

# UC San Diego

## UC San Diego Electronic Theses and Dissertations

### Title

The Ceramics of Lubaantun: Stasis and Change in the Southern Belize Region during the Late and Terminal Classic

### Permalink

<https://escholarship.org/uc/item/6zf41162>

### Author

Irish, Mark David

### Publication Date

2015

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO

The Ceramics of Lubaantun: Stasis and Change in the Southern Belize Region during the  
Late and Terminal Classic

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

in

Anthropology

by

Mark David Irish

Committee in charge:

Professor Geoffrey E. Braswell, Chair  
Professor Paul S. Goldstein  
Professor Thomas E. Levy

2015

Copyright

Mark David Irish, 2015

All rights reserved.

The Thesis of Mark David Irish is approved, and is acceptable in quality and form for publication on microfilm and electronically:

---

---

---

Chair

University of California, San Diego

2015

## DEDICATION

In recognition of all of the support they have given me throughout my years of education; for proof-reading countless essays and the source of endless amounts of constructive criticism; for raising me to value learning and the pursuit of knowledge; for always being there when I needed someone to talk to; this thesis is dedicated to my family, including my mother Deanna, my father John, my sister Stephanie, and my wonderful wife Karla.

## TABLE OF CONTENTS

Signature Page.....	iii
Dedication.....	iv
Table of Contents.....	v
List of Figures.....	vi
Acknowledgements.....	vii
Abstract of the Thesis.....	viii
Introduction.....	1
Background.....	6
The Southern Belize Region.....	12
History of Lubaantun.....	16
Ceramic Research in the Southern Belize Region.....	20
The Ceramic Chronology of Lubaantun.....	30
Data.....	30
Methods.....	38
Columbia Complex.....	39
Discussion.....	102
Conclusion.....	107
References Cited.....	111

## LIST OF FIGURES

Figure 1: Principal inland sites of the Southern Belize Region.....	7
Figure 2: Lowland Maya sites referenced herein.....	29
Figure 3: TRIP Operations at Lubaantun. Modified from Hammond 1975.....	37
Figure 4: Early Facet Turneffe Unslipped.....	48
Figure 5: Late Facet Turneffe Unslipped.....	49
Figure 6: Early Facet Remate Red.....	57
Figure 7: Late Facet Remate Red.....	58
Figure 8: Early Facet Chacluum Black.....	62
Figure 9: Late Facet Chacluum Black.....	63
Figure 10: Puluacax Unslipped.....	70
Figure 11: Early Facet Louisville Polychrome.....	76
Figure 12: Late Facet Louisville Polychrome.....	77
Figure 13: Hondo Red.....	81
Figure 14: Late Facet Lazaro Red.....	86
Figure 15: Late Facet Belize Red.....	92
Figure 16: Late Facet Fine Orange.....	95
Figure 17: Early Facet Pedregal Modeled.....	98
Figure 18: Late Facet Unnamed Gouged-Incised.....	101

## ACKNOWLEDGEMENTS

I would like to thank my committee members, Dr. Geoffrey E. Braswell, Dr. Thomas E. Levy, and Dr. Paul S. Goldstein for their invaluable input and support on the early drafts of this thesis. Special thanks to Dr. Braswell, who provided both the archaeological material that forms the basis of this study and the residence in Belize where the research was conducted. Finally, I would like to thank the residents of Big Falls, Belize for being gracious hosts to me for the two months I spent in their hometown.

## ABSTRACT OF THESIS

The Ceramics of Lubaantun: Stasis and Change in the Southern Belize Region during the  
Late and Terminal Classic

by

Mark David Irish

Master of Arts in Anthropology

University of California, San Diego, 2015

Professor Geoffrey E. Braswell, Chair

This thesis seeks to develop a ceramic chronology of the site of Lubaantun, Belize. The material analyzed was recovered by TRIP archaeologists and spans all occupational periods of the site. Because the site was occupied for less than two centuries, the uniformity in the ceramic material recovered precludes the material being divided beyond the singular Columbia Complex. Nonetheless, based on the subtle shifts in vessel form and decoration, as well as the introduction of two new types during the Terminal Classic, the Columbia Complex has been divided into an early and late facet. Based on these differences, I argue that connections with the southern Peten waned during the Terminal Classic, and the residents of Lubaantun were forced to seek

exchange ties elsewhere, particularly to the north. These results hint at a shifting economic and political landscape during the Terminal Classic, and have important implications for studying the interregional connections between sites in the Southern Belize Region.

## INTRODUCTION

The Maya center of Lubaantun, founded during the Late Classic (A.D. 600–800) and abandoned during the Terminal Classic (A.D. 800–900) has long eluded archaeologists' best attempts to reveal its history. Lubaantun is notable for many archaeological peculiarities that make it unique not only among sites in the region, but across the entire southern lowlands. Early explorations at the site noted the exceptional architecture (Merwin 1915; Joyce 1926:211; see also Hammond 1975:32; Peniche May 2010b:71) that is the finest anywhere in Belize and is equaled in the southern lowlands only at Copan. Furthermore, the site was occupied for a relatively brief period of time, founded during the end of the Late Classic and abandoned less than two centuries later. Our lack of knowledge about Lubaantun is exacerbated by the lack of carved stelae at the site, the only hieroglyphs found on three ballcourt markers (Merwin 1915; Wanyerka 2009:405–416), several carved figural plaques (Wanyerka 2009:416–424), and at least three small eroded carved monuments from the small nearby sites of Uxbentun, Caterino's Site, and Choco I (Wanyerka 2009:424–428). Furthermore, it is still unclear how Lubaantun interacted politically and economically with the nearby centers of Pusilha, Nim li Punit, Xnaheb, and Uxebenka, the four other primary sites located in the Southern Belize Region (SBR).

Hoping to understand both the history of Lubaantun and how it interacted on a regional and interregional scale, the Toledo Regional Interaction Project (TRIP), the successor to the Pusilha Archaeological Project (PUSAP), has recently conducted excavations at Lubaantun (Braswell et al. 2010; Peniche May 2010a, 2010b), and Nim li

Punit (Braswell et al. 2012). The TRIP seeks to illuminate how these sites, as well as the other regional centers of Pusilha, Uxbenka, and Xnaheb, engaged with one another to form a region, seeking answers to the same region-focused questions asked by Leventhal (1990) in his regional study of the SBR. One of the most important datasets for investigating the relationship between multiple sites is a robust regional ceramic chronology (e.g. Foias 1996). Unfortunately, the Southern Belize Region still lacks a detailed published ceramic chronology for any individual site, let alone a regional ceramic schema. Although ceramic research continues at many sites and the corpus of published data on the ceramics of each is growing, temporal assessments of ceramic assemblages remain difficult. This lack of both individual site ceramic chronologies and a regional ceramic chronology has inhibited resolution of questions surrounding both the history of Lubaantun and its integration into the Southern Belize Region as a whole.

This problem is rapidly being addressed by researchers working in the SBR. Over the last decade, many studies have been conducted that focus on the ceramics of particular sites. In seeking to answer questions concerning the political and economic integration and interaction of the SBR, the TRIP has sought to develop a unified regional ceramic framework. This work has been greatly aided by archaeologists working with the earlier PUSAP project, including Cassandra Bill and Geoffrey Braswell (Bill and Braswell 2005; Braswell et al. 2004), by the ceramic research carried out at Uxbenka by Jillian Jordan (Jordan and Prufer 2014), and preliminary studies conducted at Nim li Punit by TRIP researcher Mikael Fauvelle (2012a).

This study seeks to build on these previous endeavors by constructing a ceramic chronology for the site of Lubaantun by outlining the changes in the types, vessel forms,

and the decorative styles and motifs on pottery. In particular, I build on Hammond's (1975:296) preliminary outline of the Columbia Complex by expanding on his noted changes between the Early and Late facets, attempting to incorporate data from the last four decades since the Columbia Complex was first defined. This includes determining the changes to form and decoration of the various types uncovered at the site core, with these changes tied to the construction history of the structures from which they were recovered. Comparing these data to ceramic chronologies from across the lowlands, particularly in the Peten, the Copan area, and the Belize Valley, the research also seeks to further refine our understanding of which regions Lubaantun was interacting with and how these interactions fluctuated and shifted during the occupation of that site, tied to a broader understanding of the history of the lowlands during those periods.

In many ways, this study is an extension of Hammond's (1975) analysis of the pottery that he excavated at the site during his 1970 excavation. Nonetheless, Hammond's work was primarily focused on the creation of a ceramic typology, in which he identified over a half-dozen new types. Chronology building was not his primary goal, although it must be noted that he attempted to tease out several temporal distinctions. In this paper, I utilize Hammond's ceramic typology for the site to develop a ceramic chronology, building on the limited temporal framework that he developed and incorporating data from the last four decades of Maya archaeology since the publication of his important work. Because Lubaantun was likely occupied for less than two centuries (Hammond 1975:296), ceramics remained fairly consistent throughout the entire span of occupation. Nonetheless, several temporal patterns in the presence of absence of decorative styles are present in the material recovered by TRIP excavations at

Lubaantun during the 2009 and 2010. Below are the results of the chronology created from the ceramics recovered from those excavations.

I begin the creation of this ceramic chronology by situating the site of Lubaantun both spatially and temporally in the southern lowlands during the Late and Terminal Classic periods. This includes an overview of the environmental and human geographic setting of the site, both on a micro- and macro-scale. I then discuss more generally the Late Classic to Terminal Classic transition, the shifting economic landscape of the Terminal Classic, and the eventual collapse of most large centers at the end of the Classic period.

Next I outline previous ceramic studies from sites in the Southern Belize Region, many of which have been conducted in the last decade. This survey focuses primarily on the work from Uxbenka, Pusilha, Nim li Punit, and Lubaantun, but also attempts to include data from sites along the coast and smaller sites in the region where data are available. In particular I look at the continuity of certain forms and types between the earlier occupation at Uxbenka and the later occupation at Lubaantun, the similarity in types between Lubaantun and Nim li Punit during the Late and Terminal Classic, and the contrast between the ceramics of Pusilha and the other sites located in the Southern Belize Region.

I then use these data and my analysis of Lubaantun ceramics recovered by the TRIP to develop a ceramic chronology for Lubaantun that can be used to better understand the relationships that Lubaantun had with other sites in the region and the southern lowlands. Generally agreeing with Hammond's initial assessment of the ceramics from Lubaantun, I define the entire ceramic assemblage of the site as

constituting a single ceramic complex, based on the broad continuity in types and forms across all occupation periods. Nonetheless, there are a few modal changes to form and decoration on several important types, as well as the introduction of Belize Red and Lazaro Red ceramics and the declining prominence, though not disappearance, of Louisville Polychrome ceramics. These shifts are closely tied to the transition from Late Classic to Terminal Classic at the site, and reflect the fluctuating ceramic networks across lowland Maya civilization during this time (Rands 1973; Adams 1973; Rice and Forsyth 2004). Shifts in vessel form and surface decoration of each type are discussed in the context of ceramics recovered from elsewhere in the southern and central lowlands in an attempt to contextualize the site and the SBR in general in a wider framework.

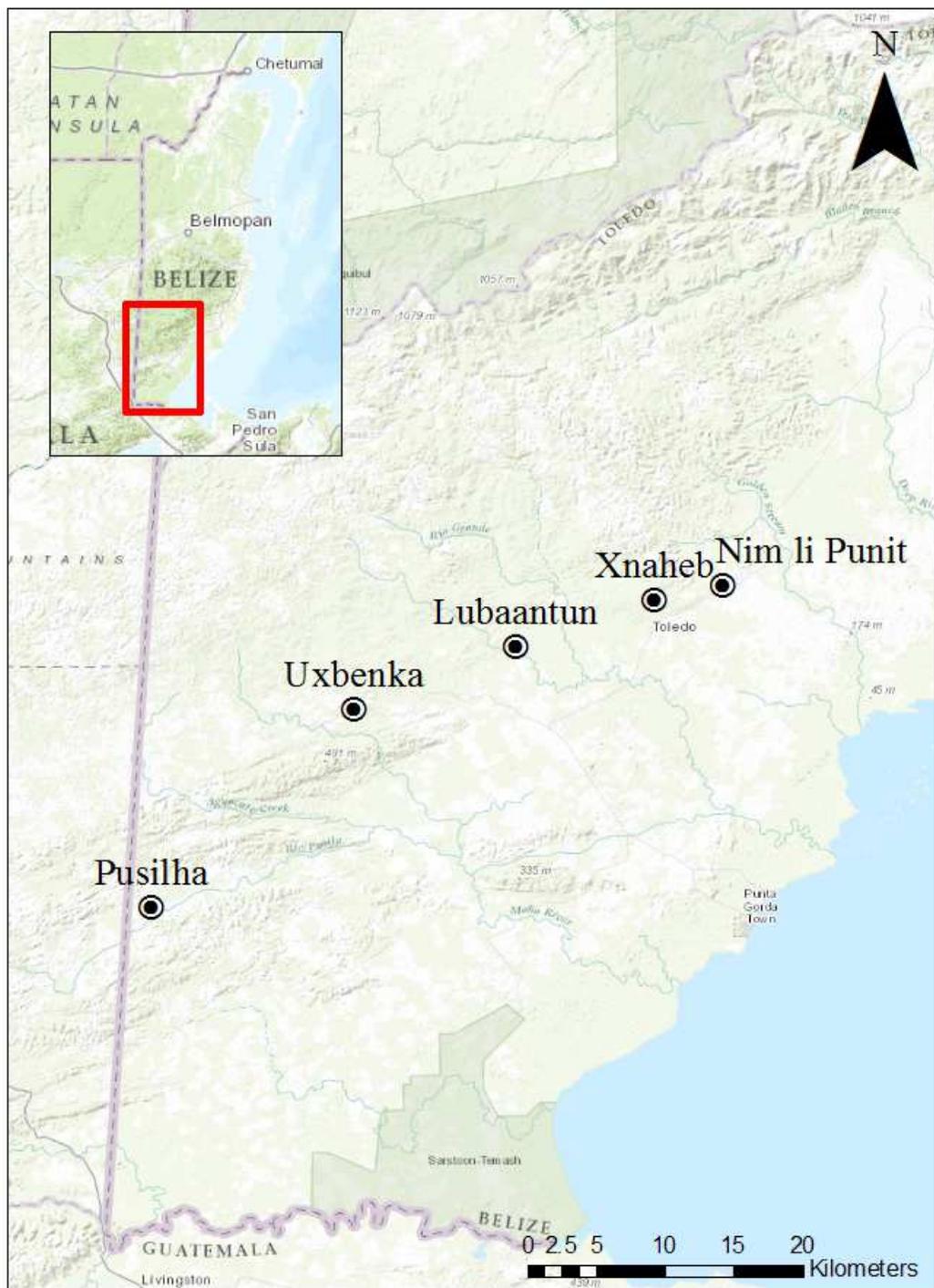
This study constitutes a further step in developing a better understanding about the ceramics of the Southern Belize. In particular, it demonstrates conclusively that the Columbia Complex of Lubaantun experienced stasis in the ceramic types, general forms, and overall decoration during the entirety of its short occupation. The generalized stability of the Columbia Complex is juxtaposed by the small changes that occurred over time, including the introduction of two new types and shifts in the finer details of decoration between the Early and Late Facet. Furthermore, the division of the Columbia Complex into distinct Early and Late facets allows for the comparison of the material from Lubaantun with other regions in the southern lowlands at a much finer temporal resolution. Future research questions made possible by this newly developed chronology are then explored.

## **BACKGROUND**

### **The Southern Belize Region**

The site of Lubaantun is located in the Toledo District in the southernmost reaches of Belize. Geographically, Lubaantun is located along the Columbia branch of the Rio Grande River, which flows from its headwaters in the Maya Mountains to the southeast, emptying into the Gulf of Honduras. Located roughly 35km by river from the mouth of the Rio Grande, Lubaantun is situated on steep hill running north to south between two valleys formed by tributaries to the Columbia (Joyce 1926:207). The area around Lubaantun contains excellent material for building blocks and for facing structures that are commonly found in suitably sized chunks (Hammond 1975:36). The location of the site near such suitable building materials and its dominant location along the Rio Grande River would have been important factors for the ancient inhabitants searching for a place to settle. The environmental setting of Lubaantun in particular and the Toledo District in general is summarized by Hammond (1975:10).

In respects to human geography, Lubaantun is located within the Southern Belize Region, an archaeological region containing five major site centers: Lubaantun, Pusilha, Nim li Punit, Uxbenka, and Xnaheb. Based on his work at sites in the Toledo District, Richard Leventhal (1990) defined the Southern Belize Region based on the presence of three cultural features found at most sites in the region: walled enclosures surrounding ballcourts, the extensive use of natural topographic features in the built environment, and tombs with sequential burials (Leventhal 1990:138). To this list must also be added the lack of corbeled vaults (Bill and Braswell 2005:301), the frequency of hieroglyphic



Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Figure 1: Principal inland sites of the Southern Belize Region

monuments when compared to the rest of Belize outside of Caracol (Braswell and Prufer 2009:45), and the eccentric lunar information, inconsistent with that attested in other regions, recorded in the hieroglyphic texts in the region (Thompson 1928:96). Just as importantly, the Southern Belize Region is geographically circumscribed by the Maya Mountains to the north and west, pine ridges and the Gulf of Honduras to the east, and the Temash and Sarstoon Rivers, with a swampy area between them, to the south (Leventhal 1990:137; Braswell and Prufer 2009:44). As such, the Southern Belize Region constitutes an important laboratory that can be used to analyze the interregional relationships of Late Classic Maya centers. This regional perspective mediates the two dominant ways in which the Maya are often studied, namely microperspective site-level excavations that often focus on a single site, and the macroperspective studies that seek to present data in terms of the entire Maya area. Focusing on how Maya polities functioned as a region is an important but often overlooked topic, but one that Toledo Regional Interaction Project and the Uxbenka Archaeological Project are currently investigating.

Uxbenka was likely the first site founded in the southern Belize Region, and the earliest occupations there have been dated by radiocarbon assays to the Late Preclassic, between 50 B.C.–A.D. 211 (Prufer et al. 2011:208; Culleton et al. 2012:1583). Interestingly, ceramics from these early contexts date to the third century A.D. during the Early Classic (Jordan and Prufer 2014:319), and it may be that the radiocarbon dates are derived from old wood (Schiffer 1986; Kennett et al. 2002), though short-lived samples were chosen to reduce this possibility (Prufer et al. 2011:205). Several stelae have been recovered from Uxbenka, though most are heavily eroded with few readable dates. Stylistically, Stela 11, 12, and 21 appear to be from the Early Classic period, and may be

some of the earliest stelae erected in the lowlands outside of the Peten, and certainly the earliest stelae so far uncovered in the Southern Belize Region (Wanyerka 2009:220). One of these, stela 11, features an Early Classic ruler with a double-headed serpent bar and a glyphic motif of the 14<sup>th</sup> kind of Tikal, *Chak Tok Ich'aak* I (Wanyerka 2009:220), also known as “Jaguar Paw” (Martin and Grube 2008:28). This may indicate that Uxbenka was under the yoke of or had some sort of privileged relationship with the site of Tikal, located in the Peten lakes region. Uxbenka was occupied from around A.D. 200–800, though like other sites in the lowlands, there may have been limited and small scale occupations after this period. Of particular importance for the present study, the ceramics of Uxbenka are incredibly similar to those of Lubaantun, many being the Early Classic and early Late Classic predecessor types to the late Late Classic and Terminal Classic types found at Lubaantun. The timing of occupation also suggests that the sites are somehow related, the end of occupation at one being coeval with the founding of the other.

Nim li Punit was likely the second major site to be founded in the Southern Belize Region between A.D. 400–450 (Daniels and Braswell 2014:290), and came to light after Hammond’s (1975) work at Lubaantun (Wilk 1976). While the site is relatively small, it is notable for the seven carved stelae erected during two periods spanning A.D. 734–741 and 790–810, as well as a roughly carved stela bearing the date Ajaw 7 that was likely erected in A.D. 830 (Prager et al. 2014:250; Wanyerka 2009:504). Nim li Punit then has the longest span of intensive occupation of any site in the Southern Belize Region, and was occupied coevally with Lubaantun during the Late and Terminal Classic. Like Uxbenka, the ceramics of Nim li Punit are similar to those of Lubaantun in a general

sense, but lack the calcite tempers of the Lubaantun material during the Late Classic (Fauvelle 2012a:86), indicating that these two sites were not integrated into the same economic system. Furthermore, excavations in 2012 confirmed Wilk's (1977) initial report of Early Classic material at Nim li Punit (Fauvelle 2012b), in direct contrast to the Lubaantun assemblage that features only Late and Terminal Classic materials.

Pusilha was easily the largest site in southern Belize. Early Classic ceramic sherds, including basal-flanged polychrome bowls and "shoe pots" indicate that the site was founded during the end of that period (Bill and Braswell 2005:304), in accordance with the earliest retrospective historical hieroglyphic texts at 9.6.17.8.18 (A.D. 571) (Prager et al. 2014:250). Based on ceramic (Bill and Braswell 2005:305–310) and hieroglyphic (Prager et al. 2014) data, the majority of occupation at Pusilha appears to have occurred during the Late Classic. Nonetheless, there is evidence in the Gateway Hill Acropolis and the Moho Plaza for Terminal Classic occupation and use (Braswell et al. 2004:227; Braswell et al. 2005:68). Postclassic material has also been recovered from the site in association with the "Bulldozed Structure" (Braswell et al. 2004:227). Unlike the other sites found in the SBR, Pusilha is unique in the number of legible hieroglyphic texts recovered at the site. The epigraphical evidence has allowed the reconstruction of the dynastic history of the site (Prager et al. 2014). Unfortunately, while there are several emblem glyphs known from the stelae at the site, they give no concrete or legible references to known Maya polities. As excavations continue across the SBR, it is possible that emblem glyphs from sites such as Lubaantun might be recovered, as has been proposed by Wanyerka (2009:415).

Xnaheb is the smallest of the five major centers in the Southern Belize region, situated atop a narrow ridge in the eastern Xpicilha Hills. Located approximately five kilometers southwest of Nim li Punit, it has been suggested that the two sites were somehow incorporated into the same polity. Dunham's gravity model suggests that a site built between central places, such as the location of Xnaheb between Lubaantun and Nim li Punit, should be located near the political boundary between them, and he suggests that Xnaheb rose in the late eighth century as a response to a shifting political and economic landscape during that time (Dunham et al. 1989:275). There are a few eroded hieroglyphic texts at the site, including a single Initial Series date of 9.17.10.0.0 (A.D. 780) found on Stela 2 (Wanyerka 2009:513), coinciding with the hieroglyphic hiatus at Nim li Punit. Archaeological data also suggest that Xnaheb was occupied for a short period during the latter part of the Late Classic (Dunham et al. 1989:268–9; Jamison 2001:79). It is more difficult to narrow down when Xnaheb was abandoned, but it was likely during the middle of the 9<sup>th</sup> century, coinciding with the abandonment of Lubaantun. In summary, Xnaheb appears to have been occupied coevally with Lubaantun, saw a florescence during the final decades of the 8<sup>th</sup> century, but was likely quickly abandoned thereafter. Most sites in the SBR appear to have been abandoned Terminal Classic.

There also exist other smaller sites in the SBR that interacted with Lubaantun, including sites located in the Maya Mountains such as Muklebal Tzul and Ek Xux (Prufer 2005) and the countless caves in the region utilized by the Classic Maya (Prufer 2002). The ruggedness of terrain and sparse population in the modern Toledo District mean that there are certainly undiscovered secondary and tertiary sites in the southern Belize region outside of the foothills zone of the five main ceremonial centers. Furthermore, there exist

several important sites along the coast that have been known to archaeologists since the earliest investigations of the region, the most important of which are the saltworks at Stingray Lagoon (McKillop 1995) and Wild Cane Cay (McKillop 1996, 2005). As discussed below, the pottery of these coastal sites in the Late and Terminal Classic is reminiscent of that from Lubaantun, indicating some sort of economic connection between the coastal and inland sites.

### **History of Lubaantun**

The history of Lubaantun has long been a difficult puzzle for archaeologists to unravel. Due to its short occupational history there is not much time depth to reconstruct how the site grew and changed over the long periods available at the other inland site in the SBR. Another issue in obstructing a more complete reconstruction is the lack of carved stelae at Lubaantun; three ballcourt markers are the only known texts of any length from the site. Nonetheless, some of the history of the site can be reconstructed through the ceramic analysis that Hammond carried out, analysis of the hieroglyphs found on the ballcourt markers, and comparing Lubaantun to other sites in the SBR. Current knowledge about Lubaantun is outlined below.

Placing the occupation history of Lubaantun in the Late and Terminal Classic has been accomplished based on different lines of evidence. Hammond (1975:295-296) narrowed the occupational span of Lubaantun to the Late Classic, particularly the latter two-thirds of the period (A.D. 700-900), based on comparison of the Lubaantun pottery with ceramics from the Peten. The association of much of the early material from Lubaantun with polychrome plates from Uaxactún's Tepeu 2 (A.D. 700 – 800) forms led

Hammond to believe that the majority of the site fell into the same period (Hammond 1975:295). The presence of Fine Orange sherds in the later construction phases, compared with the introduction of such pottery in the closely related Pasion River area, led Hammond (1975:295) to believe that the last phases of construction occurred around A.D. 830. Hammond therefore dated the entire site sequence to approximately A.D. 730-860, at the tail end of the Late Classic and into the Terminal Classic.

The site of Lubaantun was founded in the 8<sup>th</sup> century, during the end of the Late Classic, a period that is often associated with the full florescence of lowland Maya civilization. This was a period of explosive population growth and the increase in the size, complexity, and number of Maya centers and kingdoms (Sharer and Traxler 2006:495). In the Peten, this was a period of constant warfare between the alliances centered at the primate sites of Tikal and Calakmul (Martin and Grube 2008:44,112; Antonio Valdés and Fahsen 2004). Warfare appears also to have been endemic in the area around the Rio Pasion (Demarest 2004), where the ceramic data indicate strong contacts with the SBR (Hammond 1975:295). Although it is unclear whether Lubaantun was ever pulled into these conflicts, the events happening across the lowlands certainly affected the trajectory of the site's history, particularly the navigation of the geopolitical situation to maintain profitable trade connections.

The reasons why Lubaantun was settled during this period is perhaps even more opaque. It is possible shifting economic patterns that would manifest completely in the Terminal Classic forced populations to move to better control new routes. In particular, the Terminal Classic and Postclassic were periods of coastal trade that moved goods around the Yucatan peninsula (Sharer and Traxler 2006:527; McKillop 1995, 1996). That

a coastal economy was also important in the Late Classic, especially in the area around the SBR, is apparent by the presence of saltworks along the coast just down river from Lubaantun (McKillop 2005). It has been proposed the salt was transported by river inland to satisfy the nutritional requirements of inhabitants at areas far from the sea (McKillop 2005:5630). Salt would have been transported upriver by canoes, and sites such as Lubaantun would have been important exchange nodes that helped facilitate this trade. Although McKillop (2005) proposes that these salt production facilities were outside of the control of Maya states and functioned as independent production centers, Hammond (1975:97) saw the realm of Lubaantun extending down the Rio Grande all the way to the sea. If this is true, it may be that the saltworks were a subsidiary enterprise of Lubaantun. Whatever the case, ceramic evidence (discussed below) certainly ties Lubaantun with the coastal production areas, and the similarity in the assemblages may reflect close economic ties between the inland and coastal sites. It may be that Lubaantun was founded during the Late Classic to better control both the coastal saltworks and to be a well situated node along trade routes from the sea to the densely populated inland regions, both eastward to the Rio Pasion region and later north to the Vaca Plateau.

The initial founding of Lubaantun during the 8<sup>th</sup> century A.D. must also be understood in relationship to the other large inland sites in the SBR. During this time, Pusilha appears to still have been the primate site in the region as the rulers there were still erecting monuments (Prager et al. 2014) and being interred in lavish tombs (Braswell et al. 2005:82). In contrast, the founding of Lubaantun coincides with declining intensity of constructions and diminishing population levels at Uxbenka (Prufer et al. 2011:219). The similarity of ceramics between that site and Lubaantun (Jordan and Prufer 2014:322)

might indicate that the original founders of the latter came from the former. As mentioned above, it was during this period that Nim li Punit saw its greatest florescence, as evidenced by the earliest stelae erected at the site occurring during the 8<sup>th</sup> century (Prager et al. 2014:250) and the large amounts of Tepeu 2 ceramics recovered from the site (Fauvelle 2012a, 2012b). Around the founding of Lubaantun, or perhaps shortly after, the site of Xnaheb was founded between that site and Nim li Punit, only 3km from the later.

A logical reconstruction of the archaeological record may be that Lubaantun was founded by settlers from Uxbenka to both gain better access to riverine and coastal trade and to counteract the growing power of Nim li Punit. Uxbenka is located on an important overland route between the sea and the southern Peten, and the founding of Lubaantun may have occurred to protect their privileged position along trade routes. In response, the rulers of Nim li Punit flexed their muscles by founding the site of Xnaheb, and the two sites competed for trade for the remainder of the Late Classic and into the Terminal Classic. The ceramics from Nim li Punit appear to continue into periods after the abandonment of Lubaantun, so it is possible that polity was more geopolitically successful during the Terminal Classic. If both sites were reliant on trade from the coast to the inland sites, the widespread societal collapse and abandonment of many major sites in the southern lowlands and the rerouting of trade up around the Yucatan peninsula would eventually eliminate the power of the inland sites of the SBR. Nonetheless, it appears that the 8<sup>th</sup> century was a time of plenty, as nearly all of the sites save for Uxbenka, the earliest site from the region, reached their apex during this time, mirroring a similar florescence elsewhere in the central and southern lowlands.

Shifting economic interactions may also have played a role in the founding of Lubaantun. Located along the Columbia Branch of the Rio Grande River, the site is well situated to control or be integrated into trade from areas to the west, including the Rio Pasion region, and to the north, including the Vaca Plateau, Chiquibul region, and perhaps even into the Belize Valley. Previous ceramic analysis has revealed early ties to the Rio Pasion region, and the analysis presented here demonstrates early ties to the Vaca Plateau and Chiquibul Caves region and later ties to the Belize Valley. As discussed below in the chronology, the Early Facet of ceramics at Lubaantun appears to be intimately tied to sites in the southern Peten, particularly those along the Rio Pasion such including Altar de Sacrificios and Seibal, as well as sites in the Petexbatun Region. While these connections may have fluctuated during the Late Facet of the Columbia Complex, new connections appear to have opened up to regions further north.

In summation, architectural sequences, ceramic modes, and the style of sculpture on the three ballcourt markers indicate the Lubaantun was founded during the 8<sup>th</sup> century. The site was occupied into the Terminal Classic but shows no indication of Postclassic occupation, and was likely abandoned c. A.D. 850. During the period there were at least five major moments of construction activity at the site and two facets of ceramic use. The ceramics produced at the site appear to remain fairly static, although important trade wares shift. Although the exact reasons for the lateness and brevity of occupation at Lubaantun, there is preliminary evidence that shifting patterns in trade and the attempt to counteract a powerful neighbor may have been important motivations.

### **Excavation History**

Our knowledge of the prehistory of Lubaantun comes from over a century of research following its discovery in the late 19<sup>th</sup> century. The precise details regarding the modern rediscovery of Lubaantun are difficult to pin down. The earliest account comes from Thomas Gann, who cites the notes of John Carmichael who states that a site along the Columbia, probably referring to Lubaantun, had been visited by an Italian priest in the 1860s (Gann 1927:205-206; Hammond 1975:31). In contrast, Spinden hypothesized that the site may have been discovered around 1875 by white antireconstructionists who came to Central America from southern states following the conclusion of the American Civil War (Spinden 1926:276; Hammond 1975:31). Anderson notes that the site had been seen by Charles Usher, Surveyor-General of British Honduras from 1896 to 1905 (Hammond 1975:31). Although the exact moment of rediscovery may be lost to history, it can be stated with some certainty that the site was known by the late 19<sup>th</sup> century, at which time it was called the “Rio Grande Ruins”. In 1924 the site was renamed Lubaantun, a modern Maya name meaning “place of fallen stones” in the Yucatek Mayan language (Hammond 1975:33).

The earliest known archaeological investigations at Lubaantun were conducted by Thomas Gann, the medical officer to British Honduras and amateur archaeologist, in 1903 (Gann 1903). Gann’s excavations were reported to the governor and were twice published in England (Gann 1905). Gann’s excavations appear to have explored the central district of the site, from the southern end of Plaza V, the entirety of Plaza IV, and as south as the north area of Plaza III (Gann 1905:112; Hammond 1975:31). Gann’s excavation accounts came to the attention of R. E. Merwin at Harvard University’s Peabody Museum, who visited the Rio Grande Ruins in 1915 (Merwin 1915; Hammond

1975:31). Merwin measured and mapped the site from Plaza I in the south and as far north as the northern edge of Plaza V. Between Plazas II and III, Merwin excavated between Structures 4e and 4w, the first known Classic-period ballcourt (Merwin 1915), and recovered three ballcourt markers. These ball court markers were shipped from British Honduras back to the Peabody Museum, where they reside today. Merwin was also the first to describe the masonry at Lubaantun, which he classified into four different types: vertical walls, sloping walls, and two stepped walls (Merwin 1915) that Joyce would later term “stepped-perpendicular” and “in-and-out” (Joyce 1926a:211).

Gann returned to the site of Lubaantun in 1924 with the early 20<sup>th</sup>-century explorer F.A. Mitchell-Hedges and his companion Lady Richmond-Brown (Hammond 1975:33). Small excavations may have occurred during that visit, though Jouce (1926a:209) indicates that 1925 was the first field season at the site. This same group returned in 1925, and began clearing the site, conducting minor archaeological excavations (Mitchell-Hedges 1931:30-95). This work piqued the interest of Thomas Joyce, Deputy Keeper of Ceramics and Ethnography at the British Museum, who conducted excavations at the site in 1926 (Joyce 1926a, 1926b), 1927 (Joyce 1927). In 1927, the site of Pusilha was discovered by loggers (Joyce et al. 1928:323), and the discovery of carved stelae there led to the abandonment of work at Lubaantun and the beginning of work at Pusilha in 1928, 1929, and 1930, focused mostly on locating, recording, and removing stelae (Joyce et al. 1928; Joyce 1929).

With the early work at Lubaantun and Pusilha, these sites were some of the first in Belize to be subject to modern archaeological excavations. Unfortunately, after these early investigations little more in the way of archaeological work was conducted in the

SBR until Hammond's (1975; Hammond et al. 1976) study of the region, focused primarily at Lubaantun. Subsequent to Hammond's work, Richard Leventhal briefly worked at Lubaantun in the spring of 1987 as part of his Southern Belize Archaeological Project, which spanned the period from 1983 to 1987 (Leventhal 1990:129), excavating several test units in and around the site core and in several additional areas (see Wanyerka 2009:405). Lubaantun, along with the nearby site of Nim li Punit, was again excavated in the early 90's by the Maya Archaeological Sites Development Program (MASDP) that sought to consolidate and conserve a number of buildings located at those site's cores. Unfortunately, little was published as a result of the MASDP project, perhaps because the project was more focused on consolidation than excavation.

The most recent and ongoing research at the site of Lubaantun has been a part the Toledo Regional Interaction Project (TRIP), a project focused on both Lubaantun and Nim li Punit as an extension of the Pusilha Archaeological Project, which operated from 2001 until 2008. TRIP excavations at Lubaantun began in 2009 with the excavation of Structures 51 and 52, and continued with the excavation of Plaza IV and structures 34 and 45 of the site in 2010. The ceramic material analyzed herein comes wholly from these two field seasons of the TRIP, and indeed this research on the ceramic chronology of Lubaantun constitutes in its entirety the 2014 field season of that project. While Lubaantun was discovered over a century ago, the majority of research at the site has come during the past few decades, starting with the work of Norman Hammond (1975). Our knowledge of the site has increased greatly during that time, and it is hoped that the current study will allow for further insight into the history of Lubaantun.

## **Ceramic Research in the Southern Belize Region**

Although Lubaantun and the nearby site of Pusilha have been known for almost a century, no modern ceramic chronology has been developed for any SBR site. In order to better tease out the relationships that each site had with one another and how the human landscape of the region shifted over time, such temporal information must be determined. The creation of a ceramic chronology at the site of Lubaantun requires an understanding of where the site and its ceramics fit in a regional perspective. It is important to understand how the types found in the Columbia Complex are extensions of earlier complexes in the region. Although no published ceramic chronology for a site in the region exists, the last decade has seen an increased interest in understanding the complexes of each site, particularly at Uxbenka, Pusilha, and Nim li Punit. Below I attempt to outline this research to contextualize the material recovered from Lubaantun, and as background for attempting a synthesis of the material of each site into a regional ceramic chronology.

### Uxbenka

Because of the striking similarity between the Early Classic material at Uxbenka and the Late Classic material at Uxbenka and Lubaantun, the best place to start researching the ceramics at Lubaantun is not the site itself, but the nearby site of Uxbenka. (Jordan and Prufer 2014:319–323). Although a single radiocarbon assay from the site dates to the Middle Preclassic, there appears to be no evidence of ceramics dating before sometime in the 3<sup>rd</sup> century A.D, with the dating based on 24 AMS dates from Group B at Uxbenka (Aquino et al. 2013).

The most common Early Classic type encountered in the material from Uxbenka is the Santa Cruz Red Group, first established at that site (Jordan and Prufer 2014:320). This group appears to be the precursor of the Late Classic Remate Red ceramics uncovered in large quantities at Lubaantun and throughout the Southern Belize Region, featuring a surface treatment of matte buff to red flaky slip, reminiscent of the later red monochrome material produced in the region. Like the ceramics of Lubaantun, Jordan and Prufer have also determined that this Early Classic assemblage is most closely related to the ceramics of the neighboring southeastern Peten, including the presence of ceramics resembling Aguila Orange, Balanza Black, Orange Polychromes, and Triunfo Striated found in that area.

### Lubaantun

Although archaeological explorations of Lubaantun began as early as 1903, the first extant description of ceramics from Lubaantun comes from T.A. Joyce's excavation in 1926 (Joyce 1926a, 1926b). From these excavations, Joyce noted the ubiquity of a coarse domestic pottery type, which were "of considerable size, and possessed very thick walls of ill-fired red clay" (Joyce 1926a:228). This is likely a reference to the Puluacax group later defined by Hammond (1975:299). Joyce also noted that a finer ware was present in the lower excavation layers, which showed evidence of painted designs in a style that he called "Early Maya" (Joyce 1926:228). These fine-ware painted vessels are likely the Louisville Polychrome plates and cylinders that are now known to be found throughout the ceramic sequence at Lubaantun (Hammond 1975:315). Also of interest to Joyce were the ceramic pendants and whistles, as well as their molds, which he

uncovered at the site (Joyce 1926:228). Joyce noted similar occurrences of pottery from British Museum expeditions to the site in 1927 (Joyce 1927).

Ceramic research, and indeed archaeology as whole, languished at Lubaantun until Norman Hammond's excavation in 1970. Subsequent to his excavation, Hammond literally wrote the book on the Late Classic ceramics from the site in *Lubaantun: An Ancient Maya Relam*, which still remains the most important publication for understanding ceramics from the Southern Belize Region to this day. Hammond's work, while briefly touching on the chronological setting of the ceramics, primarily was interested in developing a typology for the ceramics at Lubaantun. In this typology, he divided his assemblage of thousands of pot sherds into groups and types. Nevertheless, Hammond chose not to further divide types into varieties, questioning the validity of a system that could potentially divided two sherds from the same vessel into two varieties based on the presence or absence of decoration (Hammond 1975:293).

In addition to writing the type descriptions of the ceramics that he encountered at Lubaantun, still used by archaeologists working in the SBR, Hammond's work on the ceramics of Lubaantun was important in that it began to tease out the interregional relationships across the Southern Belize Region and other regions. Particular attention was given to the impressed decorations on the monochrome Remate Red type, which Hammond noted was found both north of the Maya Mountains as well as sites along the Rio Pasion in the southern Peten, including Altar de Sacrificios (Adams 1971) and Seibal (Sabloff 1975).

Generally, Lubaantun was part of the Tepeu sphere, a group of sites that produced similar pottery during the Late and Terminal Classic. Ball (1976:323) defined sphere

membership as being roughly 60 percent or greater content similarity with other members of that sphere. The concept of ceramic spheres not only allows archaeologists to see connections between sites, but also develop area-wide chronologies. Ceramic analyses have determined that Lubaantun was occupied during the Tepeu 2 and Tepeu 3 periods. The Tepeu 2 was the Late Classic ceramic sphere, derived from the Tepeu 2 complex from Uaxactún (Smith 1955:I,II). Tepeu 3, which is generally the marker for the Terminal Classic, saw increasing divergence and regionalism of ceramic complexes, wherein polychromes declined in both quality and quantity (Rice and Forysth 2004:29).

Additionally Hammond sought to illuminate general aspects of dating the ceramics at the site. Based on the paucity of Tepeu 1-equivalent forms, the presence of Tepeu 2 and 3 forms, and the presence of Fine Orange sherds in the terminal phases of construction at the site, Hammond dated the site to sometime after A.D. 700 until about A.D. 850 (Hammond 1975:295-296). Hammond saw the ceramic transition between the third and fourth construction phases at the site as representing the same changes between the Tepeu 2 and 3 complexes at Uaxactún, further linking Lubaantun to that ceramic sphere. This transition was based primarily on the shifting of the types present in the excavated material, particularly the addition of Lazaro Red and Belize Red types and the reduction in Louisville Polychrome sherds. Nonetheless, other ceramic types, such as the Turneffe, Remate, and Puluacax groups persisted throughout the entirety of occupation. Hammond therefore grouped all of the material at Lubaantun in his newly created Columbia ceramic complex, and divided it into Early and Late facets at the termination of the phase 3 construction. Therefore, Hammond determined that the Early Columbia complex was part of the Tepeu sphere, while the Late Columbia complex was part of the

Boca sphere, along with strong ties to the Eznab sphere for the northeastern Peten (Hammond 1975:296). This later association with the Boca sphere may be incorrect, and is explored in the analysis below.

Whereas Hammond sought to create an absolute dating of the preliminary ceramic sequence he created, the present analysis is more interested in developing a relative chronology. It is the culmination of this work that this current research project hopes to complete, developing a complete ceramic chronology of the Lubaantun material that can then be combined with other site chronologies to develop a regional ceramic chronology.

### Pusilha

These interregional ties were further elucidated by the work of the PUSAP during the first decade of the 21<sup>st</sup> century. Cassandra Bill's analysis of the ceramic assemblage at Pusilha has produced a four-phase sequence for the site. These phases were dated to the beginning of the Late Classic (A.D. 600-700), the end of the Late Classic (A.D. 700-780), the Terminal Classic (A.D. 780-850), as well as a somewhat disjointed phase during the Postclassic. Early Classic material was also recovered from several cave sites in the vicinity of Pusilha, as were a few sherds recovered from architectural contexts (Bill and Braswell 2005).

The analysis undertaken as part of PUSAP uncovered that ceramics from Pusilha closely resembled types and groups that had been established at other sites across the Maya Lowlands (Braswell, Prager et al. 2004). These vessels, including striated utilitarian jars, red-slipped jars, large red-slipped bowls, and polished black and

polychrome fine wares (Braswell, Prager, et al. 2004:226) are the same general categories that are found at Lubaantun (Hammond 1975). Additionally, the short necked jar or dish type called Puluacax Unslipped has been uncovered at Pusilha, Lubaantun, and Nim li Punit (Fauvelle 2012a), and it has been proposed that these represent a uniquely southern Belize ceramic type.

### Nim li Punit

The ceramics of Nim li Punit represent something of a conundrum, as may different types have been reported, owing to the long span of occupation at the site. The earliest analysis of the ceramics comes from the initial discovery of the site, when T. Patrick Culbert assigned some of the ceramics to the Late Preclassic (Wilk 1977:8), similar to the Cantuse complex from Seibal (Sabloff 1975:77). This initial survey recovered little in the way of material that could be assigned to the Early Classic, but there was an abundance of Late Classic material, much of it similar to the material from Lubaantun (Wilk 1977:9). In particular, Belize Red and what appears to be Louisville Polychromes were found, as were monochrome red incurving-side bowls similar to the Remate Red type. Conspicuously absent from the Nim li Punit material was unit-stamping at the base of jar necks (Wilk 1977:10), so common at Lubaantun. Furthermore, these analyses uncovered no common Terminal Classic markers.

More recently, work by TRIP archaeologists has filled in the gaps from the initial analysis of Nim li Punit ceramics. Excavations in 2011 and 2012 revealed not only two distinct Terminal Classic ceramic phases at the site (Fauvelle 2012b:15), but also Early Classic sherds that were unknown in the initial investigation. The Late Classic material

from Nim li Punit is similar to that of Lubaantun but appears to show greater diversity (Fauvelle 2012b:15), with the assemblage being more evenly spread between the various ceramic groups. In particular, the Nim li Punit material shows a greater presence of the Remate, Belize, and Hondo Groups and a reduced presence of the Turneffe Groups (Fauvelle 2012a:15). The Hondo ceramic group, established by Hammond at Lubaantun (1975:313) and attested by only 14 sherds there, were found in much greater quantities at Nim li Punit, making up 12% of the diagnostic collection and up to a quarter of the total assemblage (Fauvelle 2011a:16). One striking feature of Nim li Punit is that unit-stamping appears to be present during the Late Classic, while the present analysis places the that decorative style during the Terminal Classic at Lubaantun. This is discussed further below.

Early Classic ceramic groups from Nim li Punit bear considerable similarity to those from the Late and Terminal Classic, particularly the Remate group, and the use of limestone temper in the Early Classic material is more similar to the Late and Terminal Classic and Lubaantun than the Late Classic at Nim li Punit (Fauvelle 2012a:97). During the Late Classic, the ceramics of Nim li Punit transition away from carbonate tempers while the ceramics of Lubaantun use them almost exclusively. Fauvelle (2012a:106) has hypothesized that this difference in temper and the larger proportion of Hondo Red and Belize Red ceramics at Nim li Punit indicate that the two sites did not share a ceramic economy.

### Interregional Comparisons

Just as important as the ceramic similarities between SBR sites are the interregional parallels between almost all of the sites in the SBR and certain other regions in the lowlands. One of the most obvious similarities between the material recovered from both the Southern Belize Region and the southern Peten are the red-slipped jars with impressed and stamped designs. Similar vessels to those uncovered in Late Classic contexts at Pusilha (Braswell et al. 2004) and Lubaantun (Hammond 1975) have been uncovered at sites in the Petexbatun (Foias 1996:650), at Altar de Sacrificios (Adams 1971:47) and Seibal (Sabloff 1975:168) on the Rio Pasion, and at Uaxactún and El Mirador (Forsyth 1989:92) in the northern Peten. They are also found across the Maya Mountains from the Southern Belize Region, at the many cave sites in the Chiquibul region (Hammond 1975:305) as well as at Caracol (Chase 1994:175). Importantly, these vessels appear to be mostly absent in coeval deposits in the Belize Valley, further evidence that sites in that region were not integrated into the same ceramic sphere. Ash-tempered Belize Red pottery appeared at Pusilha around the beginning of the Terminal Classic (Braswell et al. 2004:227), much as it did at Lubaantun (Hammond 1975:312) and Nim li Punit (Fauvelle 2012a:58). The introduction of this new pottery type, distinctive of the Belize Valley, suggests new economic ties with that region became important around the turn of the 9<sup>th</sup> century A.D.

Ties with the Copan region, which had often been speculated as being the principal interaction network based on hieroglyphic texts, seem to be confined to the earliest phase of occupation, and even then being only tenuous. No examples of Copador Polychrome, a type distinctive in the southern periphery of Late Classic Copan and western El Salvador, have been recovered at Pusilha (Bill and Braswell 2005:309).

Although several Copador Polychrome sherds from British Museum Expedition to the region in the late 1920's, have been shown through chemical analysis to be manufactured in the Copan region (Bishop and Beaudry 1994; Bishop et al. 1986), these sherds are mislabeled and actually come from Copan (Braswell 2015 personal communication).

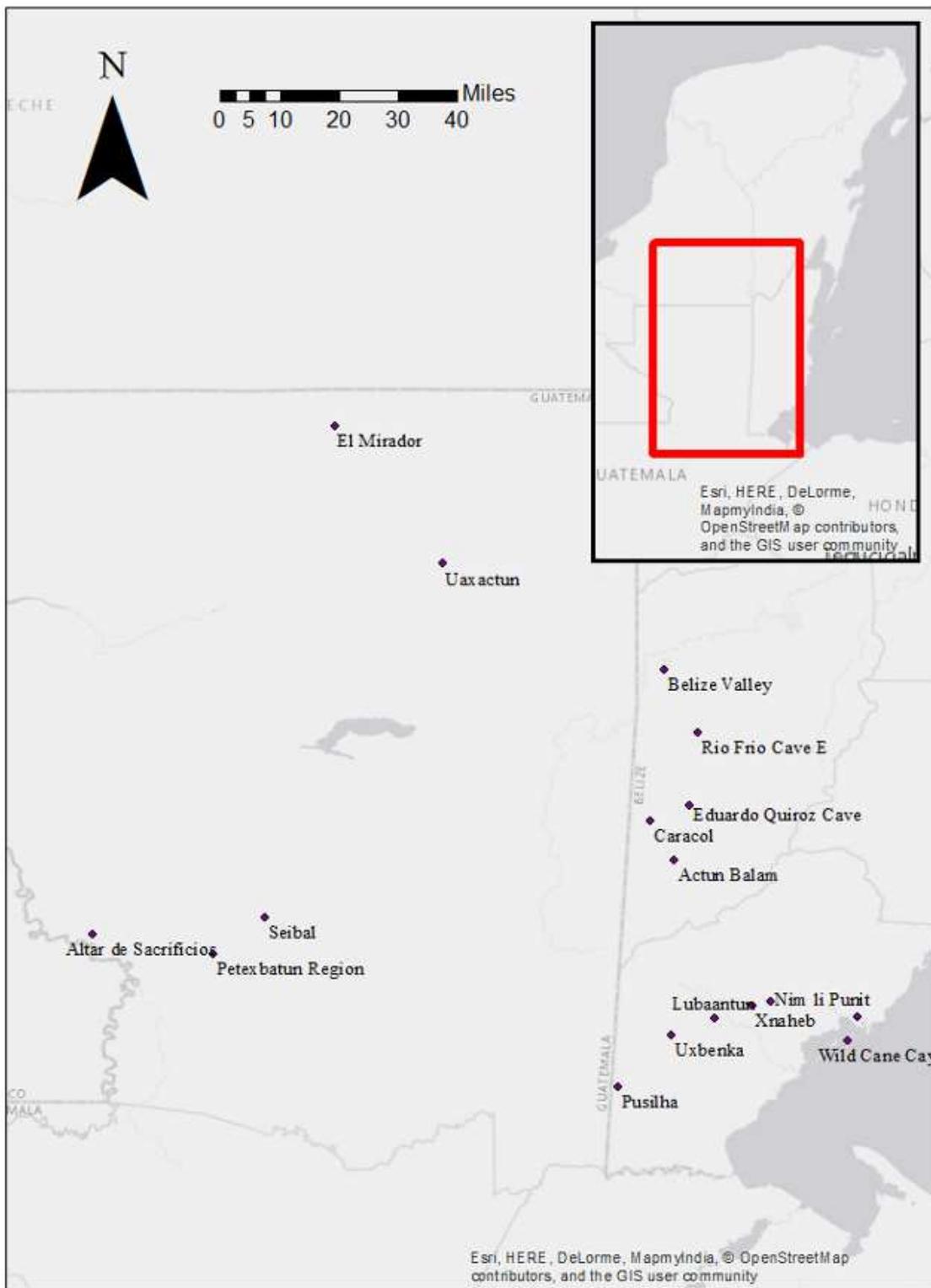


Figure 2: Lowland Maya sites referenced herein

## THE CERAMIC CHRONOLOGY OF LUBAANTUN

The goal of this study is to refine Hammond's tentative chronology for the site of Lubaantun. In particular I seek to formalize the temporal markers that Hammond only hints at in his discussion of the ceramics from the site (Hammond 1975:293). Attention was focused on the changes in vessel morphology and the decorative styles and motifs between the various construction stages of the Structures excavated by TRIP archaeologists. No material from earlier excavations was analyzed, and this study represents the first in-depth look at the new material recovered from Lubaantun by the current project.

### **Data**

The ceramics analyzed come from the Lubaantun excavations conducted by TRIP archaeologists in 2009 and 2010 (Figure 3). TRIP excavations were organized according to the Tikal system, with work divided into Operation, Suboperations, and Lots (Peniche May 2010a). Operations 1 is reserved for potential future test-pits, while Operation 2 is reserved for salvage work that may need to be conducted. As such, excavations at Lubaantun begin with Operation 3. TRIP excavations at Lubaantun consisted of four Operations numbered 3 through 6. These Operations excavated at Structures 51 and 52, 34, 45, and Plaza IV, which all together produced 27,696 ceramic sherds. In reality, the number represents a lower bound for the number of sherds, due to breakage occurring in the bag. These sherds served as the dataset that was analyzed in this study.

Because a chronology of ceramics needs to account for the stratigraphic level from which the ceramics were recovered, ceramics were sorted by lot. Understanding the context from which each lot derives is paramount to constructing an accurate chronology. As such, a brief outline of the Operations the ceramics were recovered from is offered below, with special attention paid to the chronological timeframe. As will be demonstrated, the dataset that was used for the creation of a Lubaantun ceramic chronology spans nearly the entirety of the occupational sequence at the site.

### Operation 3

Operation 3 excavated Structures 51 and 52 at Lubaantun during the 2009 TRIP field season (Braswell et al. 2009:10). Structures 51 and 52 are located on the northwest end of Hammond's Platform 47, which itself constitutes the entirety of Plaza VII (Figure 3), known as the Butterfly Plaza. In his construction sequence, Hammond designated Platform 47 and all of the Structures built around as having been constructed during phase 4 (Hammond 1975:64). These structures were almost entirely excavated by TRIP archaeologists, revealing that they were not two discrete structures, but instead part of the same construction platform (Brawell et al. 2009:11). A looter's trench that runs east to west through the platform may have given the impression that there were two neighboring structures, and as such Structure 51 refers to the area south of the trench, while Structure 52 refers to the area north of the trench. TRIP excavations revealed that in its final form, "the Structure 51/52 platform probably supported a single superstructure made of perishable materials" (Braswell et al. 2009:11). These were the first domestic structures at Lubaantun to be investigated, likely occupied by elite residents of the site.

Preliminary analysis conducted by TRIP archaeologists of the materials recovered from this Operation revealed that there were at least two phases of Terminal Classic occupation at Lubaantun, adding to Hammond's earlier Late Classic occupations (Braswell et al. 2009:39). As such, the ceramic material recovered from Operation 3 represents the tail end of occupation at Lubaantun, which heavily factors into interpretations of that material compared to material recovered in other operations. The excavations of Operation 3 were the only excavations undertaken during the 2009 field season. 3,987 ceramic sherds were recovered in this Operation (Braswell et al. 2009:58).

#### Operation 4

Operation 4 excavated at the northern end of Plaza IV at Lubaantun, just south of Structure 14 during the 2010 TRIP field season (Peniche May 2010a). Excavations at Plaza IV recovered 683 ceramic sherds (Peniche May 2010a:27) that were included in the present analysis. Plaza IV served as the focal point of the site from the first construction phase identified by Hammond (1975:51), and it was this Plaza that featured the earliest-known structures and platforms and structures. In its final form, Plaza IV was surrounded by Structures 10, 12, and 33, the three large temple pyramids that dominate the site, as well as Structure 14 in the north separating Plaza IV from Plaza V, and Structure 34 in the northwest. The northern end of Plaza IV, including the area that was excavated by TRIP archaeologists, was not constructed until phase 2 of the construction sequence (Hammond 1975:51). TRIP excavations were conducted immediately south of Structure 14 and to the west of the front staircase. The goal of these excavations was to refine the sequence of construction for Plaza IV and search for a substructure below the plaza.

Excavations revealed that Plaza IV was built in a single construction phase fairly early in the construction history of Lubaantun (Peniche May 2010a:19). Because of the earliness of Plaza IV, the 683 ceramic sherds recovered from Operation 4 likely represent some of the earliest material recovered by TRIP archaeologists at the from the site.

### Operation 5

Operation 5 excavated Structure 34, the largest unlooted structure of the architectural center of Lubaantun, during the 2010 field season of TRIP excavations at the site (Peniche May 2010b), recovering 21,284 ceramic sherds (Peniche Maya 2010b:100). Located along the western edge of Plaza IV, Hammond (1975:53) suggested that Structure 34 was built during the same construction event as Platform 13 during phase 2. Nonetheless, Hammond did not excavate Structure 34 and his chronological assumptions remained untested. The TRIP sought to establish to construction sequence of Structure 34, ascertain its relationship to the construction of Plaza IV (Operation 4), determine which architectural styles were used, and come to a conclusion on the function of the structure (Peniche May 2010b:30). As part of the excavation of the building, Structure 34 was consolidated to rebuild its final form (Stage VI).

TRIP excavations revealed at least six construction stages for Structure 34, some of which had several minor “moments” of construction (Peniche May 2010b:69). Stage I of Structure 34 was constructed in an architectural style reminiscent of Joyce’s “in-and-out” style (discussed above; Joyce 1926:211), arguing for the reevaluation of Thompson’s (1931:338) and Hammond’s (1975:68) dismissal of the style. Importantly, Hammond suggested that Structure 34 was a minor ceremonial platform, based on its location in the

ceremonial center of the site and its dimensions (Hammond 1975:53). The TRIP excavations corroborate this assessment, as the material recovered during Stages I to V did not conform to what would be expected of a domestic context. In fact, the fill, interior, and exterior of these construction stages were almost completely devoid of archaeological materials (Peniche May 2010b:71). While no artifacts were found that could be indicative of a ritual or ceremonial function, it was nonetheless concluded that that Structure 34 had religious or ceremonial functions based on its location in the “religious center” of Lubaantun (Peniche May 2010b:71) and more importantly, the form of the early substructure.

Initial analysis determined that Stage I of Structure 34, Structure 31-A, correlates to phase 2 of Hammond’s timeline of construction at Lubaantun (Peniche May 2010b:72), during the same time that Plaza IV was constructed. Stages II to VI are more difficult to assign membership to one of Hammond’s phases, but it was initially noted that the presence of Terminal Classic ceramics in Stage VI would put this stage after Hammond’s phase 5. Hammond also claimed that the stair-outset was constructed during his phase 5 (Hammond 1975:65), which might suggest that Stages IV and V were constructed during that period (Peniche May 2010b:72). This would place Stages II and III anytime between Hammond’s phases 2 and 5.

The ceramics recovered from Structure 34, therefore, represent nearly the full occupational sequence known by Hammond, as well as the Terminal Classic occupation shown by this Structure and Structures 51 and 52. Equally important for this study, the construction sequence of Structure 34 is the best attested stratigraphy of any Structure excavated at Lubaantun. Furthermore, the ceramics recovered from Structure 34 represent

76.8% of the ceramics recovered by TRIP at Lubaantun. For these three reasons, the ceramics from Operation 5 represent the bulk of the analytical material used for the construction of the Lubaantun ceramic sequence. On a more subjective note, the ceramics recovered from Structure 34 appeared to be less eroded, meaning that a greater percent of sherds were found to be diagnostic. It is vitally important then to understand the construction stages of Structure 34 in relation to the occupational sequence at the site in order to ensure full coverage of the ceramic chronology.

### Operation 6

Operation 6 was the last TRIP excavation at Lubaantun during the 2010 field season, and it focused on excavating, located on the western edge of Platform 84 (Hagerman 2010, 2011). Excavations of Structure 45 recovered 1,742 ceramic sherds (Hagerman 2010:152). TRIP excavations sought to expose the architecture of Structure 45 in order to determine its form, function, and occupational history (Hagerman 2010:110).

Structure 45 and the Platform 84, which constituted Plaza VI, it was built on are located just north of Plaza VII, the Butterfly Plaza, although Hammond placed the construction of Platform 84 and all associated structures during his phase 2, while placing Plaza VII during phase 4. Hammond's (1975:47, Fig. 21) map of Lubaantun shows Structure 45 as a small ballcourt with two parallel platforms oriented north-south, although he notes that the Structure 45 may have been an elite residence (Hammond 1975:59). TRIP excavations revealed that the Structure was never a ballcourt (Hagerman 2010:136), the depression down the middle likely stemming from tree fall and not

observable in the underlying architecture (Hagerman 2010:110). Instead, Structure 45 was likely an elite residence with four stages of construction, the earliest during Hammond's phase 2 (Hagerman 2010:136). The last construction phase is more uncertain, but the presence of Belize Red ceramics indicates that it was occupied into the Terminal Classic (Hagerman 2010:138). Stages II through IV are difficult to place chronologically, though they almost certainly occurred during the Late Classic. As such, the ceramics from Structure 45 represent the second most important collection recovered by TRIP archaeologists.

In summation, it can be said of the body of ceramics analyzed that they are representative of nearly the entire occupations span of Lubaantun. Ceramics analyzed in this analysis span from Hammond's phase 2 to phase 5 and beyond, into the Terminal Classic. Structures 34 and 45 have occupations that span from Hammond's phase 2 of construction activity at the site during the Late Classic into the Terminal Classic, after Hammond's phase 5. The excavations at Plaza IV recovered ceramics from phase 2, while the excavations at Structures 51 and 52 come from phase 4 and beyond. The only phase omitted from this analysis is phase 1, which constitutes only the southern portion of Plaza IV as well as Plaza III (Figure 3). Consideration of the phase of occupation the ceramics come from is paramount in developing a ceramic chronology anchored in the archaeological records.

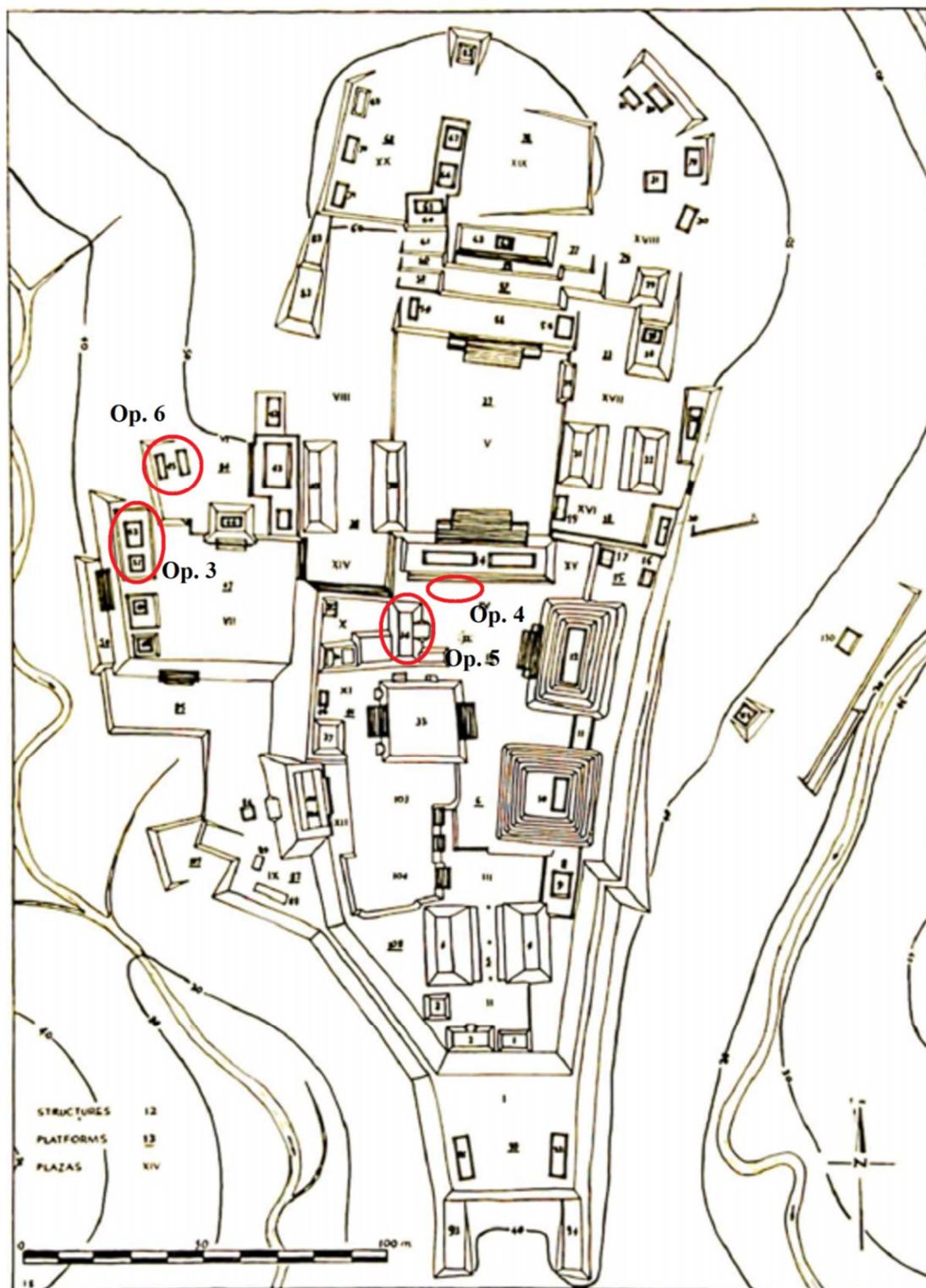


Figure 3: TRIP Operations at Lubaantun. Modified from Hammond 1975

## Methods

The 27,696 ceramic sherds that came from the four Operations outlined above were initially stored by Lot. In the first phase of the analysis, each Lot was opened and ceramics were sorted based on the presence or absence of diagnostic characteristics. Diagnostic characteristics include the presence of painted or reductive decoration of any sort, rim sherds, basal sherds, feet, or sherds with unique body shapes. This sorting process greatly reduced the number of sherds that were part of the analysis, as most of the material recovered at Lubaantun came in the form of small broken body sherds.

Sherds considered diagnostic were then individually illustrated, with all of the sherds from a Lot being illustrated at the same time. The diameter was collected from rim sherds that were complete enough to get an accurate measurement. An attempt was made to type every sherd that was illustrated with mixed success. On the one hand, many of the types found at Lubaantun are fairly distinctive, especially Louisville Polychrome, Puluacax Unslipped, and Belize Red. Other more utilitarian and less finely made types proved much more difficult to separate, particularly Remate Red and Turneffe Unslipped pottery. Sherds of these two types exhibited considerable intra-type variation and, where the slip was eroded, striking inter-type similarity. A refinement of the typology produced by Hammond (1975) may be required.

The sample as a whole was not typed; this would be a productive avenue for future research projects. The ceramic assemblage appeared exceedingly eroded during the sorting process making typing of the many small sherds a difficult undertaking in the limited amount of time available. Preservation as a whole was rather poor. This may be a common feature in the SBR, as one of the first impressions of the ceramics from Nim li

Punit were that “no poorer collection of sherds could be imagined” (Wilk 1977:7). This poor preservation may be one of the reasons that it has taken so long for a ceramic chronology to be developed for the region.

The final stage in the analytical process was to sort the lots by their stratigraphic contexts, such as grouping all of the sherds recovered from the same construction stage of a structure, and then analyze sherds from each stage as a chronological unit. General morphological and decorative changes between stages were noted. A ceramic chronology was created for each individual operation, which were then correlated to one another on the basis of the chronological designations for the stages of each structure. In this way, the entirety of the sample analyzed created a ceramic chronology.

### **The Columbia Complex**

This ceramic chronology of Lubaantun is based on a modal analysis of the pottery recovered by TRIP archaeologists in the 2009 and 2010 field season, with a particular focus on shift in vessel form and decorative techniques. Sherds analyzed were those that were considered diagnostic, which included everything but undecorated body sherds. Each diagnostic sherd was typed, but due to time constraints, type counts of the entire sample recovered were not undertaken; such counts of both number and weight of the entire Lubaantun assemblage will need to be undertaken before the Columbia Complex can be completely formalized.

Furthermore, this analysis of ceramics generally agrees with Hammond’s assessment of temporal divisions among the ceramics at Lubaantun (Hammond 1975:296). The general continuity of major ceramic units, particularly the Turneffe,

Remate, and Puluacax groups, across the entire span of occupation defies any attempt to split a ceramic chronology into two distinct complexes. Instead, the changes witnessed between the founding and the abandonment of the site are best understood as two facets of one complex. This study highlights the observed changes between the early facet and late facet of the Columbia Complex at Lubaantun.

In addition to the types listed below, Hammond (1975) also identified several types that were not included in this analysis because they were either not encountered or not recognized in the TRIP material. These are Monkey River Bichrome (Hammond 1975:322), an unnamed gouged-incised bichrome type (Hammond 1975:333), and unnamed gouged incised type (Hammond 1975:334), an unnamed red on cream type (Hammond 1975:329), and an unnamed gadrooned type (Hammond 1975:329). Except for Monkey River Bichrome, which was represented by ten sherds, all of these types were identified by Hammond based on a single sherd or vessel. It is unlikely that they comprised any significant portion of the assemblage at any point in the history of Lubaantun.

This analysis also gives a cursory overview of type descriptions. For more in-depth descriptions of ceramics from Lubaantun, Hammond's (1975) type descriptions are still unparalleled. Descriptions of the ceramics from other sites in the region also include the site of Nim li Punit (Fauvelle 2012a) as well a preliminary publications of the ceramics from Uxbenka (Jordan and Prufer 2014) and Pusilha (Bill and Braswell 2005; Braswell et al. 2005).

Descriptions of vessel morphology, including vessel forms, rims, lips, bases, and flanges, follow the definitions put forth by Smith (1955a) from his work at Uaxactun and

Sabloff (1975:22-27) from his work on the ceramics of Seibal. One exception is that I have combined the definition of dishes and plates into one group, which I group together as plates. This group consists of vessels in which the height is less than  $1/3$  the vessel diameter. Bowls are considered to be vessels that have a height between  $1/3$  and equal to the diameter, vases are unrestricted or simple restricted vessels taller than they are wide, and jars are vessels with heights greater than the maximum diameter with an independent restricted orifice.

The lack of published material on the ceramics of the SBR was the major impetus for this chronological study of Lubaantun. Because of this, intersite comparisons within the region are sparse. Nonetheless I have sought to incorporate as much data as is available in order to develop a better understanding of how the sites in the region interacted with one another, and particularly where the Columbia complex fits within the larger SBR timeframe.

### Overall Assemblage

Generally, the Early Facet of the Columbia Complex is defined by a number of forms and decorative motifs and technologies, as well as the lack of the Belize Red type. Importantly, tripod plates almost without exception lack the basal flanges that are common during the Late Facet. Bowls with basal angles and incurved sides also make an appearance at the same time. This would place the Early Facet in the Late Classic Tepeu 2.

The Late Facet of the Columbia Complex demonstrates considerable continuity in the types from the Early Classic, the main justification for lumping the entire Lubaantun

assemblage into one complex. Nonetheless there are a few important exceptions that serve as marker for the Early to Late Facet transition. The most obvious is the presence of Belize Red in later stratigraphic contexts at the site, often with Tepeu 3 (Terminal Classic) modes. What also changes between the earlier and later facets at the site are the vessel forms and decorative methods and motifs utilized. Important shifts in vessel form include plates with notched basal flanges and bowls with incurved sides and basal angles. For decorative motifs, unit-stamping becomes an all-important decoration on Remate Red bowls and jars.

Below are listed the type descriptions for the ceramics of the Columbia Complex Late Facet. Because the type descriptions, outside of decoration and vessel form, remain constant, I instead focus on shifts in vessel form and decorative motif. Perhaps more importantly, I compare these materials to other Terminal Classic complexes recovered throughout the lowlands to attempt to develop inferences about the relationships between Lubaantun and the wider Maya world.

## **Turneffe Unslipped**

### Type Description:

Turneffe Unslipped was defined based on Hammond's (1975:296-299) analysis of ceramics from Lubaantun. The paste color of Turneffe Unslipped pottery is often buff to dirty brown, with the occasional sherd that appears more pinkish-buff. The temper is often fine to medium in consistency, with fine quartz sand and crushed limestone. Occasionally shell temper is used in Turneffe Unslipped pottery, but Hammond (1975:297) noted that there was no chronological significance to the presence of this type of temper. By far the most prevalent vessel form manifest in the Turneffe Unslipped type are outcurving-neck jars, often with rims that are nearly flat and lips that are either rounded or squared, though a few unique lip forms are known.

Turneffe Unslipped pottery at Lubaantun is unique in that vessels lack a distinct neck, as observed by both Hammond (1975:298) the material recovered by TRIP, with a few exceptions that may have been Remate Red material that lacked the red slip. The vast majority of Turneffe Unslipped jars and bowls lack decoration. Nonetheless, there are several decorative styles that are quite apparent on some Turneffe Unslipped sherds.

### Columbia Complex Early Facet:

Form: The vast majority of Turneffe Unslipped vessels encountered in the Late Classic material were large jars, often with outflaring necks but not uncommonly with vertical necks (Figure 4). Bowls of this type are not unknown, although their smoother surface and finer paste may mean that they are actually Remate Red vessels that have lost their slip. Bowls commonly have rounded sides or occasionally are very slightly incurved

with a restricted orifice, though this seems to become more common in the Late Facet (Figure 4).

There are a variety of lip forms on both the Turneffe Unslipped jars and bowls. During the Early Facet, lips are often squared with a slight ridge of clay on the interior, possibly a product of the manufacturing process. Also common during this period are lips that are beveled-out. Lip forms generally lack the shallow rounded groove that is found during the Late Facet, though a few very shallow examples are extant.

Surface Decoration: Decoration in both the Early and Late Facets is generally less standardized than that found on Remate Red, both between vessels and on the same vessel. One decorative style that is prevalent on Turneffe Unslipped jar but mostly absent from Remate Red vessels are the striated lines, which consists of groups of lines marked into the clay are varying depths while it was still wet. Hammond (1975:297) noted that the narrow grooves were separated by tiny ridges, and speculated that this decorative style was caused by the pressing. The most commonly encountered decorative motif encountered in the Late Classic material are pendant incised triangles.

#### Columbia Complex Late Facet:

Form: As in the Early Facet, the most commonly encountered Turneffe Unslipped form was a jar with sloping shoulders, nearly vertical necks that often have gradual angles, and outflaring rims that are commonly gradually curve away from the neck (Figure 5).

Surface Decoration: Decoration on Turneffe Unslipped jars and bowls in the late facet of the Columbia Complex mirror those found in the Remate Red type described

below, though of course unslipped: tightly spaced comb-stamping, and radiate-incised decoration on jar shoulders, lateral incisions near the rims of bowls, and potentially some unit-stamping on each. Because Remate Red is the slipped extension of Turneffe Unslipped, they share many of the same decorative characteristics, and some of the Turneffe Unslipped jars and bowls encountered may be Remate Red vessels with weathered surfaces and completely eroded slip. Nonetheless, there are a few decorative motifs that seem to appear only on unslipped jars and bowls. Foremost of these are the unique appliqued faces that were also encountered by Hammond (1975:298) during his analysis of the pottery. These appliqued faces have thus far only been confirmed on bowls, and are commonly found directly below the rim (Figure 5).

#### Intraregional Comparison:

The combination of this being a locally produced and unslipped utilitarian type and the distinct temporal markers make intraregional comparisons between Turneffe Unslipped and other utilitarian wares from elsewhere in the lowlands difficult. Nevertheless, several descriptions may hint at nearly identical forms and decoration styles in the region. Applique decorations on vessels from the Turneffe group are known from Nim li Punit (Fauvelle 2012a:39), which may be similar to the appliqued faces of the Columbia Complex Late Facet, though it is unclear what exactly the appliqued design is. Mirroring the assemblage at Lubaantun, the material from Uxbenka appears to made primarily of Turneffe Unslipped and Remate Red vessels (Jordan and Prufer 2014: 321). Finally, near the small site of Aguacate, located between Uxbenka and Pusilha, Claire Novotny (2014:311) has also reported the presence of Turneffe Unslipped jars.

Discussions of ceramics from Pusilha (e.g. Bill and Braswell 2005; Braswell et al. 2005) do not mention the Turneffe Unslipped type, and it may be that ceramic differences between that site and the rest of the SBR are manifest also in utilitarian wares. Unfortunately, the cursory descriptions of ceramics from many SBR sites preclude the comparison of the finer details of vessel morphology and decorative motifs.

Interregional Comparison:

The decoration of Turneffe Unslipped jars is similar that of other unslipped utilitarian wares across the southern lowlands. Comparison of minute changes in vessel form is difficult due both to the way that such information is variably reported and the overwhelming amount of material. Nonetheless, comparison may be possible by focusing on unique decorative motifs, such as the applied faces found on some Terminal Classic Turneffe Unslipped bowls. Hammond (1975:298) noted that the bowls from the SBR with applied faces are similar to several found in the Tepeu 3 period at Uaxactún (Smith 1955:Fig. 49b6, Fig. 50a24). Similar vessels are reported from Actun Balam, north across the Maya Mountains

Overall, Turneffe Unslipped pottery appears to be most similar to the Cambio Unslipped type attested to at Uaxactún (Smith and Gifford 1966), Seibal (Sabloff 1975:153), Altar de Sacrificios (Adams 1971:18), and the Petexbatun Region (Foias 1996:445). While the descriptions of the paste are often very different from Turneffe Unslipped, general appearance of form and decorations are nearly identical to the unslipped utilitarian wares from these sites. Although utilitarian jars are known from every site that the Maya inhabited during the Late and Terminal Classic, the presence of

stamps and appliqued faces on some Late and Terminal Classic versions of Cambio Unslipped and Pantano Unslipped types are proof of some similarities shared by these types and Turneffe Unslipped. Other utilitarian jars that are similar in decoration, particularly the striated designs, are Encanto Striated (Adams 1971:19; Sabloff 1976:155) and Triunfo Striated (Adams 1971:19).

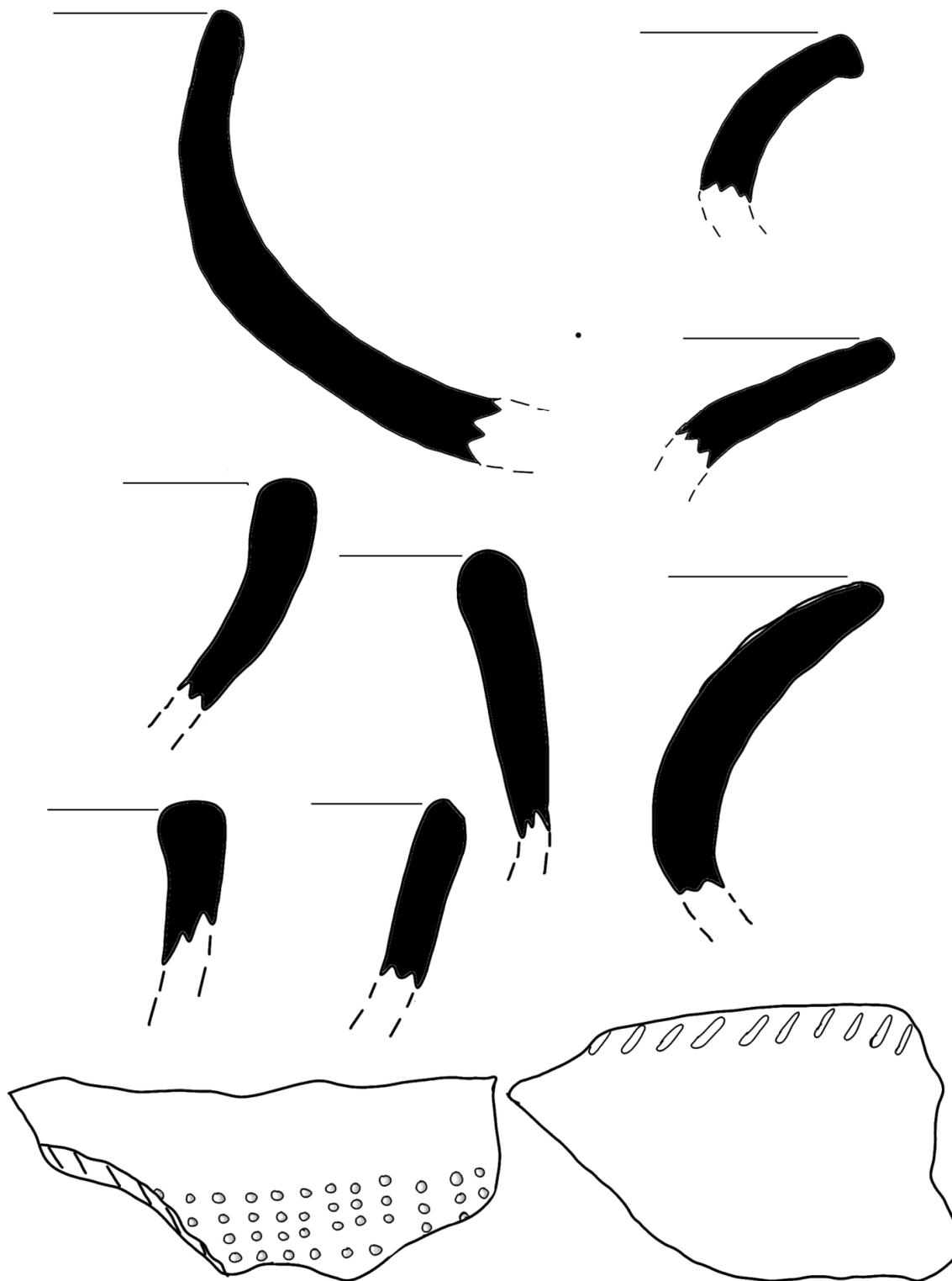


Figure 4: Early Facet Turneffe Unslipped

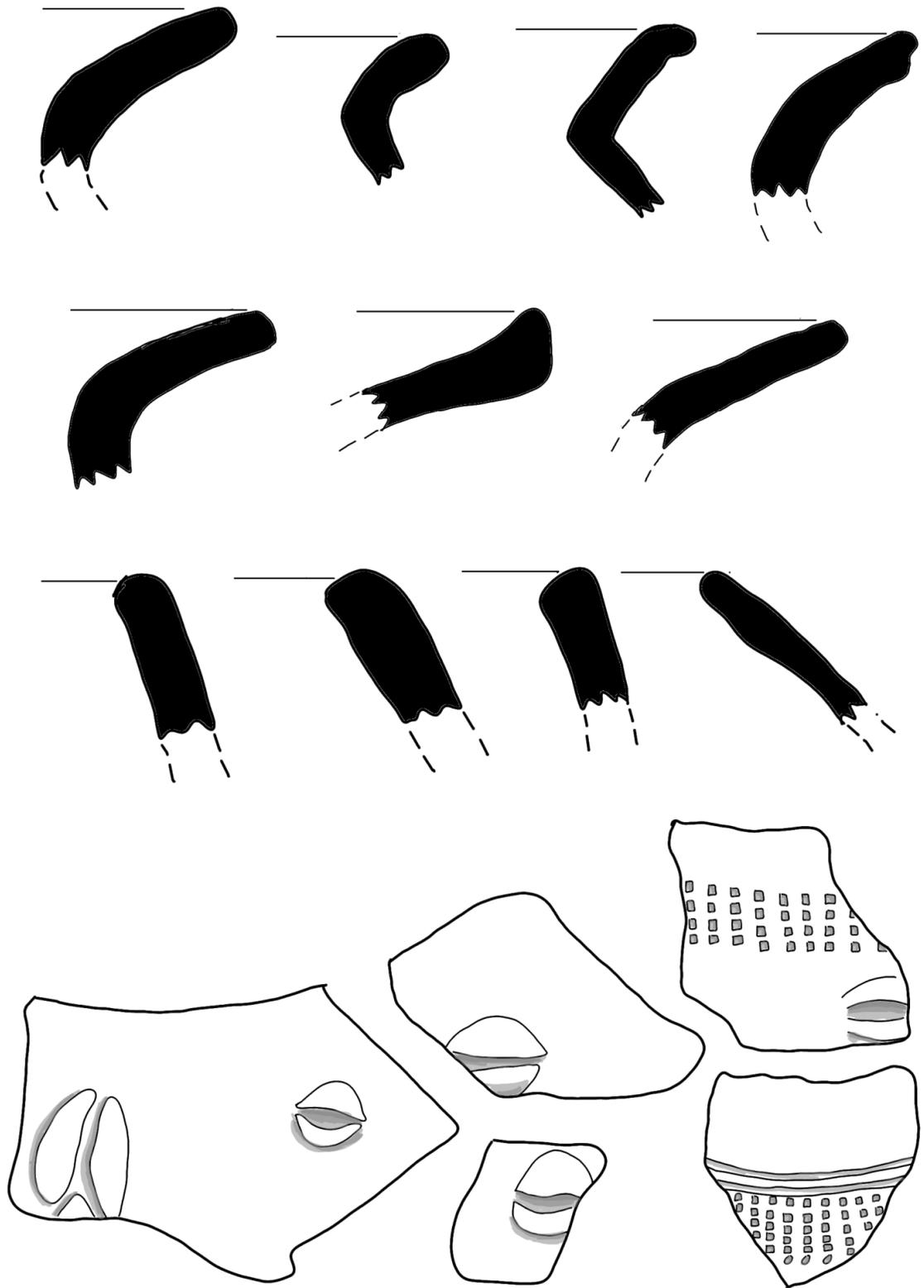


Figure 5: Late Facet Turneffe Unslipped

## **Remate Red**

### Type Description:

Remate Red ceramics are the slipped extension of the Turneffe group, but often have smoother more refined surfaces. The fabric is comprised of the same medium to medium-fine paste of the Turneffe group, often pinkish buff or dirty yellow buff. One difference between the fabric of Turneffe Unslipped and Remate Red is that the latter often has firing that leaves a dark core on both the interior and exterior. Of course the biggest difference between the two types is that Remate Red ceramics are slipped a dull plum to dull brick red, though on eroded sherds this often ranges into a darker brown. The slip on many sherds is heavily eroded, leaving a smooth surface in contrast to the often rough surface of Turneffe Unslipped ceramics.

### Columbia Complex Early Facet:

Forms: Early Facet Remate Red ceramics are commonly bowls with varying degrees of outcurved or vertical sides (Figure 6). There are few examples of bowls with rounded sides during this period, and restricted orifices are almost unknown. Additionally, jars similar to Turneffe Unslipped material have been identified, though the jars often lack the tall necks found in the Turneffe group. Instead, vessels often restrict and then have outflared everted rims. Unlike the Turneffe Unslipped ceramics, there are a few examples of vertical necks that have angular breaks from the rims and shoulders. The rims on these vessels are often decorated.

Surface Decoration: All vessels are red slipped, as part of the criteria for being placed in the Remate Red group. Decorations include incised lines and impressed or

punctate circles. The decoration of Turneffe Unslipped and Remate Red jars and bowls focuses mainly on impressed circle designs, incised grooves running lengthwise around the vessel, and short shallow comb raking. These are almost exclusively found along the shoulder of jars and bowls. The one exception are incised circles with impressed dots inside of them, found on the underside of rims on a few vessels with formalized necks. Punctate designs feature several rows of small circular punctures along the shoulder of jars, often lacking other decoration. Additionally, several jars have either impressed circular designs accompanied by incised lines running along jar shoulders, or stamped ring designs, sometimes with the inner circle having been broken out, also in association with incised lines. The latter of these has only been noted on the red-slipped Remate Red bowls. Finally, the unit-stamped designs common in the Late Facet appear to have an antecedent in the Early Facet, with small geometric designs adorning the rims of a few jars. These stamped designs are reminiscent of those found further east in the southern Peten, but are much smaller and feature different motifs than the Late Facet zoomorphic unit-stamps (Figure 7).

#### Columbia Complex Late Facet:

Forms: As with other utilitarian materials from Lubaantun, Remate Red forms remain fairly static throughout the entire occupation, one of the main justifications for keeping the entire occupation grouped into one in one complex. Nonetheless, several minute changes were noticed. Jar forms remain consistent, although taller necks appear. Bowls are less outcurved and begin to be vertical or incurved, often to a greater degree than in the Early Facet (Figure 7). A new form that appears to be heavily associated with

other Late Facet material is the incurved side bowl. These can either be slightly incurved with a slightly restricted orifice, or more commonly bowls with markedly incurved sides and a very restricted orifice. Although no systemic type counts were undertaken, it is also interesting to note that Turneffe Unslipped appears to represent a larger component of the assemblage in the Late Facet. This pattern was also noted at Nim li Punit (Fauvelle 2012a:81).

Surface Decoration: Decoration becomes slightly more complex in the Late Facet, with comb-stamped patterns, almost always vertical columns of small squares or circles, decorating the sides of bowls and shoulders of jars. Isolated impressed circular designs appear to be less important, as only one possible example was found with other Late Facet material. One of the most striking changes to Remate Red pottery during the late facet of the Columbia Complex is the presence of unit-stamped designs that appear in circumferential bands along the shoulders of jars or just below the rims of bowls. Stamping motifs are often zoomorphic in nature, with monkeys, birds, and possible snakes (or simply S-shapes) being the most often encountered examples. These unit stamps are often accompanied by comb-stamping either above or below the register of unit-stamps. These stamps are the most ubiquitous marker of the Late Facet in the Lubaantun material, and could serve as helpful signposts in the dating of further excavations.

#### Intraregional Comparison:

The Remate Red type found at Lubaantun is well situated in the ceramic assemblage of the SBR as a whole. The Early Classic Santa Cruz Red Group described at

Uxbenka appears to be the direct predecessor to the Remate Red Group that is also found at that site during the Late Classic (Jordan and Prufer 2014:321). During the Tepeu 2, coeval with the Early Facet of the Columbia Complex, the monochrome red vessels of the Remate Red group at Uxbenka are the most abundant type of pottery found there. Around the same time as Lubaantun was occupied, the Remate Red pottery is also reported from the area around Aguacate (Novotny 2014:311). Unit-stamps on Remate Red ceramics are reported from Uxbenka, though apparently lacking more elaborate zoomorphic designs such as monkey and bird motifs (Jordan and Prufer:321). These stamps may mirror the geometric designs encountered on Early Facet Columbia Complex for Lubaantun. Noting the relatively early abandonment of Uxbenka, this is further indication that complex unit-stamping is part of the Terminal Classic assemblage in the SBR and other regions. At Nim li Punit, stamping is also known from the Late Classic, often with geometric shapes like that of the Early Facet (Fauvelle 2012a:81). No zoomorphic designs are reported from that site, nor are any unit-stamped designs in the Terminal Classic. It may be that whatever these stamps represent, such as exchange with extraregional polities (see below), was controlled by Lubaantun during the Terminal Classic.

Interestingly, red-unit stamped pottery appears plentiful along coastal sites in the SBR, including Stingray Lagoon (McKillop 1995:221) and the Payne's Creek saltworks (McKillop 2005:5633), near salt-making bowls, jars, and associated artifacts, perhaps indicating connection with that economic activity. The only extant example of an actual stamp was also recovered in the coast of southern Belize at Wild Cane Cay (Kidder 1954:12). McKillop's (1995, 2005) studies of southern coast of Belize have indicated that

excess salt was produced in those regions for transport upriver into inland regions, including the southern Peten. If this is the case, it may be that the presence of unit-stamped pottery at Lubaantun represents that the site acted as a node along the routes leading from the coast to the larger inland sites to the east and to the north. In contrast, Hammond speculates that unit-stamping was instead part of the in-situ development in all of these regions (Hammond 1975:305).

#### Interregional Comparison:

Monochrome red material is known throughout the lowlands in all periods, but being a member of the Peten Gloss ware, the Remate Group appears most similar to the Tinaja Red Group in the Petexbatun Region (Foias 1996:468), Altar de Sacrificios (Adams 1971:22–23), and Seibal (Sabloff 1976:158), all of which were produced during the Late and Terminal Classic periods. The material is also similar to the Subin Red Group from Altar de Sacrificios (Adams 1971:22), though Foias (1996:479) notes that the difference between this group and Tinaja Red is only in form, and therefore classifies it as the Subin Variety under the Tinaja Red type. These related groups share many of the same forms as the Remate Red group, including slightly-outcurved bowls, incurved side bowls, and large necked-jars.

Monochrome-red jars and bowls with unit-stamping are found in the southern lowlands, primarily in the SBR, the Vaca Plateau (Chase 1994:179; Pendergast 1969:27) and Chiquibul region (Pendergast, 1970:41, 1971:51), and in the southern Peten, primarily along the Rio Pasion (Sabloff 1976:168; Adams 1971:22). Isolated finds have also been reported from El Mirador in the northern Peten (Forsyth 1989:91). Unit-

stamped pottery appears to be unknown at Piedras Negras and the Guatemalan Highlands (Adams 1971:47). Most interestingly, Adams (1971:47) speculates that the relatively small amount of unit-stamped material from the Rio Pasion, in contrast to its numerous appearance at Lubaantun, indicates that they style may have originated in the Southern Belize Region (Adams 1971:48).

The motifs employed at each site appear to differ greatly, though the most common type appears to be an S-scroll or snake. The way in which the vessels are stamped also appears to be a function of where the vessels were made. Some are found almost exclusively in double rows, some regions completely lack the comb-stamping, and other regions have large margins between the stamps. Zoomorphic stamps appear to be unique to the SBR. Two things that tie this tradition together are the nearly continuous area along which they are found and unit-stamped designs come almost exclusively from the ninth-century A.D., indicating continued connections during this period of fragmentation. Hammond speculates that unit-stamping did not originate in any one of these areas, but instead was part of the in-situ ceramic development of all regions connected through economic or cultural ties (Hammond 1975:305).

Based on the expanded suite of unit-stamp designs at sites in the Pasion Region compared to those recovered at Lubaantun and Nim li Punit (Fauvelle 2012a:81), as well as the contrast in the different motifs employed by potters in every region, I am inclined to agree with Hammond that the unit-stamping of monochrome red jars and bowls did not originate in the Southern Belize Region. Instead, I propose that Lubaantun likely existed on a trade route from the Rio Pasion out towards the Gulf on Honduras, which likely started at the coast and then up the Rio Grande into the Columbia Branch, through

passages in the Maya Mountains, and west towards the Peten. This route would facilitate not only the exchange of goods, but also ideas. Furthermore, there may be shared cultural affiliations between these regions that account for the continued similarity in the ceramic materials during the Late and Terminal Classic periods.

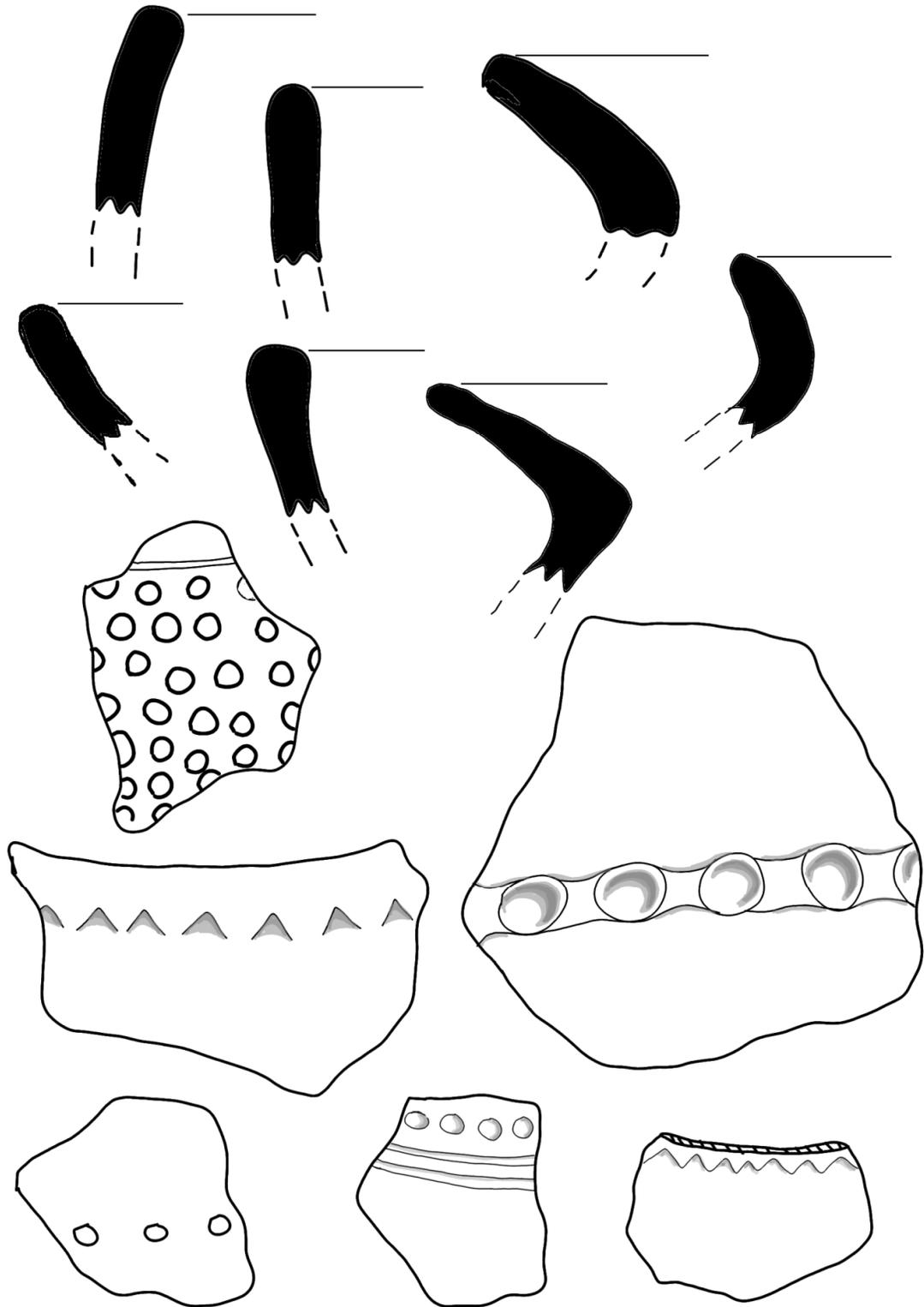


Figure 6: Early Facet Remate Red

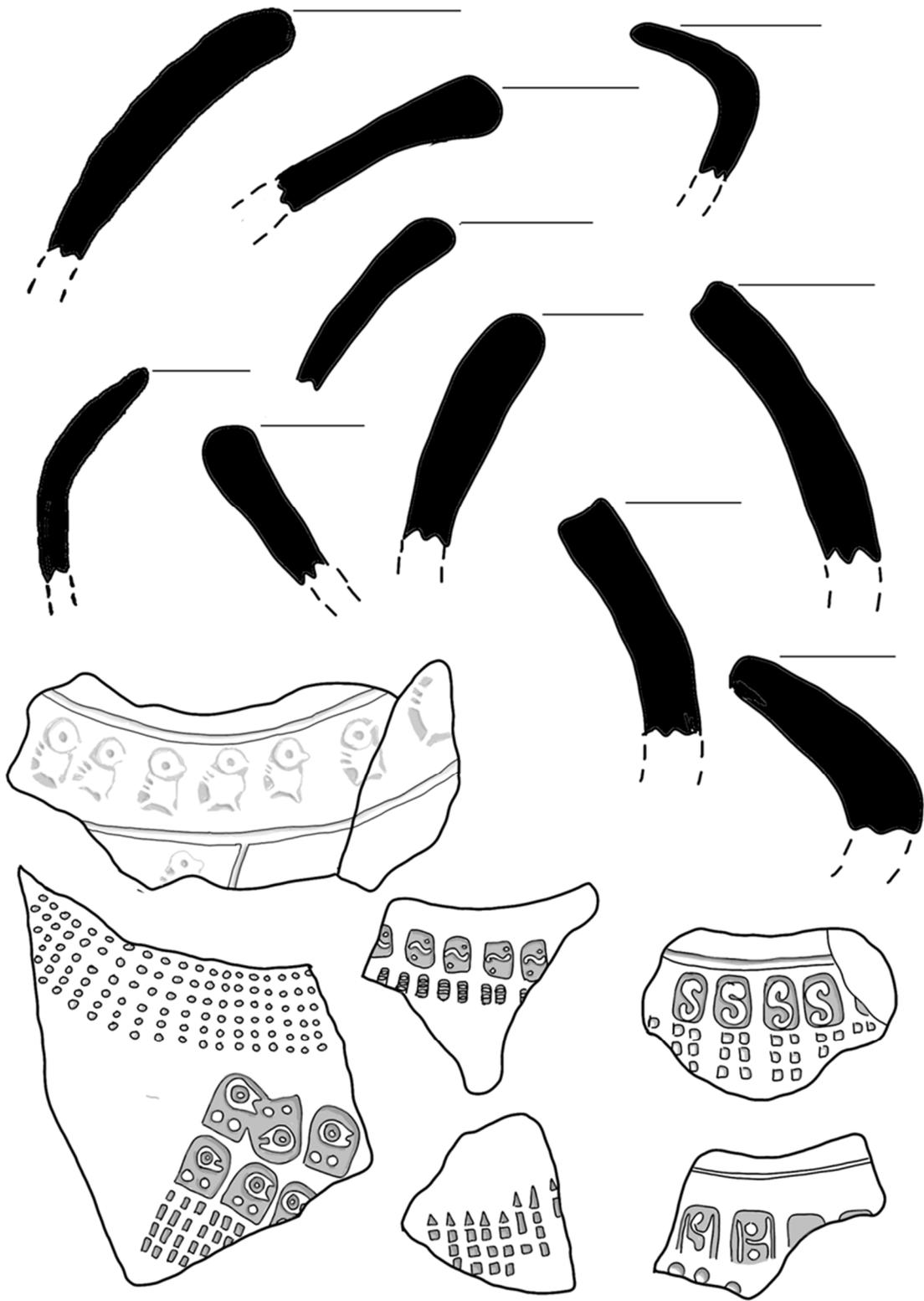


Figure 7: Late Facet Remate Red

## **Chacluum Black**

### Type Description:

Chacluum Black encompasses a wide range of attributes, with paste color that ranges from yellowish to pink, variable thickness, a wide range in the amounts of temper, and varying levels of glossiness. Hammond (1975:308) developed the Chacluum Black based on only 57 sherds recovered from his 1970 excavations, and noted that subdivision would likely be possible with a larger sample. The surface of Chacluum Black sherds are covered with a dense black slip of medium-glossiness. Common forms include tripod plates, cylinder vases, and bowls. Some Chacluum Black sherds are reminiscent of reduced fired Remate Red bowls or jars excepting the yellowish fabric. As such, Hammond (1975:308) chose to place Chacluum Black within the Remate group, but keep it as a separate type.

### Columbia Complex Early Facet:

Form: Less than a dozen diagnostic Chacluum Black sherds were identified in the TRIP material, making seriation difficult. Hammond (1975:308) noted that the most common form encountered during his excavations come from round sided bowls or jars. Several such vessels were recovered during TRIP excavations (Figure 8). Nonetheless, most of the material from the Early Facet appears to be from plates, another form attest in Hammond's work. Although no significant portion of a plate base or feet were recovered, the association of the plate sherds with other Tepeu 2 material indicates that the vessels probably lacked basal flanges.

Surface Decoration: Apart from the glossy black slip that is present on all Chacluum Black vessels, no surface decoration was extant. Hammond (1975:308) notes the presence of applied ridges, scratched designs, and circumferential incisions on vessels of this type, but it is difficult to separate these into either the Early or Late Facet based on the limited material recovered.

#### Columbia Complex Late Facet:

Form: Slightly incurved cylinder vases appear in the ceramic assemblage during the Late Facet, as evidenced by two diagnostic sherds (Figure 9). These two vases are highly reminiscent of a Chacluum Black vase recovered in 1970 (Hammond 1975:Figure 112a), both in the angle of the rim and the raised ridges running horizontally below the lip. One sherd from a possible outflaring plate was also recovered, but again no portion of the base was preserved.

Surface Decoration: The slip of Chacluum Black vessels appears to become browner during the Late Facet; such developments were also noted in the 1970 material (Hammond 1975:308). The largest development during the Late Facet is the presence of raised applied strips running circumferentially around vessels, particularly the vases that were recovered. These raised ridges are often rounded and separated by less than a centimeter. Ridges are found in groups of three or more.

#### Intraregional Comparison:

Chacluum Black materials have been reported during the Early and Late Classic at Uxbenka (Jordan and Prufer 2014:321), indicating an origin at that site. Chacluum-like

ceramics are also known in the Late Classic from Nim li Punit (Fauvelle 2012a:35), where they go by the name Ekluum Black. At Nim li Punit, the primary vessel forms are open and closed bowl forms, as well as a rarer jar form. No vases or plates appear to have been recovered in the Nim li Punit material, in contrast to the Lubaantun assemblage. The paucity of black-slipped material excavated by TRIP excavations at Lubaantun could be too small to accurately account for all vessel forms at the site. No Chacluum material has been reported from Pusilha, further indication that it existed in a separate ceramic economy and different developmental line from Uxbenka, Nim li Punit, and Lubaantun.

#### Interregional Comparison:

Although division of monochrome black ceramics is difficult, Chacluum Black is similar to other monochrome Late Classic types found throughout the lowlands. The strongest similarities appear to be between Infierno Black from the southern Peten (Sabloff 1975:119), which feature the same forms, though generally lack the incision and ridges that are nearly ubiquitous on material from Lubaantun. The incisions common on Chacluum Black sherds are reminiscent of an unnamed black-slipped and incised type from Altar de Sacrificios that have been placed temporally during the Terminal Classic (Adams 1971:Figure 58k). Hammond (1975:309) proposed that Chacluum Black was similar to the Achiote Black from Altar de Sacrificios (Adams 1971:25) and Seibal (Sabloff 1975:181), though the forms are quite dissimilar as to reject this proposed linkage.

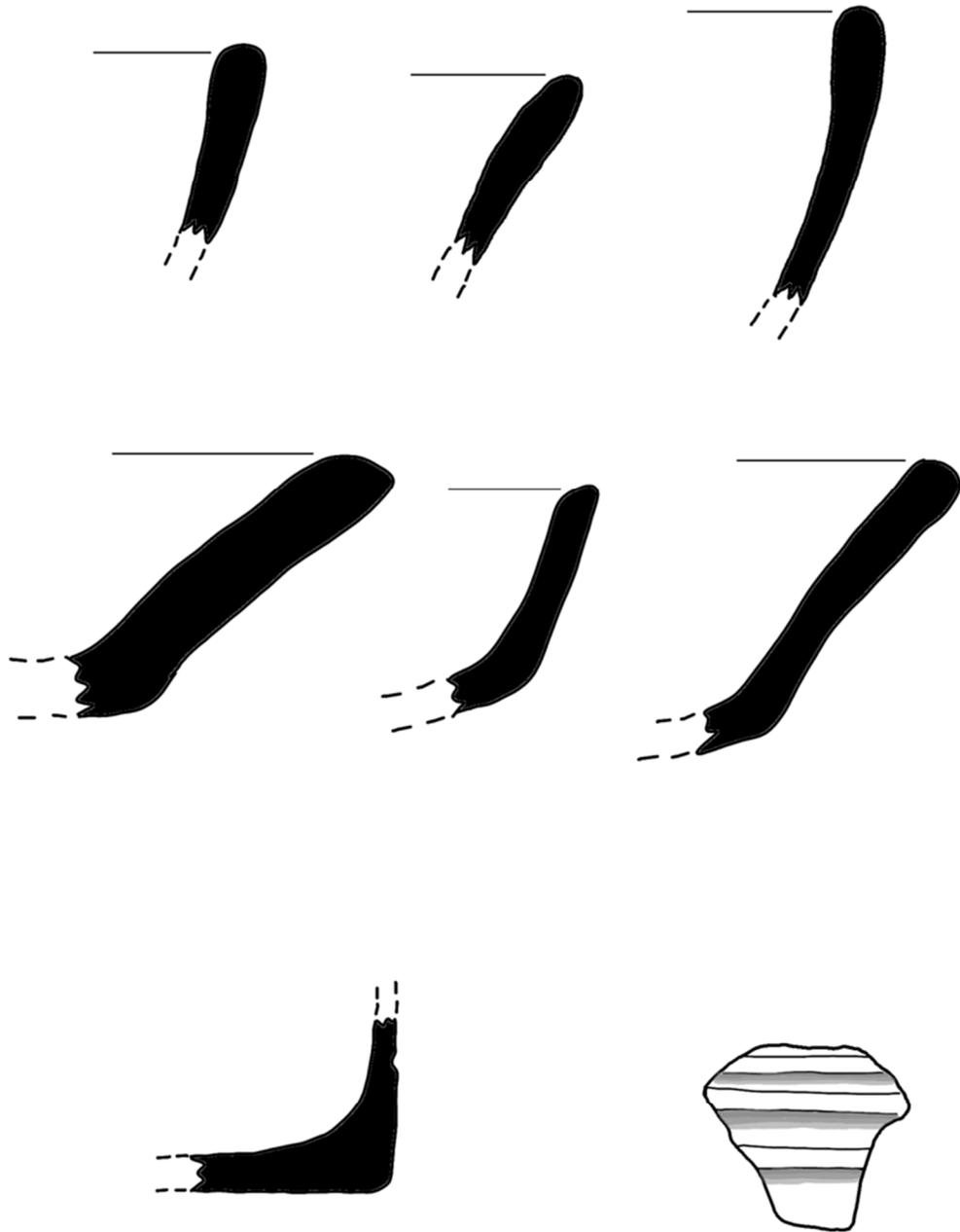


Figure 8: Early Facet Chalcium Black

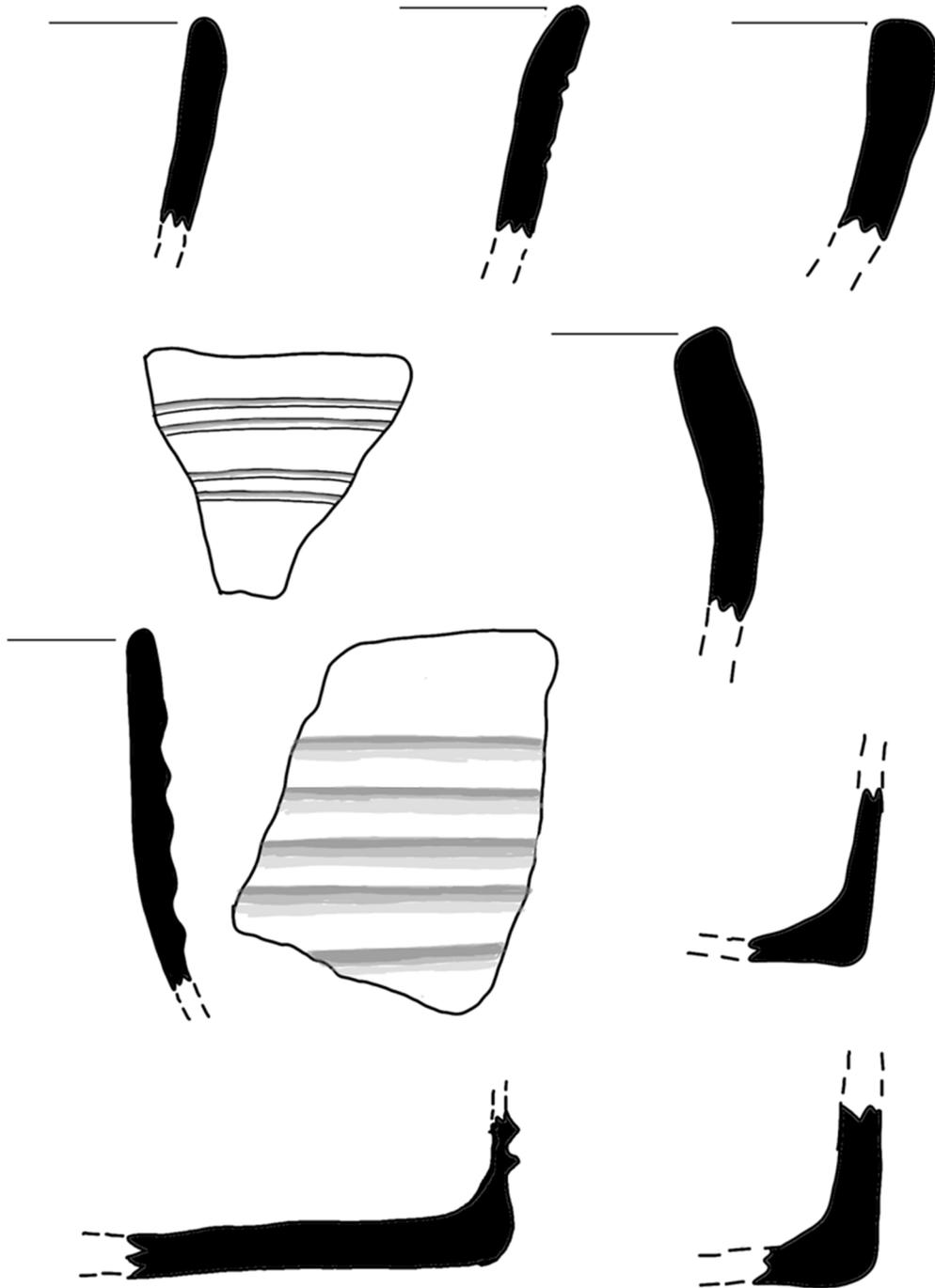


Figure 9: Late Facet Chacuum Black

## **Puluacax Unslipped**

### Type Description:

Puluacax Unslipped pottery is distinctive at Lubaantun in both composition and form, making it easily identifiable during the excavation and sorting process. The type features a thick unslipped red to orange fabric with coarse quartz-grit temper, making vessels rough to the touch. Color is commonly brick red, but can vary between orange and light pink. The core of the vessels is commonly blackish gray, but is sometimes the same color as the surface. The surface is unfinished, with extruding bits of quartz and sand temper causing a rough feeling. Hammond (1975:299) notes the presence of a light surface wash on some sherds, especially those with lighter colors. The presence of this wash was corroborated by the present study. Occasionally, there appears to be circumferential raking or striation near the bases of the vessels, just above the base.

Most Puluacax Unslipped sherds come from z-angle bowls, though some angles are very shallow and sides are nearly vertical. Rims are frequently thickened on the interior, and are often twice as thick as the sides of the vessel. Hammond (1975:299) refers to the primary Puluacax Unslipped form as that of a jar, but analysis of the material recovered at Lubaantun by TRIP indicates that bowl may be a more accurate description; Sabloff's typology of vessel forms makes it clear that jars are necked vessels with a height that exceeds the maximum diameter and featuring an independent restricted orifice (Sabloff 1975:23), criteria not fulfilled by the Puluacax Unslipped form. This confusion likely stems from the fact that Hammond (1975:300) noted that he encountered no body-to-base angles, and speculated that the vessel height must have been at least 40 to 50 cm; this has not been borne out by the present analysis. Several basal angles were

encountered in the material recovered by TRIP excavations that reveal that the vessels were squat bowls. Furthermore, the lack of base angles among Hammond's material likely stems from the base becoming increasingly thin near the base, in sharp contrast to the incredibly thick rims. No bases of Puluacax Unslipped vessels have been identified, and many of them likely eroded away due to the extreme friability and thinness of bases. Keith Prufer (2014 personal communication) believes that Puluacax ceramics were simply a ceramic collar that held another vessel, possibly over a fire. I remain unconvinced, as the base angles recovered by TRIP excavations show breakage where the base would be, evidence that vessel continued. Furthermore, Geoffrey Braswell reports that Puluacax Unslipped bases were observed during excavation, that they featured the same raking and striation observed near on the sides near the bases, and that they were black and burned (Braswell 2015 personal communication). Unfortunately, these friable bases fell apart during recovery.

#### Columbia Complex Early Facet

Form: Puluacax Unslipped appears to remain fairly static throughout the occupational history of Lubaantun (Figure 10). The type is almost wholly outcurved bowls with z-shaped side, thick rims that are sometimes thickened further on the interior, with rounded bodies that taper off into increasing thinness near the base. Several basal corners have been recovered, but locating actual bases has proven difficult.

Surface Decoration: Puluacax Unslipped lacks any surface decoration with the exception of some lines incised near the base. Whether these lines were created for some functional purpose or if they are a result of use in some sort of specialized manner is

unknown. Some sherds also show the presence of a light wash, but whether this is a result leeching from the soil or a part of the manufacture process is at this point unknown.

Columbia Complex Late Facet:

Form: Puluacax Unslipped forms change little throughout the Classic Period. Generally they are bowls with everted out rims that are often thickened on the interior. This gives the rims a rather thicker width than the area below the break in the vessel sides. Near the base, the vessel gets increasingly thin down to 0.5cm before nearly all of them have broken away. Vessels are generally standardized, but are very crudely made so as to preclude the recording of accurate rim diameters.

Hammond (1975:301) speculated that Puluacax Unslipped jars were used for large storage bowls, holding either water or corn, based on the gross fabric and necked jar form. He also left open the possibility that they were used for a more exotic function, such as boiling cacao to make chocolate, based on the concentration of the type he found in Plazas XIX and XX. In contrast, Pendergast speculates that the distinctive composition and form of a nearly identical type recovered from the Chiquibul region (see below) indicates specialized use (Pendergast 1970:58), or possible ceremonial use (Pendergast 1969:34). Both Pendergast and Hammond agree that the friability of the type makes them ill-suited for long-term use, and to this I add transportation. I argue that Puluacax Unslipped represent some aspect of the Late and Terminal Classic economy, perhaps related to production of food such as salt or cacao, that were found in a fairly limited geographical region. Further analysis is required to determine the purpose for these vessels.

Puluacax Unslipped vessels may be more frequent in the Terminal Classic, indicating that whatever economic activity they represent became more important during that period.

Surface Decoration: As with the Early Facet, there is not surface decoration found on Puluacax Unslipped ceramics save for the striated or raked lines etched near the bottom and the light wash. The lack of discernable decoration and stasis in form are strong indications that this type of ceramic had a very specific utilitarian use, and was perhaps discarded after only a few uses.

#### Intraregional Comparison:

Puluacax sherds have been reported from around Aguacate (Novotny 2014:311) and Uxbenka (Jordan and Prufer 2014:321) during the Late Classic. In contrast to Lubaantun, Puluacax Unslipped appears relatively rare at Nim li Punit during the Late Classic (Fauvelle 2012a:50), and are completely absent from Early Classic contexts at that site (Fauvelle 2012b). At Pusilha, the Puluacax Group is also confined to the Late Classic (Braswell et al. 2004:226). Throughout the SBR, no Puluacax sherds have been recovered from the Early Classic, and they appear to become more common during the Terminal Classic. No site appears to have the sheer amount of Puluacax Unslipped ceramics as Lubaantun, and whatever economic activity the type represents may have been primarily the purview of that site, becoming more important throughout time.

#### Interregional Comparison:

Puluacax Unslipped, a form that has been called diagnostic of the SBR in general and is especially known from Lubaantun, has several correlates in other regions as well, although they are typically more difficult to identify in the archaeological literature.

Pendergast's (1969:34) description of a set of crudely made bowls with rounded lower bodies, inward-curving shoulders, and outflaring rims found at Actun Balam are reminiscent of the Puluacax Unslipped type so common at Lubaantun, as are the illustrations of two of these rim sherds (Pendergast 1969:33, Figure 9k,l). The description of the vessel base approaching "eggshell thickness" is also in accord with that type, as is the presence of "diagonal slashes" (Pendergast 1969:34). Pendergast notes that this is a ware "unknown in other areas, but occurring in at least one other Chiquibul area cave..." and that this type "may have been for ceremonial use, as they crumble so easily as to make prolonged or intensive use virtually impossible" (Pendergast 1969:34). Similar crudely made jars from Eduardo Quiroz Cave, featuring the same characteristics (Pendergast 1970:57). The illustrations (Pendergast 1970:59, Figure 15a) and description (Pendergast 1970:57) follow exactly what Hammond (1975:299) reported for the type, and what was observed during the creation of this chronology.

Although crude bowls resembling Puluacax Unslipped have been recovered at Actun Balam and Eduardo Quiroz Cave, published descriptions of the ceramics from Caracol, situated between the two, have yet to describe a similar ceramic type (Chase 1994). This may result from a treatment of ceramics from Caracol that has mostly focused on burial contexts; Puluacax Unslipped seems far more utilitarian and economic than it does prestigious, and so may not be represented in those contexts.

Using new ceramic chronology to try and make sense of the geographic extent of Puluacax Unslipped ceramics. Connections across the Maya Mountains, as far north as the Chiquibul Region, is demonstrated through the presence of Puluacax Unslipped ceramics coeval with connections to the same region demonstrated through the presence of the exotic Belize Red type at Lubaantun, which came from the same region. It seems highly unlikely that such friable, crudely made jars with thin bases were exchanged the long distance from Lubaantun, across the Maya mountains, and into the Chiquibul region. Instead, the presence of jars that are reminiscent of Puluacax Unslipped likely represents similar utilitarian uses for these crude jars at each site. It is unknown whether these jars were used for cooking, storage, ritual uses, or some yet undiscovered function. Hammond's assertion that "Puluacax Unslipped is a purely local development in South Toledo" (Hammond 1975:301) must be reevaluated. Puluacax may have begun in the SBR during the Late Classic and later adopted by populations living across the Maya Mountains, perhaps in association with cacao production (Hammond 1975:301).



Figure 10: Puluacax Unslipped

## **Louisville Polychrome**

### Type Description:

Cream slipped ceramics of the Zacatal group are common throughout the southern lowlands (Foias 1997:558). At Lubaantun, Hammond (1975:315) chose not to recognize the Zacatal group, but instead created the Louisville Group. Previous analysis of ceramics at both Lubaantun and Nim li Punit by TRIP archaeologists have given the impression that Louisville and Zacatal groups overlap with one another (Fauvelle 2012a:68). It still stands that the Louisville Polychrome type developed by Hammond (1975:315) at Lubaantun is a unique manifestation of the group, and should be maintained. In essence, I advocate for moving the Louisville Polychrome type from the Louisville Group, which is likely redundant, and into the Zacatal Group recognized throughout the southern lowlands.

The fabric of Louisville Polychrome is generally consistent with the Turneffe and Remate Groups, with the addition of a thick cream coating. In sherds that are not heavily eroded, the Louisville Polychrome type is easily recognizable by the thick cream coating, which Hammond (1975:315) notes is too thick to be a true slip. Polychrome designs in orange, red, and black are found on sherds that have not experienced excessive erosion, but such sherds are the exception rather than the norm. Most sherds retain only the thick cream coating while lacking anything but very spotty decorated designs.

### Columbia Complex Early Facet:

Form: By far the most common Louisville Polychrome form recovered by TRIP excavations was tripod plates (Figure 11). Louisville Polychrome plates from the Early

Facet generally follow the same forms as Tepeu 2 ceramics reported from elsewhere in the lowlands during the Late Classic: outflaring or outcurving sides at varying angles, often with feet (see Smith 1955:II:Figures 55-59; Adams 1971:41). Rims are without exception direct, and the lips of vessels are rounded, squared, or occasionally beveled-in.

Surface Decoration: Analysis of surface decoration on Louisville polychrome is based primarily on the polychrome decorations that were painted on top of the cream coating, as vessels from the early and late facet both feature the same cream upon which designs were painted. Unfortunately, no polychrome decorations survive on Early Facet sherds. Because these vessels come from the Tepeu 2, it is likely that they shared many of the common decorations from across the Lowlands, especially Smith's "dress shirt" design (Smith 1955:I:63-64).

#### Columbia Complex: Late Facet:

Form: Hammond (1975:296) noted that the main difference between the early and late facet was the general lack of cream-slipped polychromes in the Late Facet. This position is no longer tenable in light of TRIP excavations, as several Louisville Polychromes were identified alongside Terminal Classic materials (Figure 12). Additionally, many of these Louisville Polychromes are tripod bowls or plates that have a notched basal flange, a diagnostic characteristic of the Tepeu 3 (Smith 1955:I:25). This is in contrast to the Louisville Polychromes from earlier contexts that have no flanges, notched or otherwise.

Surface Decoration: Polychrome designs remain consistent between the Early and Late Facet on Louisville Polychrome ceramics. A few sherds feature the "dress shirt"

design that is so common on Late Classic polychromes (Smith 1955:I:63-64). This is in accord with the general pattern of few new decorative techniques being added in the Tepeu 3, the exception being modeled carving.

#### Intraregional Comparison:

Zacatal Polychromes are attested at the site of Nim li Punit (Fauvelle 2012a:68), where they have been divided into three types: Indian Cream Slipped Polychrome, Acal Cream Slipped Polychrome–Soft Orange Paste, and Chub Cream Slipped Polychrome. These designations reflect temporal as well as form differences. Indian Cream Slipped Polychrome is most often in an outleaning bowl form and is associated with buried A-Horizon soils, tying the type to the earliest ceramic phases at Nim li Punit, before the occupation at Lubaantun (Fauvelle 2012a:70). Acal Cream Slipped Polychrome–Soft Orange Paste ceramics are also from the earliest ceramic phase, but have an orange paste and an incurved to slightly restricted bowl form (Fauvelle 2012a:73). The final type, Chub Cream Slipped Polychromes, are found in shallow contexts and appears to have been the primary polychrome at Nim li Punit during the later ceramic phase of that site (Fauvelle 2012a:75). This would make Chub Cream Slipped Polychrome coeval with the Louisville Polychromes of Lubaantun, but the former is known only from restricted bowl forms (Fauvelle 2012a:75), while the material at Lubaantun is mostly tripod plates.

Zacatal Polychromes are also known from Uxbenka (Jordan and Prufer 2014:322), although researchers at that site have chosen to separate Zacatal from Louisville Polychrome following Hammond. Many Louisville Polychrome vessels have been recovered from that site with similar pastes to the materials from Lubaantun (Jordan

and Prufer 2014:322). This would seem further indication of close ceramic ties between Uxbenka and Lubaantun, and as hypothesized above, Lubaantun may represent a resettling of the population from Uxbenka.

The polychrome assemblage at Pusilha is quite different from the other three major sites in the SBR. Most polychromes from that site are orange-slipped as opposed to cream slipped, and many appear to come from the Saxche-Palmar Orange groups established in the Pasion and central Peten (Braswell et al. 2004:227). The polychromes from Pusilha also feature design elements that are rare across the Maya lowlands but are common in the southeastern Mesoamerican periphery (Braswell et al. 2004:227; Bill and Braswell 2005:309).

#### Interregional Comparison:

Zacatal Polychromes are known throughout the lowlands, and the type was established at Uaxactún by Smith and Gifford (1966:164). In the southern Peten, Zacatal Polychrome ceramics are known from the Petexbatun region during the Nacimiento phase, where the temper for the ceramics is commonly carbonate like that of Lubaantun, though sand and ash tempers are also attested (Foias 1996:558). The most widely attested form is a tripod plate, similar to that at Lubaantun, which features the same beveled, round, or squared lips (Foias 1996:563).

Similar cream-based polychromes with nearly identical temper are also known in the Saxche and Palmar types from the Tepejilote Complex at Seibal (Sabloff 1975:125), though the eroded nature of sherds from that site made it more expedient to combine these two types. Similar vessels are also attested at Altar de Sacrificios (Adams 1971:41).

The paste of these vessels is similar to that of those found at Lubaantun, and the decorative motifs are also shared. The cream-slipped polychromes from Uaxactún are also strikingly similar to the material from Seibal and Lubaantun, sharing many of the same design elements and vessel forms during Tepeu 2 (Columbia Complex Early Facet). Interestingly, this type seems to have a lessened presence at Seibal and Uaxactún during the Tepeu 3 horizon in the Terminal Classic. This is in concert with Hammond's assessment of the general disappearance of the cream-slipped Louisville Polychrome type during the Late Facet of the Columbia Complex (Hammond 1975:296), but does not agree with the material recovered from TRIP archaeologists. Several diagnostic sherds were recovered from the latest contexts at Lubaantun that are clearly of the Louisville Polychrome type. Further analysis will be needed to iron out this inconsistency.

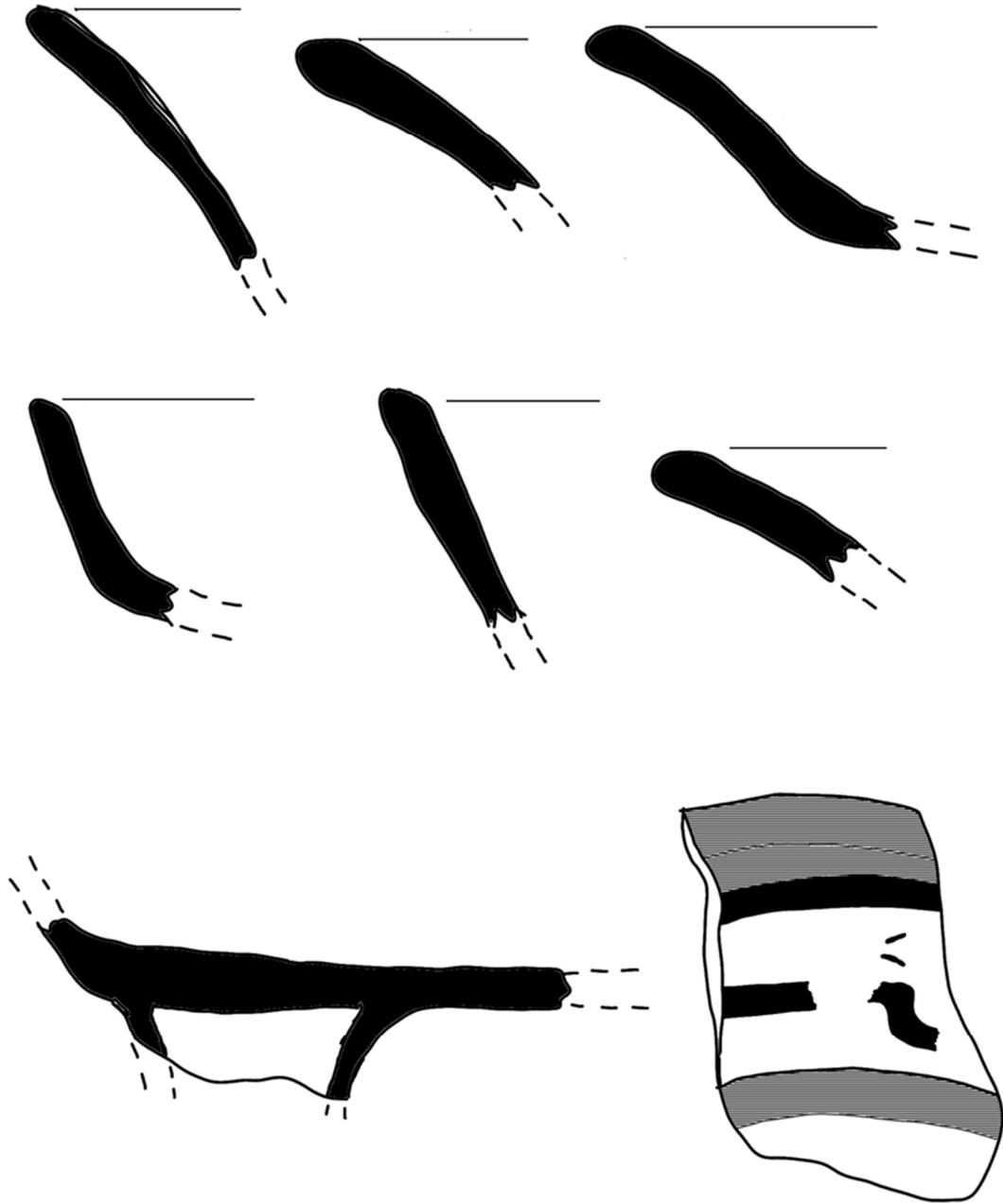


Figure 11: Early Facet Louisville Polychrome

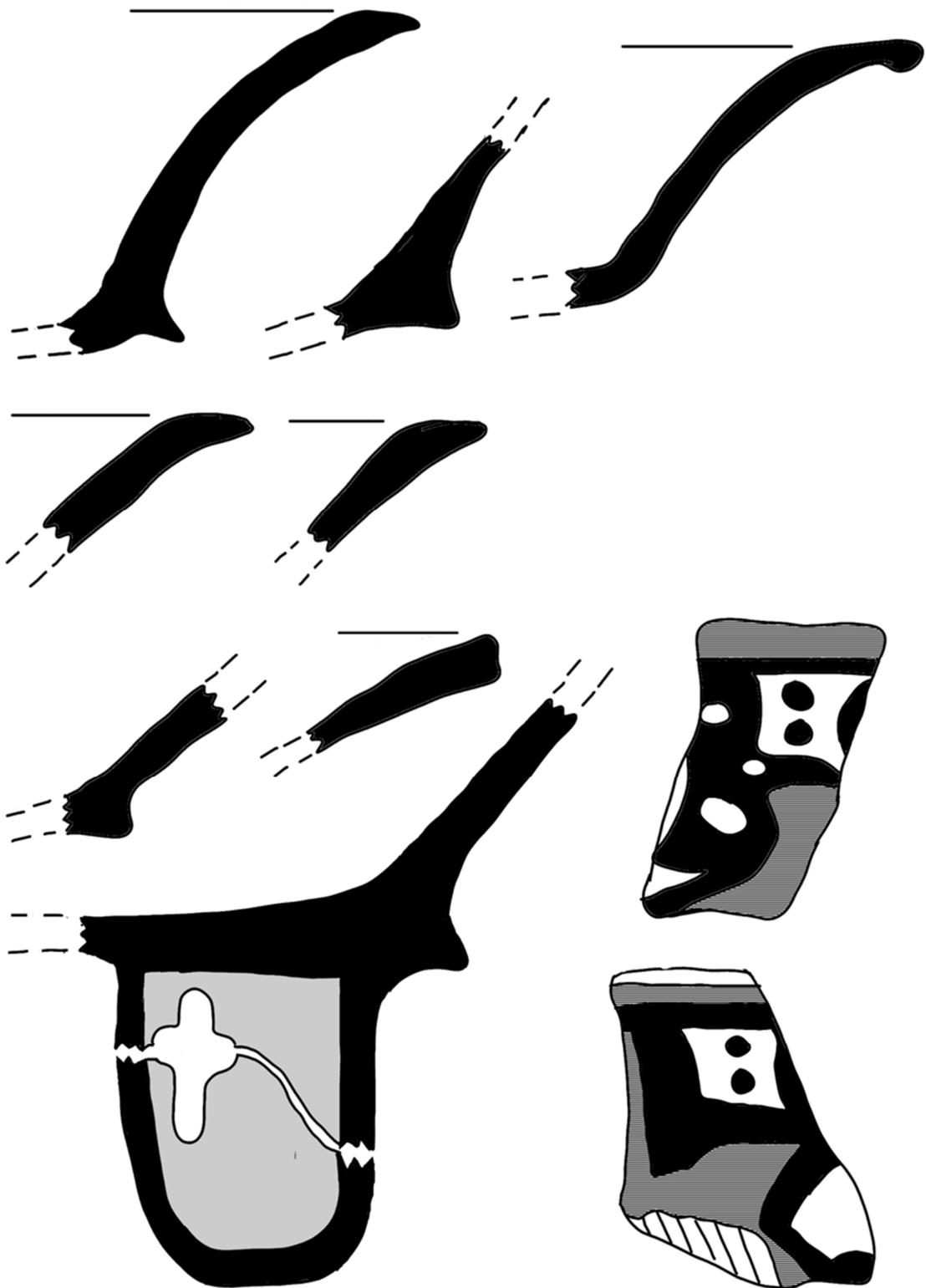


Figure 12: Late Facet Louisville Polychrome

## **Hondo Red**

### Type Description:

Hondo Red constitutes a fairly small proportion of the total assemblage at Lubaantun, and Hammond recovered only 14 sherds during his 1970 excavation (Hammond 1975:313). Hondo Red ceramics have a distinctive orange fabric that is often pock-marked where calcite and calcium carbonate temper has eroded out. The surface has a dark plum-red slip that is often partly eroded, and there is no surface decoration. The type generally appears similar to Fine Orange types in surface decoration, though the slip and fabric are both darker on Hondo Red (Hammond 1975:313) and the forms are often bowls with nubbin feet on Fine Orange wares (Hammond 1975:327). Nonetheless, the Hondo Group appears at Lubaantun before the presence of Fine Orange during the Terminal Classic (Columbia Complex Late Facet).

### Columbia Complex Early Facet:

Form: Hammond noted only sherds that likely came from large bowls or jars. Early Facet Hondo Red ceramics recovered by TRIP excavations at Lubaantun feature a wider range of forms, including bowls, jars, and what appears to be direct rim plates lacking basal flanges (Figure 13). These forms are more in line with those attested from Nim li Punit (Fauvelle 2012a).

Surface Decoration: Hondo Red sherds lack distinct decoration but feature a slightly rough and eroded dark plum-red slip. Early Facet sherds show no differentiation in surface decoration from the Late Facet.

### Columbia Complex Late Facet:

Form: During the Late Facet, jars seem to be less common, which may indicate that its connections with the source of Hondo Red ceramics either fell away or that jars were made from cruder fabrics like that of Turneffe Unslipped and Remate Red jars. Round sided bowls are found during the Late Facet, as they are in the Remate Red type.

Surface Decoration: Hondo Red sherds lack distinct decoration but feature a slightly rough and eroded dark plum-red slip. Late Facet sherds show no differentiation in surface decoration from the Early Facet.

### Intraregional Comparison:

Although the Hondo Group makes up a miniscule part of the Lubaantun and Uxbenka (Jordan and Prufer 2014:321) assemblage, at Nim li Punit it makes up as much as a quarter of the material recovered (Fauvelle 2012a:51). Additionally, Fauvelle divided the Hondo Group into three types: Hondo Red, Sunset Red, and Armadillo Red. A comparative collection from the Nim li Punit material was referenced during the present analysis, and while there appeared to be some variation in the Lubaantun material, it was considerably less than that from Nim li Punit. As such, and because the group appears absent at sites outside of the Southern Belize Region, it seems likely that the Hondo Group was primarily produced at Nim li Punit and traded intraregionally to sites such as Lubaantun during the Late and Terminal Classic. Hondo Red does not appear to constitute any portion of the material from Pusilha.

### Interregional Comparison:

Hammond (1975) noted no known ceramic types that resembled Hondo Red. Reviews of ceramics literature published since Hammond's work at Lubaantun, including work on the ceramics of the Petexbantun region (Foias 1996), Caracol (Chase 1994), the northern Peten (Forsyth 1989), and illustrations of material from Tikal (Culbert 1993). No material similar to Hondo Red has been found in this publications. The Hondo Group may represent ceramics that are indigenous to the SBR, particularly Nim li Punit.



Figure 13: Hondo Red

## **Lazaro Red**

### Type Description:

The Lazaro Red type was developed by Hammond (1975:314) at Lubaantun based on 49 sherds recovered during his 1970 excavation. The paste of the vessels is often an orange-brown and is tempered with fine sand and lime and occasionally jute shell. The fabric is similar to that of the Remate Red type, although firing is more even and without a dark core (Hammond 1975:314).

### Columbia Complex Early Facet:

Hammond (1975:314) placed the Lazaro Red type in the Late Facet of the Columbia complex based on the majority of sherds being recovered in phase 4/5 and pure phase 5 deposits. The material recovered from the TRIP excavations corroborates this assessment. All diagnostic Lazaro Red sherds recovered were found in Late Facet (Terminal Classic) contexts, have Tepeu 3 forms, and are found in the same stratigraphic levels as other Late Facet ceramics. Hammond (1975:314) notes that Lazaro Red is similar to Belize Red and Fine Orange at Lubaantun, which is attested only in very small quantities during the Early facet. As such, the Lazaro Red type appears to be primarily a Late Facet type at Lubaantun.

### Columbia Complex Late Facet:

Form: The only form attested in Hammond's analysis was a tripod bowl with a curved base and round-to-incurving sides (Figure 14), although his illustration (Hammond 1975:316 Figure 113a) of the type certainly looks more like a plate. These

diagnostic forms are diagnostic of the Tepeu 3 period across the lowlands, and consistent with Tepeu 3 bowls described by Smith (1955a), which he designated as form 125, as well as with bowls described by Hammond (1975:314) from his 1970 excavation of Lubaantun. These bowls have rounded or slightly rounded bottoms, high sides, and pointed lips.

**Surface Decoration:** The surface of Lazaro Red bowls has a slip that may have featured painted designs, although the most are so eroded as to prevent any comparison of designs. The vessels are primarily slipped with a plum red color that may range from red-brown to orange-red. Like the Remate Red type, the slip erodes fairly easily, and some vessels may appear to be unslipped. Hammond (1975:314) notes that floors of a few of the vessels have criss-cross incisions on them, and from this determined that the Lazaro Red featured a “grater bowl” used for preparing food. He also notes the presence of circumferential corrugation.

#### Intraregional Comparison:

Lazaro Red ceramics have not been reported from Uxbenka, Nim li Punit or Pusilha, though the similarity with Remate Red ceramics may make it difficult to differentiate the types; Researchers at those sites may have made a decision to lump them together under the Remate Red type alone. Interestingly, descriptions of the ceramics from those sites fail to mention the grater bowls or round bottom bowls with insloped sides that help define the type at Lubaantun. The timing of occupation at the sites in the SBR and the placement of the Lazaro Red type in the Late Facet of the Columbia Complex by both Hammond (1975:314) and myself may preclude these ceramics being

recovered in any meaningful numbers at Uxbenka or Pusilha. The different ceramic economics of Nim li Punit and Lubaantun may account for the lack of Lazaro Red at the former (Fauvelle 2012a:84). Further research on the ceramics of the Southern Belize Region is necessary to make a definitive statement regarding the distribution of this type.

#### Interregional Comparison:

Hammond (1975:314) places the Lazaro Red type in the Boca Sphere and not the Tepeu sphere based on the similarity of the vessel forms from Altar de Sacrificios (Adams 1971:132) and Seibal (Sabloff 1975). The similarity of forms and surface finish at Tepeu sphere sites such as Uaxactún indicates that this may simply be splitting hairs. Furthermore, the fact that other types in the Remate Group come from the Tepeu sphere as well as the Boca sphere would seem to indicate that Lazaro should also be considered part of that sphere. At Seibal, Tinaja Red ceramics with nearly identical forms are known during the Terminal Classic, and Sabloff (1975:160) places that type as being simultaneously in the Tepeu and Boca ceramic spheres.

The fact that all of the material that is similar to Lazaro Red at Lubaantun comes from Terminal Classic deposits strongly suggests that this type is solely a Late Facet type. Hammond notes that the “striking parallels with the Pasion Valley Find Paste types ... serves to anchor the last phase of the Lubaantun construction sequence and the Late facet of the Columbia Ceramic Complex firmly after A.D. 830, coeval with Tepeu 3 at Uaxactun, Late Bayal at Seibal, and Late Boca at Altar de Sacrificios” (Hammond 1975:315). TRIP excavations corroborate this assessment, as Lazaro Red is found with other Late Facet ceramics only in the latest deposits from the site. Unlike Belize Red (see

below), Lazaro Red seems much more tied to the Peten, indicating that connections with those regions continued even while new routes were being opened up between the Southern Belize Region and the region north of the Maya Mountains.



Figure 14: Late Facet Lazaro Red

## **Belize Red**

### Type Description:

The Belize Red type was first identified by James C. Gifford at Barton Ramie (1965). The type comes from the Spanish Outlook ceramic complex of that site, spanning from approximately A.D. 700-900 (Gifford 1976:22), roughly coeval with occupation at Lubaantun. Belize Red does not appear at Lubaantun until the Late Facet of the Columbia Complex, and appears alongside plates featuring other Terminal Classic markers.

Belize Red is part of the British Honduras Volcanic Ash Ware and as part of the Belize Ceramic Group (Gifford 1976:255). The identifying attributes of this type include red slip with a slight luster, the gritty feel of weathered surfaces, and a light buff, fine-textured paste (Gifford 1976:255). Predominate forms include shallow dishes and bowls, as well as cylinder vases. Dishes and bowls commonly feature a groove-incised line on their exterior near the rim.

Belize Red ceramics are distinctive in the Southern Belize Region and are immediately recognizable by their appearance, feel, and the presence of ash temper. Neutron Activation Analysis has revealed that the Belize Red sherds recovered at Lubaantun were not made from the same material as the more common types, including Turneffe Unslipped, Remate Red, and Louisville Polychrome (Hammond et al. 1976). As such, all of the Belize Red sherds recovered at the site and across the SBR are imports.

### Columbia Complex Early Facet:

There is little extant evidence of the Belize Red type at Lubaantun before the Late Facet of the Columbia Complex. A single sherd from Lot 5/7I/1, material recovered from

Stage I of Structure 34, appears to be a basal fragment of a Belize Red plate. It may be possible that Belize Red ceramics were making their way to the site from western Belize during this time, though it appears to be the exception rather than the rule. Similarly, Hammond found little in the way of Belize Red material in the earliest construction phases at the site. These sherds may be intrusive in the archaeological material from later periods. Belize Red ceramics constitute a much larger proportion of the assemblage during the Late Facet, starting during the transition from Stage II to Stage III of Structure. Furthermore, there is little that can be said of the type at Lubaantun during this time based on one sherd alone. Future excavations at the site may reveal more Belize Red material from earlier contexts, but agreeing with TRIPs assessment with the Belize Red type in the Southern Belize Region, I have chosen to place Belize Red ceramics solely in the Late Facet of the Columbia Complex.

#### Columbia Complex Late Facet:

Form: By far the most common Belize Red form recovered at Lubaantun is that of a tripod plate (Figure 15). These plates or dishes typically have outsloping walls and slightly curved to nearly flat bases. Small basal flanges or, more accurately, eroded parts of Z-angle sides are found on nearly all vessels, mirroring those found at Barton Ramie (Gifford 1976:259) and Caracol (Chase 1994:176)

Surface Decoration: Belize Red sherds are often heavily eroded, making identification of surface decoration difficult. Where present, the slip is a glossy red, ranging from brick red to a darker brown, and is quite thick and hard when compared to other slipped ceramics from the site. The slip appears to have preserved much better on

the interiors of plates, although a few examples were encountered with slip on the exterior; Exterior slipping is further attested at other sites with better preservation (e.g. Barton Ramie [Gifford 1976], Caracol [Chase 1994:176], Nim li Punit [Fauvelle 2012a:58]).

#### Intraregional Comparison:

At Uxbenka, less than 40 Belize Red sherds have been recovered from major core groups, all from humic contexts, including from Group B where the type is found above the uppermost level of pavers (Jordan and Prufer 2013:322). Two lines of evidence from the material recovered at Uxbenka corroborate the assessment of Belize Red as a Terminal Classic import into the region. Bayesian modeling has indicated that the contexts where Belize Red is found to A.D. 795-955 (Jordan and Prufer 2013), well after the majority of occupation at that site and after the Early Facet of the Columbia Complex at Lubaantun. Furthermore, Belize Red at Uxbenka has been found alongside a single McRae Impressed sherd, a type that dates to after A.D. 780 in the Belize Valley (LeCount 1996). Although it is difficult to make chronological comparisons between disparate regions, the presence of the McRae Impressed would seem to not only indicate a Terminal Classic date for Belize Red ceramics in the Southern Belize Region, but also that exchange between the two regions took place during that period.

At Pusilha, Belize Red ceramics also appear only at the end of occupation at that site (c. A.D. 770-830) (Bill and Braswell 2005:310), further indication of Southern Belize Region links to the Belize Valley occurred during the late Late Classic and Terminal Classic periods.

Belize Red ceramics are also known from Nim li Punit, where they represent the majority of exotic ceramics recovered (Fauvelle 2012a:27-28). Belize Red pottery represent as much as 7% of the total assemblage there, a much higher percentage than what Hammond noted for Lubaantun (Hammond 1975:105). Fauvelle (2012a:58) also notes that incising is less common at Nim li Punit, as well as the fact that ring base forms are more common than tripod forms (Fauvelle 2012a:58). Interestingly, Fauvelle notes that large amounts of Belize Red plates are found at that site in Late Classic contexts and drop off considerably during the Terminal Classic phase (Fauvelle 2012a:85-86), in direct contrast to the pattern of increased Belize Red during the Terminal Classic at Lubaantun. Nonetheless, project director Geoffrey Braswell (personal communication 2015) notes Nim li Punit has two Terminal Classic ceramic phases, and that Belize Red ceramics come from the TC1 (A.D. 780–830). This would place the presence of Belize Red at Nim li Punit coeval with its presence at Lubaantun.

In summation, ties between the Southern Belize Region and the areas north of the Maya Mountains may have been manifest in the very end of the Late Classic, but these ties appear to be strongest during the Terminal Classic. Belize Red ceramics are definitely imports into the region, and may have been traded in exchange for materials brought in from the coast.

#### Interregional Comparison:

Gifford (1976:257) notes the coeval presence of unit-stamped red monochrome and Belize Red pottery in the Vaca Plateau and Chiquibul region, strongly suggesting a route of communication and trade across the Maya Mountains and down the Rio Grande.

Although this has been ascribed the Late Classic based on Hammond's chronology of Lubaantun, it would appear based on TRIP excavations that this trade route and the unit-stamped and Belize Red pottery that indicate it actually ascribe to the Terminal Classic. These routes appear tenuous at best during the Late Classic (Early Facet), and it may be that conflict in the southern Peten (Demarest 2004) disrupted the exchange routes between that region and the SBR, forcing Lubaantun to seek additional routes of trade during this period.

The site of Caracol may have been the hub with which the Terminal Classic populations of the Southern Belize Region made new trade connections. The exact locus of Belize Red production is unknown (Chase and Chase 2012:5), but the standardization of forms and sizes would seem to indicate few production centers and perhaps the use of the vessels as trade wares (Chase et al. 2005). The ceramics were certainly widely produced in the Belize Valley (Wiley 1965:371), and are found in both domestic and ritual contexts (Chase and Chase 2012:8). Belize Red ceramics are certainly indigenous to the Belize Valley, and the INAA studies conducted by Hammond (1972) prove conclusively that the Belize Red ceramics found at Lubaantun also come from that region.

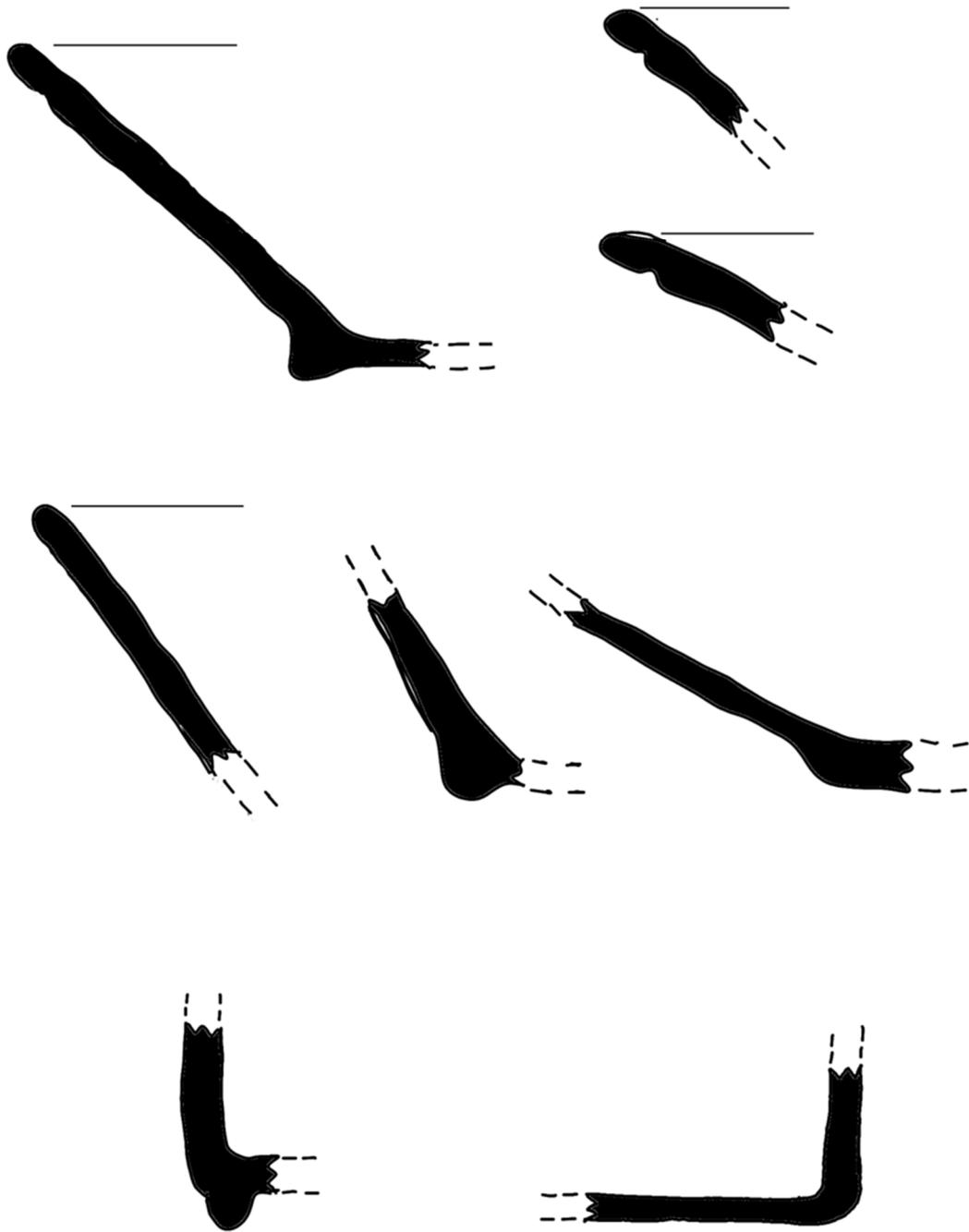


Figure 15: Late Facet Belize Red

## **Fine Orange**

### Type Description:

Ceramics from the Fine Orange Group feature a temperless fine paste and may be slipped with and orange to reddish orange slip. No other decoration, such as painting, incision, or stamping was observed on the Fine Orange material, in concert with descriptions of these vessels in other regions of the Maya lowlands.

### Columbia Complex Late Facet:

Form: The only form that could be identified with certainty was a bowl with slightly incurving sides that may have a restricted orifice (Figure 16). A slight lip was noticed on many sherds, a form attested elsewhere in the Lowlands (Sabloff 1975:Figure 375). Other forms, such as a tripod plate with a basal angle, were not recognized in the Lubaantun material, though this may be a result of the subjective nature of the sorting process.

Surface Decoration: Fine Orange ceramics have no surface decoration save for an orange to reddish-orange slips. This slip was noticed on only a few sherds in the Lubaantun material, the slip likely eroded from the majority of the sherds.

### Intraregional Comparison:

Fine Orange ceramics are not unknown in the SBR, consistently appearing in small quantities at each site during the Terminal Classic. At Nim li Punit, a small number of Fine Orange ceramics were recovered from shallow contexts, and serve as a temporal marker for the later ceramic phase at that site (Fauvelle 2012a:63). As at Lubaantun, the

only form recognized from Nim li Punit was a bowl form, though they appear more outleaning than the Lubaantun material (Fauvelle 2012a:63:Figure 3). A small number of Fine Orange sherds have also been recovered from Pusilha (Braswell, Prager et al. 2004:227), dating to a post-A.D. 830 timeline. No such ceramics appear to be reported from Uxbenka (Jordan and Prufer 2014), further indicating an earlier abandonment of that site than the other major inland centers of the SBR.

Interregional Comparison:

Fine Orange material was noted only in the Late Facet (Terminal Classic) deposits at Lubaantun, and it is likely that the site was part of the Fine Orange ceramic sphere centered at Seibal during that time (Joyce 1986; Sabloff 1975:189). These ceramics are well situated to the Terminal Classic, and have been found at both Seibal (Sabloff 1975:189) and Altar de Sacrificios (Adams 1971:27), though different forms predominate at each site. The latter is dominated by large bowls and jars with thickened rims, which are mostly unattested at Lubaantun. It may therefore be that Seibal was the main distributor of the Fine Orange material that has been recovered at Lubaantun.

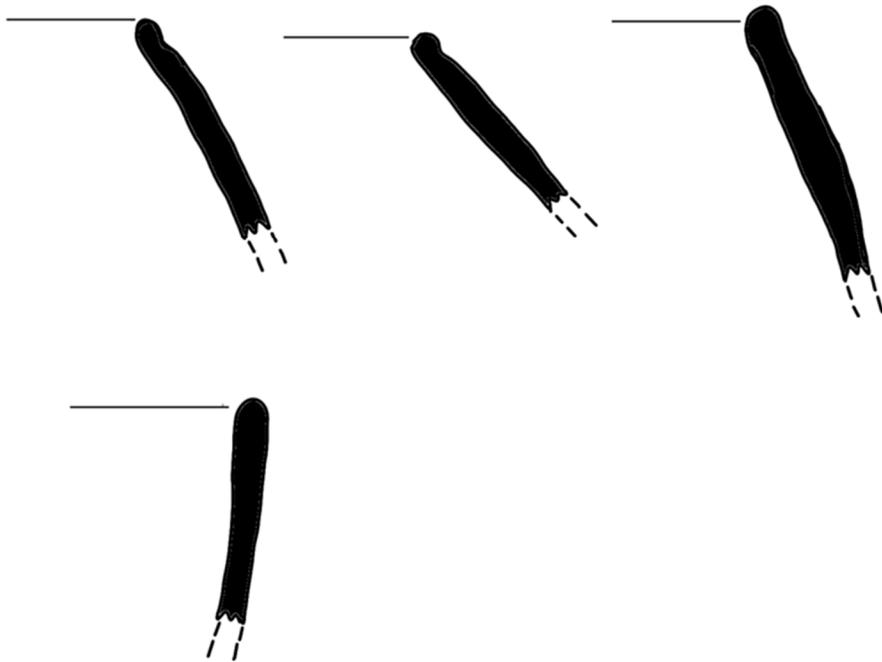


Figure 16: Late Facet Fine Orange

## **Pedregal Modeled**

### Type Description:

One modeled ceramic humanoid eye was (Figure 17) recovered from Operation 5 that is reminiscent of modeled ceramics from the southern Peten (Sabloff 1975:114). The Pedregal Modeled type, part of the Cambio Group, is most similar to the extant sherd from Lubaantun, with crude paste and coarse calcite temper. Paste is pink to tan, similar to that of Turneffe Unslipped, which also has its strongest affinities with the Cambio group of Seibal (Sabloff 1975:114).

### Columbia Complex Early Facet:

Form: No vessels were recovered from Lubaantun, but material from Seibal (Sabloff 1975:115) indicates that these modeled heads were modeled onto cylinders. This sherd was recovered from a Late Classic context in association with other Tepeu 2 ceramics, corroborated by its temporal designation at other sites (Sabloff 1975:115). No Late Facet Pedregal Modeled sherds were recovered.

Surface Decoration: The defining characteristic of this type are applied and modeled “god heads” upon the surfaces of cylinders vases. Based on the single sherd recovered, it is difficult to determine the morphology of the faces, though at Seibal they might represent the sun god (Sabloff 1975:115).

### Intraregional Comparison:

No Pedregal Modeled ceramics have been reported from other sites in the SBR.

Interregional Comparison:

Pedregal Modeled ceramics are known from the Peten region during the Late Classic, including in the Petexbatun (Foias 1996:444) and Seibal (Sabloff 1975:114), though they are not mentioned at either Altar de Sacrificios (Adams 1971) or El Mirador (Forsyth 1989). It has been recovered from some contexts in the southeast Peten (Laporte et al. 1993:92), where it was placed in its own type of Chichicuil With Wash: White Wash Variety. These ceramics are often found in the fill of important structures, and may have been deposited as part of special rituals during rebuilding or refurbishing (Foias 1996:444). This may explain the presence of this sherd in the fill of Structure 34 at Lubaantun, located in the ceremonial core of the site.



Figure 17: Early Facet Pedregal Modeled

## **Unnamed Gouged-Incised**

### Type Description:

Two sherds were recovered that feature gouged-incised decoration, unique among the Lubaantun assemblage. Unlike the unnamed gouged-incised type created by Hammond (1975:326), these sherds lack orange-slipped fabric. One sherd has a very fine paste and a glossy black surface, with the areas that have been gouged out slightly duller and lighter in color (Figure 18). The other sherd is a light brown color, reminiscent of Turneffe Unslipped ceramics found at the site, though the paste is finer than most examples from that type.

### Columbia Complex Early Facet:

No gouged-incised ceramics were recovered from Early Facet contexts.

### Columbia Complex Late Facet:

Form: Only two body sherds were recovered, so no productive discussion of form can be put forth.

Surface Decoration: Both sherds were gouged out, with smaller lines lacking depth and may have simply been incised. By removing clay, the artist created a three-dimensional decoration on the side of the vessel. The pieces recovered are too fragmentary to discuss what the artists were trying to depict, though figural scenes are possible.

### Intraregional Comparison:

Gouged-incised ceramics have only been attested at Lubaantun in the published material, though the descriptions given by Hammond (1975: 326) do not match the descriptions of the ceramics recovered by TRIP excavations.

Interregional Comparison:

The ceramics from Lubaantun are reminiscent of the Pabellon Modeled-carved ceramics from the southern Peten (Sabloff 1975:202), though they do not have as fine detail nor such three dimensional scenes. The most similar ceramics are the Toro Gouged-incised (Sabloff 1975:185; Adams 1971:52), which feature a black slip and gouged-incised decoration nearly identical to that found on one example from Lubaantun, further indication of close ceramic ties with this region.

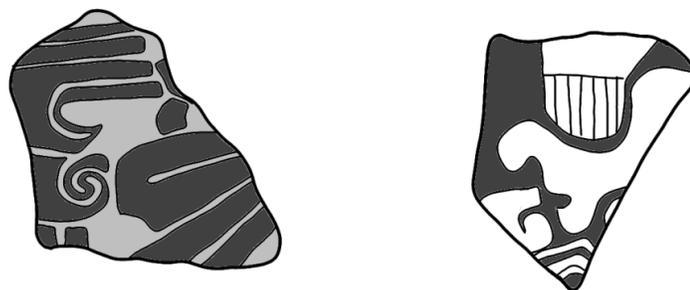


Figure 18: Late Facet Unnamed Gouged-Incised

## DISCUSSION

The main goal of this project was to refine Hammond's (1975) chronology of the ceramics at Lubaantun, which he gave only a passing treatment in favor of developing a robust typology. In general, there is agreement with his limited chronological assessment: The material from Lubaantun was highly similar during the entirety of occupation, but with several important changes between Early and Late Facets. Furthermore, the brevity of occupation at Lubaantun and the consistency of much of the material throughout all phases of the site preclude the division of the ceramic material into two distinct complexes. As such, I have chosen to retain Hammond's Early and Late Facets of the Columbia Complex and expanded on several important differences that reveal shifting patterns in exchange during occupation.

Several important distinctions were made between Hammond's chronological markers and those developed based on TRIP data. Most importantly, Hammond notes the general disappearance in Louisville Polychromes during the Late Facet, an observation that was not corroborated by our data. Furthermore, Hammond notes the presence of limited Belize Red during the earliest phases of occupation at the site (Hammond 1975:313), with the quantity increasing greatly during the later stages, when Belize Red became the dominant tripod plate type at the site. Our own analysis reveals little Belize Red material in the lower stages, save for one or two sherds, and it seems that the type was not a major component of the Columbia Complex until the Late Facet.

The Early and Late Facets can be divided based on shifts in vessel morphology, decoration, and the appearance of new types during the Terminal Classic. Type

frequencies certainly change between the facets, but due to time constraints it was unfeasible to conduct type counts of all the material excavated by the TRIP and to seriate the ceramic material. It can generally be said that Louisville Polychrome was found throughout all stages at Lubaantun with perhaps a slight lessening during the Terminal Classic, a time marked by the appearance of Belize Red and Lazaro Red. Future studies on the material of Lubaantun will be best served by prioritizing these type counts.

Although Tepeu 1 forms are unknown at Lubaantun, in the ceramic types present the Early Facet n appears similar to the Tepeu 1 and Tepeu 2 equivalent periods at Uxbenka and may be an extension of that site, with Turneffe, Remate, Chacluum, and Puluacax groups being present at both sites (Jordan and Prufer 2014:321). The Early Facet appears to have been time of interaction between the SBR and the southern Peten, as many of the same groups and wares are either shared or have correlates between the two areas, though perhaps less so than the Early Classic (Jordan and Prufer 2014:322). Turneffe Unslipped appears to be the equivalent of Cambio Unslipped, Remate Red at Lubaantun equivalent to Subin or Tinaja Red, and Louisville Polychrome similar to other cream slipped ceramics from that region. The striking similarity between the ceramics of these regions indicates continued contact throughout the Classic period, and it is possible that Lubaantun was founded by the residents of Uxbenka to better control trade between the coast and the Rio Pasion, sitting directly east of a small passage through the Maya Mountains.

During the Late Facet, roughly coeval with the Terminal Classic period, connections with the Peten appear to have lessened, a common theme during Tepeu 3 times (Rice and Forsyth 2004:49). Nonetheless, the presence of Lazaro Red ceramics in

both the Rio Pasion area and the Southern Belize Region would indicate that connections persisted during this time, along with the continued membership of the Columbia Complex within the Tepeu 3 sphere. It is also possible that Lubaantun became part of the Boca sphere periphery during this time (Sabloff 1975:17; Rice and Forsyth 2004:51), integrated into two ceramic systems at once. New connections are present during this period, especially with the areas to the north of the Maya Mountains in the Chiquibul caves region and the Vaca Plateau, as evidence by many shared forms and decorative styles, most importantly appliqued faces on unslipped bowls, unit-stamped monochrome red pottery, Belize Red plates and cylinders, and coarse bowls resembling Puluacax Unslipped type. The presence of Belize Red ceramics would indicate trade with the Belize Valley, though this may have been down-the-line trade from Caracol.

It is probable that Lubaantun facilitated, and may have controlled, trade between sites along the coast. This is based off the similarity between ceramics at sites such as Wild Cane Cay (McKillop 1996; Kidder 1954:12) and Stingray Lagoon (McKillop 1995:222) with those found at Lubaantun, as well as the proximity between the two sites. Hammond speculated that the realms of sites in the Southern Belize Region controlled a wide range of environmental areas from the mountainous foothills down to the coast (Hammond 1975:97--117). More recently, McKillop classified these coastal sites as independent salt producers outside of any state or chiefdom (McKillop 1996:54). Whatever the case, goods, including salt, were likely transported from the coast up the Rio Grande to Lubaantun and then set out for regions such as the area north of the Maya Mountains or the Rio Pasion.

What is striking is how closely the forms at Lubaantun follow the Tepeu 2 and Tepeu 3 elsewhere in the lowlands during this period, evidence of continuing contact during this period across the lowlands. One notable Tepeu 3 form that is not attested at Lubaantun, except for an aberrantly early sherd found in Stage I of Structure 34, is the pedestal stand vase. This may be the result of preservation, as other Tepeu 3 forms are widely found during the later phases of the occupation at the site. Instead, cylindrical vases, occasionally with tripod feet, appear to be the main vase form during most phases at Lubaantun. Pedestal stand bases are known from the nearby site of Pusilha (Braswell personal communication 2015), and the difference between the sites may indicate that the site of Lubaantun is less tied into the Tepeu sphere during the Terminal Classic and its initial accession into the Boca sphere.

As determined elsewhere in the lowlands, the trade of polychromes breaks down during the Terminal Classic, and monochrome material becomes the dominant fine ware (Rice and Forsyth 2004:52). The Louisville Polychrome type and the Zacatal Polychrome group are known elsewhere in the lowlands, but the area appears much more limited than in earlier periods. Furthermore, the quality of polychromes at Lubaantun is diminished when compared to similar material from other sites, resulting either from its place on the periphery of Classic Maya exchange networks or the poor quality of soil for preserving ceramic materials.

The knowledge gained through four decades of work on the ceramics of the lowlands since Hammond's excavations at Lubaantun allow for an expansion of knowledge regarding how that site and the SBR in general interacted with neighboring regions. Ceramic similarities were strongest with the southern Peten, particularly the sites

along the Rio Pasion, during the Late Classic. During the Terminal Classic, when warfare appears endemic to the southern Peten (Demarest 2004), connections with that region fluctuated. In response, it appears that the residents of Lubaantun initiated new contact with the regions north of the Maya mountains, as evidenced by ceramic similarities between the regions including unit-stamped red monochrome jars and bowls, Puluacax Unslipped vessels, and Belize Red plates and cylinders. Nonetheless, the presence of the Lazaro Red type at Lubaantun during the Terminal Classic, mirroring the development of such vessels in the Pasion region. In general, the Terminal Classic seems to be a time of increased trade for the Southern Belize Region. Imports into the area include Belize Red ceramics. At those regions where Belize Red ceramics come from, there is evidence of ceramic types that closely mirror Remate Red unit-stamped pottery. Although it is true that these pots may have come from the Pasion region where unslipped and red monochrome jars and bowls also feature red unit-stamped designs, there seems to be strong interaction between these three regions that ebbed and flowed through the final centuries of the Classic Period. In contrast, there appears to be little evidence for trade with Copan and the southeast periphery during any occupational period at Lubaantun, indicating that their focus was squarely to the west and to the north.

## CONCLUSION

The creation of a ceramic chronology at Lubaantun is an important step in developing wider interpretations about how the site interacted on both a regional and interregional scale, and how the relationships fluctuated and changed over time. By seeing how different types at Lubaantun covary with types found in other regions, cultural or trade relationships have been established. In particular, Lubaantun interacted primarily with the southern Peten, but also with the regions to the north of the Vaca Plateau during the Terminal Classic. This ceramic chronology is especially important in light of the fact that no carved stelae have been discovered at the site; only three carved ballcourt markers and a few carved plaques exist to give a historical perspective. Nevertheless, this chronology has already produced insights into shifting trade networks between the Late Classic and Terminal Classic periods at the site, and the role that a robust salt industry along the coast may have had in facilitating these interactions.

The brevity of occupation at Lubaantun did not allow for the ceramics at the site to change in a major, assemblage-wide way. As such, I tend to agree with Hammond that the Lubantuun material all represents only one ceramic complex. Nonetheless, there are important differences between the early and later facets of this complex. The Early Facet is defined by general Tepeu 2 forms, including outcurved or outflaring plates with direct rims lacking basal flanges, slightly incurved or outcurved bowls, simple incised or impressed lines decorating the major utilitarian types, and polychrome decorations including the dress-shirt motif. The Late Facet sees the introduction of two types at Lubaantun, the Belize Red from north across the Maya Mountains and the Lazaro Red

type from the Peten. Additionally, Tepeu 3 forms become important for plates and bowls, including direct plates with notches basal flanges and incurved bowls, though jar forms seem mostly unchanged except for the lips. The decoration of vessels is subtly different from that of the Early Facet: Polychromes appear much cruder made with difficult to decipher designs, unit-stamping and comb-raked impressions become all-important on monochrome red bowls and jars, and applied faces appear on unslipped incurved bowls. Modeled carved ceramics similar to the Bayal material from Seibal also makes an appearance at Lubaantun, further suggesting ties with that region.

The ceramic chronology developed herein not only allows Lubaantun materials to be situated within a history of the Southern Belize Region, but also allows for understanding the role it played in a wider lowland narrative. The chronology outlined above was created using ceramics excavated from four operations at Lubaantun; further excavations will surely lead to a refinement of the data presented here. Nonetheless, several important things can be said regarding the shifts in the ceramic material over time. The earliest occupation at Lubaantun appears to contain ceramics that are similar to those at the nearby sites of Uxbenka and Nim li Punit, particularly in the Remate and Turneffe groups. Considering that major occupation at Uxbenka stopped shortly after the founding of Lubaantun, it may be that the residents of that site moved to found a new city, perhaps in a more defensible location during the turbulent Late Classic (Demarest 2004), or perhaps to better control the Rio Grande, which evidently became an important conduit for exchange during this period. Lubaantun was certainly better positioned to not only have access to water, but a direct route to the ocean as well, especially important in a period of increased sea trade along the coast.

During the Late Classic, relationships between Lubaantun were primarily with the nearby site of Nim li Punit and the southern Peten sites such as Altar de Sacrificios, Seibal, and the Petexbatun Region, and there may have been strong cultural affinities between the two regions. During the Terminal Classic, new exchange routes became more important for Lubaantun, particularly the regions across the Maya Mountains in the Chiquibul regions and the Vaca Plateau, as evidenced by ceramics resembling the Puluacax Unslipped type and the introduction of Belize Red at Lubaantun. Nonetheless, the presence of unit-stamped pottery and certain types such as Lazaro Red at sites along the Rio Pasion indicates continued relationships with that region during the Terminal Classic.

With excavations and the development of a ceramic chronology for Lubaantun, some of the mystery surrounding the site can be dispelled. I argue that Lubaantun was primarily a hub for trade as coastal trade became more important during the Terminal Classic. Further refinement of this chronology is likely possible, and future research will certainly shed light on more differences in the Columbia Complex and may perhaps be able to divide it into more facets or even into different complexes. In particular, a reevaluation of the typology used for the chronology might be productive. While conducting this analysis, it was also noted that there existed much more variability in the ceramic assemblage than was reflected in Hammond's (1975) typology. Unfortunately, time constraints prevented the development of a new typology. Because this typology often serves as the foundation for ceramic study in the Southern Belize Region (e.g. Jordan and Prufer 2014, Novotny 2014, Fauvelle 2012a), it is important that the published record accurately reflects the true breadth of variability in the assemblage. One

of the goals of ceramicists working in the Southern Belize Region should be to develop a new typology with the four decades of new information, as has been attempted at Nim li Punit (Fauvelle 2012a). Subsequent to a revision of Hammond's typology, particularly in dividing the Turneffe Unslipped type and trying to accurately describe the variability in the Remate Red type, further division of the material recovered at Lubaantun will be possible.

As with all archaeological investigations, more work can always be done to further our knowledge of the site. Nonetheless, through the continued work of the Toledo Regional Interaction Project at Lubaantun and Nim li Punit, the predecessor Pusilha Archaeological Project at Pusilha, the Uxbenka Archaeological Project working at Uxbenka, and work by Heather McKillop at Wild Cane Cay, our understanding of the Southern Belize Region has vastly expanded from what we knew even at the beginning of the century. The chronology developed herein will help to understand the occupation at Lubaantun, particularly the shifts in trade patterns that are so apparent with the differences in exotic materials over time. Furthermore, the preliminary ceramic chronology for the Southern Belize Region outlined above will continue to allow for deeper interpretations of archaeological excavations, increasing our knowledge of the region in the Classic Period and beyond. While the lack of stela and the brevity of occupation at Lubaantun may also stand as an impediment, we are now much better able to see the relationship of Lubaantun to other sites in the Southern Belize Region, the connections the site forged with other regions in the lowlands, how these connections shifted and attenuated in the Late and Terminal Classic, and the final abandonment of the site.

## REFERENCES CITED

Adams, Richard E. W.

1971 *The Ceramics of Altar de Sacrificios*. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University Vol. 63, No. 1. Peabody Museum, Cambridge.

1973 Maya Collapse: Transformation and Termination in the Ceramic Sequence at Altar de Sacrificios. In *The Classic Maya Collapse*, edited by T. Patrick Culbert, pp. 133–164. University of New Mexico Press, Albuquerque.

Antonio Valdés, Juan, and Federico Fahsen

2004 Disaster in Sight: The Terminal Classic at Tikal and Uaxactún. In *The Terminal Classic in the Maya Lowlands: Collapse, Transition, and Transformation*, edited by Arthur A. Demarest, Prudence M. Rice, and Don S. Rice, pp. 140–161. University Press of Colorado, Boulder.

Aquino, Valorie V., Keith M. Prufer, and Douglas J. Kennett

2013 Chronological Calibration and the Dynamics of Climate and Culture Change at the Lowland Maya Center of Uxbenka. Paper presented at the Society for American Archaeology 78<sup>th</sup> Annual Meeting, Honolulu, Hawaii.

Bill, Cassandra R., and Geoffrey E. Braswell

2005 Life at the Crossroads: New Data from Pusilha, Belize. *Research Reports in Belizean Archaeology* 2:301–312.

Braswell, Geoffrey E., and Keith M. Prufer

2009 Political Organization and Interaction in Southern Belize. *Research Reports in Belizean Archaeology* 6:43–54.

Braswell, Geoffrey E, Megan R. Pitcavage, and Andrew Somerville

2009 Toledo Regional Interaction Project 2009-2010 Annual Report. UCSD Mesoamerican Archaeology Laboratory.

Braswell, Geoffrey E., Nancy Peniche May, Kiri L. Hagerman, and Megan R. Pitcavage

2010 Toledo Regional Interaction Project 2010 Annual Report. UCSD Mesoamerican Archaeology Laboratory, Occasional Paper No. 4. University of California, San Diego.

Braswell, Geoffrey E., Chelsea Fisher, and Mikael Fauvelle

- 2012 Toledo Regional Interaction Project 2012 Annual Report. UCSD Mesoamerican Archaeology Laboratory, Occasional Paper No. 5. University of California, San Diego.
- Braswell, Geoffrey E., Christian M. Prager, Cassandra R. Bill, Sonja A. Schwake, and Jennifer B. Braswell
- 2004 The Rise of Secondary States in the Southeastern Periphery of the Maya World: A Report on Recent Archaeological and Epigraphic Research at Pusilha, Belize. *Ancient Mesoamerica* 15:219–233.
- Braswell, Geoffrey E., Joel D. Gunn, María del Rosario Domínguez Carraso, William J. Folan, Larain A. Fletcher, Abel Morales López, and Michael D. Glascock.
- 2004 Defining the Terminal Classic at Calakmul, Campeche. In *The Terminal Classic in the Maya Lowlands: Collapse, Transition, and Transformation*, edited by Arthur A. Demarest, Prudence M. Rice, and Don S. Rice, pp. 162–194. University Press of Colorado, Boulder.
- Chase, Arlen F.
- 1994 A Contextual Approach to the Ceramics of Caracol, Belize. *Studies in the Archaeology of Caracol, Belize, Pre-Columbian Art Research Institute Monograph 7*, edited by Diane Z. Chase and Arlen F. Chase, pp. 157–182. Pre-Columbian Art Research Institute, San Francisco, CA.
- Culleton, Brendan J., Keith M. Prufer, and Douglas J. Kennett
- 2012 A Bayesian AMS <sup>14</sup>C Chronology of the Classic Maya Center of Uxbenka, Belize. *Journal of Archaeological Science* 39:1572–1586.
- Daniels, James T., Jr., and Geoffrey Braswell
- 2014 Procurement, Production and Distribution of Obsidian in the Southern Belize Region. *Research Reports in Belizean Archaeology* 11:289–296.
- Demarest, Arthur A.
- 2004 After the Maelstrom: Collapse of the Classic Maya Kingdoms and the Terminal Classic in Western Peten. In *The Terminal Classic in the Maya Lowlands: Collapse, Transition, and Transformation*, edited by Arthur A. Demarest, Prudence M. Rice, and Don S. Rice, pp. 102–124. University Press of Colorado, Boulder.
- Dunham, Peter S., Thomas R. Jamison, and Richard M. Leventhal
- 1989 Secondary Development and Settlement Economics: The Classic Maya of Southern Belize. In *Prehistoric Maya Economies of Belize*, edited by Patricia A. McAnany and Barry L. Isaac, pp. 255–92. JAI Press, Greenwich, CT.

Fauvelle, Mikael H. J.

2012a *Small States on the Maya Periphery: Royal Seats or Provincial Centers? A Perspective from the Ceramic Economy of Nim li Punit*. Unpublished Master's thesis, Department of Anthropology, University of California, San Diego.

2012b Analysis of Ceramics from Structure 8. In *Toledo Regional Interaction Project 2012 Annual Report*. UCSD Mesoamerican Archaeological Laboratory, Occasional Paper No. 6. pp. 97–117. University of California, San Diego.

Foias, Antonia E.

1996 *Changing Ceramic Production and Exchange Systems and the Classic Maya Collapse in the Petexbatun Region*. Unpublished Ph.D. dissertation, Department of Anthropology, Vanderbilt University, Nashville.

Forsyth, Donald W.

1989 The Ceramics of El Mirador, Peten, Guatemala, El Mirador Series, Part 4. *Papers of the New World Archaeology Foundation* 63. New World Archaeological Foundation, Brigham Young University, Provo, UT.

Gann, Thomas W. F.

1903 Untitled Report to the Governor of British Honduras on the Rio Grande Ruins. *British Honduras Minute Paper* 1069.

1905 The Ancient Mounds of Northern Honduras and the Adjacent Parts of Yucatan and Guatemala, the Former Civilisations in these Parts and the Chief Characteristics of the Races now Inhabiting Them, with and Account of a Visit to the Rio Grande Ruins. *Journal of the Anthropological Institute* 35:103–112.

Gifford, James C.

1976 *Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley*. *Memoirs of the Peabody Museum of Archaeology and Ethnology*, Vol. 18. Harvard University, Cambridge, MA.

Hagerman, Kiri L.

2010 Operation 6: Exploration of Lubaantun Structure 45. In *Toledo Regional Interaction Project 2010 Annual Report*. UCSD Mesoamerican Archaeological Laboratory, Occasional Paper No. 4. pp. 110-156. University of California, San Diego.

2011 *Reconstructing Households: The Excavations of Structure 45 at Lubaantun, Toledo District, Belize*. Unpublished Master's thesis, Department of Anthropology, University of California, San Diego.

Hammond, Norman

- 1975 *Lubaantun: A Classic Maya Realm*. Peabody Museum Monographs, No. 2. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

Hammond, Norman, G. Harbottle, and T. Gazard

- 1976 Neutron Activation and Statistical Analysis of Maya Ceramics and Clays from Lubaantun, Belize. *Archaeometry* 18(2):147–168.

Jamison, Thomas R.

- 2001 Social Organization and Architectural Context: A Comparison of Nim li Punit and Xnaheb. In *The Past and Present Maya: Essays in Honor of Robert M Carmack*, edited by John Weeks, pp. 73–87. Labyrinthos, Lancaster, CA.

Jordan, Jillian M, and Keith M. Prufer

- 2014 Contextualizing Uxbenka: Ceramic Analyses from Site Core and Household Contexts. *Research Reports in Belizean Archaeology* 11:317–325.

Joyce, Rosemary A.

- 1986 Terminal Classic Interaction on the Southeastern Maya Periphery. *American Antiquity* 51:313–329.

Joyce, Thomas A.

- 1926a Report on the Investigations at Lubaantun, British Honduras, in 1926. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 56:207–230.
- 1926b Excavations at Lubaantun, 1926. *The British Museum Quarterly* 1(3):61–65.
- 1927 British Museum Expedition to British Honduras, 1927. *The British Museum Quarterly* 2(3):71–74.
- 1928 Antiquities from Lubaantun. *The British Museum Quarterly* 2(4):106–108.
- 1929 Report on the British Museum Expedition to British Honduras, 1929. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 59:439–459.

Joyce, Thomas A., Thomas Gann, Edward L. Gruning, and Richard C. E. Long

- 1928 Report on the British Museum Expedition to British Honduras, 1928. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 58:323–350.

Kennett, Douglas J., B. Lynn Ingram, John R. Southon, and Karen Wise

- 2002 Differences in  $^{14}\text{C}$  age Between Stratigraphically Associated Charcoal and Marine Shell from the Archaic Period Site of Kilometer 4, Southern Peru: Old Wood or Old Water? *Radiocarbon* 44(1):53–58.

Leventhal, Richard M.

- 1990 Southern Belize: An Ancient Maya Region. In *Vision and Revision in Maya Studies*, edited by Flora S. Clancy and Peter D. Harrison, pp. 125–141. University of New Mexico Press, Albuquerque.

McKillop, Heather

- 1995 Underwater Archaeology, Salt Production, and Coastal Maya Trade at Stringray Lagoon, Belize. *Latin American Antiquity* 6:214–228.
- 1996 Ancient Maya Trading Ports and the Integration of Long-Distance and Regional Economics: Wild Cane Cay in South-Coastal Belize. *Ancient Mesoamerica* 7:49–62.
- 2005 Finds in Belize Document Late Classic Maya Salt Making and Canoe Transport. *Proceedings of the National Academy of Sciences of the United States of America* 102(15):5630–5634.

Martin, Simon, and Nikolai Grube

- 2008 *Chronicle of the Maya Kings and Queens*. 2<sup>nd</sup> ed. Thames and Hudson, London.

Mason, Gregory

- 1928 *Pottery and Other Artifacts from Caves in British Honduras and Guatemala*. Indian Notes and Monographs No. 47. Museum of the American Indian, New York.

Merwin, Raymond E.

- 1915 “Rio Grande,” unpublished manuscript, Peabody Museum file, X-73.

Mitchell-Hedges, Frederick Albert

- 1931 *Land of Wonder and Fear*. The Century Co., London.

Pendergast, David M.

- 1969 *The Prehistory of Actun Balam, British Honduras*. Royal Ontario Museum Art and Archaeology Occasional Paper 16, Royal Ontario Museum, Toronto.

1970 *A.H. Anderson's Excavations at Rio Frio Cave E, British Honduras (Belize)*. Royal Ontario Museum Art and Archaeology Occasional Paper 20. Royal Ontario Museum, Toronto.

1971 *Excavations at Eduardo Quiroz Cave, British Honduras (Belize)*. Royal Ontario Museum Art and Archaeology Occasional Paper 21. Royal Ontario Museum, Toronto.

Peniche May, Nancy

2010a Operation 4: Exploration of Lubaantun Plaza IV. In *Toledo Regional Interaction Project 2010 Annual Report*. UCSD Mesoamerican Archaeological Laboratory, Occasional Paper No. 4. pp. 12–28. University of California, San Diego.

2010b Operation 5: Exploration of Lubaantun Structure 34. In *Toledo Regional Interaction Project 2010 Annual Report*. UCSD Mesoamerican Archaeological Laboratory, Occasional Paper No. 4. pp. 29–109. University of California, San Diego.

Prager, Christian M, Beniamino Volta, and Geoffrey E. Braswell

2014 The Dynastic History and Archaeology of Pusilha, Belize. In *The Maya and Their Central American Neighbors: Settlement Patterns, Architecture, Hieroglyphic Texts, and Ceramics*, edited by Geoffrey E. Braswell, pp. 245–307. Routledge, London.

Prufer, Keith M.

2002 *Communities, Caves, and Ritual Specialists: A Study of Sacred Space in the Maya Mountains of Southern Belize*. Unpublished Ph.D. dissertation. Department of Anthropology, Southern Illinois University, Carbondale.

2005 The Early Classic in Southern Belize: A Regional View from Uxbenka and Ek Xux. *Research Reports in Belizean Archaeology* 2:169–178.

Prufer, Keith M., Holley Moyes, Brendan J. Culleton, Andrew Kindon, and Douglas J. Kennett

2011 Formation of a Complex Polity on the Eastern Periphery of the Maya Lowlands. *Latin American Antiquity* 22:199–223.

Rands, Robert L.

1973 The Classic Collapse in the Southern Maya Lowlands: Chronology. In *The Classic Maya Collapse*, edited by T. Patrick Culbert, pp. 43–62. University of New Mexico Press, Albuquerque.

Rice, Prudence M., and Donald Forsyth

- 2004 Terminal Classic-Period Lowland Ceramics. In *The Terminal Classic in the Maya Lowlands: Collapse, Transition, and Transformation*, edited by Arthur A. Demarest, Prudence M. Rice, and Don S. Rice, pp. 28–59. University Press of Colorado, Boulder.
- Sabloff, Jeremy A.
- 1975 Excavations at Seibal: Ceramics. *Memoirs of the Peabody Museum of Archaeology and Ethnology* 13(2).
- Schiffer, Michael B.
- 1986 Radiocarbon Dating and the “Old Wood” Problem: The Case of the Hohokam Chronology. *Journal of Archaeological Science* 13:13–30.
- Smith, Robert E.
- 1955 *Ceramic Sequence at Uaxactun, Guatemala*. 2 vols. Middle American Research Institute Publication No. 20. Tulane University, New Orleans.
- Smith, Robert E., and James C. Gifford
- 1966 *Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to the Ceramic Sequence at Uaxactun*. Middle American Research University Publication 28, pp. 125–174, Tulane University, New Orleans, Louisiana.
- Spinden, Herbert J.
- 1926 Maya Architecture: A Review of Some Recent Publications. *The Arts* 10:270–277.
- Thompson, J. Eric
- 1928 Some New Dates from Pusilha. *Man* 28:95–97.
- Walters, Gary Rex, and Lorington O. Weller
- 1994 Pusilha Project: 1992 Field Report. (Unpublished manuscript in the author’s possession).
- Wanyerka, Phillip J.
- 1999 A Brief Description of the Carved Monuments at Xnaheb, Toledo District, Belize. *Mexicon* 21:18–20.
- 2009 *Classic Maya Political Organization: Epigraphic Evidence of Hierarchical Organization in the Southern Maya Mountains Region of Belize*. Unpublished Ph.D. dissertation, Department of Anthropology, Southern Illinois University, Carbondale.

Wilk, Richard

1976 Some Archaeological Work in Belize, 1976. *Belizean Studies* 4(4):19–24.

1977 Preliminary Operations at Nimli Punit, Belize, 1976. Unpublished manuscript in the author's possession.