point, however, is that one or two of these correlates are rarely sufficient to prove elite status and especially relative proximity to or distance from the site core is not enough to clearly define the status of a structure.

The architecture and artifact assemblages Webster and Gonlin exposed were similar to urban elite residences, and they also recovered rare and exotic items that would not typically be expected in commoner contexts. I am doubtful, therefore, that the residences they excavated truly belonged to commoners. They did not discuss the possibility that they were instead working with rural or lower-level elites. The majority of the architecture they excavated were nicely constructed stone platforms, and the artifact assemblage was similar to the assemblages from elite residences within the site core. While Webster and Gonlin's work has paved the way for those who are interested in studying peripheral and rural residences, and their attention to detail and thorough excavation of peripheral space is exemplary of good household archaeology, their final conclusions are suspect since they seem to rely more on location in forming their conclusions than any architectural or material correlates of status. Their work and the questions that arise from it also present some interesting points for comparison with my own work at Lubaantun, which I will discuss in the next section

The above examples of the projects carried out by Willey et al., Hendon, and Webster and Gonlin were chosen for several purposes. First, I wanted to provide both early and more recent examples of how household archaeology has been used in the Maya area in order to provide a backdrop for the following discussion of my own excavation of Structure 45. Second, I wished to illustrate some of the different approaches that have been used within the field of Maya household archaeology and how they have been utilized in the pursuit of various questions related to Maya society ranging from broad demographic studies to smaller-scale studies of household functioning. Third, while I do not agree with all the conclusions drawn by these projects, they are all—in one way or another—exemplary of good research design, methodology, and execution, and were chosen for these merits. They provide not only a historical perspective on the evolving field of household archaeology, but also relate to my own work in

the field and in the following section will be directly tied to the excavation of Structure 45 at Lubaantun.

## Lubaantun and the Excavation of Structure 45

The site of Lubaantun is located in the Toledo district of Belize about seven miles off the Southern highway. The Toledo district lies at the southernmost end of Belize, on the eastern coast of Mexico's Yucatan Peninsula and next to the district of Peten in Guatemala, Lubaantun and its surrounding region lay in the very heartland of Classic Maya civilization. This is evidenced by the close proximity of Lubaantun to several other Classic Maya sites such as Nimli Punit, Uxbenka, and Pusilha in the Toledo region, among others. Lubaantun is geographically set in hilly terrain between the Maya mountains that run to the west and the Caribbean Sea approximately 35 kilometers to the east.

Lubaantun was built and occupied during the Late and Terminal Classic periods (ca. AD 700-900), and if there was an earlier period of occupation then no convincing evidence of it has yet surfaced. The site has been known of for over a hundred years and has been probed by occasional archaeological investigations for almost as long. In 1903 the Governor of (then) British Honduras sent Dr. Thomas Gann—medical officer and amateur archaeologist to investigate the ruins that had been rediscovered approximately 25 years earlier (Hammond 1975:31). Gann surveyed the ceremonial core of the site, including Plaza IV (which contains the three largest pyramids), and excavated a few test-pits in some structures that are still today referred to as "Gann holes."

R. E. Merwin saw Gann's report and decided to conduct his own survey and series of excavations while he was in the area. A number of other archaeologists have conducted small projects at Lubaantun over the last century, but none have been as important to our knowledge of the site as Norman Hammond's project.

Norman Hammond surveyed and excavated at Lubaantun and the surrounding area between 1969-1971, his interest stemming from the apparent idiosyncrasies displayed by Lubaantun that separate it from the traditional Maya canon including a lack of stelae and vaulted architecture, and unusual "stepped perpendicular" architecture of many of the main structures (Hammond 1975: 5). Hammond's survey and excavations created the site map that is still used for the core of Lubaantun today. Excavations were aimed at determining the settlement and building chronology for the site, thus excavations mainly focused on hill platforms, plazas, and smaller structures since these can reveal much about construction chronology without the added expense of dealing with monumental architecture. The evidence he recovered from this work led Hammond (1975) to propose at least five different phases of construction for the site of Lubaantun, while individual structures may have had more or less. Recently, TRIP excavations over the 2009 and 2010 field seasons at the site confirm that there were in fact multiple construction phases, and some of the excavated structures show evidence of more than five building phases (Braswell et al. 2011).

The 2010 TRIP field season concentrated on excavating Structures 34 and 45, the latter being the structure that will be discussed here. Structure 45 is located on the westernmost edge of Platform 84 to the northwest of the ceremonial core of Lubaantun (Plaza IV), and almost directly north of Structures 51 and 52 that were excavated by a TRIP project in June 2009, and determined to be elite residential structures based on their artifact assemblages and location (Figure 2). Under the direction of Geoffrey Braswell, I excavated Structure 45 with the help of another graduate student and two workmen. We conducted our excavation in order to expose the architecture associated with Structure 45 with the goal of determining its form, and its construction, occupation, and use history, and to recover all cultural materials. Norman Hammond's settlement map shows Structure 45 as a small ballcourt consisting of two low, north-south oriented, parallel platforms, although in his text he refers to it as a possible residence (1975: 59). Before excavation the Structure 45 mound resembled two parallel mounds due to a depression running along its central north-south axis, which we now believe to have been caused by root action and tree fall. It became apparent after only two days of excavation that Structure 45 is actually a single low platform measuring approximately 8-m (East-West) by 13-m (North-South).

# Methods

In preparation for the excavation of Structure 45—which was termed Operation 6 by the TRIP project—we arranged a grid of 63 2-m (North-South) by 2-m (East-West) units on top and off the sides of the platform to the west (Figure 3). Rows of units running North-South were assigned a suboperation number running from one through nine, and East-West units were assigned a letter from A to G. Units were therefore given an alphanumeric designation based on their location within the grid. Excavation of Structure 45 was conducted unit by unit, and within each unit by lots. Lots typically corresponded to obvious stratigraphic levels but in many cases also differentiated between areas or special contexts within the same stratigraphic layer. In each unit, excavation began with the removal of organic surface material and proceeded with the excavation of O- and A-horizon soils using hand trowels. All excavated soils were screened through 1/4" screens. Any cut or faced stones that were revealed during excavation were left *in situ* until the excavation of the current lot had been finished. Stones were then photographed and drawn, and either replaced into the walls of the structure (when possible) or cleared and set aside in order to facilitate further excavation. All recovered cultural materials were collected, separated by type (obsidian, chert, ceramic sherds, *jute*, and so on), counted, and placed in bags with tags that recorded the unit and lot where they had been discovered.

For the majority of the investigations we excavated with two teams of two people each: one team of two archaeologists and one team of two workmen. In the final weeks of the project, however, we had an additional team of two workmen excavating as well as another team of three men that worked on the final consolidation of the structure.

#### The Excavation of Structure 45

Structure 45 was excavated almost in its entirety, the exceptions being due to time constraints. Platform 84—on which Structure 45 is built—is contained to the west and south by a series of terraces, which we probed extensively, but did not excavate in their entirety due to time constraints. We employed both clearing and penetrating excavations in order to explore the construction history of the structure and the terraces on the western slope. First, we conducted horizontal excavations both on top of and off the western side of Platform 84 in order to expose the terminal architecture of the structure (Figure 4). Second, we continued excavation under and around the terminal phase of construction, revealing previous phases that had not been visible during the earlier phase of excavation. Third, we employed vertical excavations of two test pits in the center of the structure to expose the earlier phases of architecture and understand the construction sequence. The test pits yielded valuable information about the sequence of architectural features and construction activities associated with both Platform 84 and Structure 45.

The following features were discovered during our excavation of Structure 45 and the western slope of Platform 84. Architectural features were assigned feature numbers that include the Operation and Suboperation numbers

to identify its spatial location, followed by the specific feature number that was assigned in the order of its discovery. For example, Feature 6/2/1 is located in Operation 6, Suboperation 2 (the second North-South row), and it is the first feature exposed within this suboperation. A complete list of architectural features can be found in Table 1.

*Feature 6/2/1*. This feature represents the south-facing wall of Structure 45 and runs East-West along the very southern edge of Suboperation 2 (Figure 5). We encountered the face of this feature during our excavation of Suboperation 1, and followed it west all the way to Row F where it had collapsed down the western slope. This feature articulates with the east-facing wall of the structure—F. 6/2/2—in a nicely rounded corner in Unit 6/2B that had partially collapsed. We discovered that Feature 6/2/1 is comprised of four to five courses of cut stones, some of which were discovered *in situ* although parts of the wall had been severely disturbed by root action. It is likely that the wall had an additional few courses of stones that have since either collapsed or were removed in antiquity. In Unit 6/1D the wall was remarkably well-preserved by a large tree growing in the unit, and we discovered that the fifth course was recessed about 15-cm, which is in agreement with our findings from the excavation of Feature 6/2/2 discussed below.

*Feature 6/2/2.* During excavation of Suboperation 6/2 we discovered the east-facing wall of Structure 45, which is composed of four to five courses of cut stones, and forms the face of structure (Figure 6). The wall extends from

Suboperation 6/2 through Suboperation 6/8, terminating at both its north and south ends in rounded corners where it articulates with the southern (F. 6/2/1) and northern (F. 6/8/1) walls of Structure 45. Evidence from Unit 6/3B suggests that the fifth course (and presumably any additional courses that have since been lost) was recessed approximately 15-cm. In Suboperations 6/3 through 6/6, this feature also articulates with Feature 6/3/1, the eastern stairblock that leads from the plazuela into the structure.

*Feature 6/2/3.* As we followed Feature 6/2/1 west, we discovered the west-facing wall of Structure 45—Feature 6/2/3—in Unit 6/2F (Figure 7). This wall runs North-South through Suboperations 6/2, 6/3, 6/4, 6/5, and 6/6. Although we were unable to excavate Units 6/6F and 6/7F due to time constraints, the uppermost course of the wall was visible on the surface of Unit 6/6F and is presumed to continue through both of these units. The articulations with the northern and southern walls of the structure are missing and most likely collapsed down the western slope of the platform in antiquity.

*Feature 6/2/4*. This feature is the vertical, west-facing wall of Platform 84 that was first discovered in Unit 6/2F (Figure 7). We excavated nine courses *in situ*, and the wall was seen to continue even deeper but we were unable to locate the bottom course. This wall continued northward into Suboperations 6/3, 6/4, and 6/5 where it appeared to end in a corner. Although the western wall of Structure 45 (F. 6/2/3) has partially collapsed backwards, it most likely rested on this western terrace wall and relied on it for support.

*Feature 6/3/1*. We first discovered this feature in Unit 6/3A and followed it west into Unit 6/3B where we discovered its articulation with the east-facing wall of Structure 45. Feature 6/3/1 is an outset, east-facing stairblock that articulates with Feature 6/2/2 in Units 6/3B and 6/6B (Figure 6). We were able to locate its southeast corner, of which one course remained *in situ*. The interior of the stairblock was filled with dry fill and large, uncut stones. Most of the stones in the stairblock, however, were removed in antiquity and little survives of the northwestern portion of it.

*Features 6/3/2 and 6/3/3.* These two features are western terrace walls that we located approximately 1-m west of Feature 6/2/4 during the excavation of the western slope (Figure 7). Feature 6/3/2 is composed of six courses and extends through Suboperations 6/3, 6/4, 6/5, and 6/6. Feature 6/3/3 is the westernmost terrace wall that we discovered. Located approximately 50-cm west of Feature 6/3/2, it continues northward from Unit 6/3G into Suboperations 6/4, 6/5, 6/6.

*Feature 6/3/4.* During our excavation of the fifth lot in Unit 6/3B we discovered five stones aligned in two courses, running East-West. Although we excavated several lots in this unit during the beginning of the project, we returned to it at the end of the project in an attempt to locate the southern wall of the Phase I substructure (Fig. 4, Fig 10). The two courses that we located most likely form part of this wall, and although we were unable to follow it to its articulation with the east and west walls of the Phase I substructure (F. 6/7/1 or

F. 6/7/3) since it runs underneath Feature 6/2/2 (which had already been consolidated at that point, it undoubtedly connects to themOur goal in attempting to locate this wall was to give us an estimation of the size of the Phase I substructure (approximately 48 m<sup>2</sup>), and to confirm our hypotheses regarding the construction sequence of Structure 45.

*Feature 6/4/1*. After exposing the east-facing wall of the Phase I superplatform during our excavation of Feature 6/5/1, we followed the wall south to a corner in Unit 6/4B where it articulates with its south-facing wall, Feature 6/4/1 (Figure 10). This feature runs roughly East-West, and we followed it into Units 6/4C and 6/4D, where it disappeared. The southwest corner of the superplatform had been completely dismantled and the stones taken away, probably in antiquity when the residents of Structure 45 decided to expand the structure. Like the rest of the Phase I constructions, the wall was built primarily out of cut sandstone blocks.

*Feature 6/5/1*. This feature forms the east-facing wall of the Phase I superplatform that was mentioned above (Figure 8). We discovered this feature running North-South through Suboperations 6/4, 6/5, and 6/6 while excavating Feature 6/2/2. At first we thought it was a well-made retention wall for fill inside the structure, but as we continued to excavate it quickly became apparent that it was not in fact a retention wall but rather belonged to a previous phase of construction. The discovery of this feature was our first indication that we were

dealing with multiple phases of construction. We found six courses of cut sandstone blocks and followed the wall to both its northern and southern corners, finding that it articulates with Feature 6/4/1 in the South. Even though we found a clear northern corner, the north-facing wall of the superplatform had either collapsed or had been intentionally dismantled in antiquity.

*Feature 6/7/1*. We discovered Feature 6/7/1 in Unit 6/7D in excellent condition, and soon realized that this belonged to an earlier phase of construction. Further excavation revealed that it was most likely the northern wall of a substructure (Phase I) of Structure 45 (Figures 4, 10). We exposed the upper five courses of it but were unable to locate its bottom course. The wall was constructed out of well-cut sandstone blocks, and runs East-West through Suboperation 7. We were able to locate both its east and west corners where it articulates with the east- and west-facing walls of the Phase I substructure (F. 6/7/2 and F. 6/7/3).

*Feature 6/7/2.* As we followed the north-facing wall of the substructure west, we located its point of articulation with this feature, the west-facing wall of the Phase I substructure (Figures 4, 10). This discovery took place during the final week of excavation, and we were therefore unable to excavate past its upper two courses, although it most likely extends just as deep as Feature 6/7/1. We did, however, follow its progression south through Suboperations 6/7, 6/6, and a few centimeters into Suboperation 6/5, where we were unable to locate its

continuation. Similar to other features from Phase I construction, this wall was built out of cut sandstone blocks.

*Feature* 6/7/3. This feature represents the east-facing wall of the Phase I substructure, and articulates with Feature 6/7/1 in a northeast corner in Unit 6/7B (Figure 10). Interestingly, we did not locate this feature during normal excavation but rather during our consolidation efforts. As we cleared away soil in order to reset the blocks from Feature 6/2/2, we discovered Feature 6/7/3running North-South directly beneath the east wall of Structure 45. The stones from Feature 6/7/3 were recessed a few centimeters from the face of Feature 6/2/2, which is why we were unable to locate it during excavation. Once we discovered its presence, we excavated the upper two courses of it, and followed it south until it disappeared beneath the outset stairs of Structure 45. The stairs had already been consolidated, as had much of the eastern wall of Structure 45, and so we were unable to follow it any further. We did however return to excavate in Unit 6/3B where we quickly discovered Feature 6/3/4, and were therefore able to approximate the location of the articulation of the two features: close to the center point of Unit 6/3B, beneath Feature 6/2/2.

*Feature 6/8/1*. As we followed the continuation of the east-facing wall of Structure 45 northwards, we located a rounded corner in Unit 6/8B where it articulates with Feature 6/8/1, the north-facing wall of the third phase of the structure (Figure 9). Feature 6/8/1 runs East-West through Suboperation 6/8, and although its northwest corner partially collapsed down the western slope,

enough curved stones remain for us to be able to say with certainty that it articulated with Feature 6/2/3 in a rounded corner. This wall was badly disturbed by root action in many places, but we were able to reconstruct most of it to a height of four to five courses.

*Features 6/8/2 and 6/9/1*. During our excavation of Feature 6/8/1, the soil matrix changed abruptly to a mixture of light brownish-yellow soil mixed with large fill that was stacked directly against the wall. We soon realized this change was the result of an additional, fourth phase of construction. Features 6/8/2 and 6/9/1 are, respectively, the west- and east-facing walls of a crude, cobbled extension that was made to Structure 45 (Figure 4). Construction of this extension occurred at some undetermined point after the completion of the third phase of construction of Structure 45. Only five stones (arranged in 2 courses) survive in each of these features, and although we were unable to locate the northernmost extents of these features, they most likely extend past our grid and would be revealed by further excavation. Feature 6/8/2 directly abuts the north-facing wall (F. 6/8/1) on the border between Units 6/8E and 6/8F, and while Feature 6/9/1 was not seen to articulate with Feature 6/8/1, no doubt it did in antiquity.

*Features* 6/5/2, 6/7/4, 6/7/5, 6/7/6, 6/7/7. These features were all retention walls of various lengths that we encountered during our excavation of Phase I and Phase III architecture. Feature 6/7/4, located immediately behind the western wall of the substructure (F. 6/7/2) was a Phase I retention wall,

while all the rest belonged to the third phase of construction (Figure 4). These were put in place during the construction of the third phase of Structure 45 in order to keep the fill from pushing on the external walls of the structure.

All of the features we excavated and that have been discussed here were either external structural walls, terrace walls, or internal retention walls. All were constructed either out of limestone or sandstone cut blocks, or a combination of both. We found enough evidence of plaster adhering to structure and terrace walls or mixed up into the soil matrix to conclude that both the façade of the structure and the platform area around it were plastered. All of the plaster, however, was in such poor, fragmented condition that it never warranted a feature number. We also found no evidence of a perishable superstructure, but this is to be expected in an environment such as the Toledo district.

As we neared the end of our excavation of Structure 45, we began to consolidate the Phase III walls and eastern stairblock of Structure 45 (Figures 12, 13, 14, 15). We removed all stones in the walls and some of the surrounding soil matrix in order to prepare a level surface for resetting the stones. We only consolidated the eastern, northern, and southern Phase III walls (including the stairblock) and filled in the excavated units within the structure and on the western slopes in order to protect the unconsolidated features.

## **Cultural Materials**

During the course of excavation we recovered a good amount of cultural materials, but less than expected based on our findings at Structure 34 and Structures 51 and 52 from the previous year. Including the findings from all phases of construction and the western terraces we found approximately 1,700 ceramic sherds, 40 pieces of obsidian, about 500 pieces of artifactual and natural chert (although they have not yet been analyzed and so the sample is probably inflated), less than 200 jute (river snail shells), six groundstone fragments, five figurine fragments, and a few faunal bones and carbon samples from unreliable contexts. The cultural materials found within the terrace fill are problematic because we cannot determine where they came from. Unfortunately, many of our more interesting finds come from terrace fill and although a large portion of them were probably thrown off the back of Structure 45, they should not all be assumed to have come from Structure 45 since in many cases of secondary deposition—especially in construction fill—refuse from a number of different places and contexts may be included.

Unfortunately the ceramic assemblage has not yet been completely analyzed, but nevertheless there are still some tentative conclusions that can be drawn from it. The distribution of ceramics across Structure 45 was relatively uniform with three notable exceptions. We found slightly higher concentrations of ceramics both in the front (east side) of Structure 45, especially around the stairblock, and off the back of the structure in the western terraces. The third

exception is from the two units in which we excavated the test pits, which makes sense given the amount of soil we removed during excavation. It is also unsurprising that the western terraces were another locus of increased ceramic frequency. The inhabitants probably threw refuse and broken ceramics off the back of the structure, where they were left to accumulate. As for the east side of Structure 45 near the stairblock, a possible explanation for the increased frequency of ceramics in the area is that it could have been a locus of activity for the residents of the structure.

The ceramic assemblage is comprised of a number of different local ceramic types including: Puluacax, Turneffe, Remate Red, Belize Red, and Louisville Polychrome, although additional types may be found on analysis (Figures 16 and 17). Our impressions of the assemblage as it was coming out of the ground is that Puluacax—a crude, utilitarian ware used for cooking and storage—made up only a very small percentage of the overall assemblage, as did the polychromes. The bulk of the collection is made up of the Turneffe and Remate Red wares, with a good amount of Belize Red. The relative frequency of these different types is quite informative as to the function of Structure 45 and the activities that might have occurred there. As Puluacax ceramics are used as large storage vessels, we would expect to find many sherds of this types in areas where cooking and food storage occurred. According to Hammond (1975: 299) Turneffe "forms the medium-range domestic storage pottery at the site," and its relative abundance suggests that there were storage-related

activities of some kind occurring at Structure 45. Hammond suggests that Puluaxac wares were used for bulk storage, and finding little evidence of them but a large amount of Turneffe could indicate the storage of smaller quantities, or different types of material. Or perhaps the relative amounts of Puluacax to Turneffe could even speak to the status of the structure; perhaps the occupants of Structure 45 had finer utilitarian ceramics than ordinary households could obtain.

Remate Red and Belize Red, which are higher in quality than Puluacax and Turneffe according to Hammond (see Hammond 1975, Appendix 3), are also common in the Structure 45 assemblage. They are commonly found in forms and sizes that have led many to believe that they were serving ware for food, and their comparative quality suggests that they might have been used by an upper stratum of the population. Hammond (1975: 320) notes that the Louisville Polychromes were present in all areas of the site but are most commonly found in the ceremonial core, and chronologically they are more important earlier in the history of Lubaantun. Polychromes have traditionally been viewed as luxury goods and are typically associated with higher status residences or ceremonial structures; however, Willey's survey and excavation of house mounds in Barton Ramie and other sites in the Belize valley revealed that polychrome vessels were often found in association with commoner burials and in peripheral refuse deposits (1965). The presence of these polychromes in the assemblage suggests that the structure was a higher-status residence, but

presents an additional problem for our analysis. While some sherds were indeed found in front (to the east) of the structure, the majority were recovered from the units on the western slope and in terrace fill. It is likely that refuse from Structure 45 made its way into the fill, or was thrown over the back of the platform and left to accumulate on the terraces. Yet it is equally likely that other structures and groups contributed refuse to fill the terraces when they were being built. We cannot say, therefore, that all of the wares that we excavated from the terraces belong to the Structure 45 assemblage.

Based on the ceramic evidence, a tentative conclusion is that Structure 45 was a high-status residence and the locus of limited food preparation and storage activities. The complete lack of censer fragments also argues for this hypothesis—that Structure 45 was a residence. The presence of polychromes, Remate Red, and Belize Red wares suggests that food consumption was an important activity in and around the structure since these types are commonly associated with serving vessels. The distribution between finer and cruder wares at Structure 45 indicates that the people using this structure were probably of an upper socioeconomic stratum of society.

## Architecture

Excavation revealed that the phase of architecture that was visible on the surface was in fact the third of four main construction phases. This third phase, which will be referred to as Structure 45, rests on top of a smaller and earlier

construction that consisted of a substructure and a superplatform built during the first phase of construction. Both test pits in the center of Structure 45 (Figure 11) showed an uninterrupted layer of platform fill reaching from the top of the superplatform all the way down to the level of the ancient, buried A-horizon soil. The complete absence of a patio floor or any other type of break underneath the first phase of construction indicates that Platform 84 and the substructure of Structure 45 were built at the same time and directly on top of the ancient topsoil. The second phase of construction involved raising the level of the outside plaza floor almost to the top of the Phase I substructure.

The third phase of construction—Structure 45—consisted of a vertical and horizontal extension of the previous structure and the addition of an eastern stairblock that faced towards the plazuela. The architecture in this third phase is characterized by rounded corners on the main structure, which to the best of our knowledge is uncharacteristic of other residential architecture in the site, like Structures 51 and 52 for example. The rounded corners of Structure 45 parallels the design of some of the monumental architecture found within the ceremonial core of Lubaantun, such as the large pyramids in Plaza IV (Structures 10 and 12). Apart from these pyramids, however, there are not many examples of this style of architecture. The fact that Structure 45 has architectural parallels with two of the most important structures at the site is interesting, to say the least. This emulation of form could be an indicator that the residents of Structure 45 were important or powerful people, but this is only speculative.

The fourth and final phase of construction consisted of a northward, cobblestone extension sometime after the construction of the third phase had been completed. Due to time constraints we were unable to explore this fourth phase fully and do not know how far to the north it extends or what purpose it served. It is likely, however, that it was built either to facilitate a larger perishable structure being built, or to increase the size of the activity area.

The western terraces on the slope of Platform 84 remain somewhat of an enigma in that we do not know what phase of construction they correspond to. The best scenario is that they were built during one of the first three phases, probably the first or second since that seems to be when the platform was completed.

The architecture speaks volumes about the construction and use history of the structure. The substructure and its superplatform were both wellconstructed, and built out of finely-cut sandstone blocks (with the exception of one limestone block in the superplatform). The third phase—Structure 45—was larger, had nicely rounded corners, and was made out of a mix of sandstone and limestone. The limestone blocks were well-cut, but not as finely worked as the sandstone blocks from the substructure. This probably has to do with the workability of the material, and since we know Phase III was plastered over, it would not have been necessary to face the blocks. We found no traces of plaster adhering to the faces of the substructure or superplatform, however, so we cannot say whether they were originally plastered. This is likely, though,

since the plaza floor was plastered and this seems to be a common treatment of architecture at Lubaantun. The most apparent difference between the substructure and Structure 45 apart from the construction material is the form of the structure. While the substructure was smaller with rectangular corners and a superplatform, Structure 45 was larger (having expanded in all directions) and had beautifully formed, curved corners. It seems likely that since Structure 45 is a single, low platform, it was intended to hold a perishable superstructure, much like the modern Q'eqchi' living in the area build long, rectangular thatched houses. Although preservation is poor in the area, and we found no evidence of a perishable superstructure or post holes, this still is the most likely scenario.

## Discussion

During the course of our excavations we found no associated middens (apart from the artifacts we found in construction fill), nor any caching behavior that is typical of Maya architecture. Both Hammond (1975) and Braswell et al (2011a; 2011b) have noticed that caching and burial practices at Lubaantun are significantly different from other Classic Maya sites, both in location and frequency—neither corner caches nor subfloor burials are common at Lubaantun. During Hammond's excavation of Lubaantun, he recovered only a very small sample of human remains and concluded that burial practices at Lubaantun differ greatly from the rest of the Maya area. No caches or burials were found at Structure 45, although it is possible that we did not probe deeply enough to locate them in certain areas.

The previous TRIP excavation of Structures 51 and 52 yielded a *jute* cache inside the structure, and based on these findings our expectations for Structure 45 were that it would reveal similar caching practices. Not only did we not locate any caches, we recovered very few *jute* from within and around the structure. As *jute*—local river snails of the species *P. glaphyrus* or *P. indiorum*—were an important dietary supplement in this area, their relative scarcity points either to different consumption practices at Structure 45, a shorter period of occupation, or depositional processes that removed evidence of them. The final answer seems the most plausible given the shortage of many

items that we would expect to find associated with a residence. Faunal bones were extremely rare, which if food consumption and feasting were important at Structure 45, should have been more in evidence. This also supports the hypothesis of extensive secondary deposition in and around Structure 45, where the refuse was periodically cleared away and deposited in fill or a midden.

There is very little evidence to support any kind of craft or production activities at Structure 45. We found no artifacts that were related to textile production, shell working, ceramic manufacturing, or lithic production. After the chert assemblage is analyzed however, our picture of the structure may change. We recovered extremely few figurine fragments from Structure 45, which is consistent with previous TRIP findings from the excavation of Structures 51 and 52, but contrary to Hammond's (1975) report that figurines were frequently found during his excavation and survey of Lubaantun. This could be the result of declining figurine production and use throughout the history of Lubaantun, or another data casualty of secondary deposition. Groundstone fragments were also infrequent, and all but two of them were found in the units on the western slope. The groundstone fragments found around the terraces, however, were located in the first level, and so it is likely that they were used at Structure 45 and then thrown off the back of the platform when they had broken. The absence of any unbroken groundstone, or other tools or ceramics for that matter, argues that curation behavior was also active in shaping the archaeological assemblage at Structure 45.

In Hammond's proposed five-phase building plan for the site of Lubaantun, he posits that Platform 84 and all of its structures (including Structure 45) were built during the second phase when construction expanded outwards from what would become the ceremonial core. Knowing what we know now about the construction history of Structure 45, I may make some tentative conclusions about how it relates to the overall site chronology. The first phase of Structure 45—the substructure and its superplatform—were contemporaneous with the first stage of Platform 84, which puts their construction in the second phase of Hammond's site chronology. The raising of Platform 84 and the expansion of Structure 45 occurred at some point after that, perhaps in the third phase of the site chronology, but it could just have easily fallen within a different phase. Having established that the substructure likely falls within the second phase of the expansion of Lubaantun, it becomes clear that Structure 45 (including all of its phases) was in use for a long time. Its earliest stages were built during the Late Classic period, but occupation probably continued until the site was abandoned during the Terminal Classic. We still do not know why the site was abandoned when it was, but there is at least no evidence of a violent end to the site. Like those of the rest of the site, the inhabitants of Structure 45 probably moved rather than evacuated, taking their precious and important belongings with them, leaving little refuse or artifacts behind them.

Having discussed the construction history and artifact assemblage of Structure 45 allows us to make a more informed argument about its use history and its relation to the other structures in the plaza group and to the rest of the site. In addition to Structure 45, Platform 84 contains three other structures: Structures 42, 43, and 44. Hammond (1975: 59) says that during the second phase of site construction, Structure 42 was added to the plazuela group, while Structure 43 was converted into a long residential platform, and Structure 44 was converted into a small temple pyramid. The visible constructions on Platform 84 most likely also correspond to a later phase of building, similar to the third phase of Structure 45, or were built for the first time when the platform was raised before the construction of Structure 45. Together with Structure 45, Hammond asserts that all the structures on Platform 84 combined to form an elite household unit. While Structure 45 is the only one to have been thoroughly excavated to date, Hammond's hypothesis seems plausible. Structure 45 faces east, into the plazuela and directly towards Structure 43. Perhaps the structures on Platform 84 did constitute a household group— Structures 42, 43, and 45 being residential units for extended family (or a corporate group tied by fictive kinship; see Gillespie 2000), and Structure 44 being the household shrine or place of worship. Unfortunately, until the rest of these structures can be excavated, this can only remain speculation.

The issues raised by Webster and Gonlin's (1988) work are pertinent when attempting to determine the function and status of a structure. The question remains: how is one to know whether they are working with elite or commoner household units? By themselves, the architectural or assemblage data would not be enough to prove the function or status of Structure 45, but when considered together the argument is much sounder. Based on the body of the archaeological data such as its architecture, artifact assemblage, and proximity to the ceremonial core of the site, I would argue that Structure 45 was an elite residence. The architecture in the first and third phases of Structure 45 is of high quality, and the rounded corners belonging to the third phase of construction parallel monumental architecture found within the ceremonial core. Similarly, the energetics required to quarry, work, and transport the stone used in construction of Structure 45, the raised platform on which it is built, and the other structures on the plazuela (if they are indeed part of the same household unit) must have been enormous. Construction of this magnitude would have required a long time and many people, which speaks to the power and resources of the residents of Structure 45 and the nearby structures. The proximity of Structure 45 to both large public space and the ceremonial core is also indicative of high status, although we must be careful in assigning status to structures based purely on location lest we stray into a concentric model of site planning. Finally, the dominance of fine serving vessels in the ceramic assemblage, the scarcity of cooking and storage wares, and the absence of ceremonial wares indicate that Structure 45 was a residence of high socioeconomic status where food consumption—but little food production—took place.

### Conclusion

The field of archaeology has come a long way since its infancy. Over the years new methods for observing and analyzing the archaeological record have been incorporated into the field, an example of which is the recently embraced subdiscipline of household archaeology. This stems from the recognition that households were important units of social organization in societies the world over, and the loci of a range of different domestic and productive activities that can be studied in the archaeological record. Unsurprisingly, many different definitions of households have been developed over the years, but due to the varied nature of human activities, the best definitions may be the more inclusive ones, which allow for the possibility of households being constituted by a wide range of different types of activities and relationships.

There are a number of different artifact types that archaeologists believe to be common indicators of households, such as evidence of food and water storage, sleeping areas, implements used for food production, and so on, but a household assemblage should never be assumed to be representative of the full range of activities that occurred in the household. Different depositional processes—together with preservation—either contribute to or reduce the artifact assemblage that archaeologists are left to work with. Processes of deposition, both primary and secondary, contribute to the artifact assemblage by

leaving tools and household items in either their places of use or in removed and concentrated areas of refuse disposal such as middens and fill. Curation behavior depletes the remaining archaeological record as a structure is abandoned since usable and valuable objects are taken with the residents as they depart.

For many reasons—including the fact that it is frequently obvious to archaeologists during initial surveys and preliminary investigation architectural analysis is a commonly utilized and very informative aspect of household archaeology both in its physical attributes and also as a location of domestic activities that have left residues for analysis. The physical attributes of the residential structure, however, may reveal more about the builders and less about subsequent generations that inhabited it. On an individual level, construction techniques, size, materials, ornamentation, and orientation can all provide information on the people who built the structure, while at a broader level spatial patterning can reveal information on subjects such as cosmology and social organization principles that were at work in sites. When all aspects of the household are considered, we arrive at a more comprehensive understanding of the people who built and inhabited it, and the activities they were occupied with on a daily basis.

Lubaantun has been known of by westerners for over a hundred years and has been the subject of archaeological investigations for almost as long by a number of researchers, the most important of which has been Norman Hammond. It is Hammond's survey map and site chronology that is still used today, and have become the basis for recent TRIP excavations at the site. The 2010 TRIP excavation of Structure 45 at Lubaantun was aimed at understanding the construction, occupation, and use history of the structure, and how it related to its surroundings and the rest of the site. Recovered cultural materials were relatively scarce compared to the excavation of Structure 34 in 2010, and nearby Structures 51 and 52 the previous year. Some preliminary conclusions were able to be drawn, however, on the basis of remaining cultural materials and architectural evidence

Architectural data demonstrates that Structure 45 is composed of four discrete building phases, with the visible construction on the surface actually belonging to the third phase of construction. The first phase of construction included the building of the substructure and its superplatform, which most likely coincided with the second phase of Hammond's site chronology. The second phase of Structure 45 involved the raising of the plaza floor to nearly the top of the substructure walls. The third phase is represented by the now visible Structure 45 with rounded corners and an east-facing stairblock. The fourth phase was a cobbled extension to the north of the main structure, the purpose of which is still unknown. The other structures on Platform 84 were either built or rebuilt during the third phase of construction at Structure 45, since the platform level was raised significantly during the second phase. Structures 42, 43, and 44, along with Structure 45 could have comprised a household unit since they

all sit on the same platform and for the most part are oriented inward towards the plazuela and each other.

The recovered cultural materials at Structure 45 suggest that it was an elite residence that was involved mainly in activities surrounding food consumption, but little food preparation and no craft activities. The ceramic assemblage is composed mainly of fine serving vessels, and much fewer cooking and storage vessels. Similarly, broken groundstones were present but not common in the assemblage. While we did recover a good amount of obsidian, all other artifact types were unexpectedly scarce compared to the amounts recovered from other excavations in the area. The most likely explanation of this is that routine processes of secondary deposition and finally curation behavior stripped the artifact assemblage that was left for us to find. Quite probably a much larger range of activities went on at Structure 45, but there is simply no evidence of them.

The lack of burials at Structure 45 is unusual for the greater Maya area, but unfortunately quite typical at Lubaantun. Subfloor burials are commonly found in the Maya area, but for some unknown reason burial practices were significantly different at Lubaantun. Perhaps in the future, excavations in front of the structures, underneath the plazuela floor, and within some of the other structures on the platform will yield human remains and associated artifacts, which would no doubt give us a better understanding of the identities of the residents and the activities they participated in. Similarly, locating burials in the

future might also help to explain the relationship between the different structures on Platform 84, and if they did indeed form a household unit.

The lack of any specialized types of ceramics such as censors or other ritual paraphernalia in the assemblage at Structure 45 combined with the domination of fine serving vessels is what leads me to conclude that Structure 45 most likely was an elite residence where food consumption activities took place. The Phase III platform we excavated probably served as a base for a perishable superstructure, which are still commonly built and inhabited in the area today. Unfortunately, the rest of the artifact assemblage does not speak strongly as to any other activities that went on at Structure 45. Further exploration of this structure should focus on the front and back sides (east and west, respectively) in hopes of discovering middens, caches, and burials. Test pitting the plazuela could also yield important information as to the building history and activities that went on there. Similar to Webster and Gonlin's (1988) work, further exploration of Platform 84 should involve trenching operations in order to locate burials and any ancillary structures that may have existed, but which leave no trace on the surface. Additionally, the completion of analysis of the ceramic assemblage from Structure 45 will no doubt shed light on these preliminary conclusions.

The application of household archaeology to the study of Lubaantun has drastically changed the picture that we have of the site. From the excavation of households, and Structure 45 in particular, we have a better understanding of

both the broader composition and functioning of the site as well as its smaller, constituent parts. Household units are the most fundamental organizational units that communities and societies are comprised of, and understanding them on an individual level contributes to our broader understanding of the society as a whole. Structure 45 is no exception to this rule. The excavation of Structure 45 revealed new information on the daily social and subsistence practices of the residents in addition to contributing to the growing corpus of knowledge of Lubaantun. While the artifact assemblage we recovered was limited, when considered in conjunction with the information from our architectural investigation an interesting picture begins to emerge. The residents of Structure 45 were Maya who probably belonged to an upper socioeconomic stratum of Lubaantun society. Their residence was a locus of food consumption-perhaps feasting activities—and may have been linked to the other structures in the shared plazuela, forming a household unit with them. Hendon's (2009) theory of shared responsibilities within households at Copan could be an applicable model for this situation. Although excavation of the other structures in the plazuela group would be necessary to prove this idea, it is possible that Structure 45 was the locus of food consumption, while the other structures all had their own individual purposes and responsibilities that contributed to household functioning.

Interestingly, although the residents of Structure 45 did display some of what would be considered traditional "Maya" practices, many of their behaviors

seem atypical for the Maya area. We did not find any evidence of caching or interments during our investigation of the structure, which is odd to say the least—especially when one considers the length of time that the structure (including all of its phases) was occupied. Even nearby residences (Structures 51 and 52) within the site had caches, although these too differed from traditional Maya practices in terms of placement. Comparing the data recovered from the excavation of households at Lubaantun not only allows us to better understand the daily lives of the residents and greater social practices at Lubaantun, but also gives us a way to compare their social practices with those of other sites in the Toledo district and even the greater Maya area. Although further excavation is necessary to fully understand the role Structure 45 played in the Platform 84 plazuela, the excavation of Structure 45 has brought us closer to understanding the lives of the ancient residents of Lubaantun and their place in Late and Terminal Classic society of the greater Maya area.

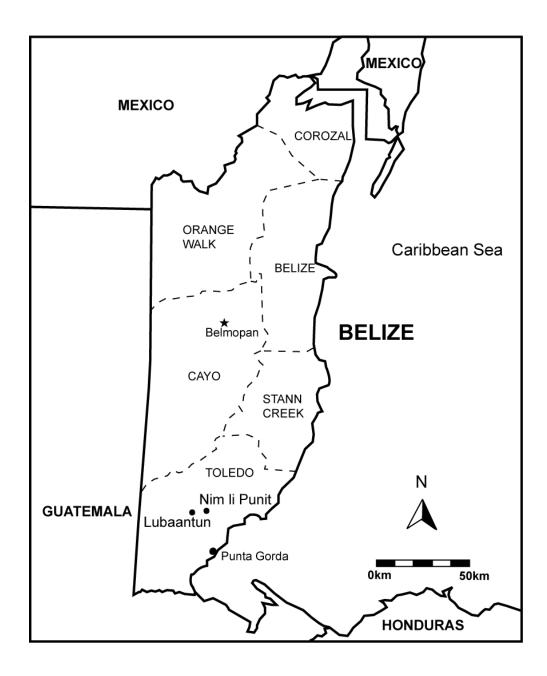


Figure 1. Map of Belize showing the archaeological sites of Lubaantun and Nim li Punit.

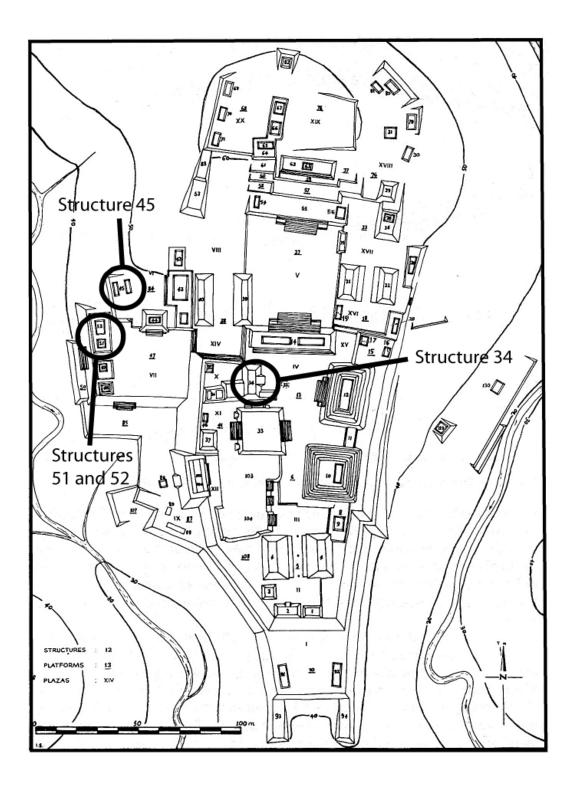


Figure 2. Norman Hammond's site map of Lubaantun with Structures 45, 51, and 52 shown. (modified from Hammond 1975: 47)

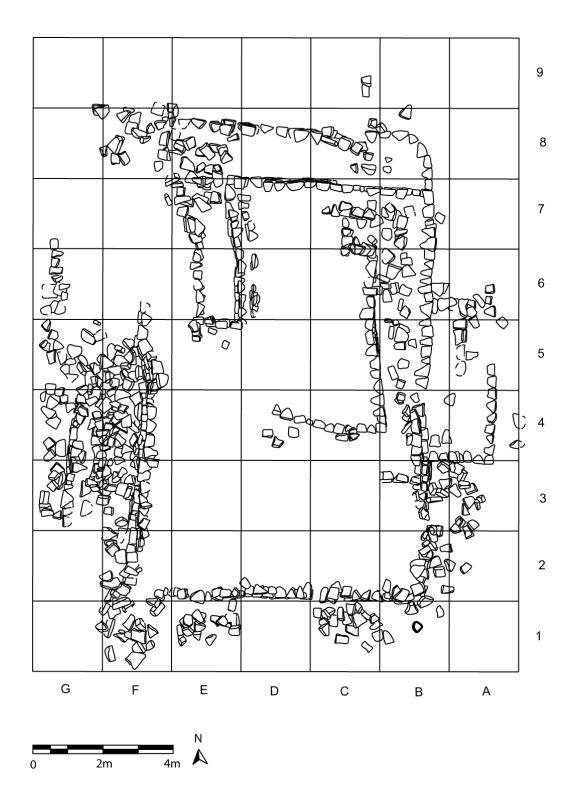


Figure 3. Plan view of excavation units and Structure 45 after excavation.

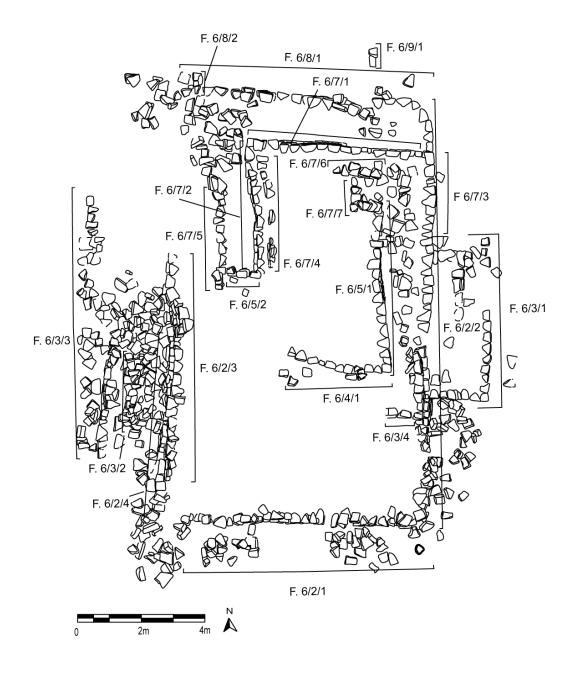
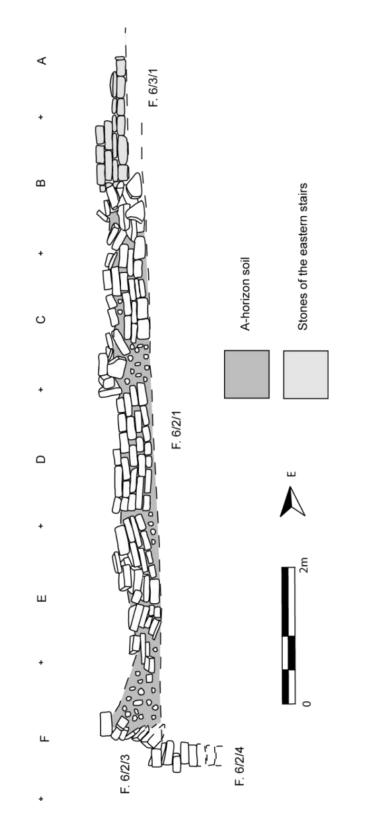
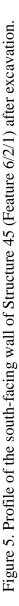


Figure 4. Plan view of Structure 45 after excavation with Feature numbers shown.





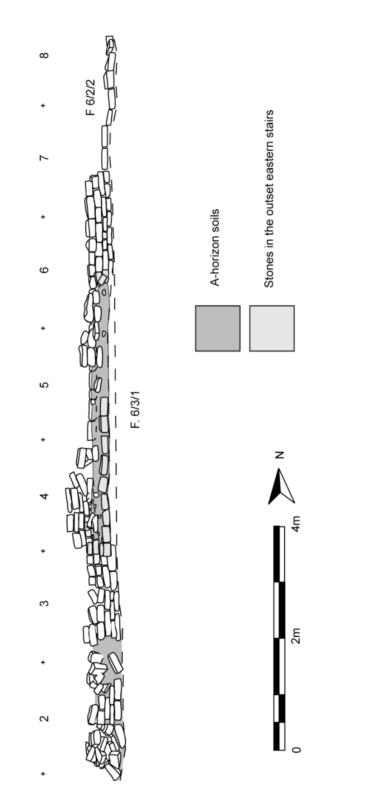
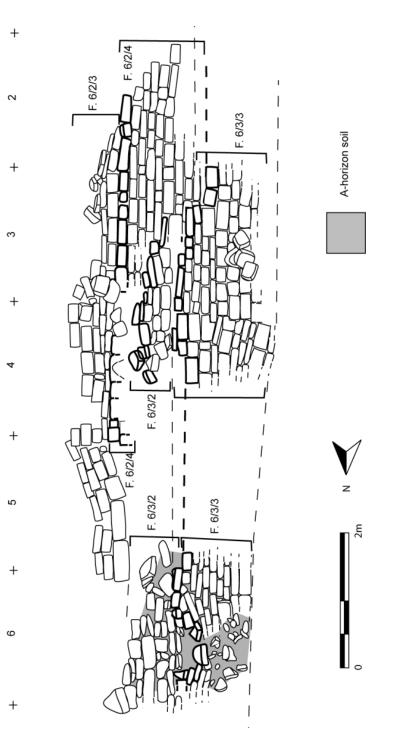
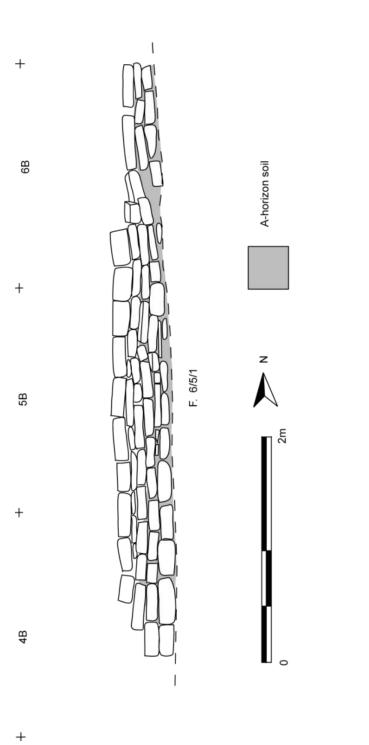


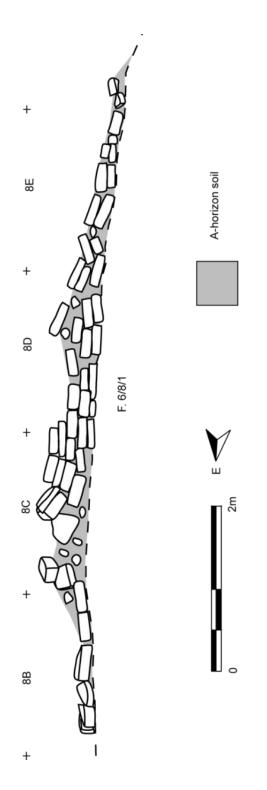
Figure 6. Profile of the east-facing wall (Feature 6/2/2) and the eastern stairblock (Feature 6/3/1) after excavation.













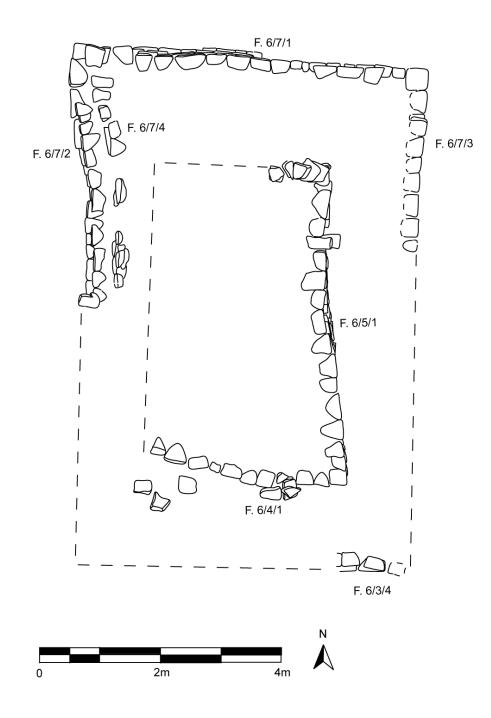
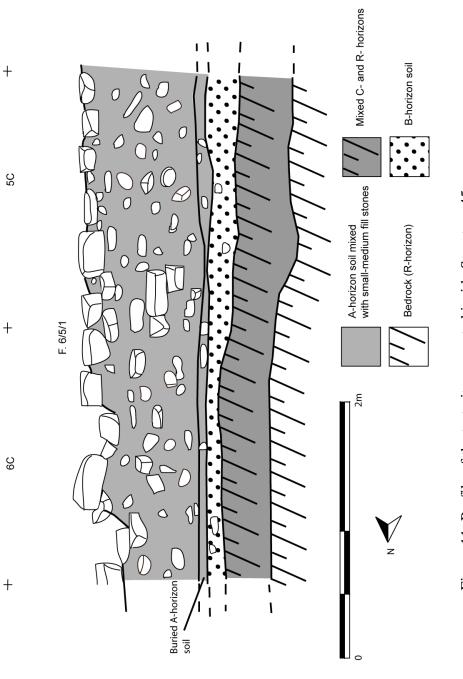


Figure 10. View of Phase I construction after excavation.





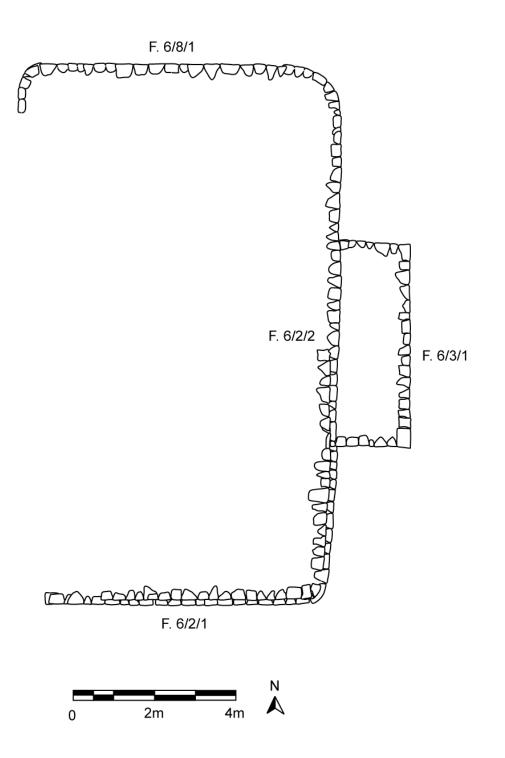
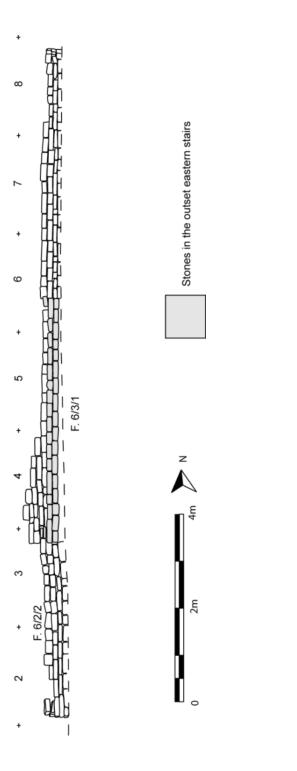


Figure 12. Plan view of Structure 45 after consolidation.





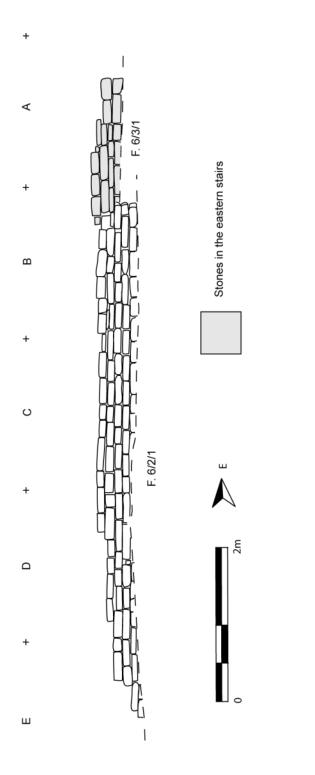
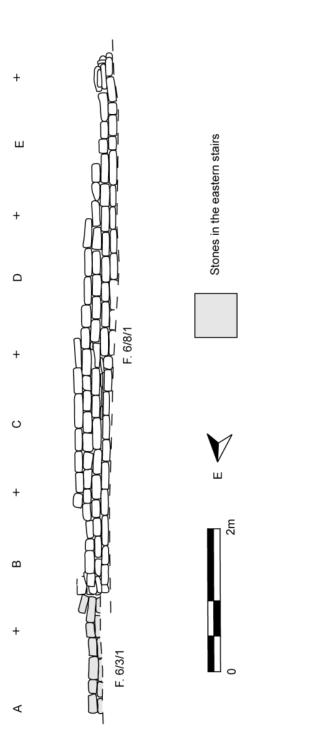


Figure 14. Profile of the south-facing wall (Feature 6/2/1) and the stairblock (Feature 6/3/1) after consolidation.



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Figure 15. Profile of the north-facing wall (Feature 6/8/1) and the stairblock (Feature 6/3/1) after consolidation.

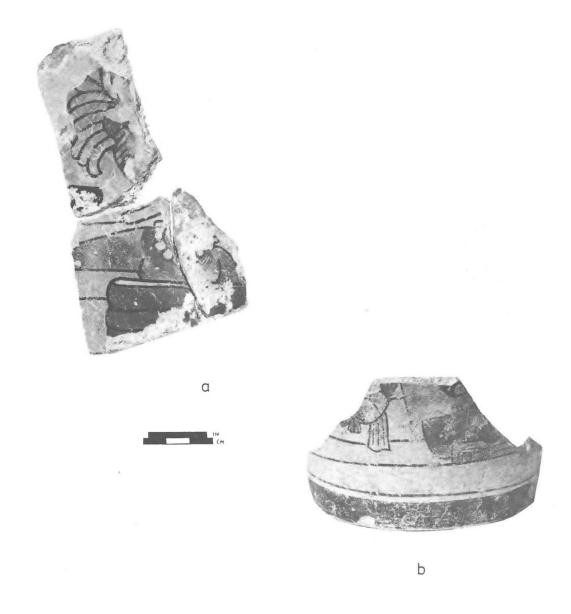


Figure 16. Two fragments of a Louisville Polychrome cylinder vase from Lubaantun. (Taken from Hammond 1975: 115, Fig. 115).

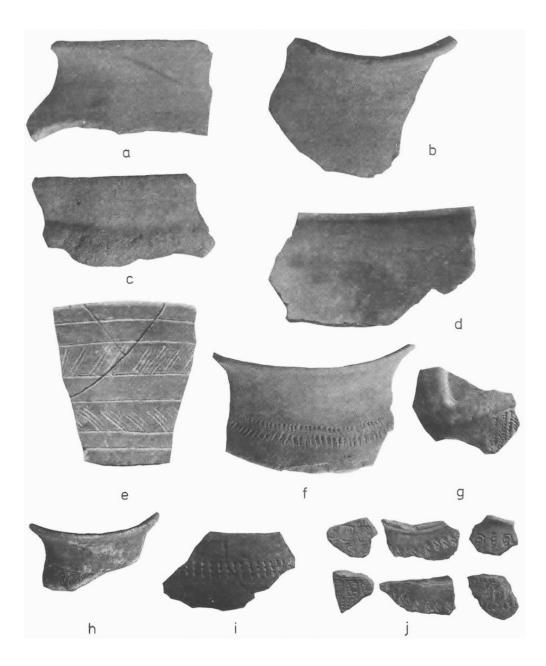


Figure 17. Examples of ceramic sherds typically found at Lubaantun: a. Turneffe Unslipped jar; b. Turneffe Unslipped jar with striated decoration on shoulder; c. Puluacax Unslipped jar; d. Remate Red bowl; e. Remate Red bowl with high sides and banded incised ornamentation; f. Remate Red jar with radiate-incised ornamentation; g. large Remate Red effigy vessel; h. Remate Red jar neck and shoulder with unit-stamped band of monkey designs; i. Remate Red bowl with comb-shaped ornamentation; j. Unit-stamped designs on Remate Red jars (taken from Hammond 1975: 331, Fig. 118).

Table 1. List of architectural features.

Feature	Description	Location (SubOp)
F. 6/2/1	South-facing wall of Structure 45	6/2B, 6/2C, 6/2D, 6/2E, and 6/2F (missing)
F. 6/2/2	East-facing wall of Structure 45	6/2B, 6/3B, 6/4B, 6/5B, 6/6B 6/7B, and 6/8B
F. 6/2/3	West-facing wall of Structure 45	6/2F, 6/3F, 6/4F, 6/5F, 6/6F (southern end only), and presumably in 6/7F, and 6/8F
F. 6/2/4	West-facing wall of Platform 84 (directly beneath F. 6/2/3)	6/2F, 6/3F, 6/4F, and 6/5F (southern half only)
F. 6/3/1	Eastern outset stairs of Structure 45	6/3A, 6/3B, 6/4A, 6/4B, 6/5A, 6/5B, 6/6A, and 6/6B
F. 6/3/2	5-course western terrace wall 1-m west of F. 6/2/4	6/3G, 6/4G (southern half only), 6/5G (very northern edge only), and 6/6G
F. 6/3/3	11-course westernmost terrace wall, about 50-cm west of F. 6/3/2	6/3G, 6/4G, 6/5G (not fully excavated), 6/6G, and presumably continues into 6/2G and 6/7G
F. 6/3/4	South-facing wall of the Phase I substructure	6/3B, and presumably continues into 6/3C and 6/3D
F. 6/4/1	South-facing wall of the Phase I superplatform	6/4C and 6/4D
F. 6/5/1	East-facing wall of the Phase I superplatform	6/4B, 6/4C, 6/5C, and 6/6C
F. 6/5/2	North-facing retention wall of Str. 45, running between F. 6/7/2 and 6/7/5	6/5E
F. 6/7/1	North-facing wall of Phase I substructure	6/7B, 6/7C, 6/7D, and 6/7E
F. 6/7/2	West-facing wall of Phase I substructure	6/5E (traces in the northern half), 6/6E, and 6/7E

Table 1 continued...

Feature	Description	Location (SubOp)
F. 6/7/3	East-facing wall of the Phase I substructure	6/6B and 6/7B
F. 6/7/4	West-facing retaining wall of Phase I, about 50-cm east of F. 6/7/2	(presumably in 6/5D) 6/6D, 6/7E, and 6/7D
F. 6/7/5	West-facing retaining wall of Str. 45, about 1-m east of F. 6/2/3	6/5E (northern half only), 6/6E, and 6/7E
F. 6/7/6	A two-sided alignment of cut stones, 3 courses high possible retention wall for Str. 45	6/7C
F. 6/7/7	1-m long west-facing rentention wall	6/7C
F. 6/8/1	North-facing wall of Structure 45	6/8B, 6/8C, 6/8D, 6/8E, 6/8F
F. 6/8/2	2-course, west-facing wall of Phase IV construction	6/8E and 6/8F (traces only), and presumably continues north of the grid
F. 6/9/1	2-course, east-facing wall of Phase IV construction	6/9C, and presumably continues north of the grid

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