Archaeological Investigations in the Eastern Maya Lowlands: Papers of the 2004 Belize Archaeology Symposium

Edited by
Jaime Awe, John Morris, Sherilyne Jones and Christophe Helmke
Research Reports in Belizean Archaeology Volume 2
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Edited by Jaime Awe, John Morris, Sherilyne Jones, and Christophe Helmke
In memory of

Douglas Weinberg
ACKNOWLEDGEMENTS

This publication marks the second volume of the Research Reports in Belizean Archaeology. Its successful production could only have been made possible by the unselfish efforts of family, friends, colleagues, and associates; too many, in fact, to mention in the following few paragraphs. If we fail to acknowledge any of you by name, forgive us for our omission, and know that we sincerely appreciate your invaluable contribution.

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Christophe Helmke has been included as an editor not only because of his technical assistance with the graphics, production layout and formatting of the papers, but because of his particular editorial contributions with papers that deal with Mayan languages and epigraphic information. Several other editors and anonymous reviewers gave of their time and made constructive criticisms that enhanced our end product. A special thanks to Sherilyne Jones who, despite the challenges of late term pregnancy, worked tremendously hard to complete the publication of this volume. Thanks also to Victoria Olesky, a volunteer who assisted in checking bibliographic references and did line editing.

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Our foreign colleagues merit special recognition for many of them sacrificed other professional responsibilities in their effort to attend the 2nd Symposium. It is their contributions that form the heart of this new volume, and that provide Belizeans with a better understanding of our past. Thanks also to our guest speaker, Francisco Estrada-Belli from Vanderbilt University, for the stimulating account of ancient Maya society at Holmul, Guatemala.

Once again, this symposium would have never gotten off the ground had it not been for the unselfish efforts of the entire staff of the Institute of Archaeology. Special thanks must be given to Antonio Beardall, Mellisa Badillo, Jason Bliss, Darci Corea, Yashin Dujon, David Griffith, Claudia Elena, Nathaniel Shanklin, George Thompson, Joyce Tun, Wayne Moore and Brian Woodye, Executive Chairperson of the symposium. Thanks also to Therese Batty, who is now working with the Museum of Belize. We are grateful for your patience, expertise and invaluable help. The second volume of the Research Reports in Belizean Archaeology is once again a testimony to the commitment, dedication and perseverance of the entire staff of the Institute of Archaeology, and to the philanthropic vision of the National Institute of Culture and History.

Jaime Awe and John Morris
Belmopan, Belize, June 2005
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INTRODUCTION AND SYNTHESIS OF THE 2004 BELIZEAN ARCHAEOLOGY SYMPOSIUM

John Morris and Jaime Awe

Introduction

This set of papers marks the second volume of the Belize Archaeology Symposium devoted to archaeological research on the ancient Maya civilization in Belize. The papers included in this volume were all presented to the general public at the Belize Archaeology Symposium 2004, with the exception of Tom Guderjan paper. The 2004 symposium was designed to address three areas of concern: The Early Classic Period as a topical issue for discussion; the archaeology of the Historic Period (1400-1900); and Archaeological Research Reports that highlight current findings of the 2003-2004 archaeological field season carried out by principal investigators working in Belize. The volume is therefore divided into three sections.

Section One: The Early Classic Period

In section one, scholars emphasize that the problems in identifying the Early Classic Period of ancient Maya civilization are twofold. First, traditionally the Early Classic has been defined chronologically by certain material culture but the specific makeup of the period remains somewhat obscure. Secondly, a decline in population and economic activities during this period is often assumed but not archaeologically demarcated. These papers address the aforementioned concerns and also offer important resolutions to these issues. The volume commences with Arlen and Diane Chase discussion of how the Early Classic was traditionally defined in the past and how theoretically and methodologically this construction presents difficulties for researchers today. They discuss the transitions between the Early Classic and Late Classic at Caracol highlighting complex and methodological topics that are of paramount concerns in the Early Classic Period. They note that although not the huge sprawling metropolis that it became in the Late Classic Period, Caracol had a fairly substantial population during the Early Classic Period. The archaeological data demonstrate that major shifts in ritual patterns occurred between the two periods at the site –both in residential groups and in the site epicentre. Ceramic distribution patterns found in the Early Classic mirror those found later in the Terminal Classic in that status-linked pottery appears to have been employed; this practice however, creates methodological problems for the identification of the time period in the archaeological record. The authors expound however, that contextually recovered materials and deposits found over 20 years of research at the site have helped in mapping the precise nature of the Early Classic Period at Caracol.

Similarly Jaime Awe and Christophe Helmke argue that in the Belize Valley misconceptions about the Early Classic abound. They maintain that in the past, a number of archaeologists conducting research in the upper Belize River Valley have proclaimed that few sites contain evidence for continued growth and development during the Early Classic
period. In some instances researchers working in the Belize Valley and elsewhere have suggested that many sites may have experienced high levels of depopulation and a concentration of the populace in a few centres. Awe and Helmke assert that recent investigations by the Belize Valley Archaeological Research project do not concur with the aforementioned conclusions. In contrast, the BVAR research suggests that there is substantial Early Classic data for the upper Belize Valley, and that the Early Classic was actually one of the most dynamic periods in the prehistory of western Belize. In addition, Awe and Helmke also negate that the impact of Teotihuacan was as dramatic as has been espoused. Nevertheless, in the Belize Valley, few sites exhibit Early Classic material remains and some researchers suggest a severe depopulation of the area and aggregation of the remaining population into a few centres such as Actuncan and El Pilar. Further evidence for these suggestions/contentions are provided by two other case studies in the Belize Valley presented below.

The first paper by Lisa LeCount and John H. Blitz at the site of Actuncan shows that preliminary investigations has confirmed that the Early Classic period was indeed a time of significant demographic shifts. Only one out of three households that were sampled in the northern portion of the site showed evidence of long-term habitation that spans the Formative and Classic periods. This season’s research at Actuncan sampled a wider array of elite and commoner house mounds, as well as a previously identified Early Classic ceramic dump, in the northern civic area. This paper reports their findings concerning the spatial and contextual extent of Early Classic deposits from this important centre. The authors also put forward views about factors that gave rise to institutionalized kingship at Actuncan, and contend that the processes that gave rise to the systemic state (sensu Blanton) in the Belize Valley may have done so under circumscribed conditions.

The second paper by Kathryn Brown and James Garber also focus on the rise of complexity at Blackman Eddy, a small site in the Belize Valley. They utilize data on architecture and ritual to buttress their arguments but note that the nature of Middle Preclassic architecture and associated ritual deposits has been difficult to study due to overlying Classic Period remains. This has caused a sampling bias with respect to any understanding of this critical time period. The recent investigations at the site of Blackman Eddy have however, revealed a developmental sequence of Middle Preclassic public architecture and associated ritual deposits. Evidence suggest that the consolidation of wealth, prestige, and power by an emerging elite over time, culminated in the use of public architecture and material culture as mediums to transmit ideologically related messages pertaining to the social order of the community. The architectural sequence from Blackman Eddy indicates that the function of public architecture changed dramatically through time. Low, broad platforms dating to the early Middle Preclassic functioned as integrative features within the community, which served multiple functions including the location for communal ritual feasting activities. The evidence suggests that through time public architecture became more elaborate while ritual deposits shifted towards a more restrictive form. The pyramidal architecture style appears for the first time at the end of the late Middle Preclassic, which also corresponds to the introduction of sub-floor cache deposits. The Blackman Eddy data also suggest that the new architectural form and ritual caching behaviour reflects a change in social order in which emerging elites restrict access to both the architecture and associated ritual activities.
To sort out regional connections and similarities between the Early Classic in the Belize Valley and the same time period in the Chiquibul, John Morris and Anabel Ford combined paper examined the Early Classic period at Mountain Cow in the Chiquibul and the site of El Pilar, which lies just outside of the Belize Valley. Similarities in architecture, ceramic styles and urban developments were charted and they have proposed that we should either abandon the idea of a ceramic trait list for the Early Classic or establish new defining criteria. Evidence also indicates continuity in population increases from the Late Preclassic to the Early Classic. At both sites similarities suggest the emergence of new integrating architectural forms such as E-Groups and the apparent development of structured settlement patterns, resulting in population concentration around an epicentre.

Shifting our focus to the northern half of the country, Palma J. Buttles et al. expounds on Early Classic manifestations for northern Belize. These scholars argue, along the same vein, that the questions pertaining to the Early Classic posited for the Chiquibul and the Belize Valley are similar for their region. They elucidate that the Early Classic period has been often defined chronologically and by emphasis on certain material culture but likewise no systematic classification of the period has been put forward. They observe that archaeological research from north and northwest Belize may provide some new insights for describing and defining the Early Classic in Belize. Buttles et al. points out that landscape patterning as well as material culture can serve as significant indices of Early Classic life and that technological development and the contexts in which they are found for the Early Classic serve to define activities for the period. Ceramics, lithics, architecture, etc. indicate a rather robust Early Classic that has been poorly understood or perhaps more specifically, inadequately identified. Several categories of Early Classic material culture, the context(s) of the remains, and the interpretations of these findings are reported. The implications of these interpretations are also addressed for northern Belize and the surrounding regions.

The subsequent four papers seek to advance our understanding of the Early Classic by providing specific case studies that illustrate different methodologies and strategies, specifically designed to identify and classify precise categories of Early Classic material culture. Diane Z. Chase and Arlen F. Chase study of the Early Classic at Santa Rita Corozal is one such example where material culture is well defined. The Early Classic Period is well represented in the excavations undertaken at Santa Rita Corozal. The archaeological data from this site are worthy of note because Santa Rita was a relatively small site throughout the Classic Period; yet, it is a site that had access to many long-distance trade goods. There was also a marked difference between the upper level and all other levels of Santa Rita Corozal society during the Early Classic Period. Contextual and spatial patterns at Santa Rita also suggest that the Early Classic would be methodologically difficult to identify without a stratified excavation sample. The data recovered from the site also raises broader questions with regard to regional interaction in northern Belize during the Early Classic Period.

Tom Guderjan work at the Maya site of Blue Creek, Belize also uncovered substantial deposits of Early Classic material. Blue Creek is a medium-sized Maya center in northwest Belize that has been investigated annually since 1992. This long-term approach to a single site has yielded a massive and detailed database, only part of which is included in this
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summary of the Early Classic period at Blue Creek. The first investigations at Blue Creek focused on the site core and yielded a series of important discoveries. Not the least of these was that much of the public architecture at Blue Creek was constructed in the Early Classic period. As the project expanded into new research domains, it was also found that the settlement zone offered equally important data about the period. Additionally, it is now documented that the occupational history of Blue Creek begins in the early Middle Classic period at approximately 900 B.C. and ends with the Terminal Classic period in the mid-9th century AD.

Ann Pyburn rather eclectic paper draws on extensive research conducted at the site of Chau Hiix where complex deposits create a methodological nightmare. Nevertheless, Pyburn argues that the Early Classic Period appears to be underrepresented in the archaeological record of Northern Belize. Originally this was thought to indicate a population decline, but more recently several competing hypotheses have been advanced to account for this anomaly. In this paper she discusses the complexity of the formation processes that resulted in the archaeological record of Maya habitation at the site of Chau Hiix, Belize. Although focused on later deposits at the site, the discussion has relevance for understanding the visibility and defining the parameters of the Early Classic, sandwiched as it is between two much more manifest eras.

Sean Goldsmith working at the same site but examining the rural areas of the site has documented a community that dates principally to the Early Classic period. Field-work strategy utilized a large-area spatial approach, which uncovered several house lots within this community, and has also enabled data collection at a scale appropriate to understanding household activity. The comparison of data derived from these house lots suggests that economic strategizing was not homogenous across the community, and may have led to the differential accumulation of wealth by individual households. At the same time, these diverse economic strategies were socially integrated at the community level through public architectural construction and shared material values. Why it was important to build and maintain local ties is not immediately clear, but it is proposed in this paper that the development of strong non-elite community structures in the Early Classic was a strategic counterpoint to burgeoning elite power in the site centre during the same period. In this way, the Early Classic commoners of Maya society are viewed as more self-empowering than traditional models allow. Such a view is contrasted with evidence that suggests the solidification of centralized elite authority in the Late Classic at Chau Hiix, and thus offers a glimpse into the social underpinnings of the early Maya state.

The Early Classic period in southern Belize has rarely ever been discussed, much less properly defined, and to some extent was deemed to not have existed. The Early Classic in southern Belize is an unsettled topic. Keith Prufer attempts to rectify this omission by providing a critical regional view from the site of Uxbenka, Toledo. Despite nearly a century of investigation the cultural landscape of the 3rd through the 6th centuries in this region remains poorly defined. Epigraphic data now emerging indicate that two sites, Uxbenka and Pusilha were formidable centers linked to dominant polities in the Peten, and Uxbenka appears to be the earliest known center in southern Belize. This paper discusses the status of Early Classic in southern Belize, the role of Uxbenka in regional developments, and the goals for current research at the site.
Another researcher Phil Wanyerka using epigraphic evidence also discuss the sociopolitical landscape in Southern Belize during this critical period. His paper focuses on recent epigraphic findings of the Southern Belize Epigraphic Project and its work on the hieroglyphic inscriptions of Uxbenka, a small emblem glyph-bearing polity located in the southern foothills of the Maya Mountains, Belize. The article aims to highlight and reveal new historical insights that will demonstrably show that previously unrecognized iconographic motifs featured on three Cycle 8 monuments at Uxbenka provide clear and convincing evidence that strong political and ideological ties had existed between the royal dynasties of Uxbenka and Tikal during the later half of the 4th century. These new findings strengthen the assumption that Uxbenka’s emergence and rise to prominence during the Early Classic may have been the result of Tikal’s prosperity as the pre-eminent hegemonic power of this era. The epigraphic evidence demonstrate that Uxbenka’s Stela 11 may have been created as a contemporary funerary monument to commemorate the death of the 14th ruler of the Tikal dynasty Chak Tok Ich’aak I and it may provide additional historical data concerning the aftermath at Tikal during perhaps the most turbulent era in Maya Lowland history; that being the arrival of the Teotihuacanos to the central Peten in A.D. 378 (see Awe and Helmke this volume for a contrasting view of the role Teotihuacan has played in Early Classic developments in the Maya lowlands).

We conclude this section by an article that serves to provide additional background for the Early Classic, especially given the fact that the site of Holmul was central for the development of an initial understanding of the Early Classic. Estrada-Belli points out that despite its anthropological significance; the Early Classic is one of the least understood archaeological periods in Maya prehistory. What archaeologists know about the Early Classic period is based predominately on excavations at large sites such as Tikal and Holmul. This paper summarizes results of ongoing research in the Holmul region on a Maya kingdom strategically located between the central Peten and the Belize coastal areas. The beginning of ritual and political activity at the newly found site of Cival reaching back to the Middle Preclassic period attests to a surprisingly early development of Lowland Maya civilization in this area. Early patterns of monumental sculpture, iconography and public architecture are among the earliest evidence of centralized power and an initial ideology of Lowland Maya kingship. Excavations of an Early Classic palace at La Sufricaya and a small temple at Holmul, document the emergence of Holmul as a Classic Maya dynastic center and its participation in the Maya-Teotihuacan relationships with Tikal and Uaxactun. Finally, Holmul’s palace and main plaza reveal a Late Classic florescence and ensuing demise during the Terminal Classic period and may link the site’s fate to major war events in the late history of the Maya Lowlands.

Section Two: Historical and Colonial Period Archaeology

This section deal with the nascent emergence of historical archaeology, an area of research sporadically carried out by archaeologists working in Belize over the previous decades, but recently emerging as a critical area of concern, especially for the period where evidence exist for transitions from the Maya Postclassic to the Colonial era. Two papers shed new light on this period. Darcy Wiewall attempts to identify the late Postclassic-Colonial transitions at the Maya site of Lamanai in Northern Belize. The 2003 field season comprised a
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two-part research strategy designed to identify house lots occupied in the Late Postclassic (A.D. 1450 – 1545) and Spanish Colonial (A.D. 1546 – 1650) periods. Two field strategies were employed to locate house lots. The first consisted of systematic survey and mapping, which sought to locate house lots by examining visible low platforms and artefact scatters. The second consisted of a posthole sampling strategy, which sought to locate house lots and their components by identification of sub-surface features, artefacts, and soil chemical residues. Overall, the three-part research strategy integrated traditional methods of survey with methods appropriate to the location and identification of sub-surface platforms, activity and refuse deposits, such as an intensive posthole excavation program combined with recovery of non-observable remains through soil chemical residues. The survey resulted in the identification of a number of previously unidentified features that have potential for understanding the Late Postclassic-Colonial transition. Variation in the frequency and distribution of artefacts and phosphate levels throughout the survey area, revealed in the posthole excavations, appear to indicate the location of potential house lots and their associated activity and refuse areas.

Maxine H. Oland and Marilyn A. Masson present the results of four seasons of archaeological work on the Late Postclassic/Colonial period Maya settlement and occupation of the Western shore of the Progresso Lagoon. They profess that this site corresponds to the historically known encomienda of Chanlacan, known for its role in the early Colonial Maya resistance movement. Excavations at the shore settlement were concentrated in a residential area, in which three household structures were horizontally excavated, as well as in an upper status residential/ritual area close to the lagoon shore. Results from these excavations contribute to the Belize Postclassic Project’s study of the long-term political economy of the Progresso Lagoon area, and more generally, to understanding the Late Postclassic-Colonial period transition in northern Belize.

Scott Simmons also working at Lamanai provides direct evidence of Spanish influence in metallurgy manufacturing during the Contact Period. This paper reports on the results of the recent findings of his Maya archaeometallurgy project during the Spanish Contact Period. Simmons has documented that more copper and alloyed copper artefacts have been recovered from controlled archaeological excavations at Lamanai than at any other Maya site. An important goal of his Maya Archaeometallurgy Project is to assess how this technology was integrated into Maya social, economic and political systems during the centuries just before and during Spanish Colonial times. The recent excavations have focused on Str. N11-18, the residence of Lamanai’s ruler during Spanish Contact period. Seventy-six of the 164 (46%) copper and alloyed copper artefacts recovered thus far from Lamanai come from Str. N11-18, as well as a number of pieces of scrap sheet metal, along with miscast copper bells, prills and four copper ingots. These artefacts provide us with rather compelling evidence that the Maya at Lamanai were crafting copper objects. The analyses of artefact chemistries indicate that ingots, along with other copper objects dating to Spanish Contact times, were made of stock metal derived from melting down copper artefacts. The results of other, more recent chemical compositional analyses are also presented.

A most exciting outcome of the Xibun Archaeological Research Project (XARP), headed by Dr. Patricia McAnany of Boston University, has been the discovery
of Spanish colonial presence in Maya communities along the Sibun River of central Belize. Steven Morandi, one of McAnany graduate student has been investigating the Spanish Colonial Frontier in the Sibun River Valley, Belize as part of his doctoral dissertation. For the first time, the historical record of the Sibun River Valley left by Spaniards, though scant, can be compared against the archaeological record to provide a more complete and less Euro-centric view of cultural changes that occurred there during the period 1540 to 1630. While the centers of Spanish control were located in northern Yucatan, their influence was felt as far south as the Sibun River in Belize. An archaeological site near the village of Cedar Bank has yielded a mixture of Maya and Spanish artefacts that are just now being analyzed, and which are providing the first glimpses of Maya life on this Spanish colonial frontier. One interesting possibility is that the site of Cedar Bank may represent the town known in the historical record as Xibun. Overall, the Spanish colonial period provides a crucial link between the pre-contact Maya societies of Belize and the succeeding British and African-Caribbean influence in the region. Cedar Bank represents only the third known site in central Belize with a Spanish colonial component, and so offers a rare window into this critical period of Belizean history.

Belize was settled by the British logwood cutters and their slaves and Daniel Finamore in his paper “A Tale of Three Rivers: European and African Settlers in the New, Belize and Sibun River Drainages’ compares and contrasts the settlements in these areas. Investigations in three major river drainages of Belize have established an archaeological framework for studying settlements associated with British settlers and African labourers involved in timber exploitation. The sites in each area correspond to different populations, activities, and types of occupation, representing distinct and little-known facets of the nation’s history. Different patterns of preservation add to the distinctiveness of the archaeological record in each region. A site on the lower Belize River known as the Barcadero was probably the first semi-permanent settlement by migrants from the British Isles. From about 1680 to 1730, a community of mariners lived in crude huts and worked cooperatively to extract logwood to sell to passing ships. Further downriver is the site of Convention Town, formed in the late 18th century to accommodate evacuees from the Mosquito Shore, many of whom were relatively prosperous. In contrast, seventeen sites along the New River have yielded information regarding the lives of enslaved and free labourers of African-Caribbean heritage, who spent months each year living in forest labour camps isolated from the coastal population. These sites provide information about the poorest inhabitants of the settlement, many of who were involuntary occupants of communities that were organized corporately for economic efficiency. Research currently under way in the Sibun valley has yielded evidence of significant British colonial occupation, some predating officially sanctioned settlement there. Hence, historical and archaeological sources offer insights into the mahogany trade not encountered elsewhere, from the mechanics of extraction to aspects of the international social networks through which business was conducted.

When the British and their slaves settled in Belize they encountered indigenous Maya peoples in the forest living away from the coast. In the ensuing struggles for dominion over the lands that now comprise the modern political boundaries of Belize, the Maya fought both the British and Spanish conquerors over
several centuries. Other Maya and Mestizo immigrants from Yucatan, who were fleeing the Caste war, joined the Maya of Belize. Jason Yaeger et al. discuss the fate of one such group, the San Pedro Maya in British Honduras, during 1855-1936. The immigration of thousands of Maya and Mestizo people from Mexico during Yucatan’s Caste War transformed the demography, economy and society of British Honduras. The San Pedro Maya Project examines the strategies and practices by which colonial officials and merchants on one hand, and a group of Maya immigrants, the San Pedro Maya, on the other, negotiated their changing relationships within the emergent political and economic institutions of British Honduras. The project employed archaeological materials, oral narratives, and archival documents to reconstruct daily life and domestic activities at the village of San Pedro Siris, examining the role that villagers’ daily decisions and practices played in the dynamic processes that resulted ultimately in their incorporation within a new colonial society. The project specifically targeted the intersecting realms of the local economy (milpa agriculture, local non-agricultural production, extraction of forest products, and the participation in barter and marketplace exchanges) and domestic life (vernacular architecture, cuisine and meal service), arguing that the San Pedro Maya rapidly became active and integral participants in the colonial economy, but that they maintained a high degree of effective autonomy in village decision-making and resisted cultural assimilation and colonial political domination. As mahogany logging operations expanded, however, changes in land tenure laws and the growth of extractive forest industries undermined their autonomy, leading to more active resistance to colonial institutions and, eventually, their forced removal from their villages.

We conclude this section with Andrew Kinkella’s paper on the archaeological findings at the historic period site of Yalbac. He notes that the ancient Maya stone architecture that permeates the landscape of the Yalbac area will forever define it as land inhabited by the ancient Maya. Yet although the impressive temples and acropolis may dissuade us, it is important to remember that the ancient Maya left Yalbac a thousand years ago and that in the intervening years, the area has not lain dormant, but has been redefined by the various human groups that have come to inhabit this same spot. Since the arrival of the Spanish, the land and environs where Yalbac stands have been home to slaves, loggers, and even confederate soldiers fleeing retribution from the American Government. Their stories are small in comparison to that of the ancient Maya, but just as significant. The Yalbac project has recovered a small collection of historic artefacts at Yalbac, most from Site 14 in the Yalbac site core. The collection consists of 17 glass, metal, and ceramic objects dating from approximately 1880 to 1930. These artefacts, combined with the written history of the area, tell us about the early logging efforts of the Belize Estate and Produce Company (BEC) as well as the lifestyles of the loggers and other communities located at Yalbac.

Section Three: General Research Papers

Southern Belize: Toledo District

In this section we have placed the special reports of archaeological research carried out by foreign funded projects in Belize. As in the previous volume we present the papers by region, first commencing with the southernmost part of the country, the Toledo district, followed by the central/coastal Belize district area. We then shift focus to western Belize and
conclude with the archaeological reports from northern Belize. The first paper by Heather McKillop, a long-time contributor to Belizean archaeology, presents an analysis of the role of salt workshops and her re-examination of the political economy of the ancient Maya. The discovery in 2003 of eight new salt workshops in Paynes Creek National Park brings the total known to twelve. Sea-level rise had inundated the workshops, preserving pots in situ in Punta Ycacos Lagoon. The salt works were workshops where seawater or brine was boiled in pots over fires to produce loose salt or salt cakes, as indicated by ethnographic analogy. The salt works are non-domestic, specialized workplaces of people who lived elsewhere, as indicated by the artifactual remains and quantitative analysis of the artefacts. McKillop indicates that essential to the biological functioning of the human body, salt was a scarce commodity for the urban Maya. In order to maintain a supply of salt, the urban Maya at such nearby cities as Lubaantun, Nim Li Punit and cities in adjacent Guatemala, created marriage, trade, and other alliances with the coastal Maya of southern Belize. Her paper questions the centralized model of the Late Classic Maya economy in which the urban royal Maya and their courtiers controlled the production and distribution of goods and resources. She argues that notwithstanding the presence of attached specialists producing highly crafted goods in lowlands cities, there was considerable variability in the production and level of elite control of other, including more utilitarian goods. The existence of independent salt workshops not associated with household production in Paynes Creek National Park is one such type of workshop production. McKillop suggests that the salt works indicate that the Classic Maya political economy was diverse, supporting a less centralized, even segmentary model of Maya society. She continues her work in the Port Honduras area of southern Belize.

As a component of the same project, Bretton Somers and Heather McKillop introduced the novel concept of “invisible settlements”. These sites have been located along the coastal regions in the area known as Port Honduras Marine Reserve. They contend that despite the virtual absence of modern coastal settlement in Port Honduras Marine Reserve, there was significant ancient Maya settlement that is “invisible”, buried by landscape changes. The extent of invisible settlement is startling and begs the questions: How much settlement evidence is unknown due to emphasis on mounds as evidence of settlement? By how much have scholars underestimated ancient Maya population from sites without mounded remains? To provide answers to these questions transect excavations in the forest at Arvin’s Landing in 2003 were used to investigate the presence and extent, if any, of invisible settlement evidence, where there were no mounded remains of houses and no surface artefacts. This method of shovel testing along transects was successful in defining the extent of ancient settlement in other areas such as in the Port Honduras Marine Reserve, including the offshore area around Wild Cane Cay, at Frenchman’s Cay, Tiger Mound, and previously at Arvin’s Landing. For the 2003 Arvin's Landing transect survey, 18 rows of shovel tests, placed 10 meters apart, were excavated off a main transect. Every row of shovel tests in the 2003 the Arvin’s transect uncovered artefacts. The value of this technique in uncovering a more accurate view of ancient Maya settlement and population was discussed.

As we move inland to the remote site of Pusilha, Cassandra R. Bill and Geoffrey E. Braswell present new data that raise stimulating inquiries concerning the culture history of the region. Recent excavations at
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the site of Pusilha, Belize have revealed a diverse material culture assemblage that raises more questions than answers with regard to the occupational history and development of the Southern Belize subregion, located in the southeastern periphery of the Maya lowlands. In this paper the authors describe significant findings from investigations conducted in 2004, as well as the major components of a provisional ceramic typology. The majority of ceramic material excavated so far date to the Late Classic period and reveal clear links to contemporary complexes from various parts of the Maya area, as well as to non-Maya regions in Honduras.

Central Coastal Region: Belize District

The following two papers presented here deal with the central coastal areas, particularly along the Sibun drainage and the areas associated with its headwaters and its subsequent meander towards the Caribbean Sea. McAnany et al. have documented a rich historical profile for the area. Their focus in this paper is on Terminal Classic sites in the Sibun Valley. The local history of a cacao (chocolate) producing valley in the Sibun in Central Belize is juxtaposed against the political turbulence incumbent upon the collapse of the Lowland Maya Classic dynasties. New data from recent excavations-closely dated through radiocarbon analyses-indicate that political influence over the valley was actively contested at the end of the Classic period. The influence of the Peten dynasties-attested in ceramics and architecture-appears to have been challenged by the influence and power exerted by the northern Yucatec region, likely Chichen Itza. Changing patterns of ceramics, ritual architecture, and mortuary practices reveal the political re-orientation of the Sibun valley inhabitants. In general, the Sibun Valley is strategically located relative to the active trade routes of the Caribbean inner channel and the Terminal Classic Maya farmers of the Sibun Valley enjoyed ready access to a market for their highly desired cacao crop. Details of Sibun Maya daily practice provide a textbook example of survival and continuity in the face of political upheaval.

Sandra L. López Varela, a ceramic expert from Mexico, working on the Sibun Valley project has examined and concisely discusses the chronology and distribution of Maya pottery of the area. Her studies of the pottery found in the caves and settlements of the Sibun River Valley explore potters' life and behaviours from the Middle Formative to Colonial times. Results from type: variety studies and distribution analysis of Sibun pottery reflect the multi-level dimensions of social practice. In this exercise, the combined methodology illustrates that pottery expresses the societal needs of the very early settlers of the Sibun River Valley and also expressed the worldview of the first Europeans that settled into Belize.

Western Region: Cayo District

The western region of Belize especially the Cayo District has seen a tremendous growth in archaeological research in the last decade. The four papers that follow examine a wide range of social and political analyses including the lives of ancient Maya farmers and the activities of the Maya elites. Cynthia Robin et al. examined household and community ritual at Chan, an ancient Maya farming community located in west-central Belize, which was occupied continuously from the Middle Preclassic to Early Postclassic periods (ca. 900 B.C. – A.D. 1250). This article presents the results of the second season of a multi-year archaeological research project at Chan. In 2003 a survey of the site identifying 583 mounds and 1258 agricultural terraces in a 3.29 square kilometre area were completed. Research in
both domestic and public plaza areas revealed new insights into the ritual practices of Maya farmers, from the humblest farmer to the leaders of the farming community. Given Chan’s lengthy occupation, excavations data on rituals provides evidence concerning both the nature and changes in farmers' ritual practices over the expanse of Pre-Columbian Maya history.

Ritual and worship play an important role in people’s lives and whether these are conducted at private shrines, in public or in grandiose churches or temples, these behaviours reflect religious expression and experiences. Lisa Lucero argues that scholarly interpretations of Late Classic Maya temples are relatively vague on their role and function except that they are stages for royal ceremonies. She claims that at secondary centers such as Yalbac, Belize, which do not have written or obvious iconographic records, charting temple attributes can reveal their histories especially given the crucial role temples played in daily social and religious life. The analysis of evidence from looters trenches found on temples at Yalbac, while preliminary, has exciting implications regarding the role of temples and the potential for these buildings to serve as textual information as we strive to understand Classic Maya society?

Regional interaction and sociopolitical development in the Belize Valley is the focus of the next two papers. Carolyn Audet and Jaime Awe examine the Middle to Late Postclassic occupation at Baking Pot, Belize. They revisit the importance of Baking Pot’s role in the political hierarchy of the region. Recent excavations by the Belize Valley Archaeological Reconnaissance Project have yielded evidence of early to Middle Postclassic occupation at the site of Baking Pot. This evidence includes a refuse deposit containing partially complete ceramic vessels, a ceramic mask, crystal beads, chert and obsidian arrowheads, and complete obsidian blades. Three copper bells were also found around the structure in association with Postclassic ceramics. This new evidence suggests that the quality of material possessions by the Valley occupants had not diminished as was previously thought and that trade routes remained intact in this region. More importantly, these findings remind us that we cannot continue to ignore the Postclassic Maya. Despite the often-ephemeral nature of Postclassic activity, it is equally as vital as evidence from the Maya Preclassic and Classic periods.

Dorie Reents-Budet et al. also discusses sociopolitical interconnections and provide an excellent analysis of pottery from Classic period (A.D. 250 – 850) burials and other special contexts in Group 1 at Baking Pot, Belize, located in the western Belize River Valley. The multi-disciplinary research addresses questions of the nature, direction, and degree of interaction between Baking Pot and its neighbours both near and far. The investigations combined neutron activation analysis of the vessels’ pastes with traditional archaeological type: variety assessments and art historical analyses of style and iconography. The combined research indicates that Baking Pot developed vigorous ceramic traditions in-step with those sites in its immediate cultural vicinity. The pottery also implies relatively strong and consistent relations with Buenavista del Cayo and other centers in western Belize. Long distance relations are indicated with Caracol and sites in southern Belize as well as with Holmul and other centers in the eastern Peten. The most distant relationship indicated by the pottery is with a site either in the Guaytan area of the middle Motagua River Valley of southern Guatemala or one in Veracruz, Mexico.
Northern Belize: Orange Walk and Corozal District

Research in northern Belize has focused primarily on large-scale settlement pattern studies over a wide area known as the Three Rivers Region. Jon Lohse et al. portray an overview of the political ecology of the upper northwestern Belize. These authors argue that evidence in this area indicate dramatic changes in the fabric of Maya social and political organization over the transition from the Early to Late Classic (from ca. A.D. 450 onward). These transitions are visible in the material record through altered growth trajectories of site centers, shifting rural settlement, and in patterns of regional ceramic production. Evidence for differences in the ways certain natural resources came to be utilized and for important environmental changes, including rising water tables and, later on, droughty conditions were also documented. In marshalling these data, they note that the Late Classic (ca. A.D. 600 – 850) organization of that study area to be the result of combined inputs from and requirements of multiple quarters of society, including both urban and rural residents as they responded to natural forces as well as the well-documented political developments across the Maya Lowlands.

Fred Valdez, Jr., adds to this general overview by discussing the ancient Maya settlements in the Programme for Belize lands. Twelve seasons of archaeological research in northwest Belize allow for analysis and interpretation of many ancient Maya activities. The Programme for Belize Archaeological Project (PfBAP) has continued the difficult tasks of survey, mapping, and excavation in an attempt to understand the social, political, and economic interrelationships between minor and major settlement areas. While large site investigations have been generally assigned to specific research agendas, the PfBAP continues a significant push to researching small sites and rural settlements. Research concerning the smaller settlements and general landscape manipulation is the focus of this presentation. Where and how were the Maya utilizing the NW area of Belize for their livelihood? What kind of life did these activities provide for most of the Maya? Settlement locations, artefacts (production and consumption), and general patterns of land use all serve to help define ancient Maya life in NW Belize.

In a superbly written paper Kay S. Sunahara and Richard Meadows propose that the focus of the Formalized Landscape Project (FLP) is to discover how the ancient Maya altered and modelled the landscape. Investigation into ancient Maya non-urban social complexity in the Three Region of Northwestern Belize is also affiliated with the Programme for Belize Archaeological Project. The FLP over the past two field seasons (2003-2004) has located and documented over 20 ancient Maya building groups with associated agricultural and water management features along a 10 km east west transect in the southwest zone of the Programme for Belize Land. Preliminary excavations at three of these groups suggest a high level of variation and complexity in settlement and social organization during the Late Classic Period. Both authors suggest that the cultural features visible across the landscape crystallized during a time when communities were engaging in intensive cultivation of the land, as well as complex political, economic and social activities. Sunahara and Meadows argue that the political economy was also influenced by physiographic and environmental location, as well as resource appropriations. In turn the landscapes that are viewed in the present are refractions of ancient systems and structures. The communities who occupied the diversity of structures groups identified
by the FLP certainly had political economic agendas of their own that crosscut formalized political economic or social hierarchies and cemented socioeconomic and political ties.

Investigations along the Blue Creek escarpment in northern Belize have yielded information on archaic periods in Belize. Jon Lohse's stimulating overview of the preceramic evidence from Paleo-Indian and archaic time periods in Belize is a timely exposition. This paper compiles much of the available data in an effort to bring the hunting and gathering and itinerant horticultural millennia of Belize prehistory into a broader, more accurate, and more comprehensive perspective than has been presented to date. The Paleo-Indian period sees influences from North as well as South America, with settlement preferences shown for river valleys and perhaps near-coastal margins. Cave sites hold promise for yielding new and well-preserved data from this early period. Lohse proposes that the Archaic begins around 6000 B.C., but the evidence is lacking and the period is poorly dated until 3400 B.C., and was probably characterized by mobile hunter-foragers throughout the early and middle Holocene. By 3400 B.C., however, he points out that there is more evidence available to demonstrate habitat modification and early maize horticulture. The period beginning around 1500 B.C., called the Early Formative elsewhere in Mesoamerica but referred to in Belize as the Late Preclassic, shows intensifying maize cultivation, apparently mobile populations, and also the appearance of well-defined stone tool traditions that trend into the early Middle Preclassic.

Shirley Mock continues her work on the daunting northern Belize coastal areas documenting Maya Postclassic transitions and ideology by examining ceramic deposits. During the period (A.D. 1000 – 1300) Mock suggests that mercantile elite rose to control newly organized coastal trading works at Saktunja and connected to Yucatan. Maya elites developed strategies to reaffirm and reinforce their claims to status and these involve a melding of mythological and historic components. Mock demonstrates how ceramics, as portable objects, became an increasingly flexible media that could enhance and forge wider commercial linkages. Examined within the context of other media and models, she notes that ceramics also provide crucial indices in illuminating new styles of ideological messaging pertinent to profound social changes during the Maya Post Classic period (A.D. 1000 – 1400).

We end this volume by presenting a paper that can be aptly termed applied anthropology, where the authors have combined archaeological research, environmental studies, and community development to demonstrate how these disciplines have come together to create the Maya Forest Garden at El Pilar. Anabel Ford et al. in an innovating perspective address the matter of adaptive management and community participation at El Pilar. Resource management and conservation are more keenly required for the Maya forest especially where population growth is threatening the integrity of the tropical ecosystems by contemporary development projects. Curiously, the Maya forest was home to the Maya civilization with 3 to 9 times current populations of the region. The forest survived, demonstrating resilience to human expansion across millennia, and the El Pilar Program suggests there are lessons to be learned from the past. Over the past decade, innovations of the El Pilar Program have forged new ground for community participation in the conservation development of the El Pilar Archaeological Reserve for Maya Flora and Fauna, joining themes of global importance – tourism,
natural resources, foreign affairs, rural development, and education— with traditional forest gardening impacts agriculture, rural enterprise and capacity building. Today the program embraces partnerships in Belize and Guatemala with alliances in the international NGO community. The El Pilar Program has collaboratively built an innovative community participatory process, in creating a unique management planning design, and in developing a new tourism destination. The success of local outreach is seen in the growth of the community organization Amigos de El Pilar that has worked together with the El Pilar Program to build a participatory relationship between the community and the reserve that is mutually beneficial. This dynamic relationship lies at the heart of the El Pilar philosophy, resilient and with the potential to educate communities, transform local-level resource management, and inform conservation designs for the Maya Forest.

To conclude, and as promised, the Institute of Archaeology has published the second volume of research papers on archaeological findings in Belize. The diverse nature of topics discussed in this volume underscores the complexity of archaeological research both theoretical and methodological. Archaeological research in Belize has grown tremendously over the last decade and it is the mandate of Institute of Archaeology to publish the findings of these scholarly presentations in a scientific journal, to provide knowledge not only for the Belizean public, but to all those interested in the past histories of ancient civilizations.
SECTION ONE: THE EARLY CLASSIC PERIOD
The Early Classic Period is difficult to define for a variety of reasons, not the least of which is a widespread preconception that can be found among many Maya archaeologists that the Early Classic either does not exist at some sites or that it represents a drastic reduction in terms of population numbers. Why and how this myth came into existence is partially a result of historical accident and partially a result of excavation and analytic methodology that does not take into account the very real cultural changes that occurred during the onset of the Early Classic Period.

We tend to look at the Early Classic Period through a Late Classic lens. In general, this lens works fairly well in terms of excavation methodology for the later part of the Early Classic Period, at least in terms of elite remains. However, this Late Classic lens tends to cloud our view of the first half of the Early Classic, where the excavation methodology needs to be substantially altered in order to encounter these earlier remains. Much like the Terminal Classic era (D. Chase and A. Chase in press), the transition from the Late Preclassic to Early Classic followed different frames of reference – frames that are only barely understood, but that do not lend themselves to being found with excavation methodology honed in the Late Classic Period. Analytically, the Early Classic has some similarities to the Terminal Classic Period in the use of status-linked ceramic materials (see Lincoln 1985, A. Chase and D. Chase 2004, in press). Given the conjoined problems of excavation and analytic methodology, it is not surprising that many scholars have had difficulty isolating, let alone finding, the Early Classic era.

Background

Identification of Early Classic remains and the transformation from the Preclassic to the Classic Period is not solely a modern concern. It was very much an interest of initial Carnegie researchers at Uaxactun, the site that came to form the baseline of later definitions of the Early Classic Period. The transition into the Early Classic was notoriously difficult to define at Uaxactun. Robert Smith (1955), the ceramic analyst at Uaxactun, was unsure of the nature of continuities from the Late Preclassic into the Early Classic. Aware of
Early Classic Caracol

earlier transitional ceramics from Holmul, Guatemala (Merwin and Vaillant 1932), he suspected that an entire ceramic phase, one he called “Matzanel,” was missing from the Uaxactun sequence. Although he subdivided his Early Classic phase into three parts, he had trouble defining its earlier two subdivisions (Tzakol 1 and Tzakol 2). Temporally, he saw the Early Classic as running from A.D. 278 to A.D. 593, largely defined on the basis of his understanding of hieroglyphic texts and stone monuments at Uaxactun. Thus, while Uaxactun clearly had substantial deposits dating to Tzakol 3 (his latest subdivision of the Early Classic), the transition out of Late Preclassic Chicanel ceramics was problematic; and, importantly, most of the Tzakol 3 materials at Uaxactun derived from high status tombs.

Sequencing problems recognized in the ceramics at Uaxactun were also indirectly extended to other analytic realms. Uaxactun’s E Group was thought to have functioned as an architectural complex for measuring solstices and equinoxes. Even though a Late Preclassic building was stratigraphically related to this function, because 8th cycle stelae were associated with a later rebuilding of this complex, Uaxactun’s E Group came to be defined as an architectural hallmark for the Early Classic Period. However, subsequent work on E Groups (or “architectural commemorative complexes”) at other sites demonstrated that these complexes all had Preclassic origins (A. Chase and D. Chase 1995; Hansen 1998; Laporte and Fialko 1995).

Subsequent archaeological projects widely used the Uaxactun ceramic sequence, but did not substantially refine its complexes or dating. Fourteen years of excavation at Tikal by the University of Pennsylvania largely replicated and amplified the Early Classic sequence seen at Uaxactun. The earlier parts of the Early Classic at Tikal (Manik 1 and 2) were curiously under-represented in the archaeological record recovered by the University of Pennsylvania team (later recognized as a sampling problem) while the latest Early Classic facet (Manik 3) was especially well represented in elite tombs (e.g. Culbert 1993). A focus on these elite tombs resulted in rampant speculation that the great central Mexican site of Teotihuacan had directly impacted the southern lowland site of Tikal in some way based largely on similarities in ceramics and iconography (Coe 1972; Coggins 1975). Sanders and Price (1968), in fact, argued that Teotihuacan intervention in the Southern lowlands, either directly from Teotihuacan or indirectly through the site of Kaminaljuyu, gave rise to the first true Maya state. While epigraphers have perpetuated this view of interventionist history (Schele and Freidel 1990; Stuart 2000; Martin 2003), the archaeological record argues strongly against any forcible impact from Teotihuacan (Demarest and Foias 1993; Iglesias 2003; Laporte 2003; White et al. 2000, 2001). The more recent Tikal excavations by Juan Pedro Laporte (2003; Laporte and Fialko 1995) and his colleagues have better defined the Early Classic Period at that site and substantially filled in ceramic gaps relevant to Tikal’s earlier phases. These investigations suggest a Maya, rather than Teotihuacan, temporal priority for key ceramic types and architectural styles.

While Early Classic materials could be defined in most excavations at the various sites that were excavated in the 1950s and 1960s, the analysts usually commented that the full spectrum of what should have been there was absent. For Barton Ramie (Willey et al. 1965), Altar de Sacrificios (Adams 1971), and Altun Ha (Pendergast 2003:244), this meant that few of the hallmark cylinder tripods were found, although other materials could be assigned to this temporal era. At Seibal, however,
there were problems finding and defining any Early Classic occupation. Secure Early Classic occupation could only be assigned to the site epicenter and a “temple” 2 kilometers distant. Based on these data, Sabloff (1975:233) argued that Seibal “was virtually abandoned for several hundred years” between the Late Preclassic and the Late Classic Period. This idea of an Early Classic population depression or abandonment was subsequently popularized (Willey et al. 1975:41; Willey 1977:395-396) and adopted by later researchers (e.g., Sidrys 1983:397-399) who also had difficulty locating the Early Classic remains within their archaeological samples. Based on his archaeological data and in accord with this viewpoint, Freidel (1978, Freidel et al. 1982) argued that Cerros was almost completely abandoned at the end of the Late Preclassic Period (although subsequent re-analysis did in fact identify Early Classic remains within the Cerros structures [Walker 1998]). The accumulated publications led to a widespread belief that there was little or no Early Classic Period occupation in large portions of the Southern lowlands, presumably because of some sort of larger societal decline. Lincoln (1985) provided an alternative solution to the dilemma of the “missing” Early Classic by postulating that Preclassic ceramics continued to be used by the bulk of “Early Classic” populations at many sites and were thus not easily distinguishable by the ceramic analyst. While initially not widely accepted, Lincoln’s (1985) work in fact provided part of the resolution to the Early Classic problem.

The above being said, we should note that we have frequently looked in bewilderment at those who postulated Early Classic abandonment or had difficulty in finding Early Classic archaeological remains—for the Early Classic Period has been well represented at each of the major sites at which we have worked. Both Tayasal and Cenote in the central Peten of Guatemala produced burials and tombs dating to the Early Classic. And, the conjunction of E Groups, the advent of stela, and Protoclassic ceramics were all in evidence at Cenote (A. Chase 1985). Thus, ceramically, a clear transition was manifested in intertwined ceramic modes that spanned the Late Preclassic into the Early Classic; another transition was seen in ceramic modes conjoining the Early and Late Classic eras (A. Chase and D. Chase 1983). However, exactly when these transitions occurred was somewhat hazy. In fact, it was in examining the Tayasal data that we started to understand some of the analytical problems involved in the Early Classic, for if one used the standard temporal frame for the Early Classic –then current– of A.D. 250 to A.D. 600, it would appear as if there was a population decline in the archaeological record. But, if one reduced the upper end of this phase from A.D. 600 to A.D. 550, as archaeological sequencing and cross-dating dictated (see A. Chase 1990), then the population curve reversed itself and the Early Classic demonstrated a population upswing. Thus, a 50-year shift in timeframe drastically restructured analytic perceptions of the same data (A. Chase 1990:158). Methodologically, the Tayasal data further demonstrated that Early Classic remains were not often encountered in random settlement test-pits, but were rather more likely to appear deeply buried in larger architecture. Thus, sampling was clearly a key issue in the recovery of Early Classic Period remains.

Santa Rita Corozal also produced a sizeable amount of Early Classic material including tombs, burials, caches, and on-floor refuse (see D. Chase and A. Chase, this volume). Analytically, these data again demonstrated ceramic continuity between the Late Preclassic and Early Classic, but
also suggested an Early Classic exuberance that far exceeds the central Peten materials. Unlike the central Peten, the continuities in certain forms in northern Belize between the Early and Late Classic eras sometime made an ascription to the Late Classic difficult (e.g. Pring 1976). These same data showed a highly stratified society and demonstrated that a few people could accomplish great architectural feats (D. Chase 1990:207), something later expounded upon in terms of ergonomics by Abrams (1994) for Copan.

Like the Tayasal-Paxcaman Zone and Santa Rita Corozal, Caracol also has blessed us with plentiful Early Classic remains. Analytically, we have several deposits that permit us to examine both the Late Preclassic and Early Classic articulation and the Early Classic to Late Classic transition. Methodologically, Caracol has also allowed us to note that our traditional excavation techniques—i.e., axial trenches on mounded architecture—may be fine for identifying remains from the late Early Classic onwards, but that they are not well-suited for finding earlier Early Classic remains. Many Early Classic primary deposits tend to be inside elevated plazas and not on structural axes. Thus, part of our inability to find Early Classic remains can be ascribed to an excavation methodology that is conditioned to find Late Classic deposits.

The Early Classic Period at Caracol

To understand the Early Classic Period at Caracol, one needs to first define the known Preclassic remains at the site. Preclassic Caracol was quite precocious. Caracol’s Preclassic ceramics may go back as far as 600 B.C. based on form and decorative seriation. However, most Preclassic occupation at Caracol is deeply buried and difficult to access. In the epicenter, Preclassic architecture has been investigated in three loci. Caana, Caracol’s main epicentral complex, had been built to a height of over 38 meters by the end of the Late Preclassic era. In the A6 locus was a Late Preclassic version of Caracol’s E Group (or commemorative architectural complex; see A. Chase and D. Chase 1995). Finally, two Preclassic building platforms have been partially excavated deep beneath the elevated plaza in front of Structure B34. Preclassic caches also are known from both the Caracol epicenter and from some of the outlying sites that were engulfed by Caracol’s Late Classic settlement. J. Eric S. Thompson (1931) recovered Preclassic caches from both Hatzcap Ceel and Cahal Pichik. The Caracol Archaeological Project also encountered looted cache vessels of probably Late Preclassic date at Cahal Pichik. In the Caracol epicenter, two Late Preclassic caches were found in the core of Structure A6-2nd. Both consist of pottery containers with only a few contents; however, one was bedded on hundreds of broken greenstone beads.

The transition between the Late Preclassic and the Early Classic—to some extent representing the earlier end of the Early Classic—is exceedingly well represented at Caracol in terms of ceramics contained in burials, caches, and refuse deposits. These data substantially augment Brady et al.’s (1998) discussion and faceting of ceramic typologies for the “Protoclassic”. Brady and his colleagues argue that Protoclassic ceramics can subdivided into two temporal facets, one that is essentially Late Preclassic and represented by Usulutan material and tetrapod nubbin supports and a second that is essentially Early Classic and is characterized by orange-gloss polychrome mammiform tetrapods and pot-stands; the earlier facet is dated from 75 ± 25 B.C. to A.D. 150 and the later facet is dated from A.D. 150 to ca. A.D. 400. Unlike much of the data examined by Brady et al. (1998), the Caracol archaeological data on this
transition comes mostly from primary deposits.

Part of the problem in dealing with this transitional era is perceptions about what Preclassic ceramics as opposed to Early Classic ceramics look like. Simply put, Preclassic ceramic materials were viewed as being monochrome red, black, or cream, were often portrayed as being fairly thick and heavy, and were perceived as having waxy finishes; Early Classic ceramics were considered as being more finely made, as having forms that included basal flanges, z-angles, lids, and cylinder tripods, and as being decorated with polychrome or with gouging and incising on blackwares. In the past, many of our contexts for these early materials came from fill, and the ceramic analyst had little choice but to sort materials into what were perceived as being Preclassic as opposed to Early Classic types. Assumptions were made as to what went with what, and it was believed that waxy wares and glossy wares were temporally sequent. In the absence of good radiocarbon dates, dating was based on comparisons to other sites (where other analysts had supposedly already resolved these issues). What this meant is that our understanding of the Late Preclassic and Early Classic transition, an era difficult to find archaeologically, was reified in terms of analytic preconceptions.

After 20 years of research at Caracol, we are only now starting to break out of this analytic straightjacket. At this point we have a number of deposits that can be dated to the “Preclassic” end of this transition. Two burials have been recovered from Caracol that combines Preclassic and Protoclassic forms and surface treatments. But, unlike the recovered burials noted above, these finewares were in association with other utilitarian and ceremonial ceramics that included large slipped water-jars, large unslipped ollas with handles, and various kinds of censerware. Both glossy orange-wares of various forms (including large mammiform supports [not illustrated here]) and large waxy red-ware dishes were present in the reconstructable ceramics, as well as a mammiform blackware plate, a
Figure 1. Burial plan of a woman at Caracol Structure B34 ca. A.D. 150. She was accompanied by 32 vessels, 10 of which are shown here: (a, b) Laguna Verde Incised; (c) Sacluc Black-on-Orange; (d) Alta Mira Fluted; (e) Flor Cream; (f, g) Mojara Orange Polychrome; (h) Sierra Red; (i) Accordian Incised; (j) Mut Red-on-Brown.
Figure 2. a: Vessels from a refuse deposit at the bottom of a collapsed *chultun* in the South Acropolis (excav. C164D), representing transitional ceramic material at the beginning of the Early Classic era (ca. A.D. 200).
Lagartos Punctated mushroom pot, and 2 Sacluc Black-on-Orange bowls (1 with mammiform supports and the other with a groove-hook lip). This admixture was much richer than that which occurred in the interments, conjoining forms that would normally be dated only to the Late Preclassic with forms that are clearly knocking on the A.D. 150-facet transition in the Brady et al. (1998) dating scheme.

The overlap between the Late Preclassic and Early Classic ceramics and the problems in burial ceramics and sampling became even clearer during our 2004 field season. Excavations in the platform north of Structure B36 produced three burials that are quite early in the Early Classic sequence. Two of these interments were placed directly within the fill of the platform and approximately half a meter

Figure 2. b: Vessels from a refuse deposit at the bottom of a collapsed chultun in the South Acropolis (excav. C164D), representing transitional ceramic material at the beginning of the Early Classic era (ca. A.D. 200).
below the modern ground surface. Each burial was associated with two vessels (Figure 3). One was accompanied by a basal-flange polychrome bowl and a polychrome pot-stand; the other was accompanied by a miniature handled olla and a small collared bowl with lug-handles. The stratigraphy indicates that both interments had to have been deposited within a very short time span relative to each other. However, traditional ceramic analysis would make one interment “Preclassic” and the other “Early Classic,” thus to some extent mirroring the admixture seen in the earlier deposits discussed above. The third interment recovered immediately east of the other two was a re-entered tomb (see D. Chase and A. Chase 2004a) containing six vessels (including two basal-flanged bowls) and an incised blackware lid, all dating this interment to the Early Classic Period. Thus, these excavations also confirm the difficulty in dating isolated ceramics outside of contextual assemblages and stratigraphic relationships.

Besides the above deposits, 15 other Caracol interments can be assigned to the Early Classic Period. Eight Early Classic tombs are known from Caracol: five come from the site epicenter (Figure 4), one comes from the Retiro termini, and two were recovered in the settlement area (Figure 5). Two other Early Classic interments come from chultuns excavated within the settlement area (Figure 6). Two more Early Classic interments were recovered in settlement test excavations and at least three other Early Classic interments are cursorily known from settlement looting. Most of the Caracol Early Classic interments have basal-flange bowls. Interestingly, however, cylinder tripods only come from three tombs in the site epicenter. Five Early Classic interments have hourglass incensarios in them: one tomb has an effigy-face censer; a chultun burial has a spiked censer with its base removed (see Figure 6a); three other tombs have plainer forms (1 in the site epicenter and 2 in residential settlements). The Early Classic burials with these incensarios date from the later part of the Early Classic, and the hour-glass incensario can be considered to be a transitional form as it continued to be placed in other burials dating to the early part of the Late Classic Period.

At minimum, four excavated caches fall within the transitional Late Preclassic to Early Classic era at Caracol. This includes materials from both within and outside the site epicenter. Primary among these are two caches that were deposited during the construction of Structure A6-1st. One cache was in a barrel-shaped vessel; it contained color-coded directional shells set about a central earflare assemblage on a bed of malachite; also included in the urn were carved shell and jadeite figures (including human “Charlie Chaplins” [Moholy-Nagy 1985]), pine needles, pumpkin seeds, a beehive, and sharks teeth. Carbon within this urn yielded a date of 1980 + 80 (B.C. 190 A.D. 190 [260]; Beta 18060). A second cache in the core of Structure A6-1st was located in a stone geode. It too contained a central jadeite earflare above a pair of Spondylus shell that held a jadeite mask; the whole had been enclosed in a cloth that contained malachite pebbles and had been set above 664.7 grams of liquid mercury. Extensive burning on structure floors that sealed these two caches were dated and yielded a series of three dates that confirmed the “transitional” placement of these caches, presumably as early as A.D. 60 (A. Chase and D. Chase 1995:96-97). The early placement of this cache pattern at Caracol anticipates similar patterns found at Tikal almost 250 years later (see Coe 1990:926-930) and again emphasizes the importance of sampling and the difficulties in cross-dating. The other two transitional
Figure 3. Interment plans and vessels from two roughly coeval burials deposited within the Structure B36 platform (excavation C168H).
Figure 4. Early Classic vessels from a tomb in a residential (excav. C95B).
Figure 5. Early Classic vessels from tomb at Caracol settlement area (excav. C116D).
Figure 6. Vessels associated with a burial inside a chultun in the Caracol settlement area (excavation C67A).
Early Classic Caracol

caches at Caracol come from an outlying housemound group (an urn with shells and an obsidian ‘Charlie Chaplin’) and from within the Structure B34 plaza (lip-to-lip bowls containing \textit{Pomacea} shells and a miniature carved mica stingray spine).

Besides the above transitional caches, fourteen additional caches in enclosed ceramic containers may be assigned an Early Classic date, six from the settlement area and eight from the epicenter (see Figure 7). All are on presumed structural axes, although half of the settlement caches are non-structural and were recovered from within plazas. While there are differences among the contents of these caches, ‘Charlie Chaplins’ shells, and carved jade are especially noticeable. Face caches first appear at the transition between the Early and Late Classic in the middle of the sixth century, but finger caches would appear to have a longer history, perhaps spanning the entire Early Classic Period (D. Chase and A. Chase 1998). Because the ceramic form of small-unslipped dishes does not vary all that much over time, it is difficult to date isolated finger caches without good stratigraphic control.

Apart from ritual deposits, it is also possible to briefly comment on architecture and settlement patterns. Most Early Classic remains are deeply buried within Caracol’s extensive Late Classic constructions. However, the majority of Caracol’s A Plaza was constructed by the end of the Early Classic Period. Not only was the Late Preclassic commemorative complex further extended and elaborated on the western and eastern sides of this plaza during the Early Classic Period, but the platform mass of the temples known as Structures A1 and A3 were also built during this era. As previously mentioned, Caana’s Structure B19 reached a height of at least 38 meters prior to the Early Classic Period, and evidence exists for a buried Early Classic version of Structure B20 that was on a more northerly axis during this era. Apart from these scant data, little has actually been recovered on Caana proper relative to the true Early Classic. Outside of epicentral construction, what can be noted is that the Early Classic landscape about Caracol was quite different than the Late Classic one. Residential groups were sparser, although agricultural terracing was probably being constructed (Healy et al. 1983). Sizeable architectural complexes (such as Talking Trees, Tulaktuhebe, and Saraguate) –some elaborations of earlier Preclassic constructions– were regularly spaced over the terrain at distances of approximately 2 kilometers from each other. Most of these groups were later engulfed by the more dense Late Classic population (e.g. D. Chase and A. Chase 2002). However, the amount of Early Classic construction activity visible throughout Caracol, when combined with evidence from burials and caches, bespeaks an active and presumably prosperous site one that was well positioned for growth and development in the Late Classic.

A note needs to be made concerning Caracol’s hieroglyphic record and the Early Classic Period. Ballcourt Marker 3, dating to A.D. 798, makes reference to Caracol’s founding ruler, Te’ K’ab’ Chaak, and his probable accession to the throne in 8.14.13.10.4 or A.D. 331. Clearly identifiable events related to Caracol’s early history are, however, few and far between in the texts. A badly broken Stela 23, set beneath a later altar at the summit of Structure A2, records a late 8 Baktun ISIG (Grube 1994:91-92) somewhere between A.D. 361 and A.D. 429. The Caracol Tourism Development Project recovered the upper half of Stela 20 under a side stairway for the A Plaza’s eastern platform (Figure 8). The full date on this monument can now be read as 8.18.4.12 or A.D. 400, but again little else can be garnered historically,
Figure 7. Part of Special Deposit C141C-1, which was placed in a small structure appended to the rear of Caracol Structure A1 (excav. C141C). Positioning of associated artifacts within the cache vessel is shown in four levels. Also illustrated is the central jadeite figurine and 22 “Charlie Chaplins” from within the urn (far left one is jadeite; the other 21 are of shell).
although both the A Plaza and the South Acropolis are loci of activity at this time. Two tombs from the South Acropolis may be dated from before (Structure D7) and after (Structure D16; e.g. A. Chase 1994) this monument. The double-decker tomb recorded by Satterthwaite (1954) in front of Structure A6 also was placed subsequent to Stela 20. While many early 9th cycle monuments exist at Caracol (e.g. Stelae 2, 4, 13, 14, 15, and 16 as well as in Giant Ahau Altars 2, 3, and 4), these texts are largely eroded and, thus, only the briefest parts of Caracol’s Early Classic history have been decoded. Apart from the founder, the next Caracol ruler, Yajaw Te’ K’ínich I, is noted as acceding to the throne in A.D. 484 (9.2.9.0.16; Martin and Grube 2000:86). His father was named K’ak’ Ujol K’ínich I and his son, K’an I, acceded to power in A.D. 531 (9.4.16.13.3) near the transition to the Late Classic Period; in turn, K’an I’s son, Yajaw Te’ K’ínich II, acceded in A.D. 554 (9.5.19.1.2) under the auspices of a Tikal lord (Martin and Grube 2000:89). Caracol’s independence from any relationship with Tikal resulted from the A.D. 562 “star war” recorded on Altar 21 (A. Chase 1991). Although no rulers’ interments have been unequivocally documented, monuments and dated chambers help anchor the Caracol sequence.

Caracol’s ample archaeological record helps us to interpret the later transition to the Late Classic Period. While the population of early 6th century Caracol was nowhere near Late Classic size, displays of opulence in Caracol’s Early Classic burials and caches suggest that the site must have been relatively well established prior to the war with Tikal. That this was, in fact, the case can be seen in the earliest tomb from Structure B20. Dated to A.D. 537 (9.5.3.1.3) by a text painted on the east wall of the tomb, this chamber is large and impressive (D. Chase 1994:fig. 10.3), measuring 3.62 m in length, by 1.95 m in width, by 3.2 m in height. It housed the remains of a single individual accompanied by 15 pottery vessels (A. Chase 1994:fig. 13.1), 2 Spondylus shells, a carved jadeite pendant, jadeite earflares, and 14 limestone spindle whorls (among other items). The contents, size, and location of this chamber suggest that members of Caracol’s ruling dynasty prospered prior to the war with Tikal. The impact of the successful warfare with Tikal also can be seen in the substantial construction undertaken in the Structure B20 locus between the use of this chamber in A.D. 537 and the use of the sequent chamber in A.D. 577 (9.7.3.12.15). The A.D. 537 tomb was sited behind an earlier stairway mask. Some time later this first mask and its associated stair was covered by a new set of steps and a small “shrine” room or building that was elevated directly above the tomb chamber. After extensive use, this second stair was disassembled and the rear of the shrine was cut away to place the tomb used.

Figure 8. Upper section of Caracol Stela 20 dating to 8.18.4.4.12. (drawing by A. and D. Chase).
in A.D. 577 as well as two additional chambers that were encased in Structure B20-2nd (D. Chase and A. Chase 1998). A similar intensification in residential construction is also visible throughout the site at the transition from the Early to Late Classic Period following the A.D. 562 war (A. Chase and D. Chase 1989; D. Chase and A. Chase 2003).

Conclusion

Transitions are far more intriguing than stable blocks of time. Yet, transitions are also notoriously difficult to identify in the archaeological record because of their fluid (and fleeting) nature. We archaeologists tend to define blocks of time and to look for horizons that can be identified through specific modes and markers. In spite of a widespread dearth of appropriate contexts and deposits for analysis, modes and markers have tended to be used in Maya archaeology to make temporal subdivisions, thus actually reifying and obfuscating a very fluid situation.

Most Maya archaeologists “know” what basic Early Classic ceramics look like and can identify them and sort them out of mixed fill collections. At least for the later part of the Early Classic Period, we have used these markers to assess connections to and interaction with central Mexico and elsewhere (e.g. Braswell 2003). However, it has only been with Laporte’s (2003) successful recovery of numerous primary deposits from the Mundo Perdido area of Tikal that we have begun to get a handle on what transpired in the earlier part of the Early Classic Period and how this era articulated with “Protoclassic” modes and markers. Yet, even with Laporte’s extensive work, the articulation of the Late Preclassic and Early Classic at Tikal was and is still not fully resolved. Thus, the Caracol materials are important to understanding this early transition and, as at Tikal, reveal that the vagaries of sampling can very much condition interpretations.

Much of our understanding of the past itself results from historical events and activities. Thus, the Uaxactun and Tikal excavations have come to condition our view not only of the earlier transition, but also of the later transition from the Early Classic to the Late Classic. The extensive archaeological excavations at Tikal did not recover voluminous materials that related to this later ceramic transition from the Early Classic to the Late Classic Period. The lack of identifiable material for this later transition at Tikal may quite possibly have been a result of the historically noted A.D. 562-war event involving Caracol that disrupted the Tikal elite order for 130 years. Tikal entered into a monument hiatus between A.D. 562 and A.D. 692; elite burials from this transitional era were both difficult to find and to date (e.g. Culbert 1993). An inverse situation occurs at Caracol during this same time; there was an inscriptive apogee accompanied by plentiful archaeological deposits and remains. Again, the Caracol sequence is able to define this transition with well-dated ceramic assemblages and with the onset of new site-wide ritual practices (A. Chase and D. Chase 1994; D. Chase and A. Chase 2004b) that continued throughout the rest of the Late Classic Period.

Even though research at Caracol has focused predominantly on its Late Classic occupation, during the 20 years of the Caracol Archaeological Project, there has been an increase in discoveries relevant to the site’s early history. Exactly why Caracol initially developed where it did is probably never knowable, although Caracol’s emergence as a city can be seen in the archaeological record (A. Chase et al. 2001). In spite of a lack of water, a series of areas in the Caracol region were occupied by at least 600 B.C. By A.D. 100 all of Caracol’s
major epicenter groups were the loci of massive constructions; Caana rose 38 meters above the jungle floor. The presence of several E Groups within the site boundaries and the many elaborate ritual offerings dating to the 1st century A.D. and later suggest that Caracol was well established before the formal advent of the Classic Period. It would appear that Early Classic Caracol continued to grow and to embellish the already established Preclassic patterns. During the 6th and 7th centuries Caracol expanded to become larger and more centralized; it became a giant site with a substantial population and massive public works projects. Giant sites often have humble beginnings; however, the archaeological data indicate that prepubescent Caracol was always substantial, even in the Preclassic era. Just as the Late Classic architecture covers earlier construction, so has Late Classic Caracol obscured what is now being revealed as a formidable earlier history. The combined work of various researchers has made the Early Classic far more understandable, but at the same time we now know the impact that sampling, cross-dating, type and mode markers, and preconceived notions can have on interpretations of the past.

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It has been expounded upon that the Early Classic Period is one of the least understood archaeological periods in Maya civilization. What archaeologists know about the Early Classic is based predominantly on excavations at large sites such as Tikal and Holmul. In the Belize Valley some researchers suggest a severe depopulation of the area and aggregation of the remaining populace into a few centers. This paper reviews the data available from the sites of Barton Ramie, Buenavista, Pacbitun, Cahal Pech and selected cave sites (Chechem Ha, Actun Chapat, Uchentzub) along the Macal valley charting a number of diagnostic features which can be used to define the nature of the Early Classic Maya, and confirming that the Early Classic was actually one of the most dynamic periods in the prehistory of Belize. Significantly, this article exposes the apparent absence of architectural and iconographic diagnostic aspects of the material culture of Teotihuacan in western Belize, which indicate that the Belize Valley sites may have formed a more cohesive network of interaction, and one less exposed to sites under hypothesized Teotihuacan influences.

Introduction

In a paper published in the first volume of the Research Reports in Belizean Archaeology, LeCount (2004:27-28) accurately noted that “…the Early Classic is one of the least understood archaeological time periods in the Maya lowlands.” She added that “much of our understanding of this critical time period is based on the tomb and temple excavations at a few large sites”, such as Tikal, Uaxactun, Holmul and Copan. Furthermore, when Early Classic remains are identified outside of the central Peten, they are usually associated with elite contexts.

In the Belize Valley and western Peten, this assumed rarity of Early Classic remains has led some researchers to “suggest a severe depopulation of the area and aggregation of the remaining populace into a few centers such as Actuncan” (LeCount 2004:27). In contrast with this view, other researchers (Awe 1992, Demarest 1992, Lincoln 1985) have suggested that the paucity of Early Classic diagnostics in some regions may simply reflect the continuity of Late Preclassic assemblages beyond the third and fourth centuries A.D. Some of us (cf. Audet and Awe 2004:52) also believe that because previous investigators have tried to define the Early Classic on the basis of a few Peten-centric diagnostic ceramic types, they have generally failed to record evidence for local development during this time. By reviewing the data available for selected sites in the Belize River valley, we want to demonstrate two points: first, that there are a number of diagnostic features which can be used to define the nature of Early Classic Maya culture in the Belize Valley, and secondly, that the available data serves to confirm that the Early Classic was actually one of the most dynamic periods in the prehistory of western Belize.

Barton Ramie

At Barton Ramie Willey et al. (1965:350) and Gifford (1975) designated the Early Classic period as the Hermitage
Early Classic Belize River Valley

Early Classic Belize River Valley

phase. Overlapping Hermitage with the slightly earlier Floral Park phase, their Terminal Preclassic – Early Classic periods were dated from A.D. 100 to 600 and correlated with the Matzanel-Tzakol phases at Uaxactun.

The settlement survey and excavations conducted by Willey and his colleagues noted that the Hermitage phase at Barton Ramie was characterized by a considerable increase in population. They (Willey et al. 1965:350) report that 76.9% or 50 out of the 65 mounds that were tested produced evidence of occupation during the Hermitage phase. In 30 mounds there was also evidence of platform construction. Most of the platforms were rectangular in form, except for BR 190, which was circular in plan and had an attached ramp and rectangular terrace.

At least eight burials at Barton Ramie were dated to the Hermitage phase (Willey et al. 1965:545-558). The orientation of these burials was extended with head to the south, and in prone or supine positions. A few individuals were also placed in seated positions (Willey et al. 1965:565-566).

Non-ceramic artifacts of the Hermitage phase at Barton Ramie included small and large varieties of metates, bark beaters, obsidian cores, pyrite mosaic mirrors, Olivella shell tinklers, plus shell pendants and beads. Willey et al. (1965:566) further suggested that stemmed projectile points or knives were likely first introduced during the Hermitage phase.

The Floral Park-Hermitage phases at Barton Ramie also witnessed the introduction of new ceramic innovations (Figure 1). New Floral Park ceramic types included pottery designated as Aguacate Orange and Ixcanrio Polychrome. The most diagnostic form of this pottery is a large bowl with mammiform tetrapodal supports. The diagnostic pottery of the subsequent Hermitage phase was found to be closely related with the glossy wares and polychromes that are found in the northeastern Peten. The two principal polychrome types for Hermitage were Actuncan Orange and Dos Arroyos Orange, both produced in basal-flanged bowl forms (Willey et al. 1965:566). Furthermore,

The Aguacate Ceramic Group of the previous Floral Park Phase is not extinguished but continues in a variety known as Privacion. Also, the old resident red monochrome tradition has its descendant in the Minanha Red type which is also made in the basal-flange bowl form. Striated utility pottery, which has a long and more or less continuous history throughout the Barton Ramie sequence is particularly plentiful in the Hermitage Phase. Finally, Early Classic modes of Teotihuacan inspiration are seen in the slab-footed tripod jars most frequently occurring in the Balanza Black Ceramic Group. These Teotihuacan-like forms are not as common as at ceremonial centers of Uaxactun or Tikal, but they are definitely present in the house mound detritus at Barton Ramie. (Willey et al. 1965:566).

Despite obvious cultural changes, the Barton Ramie ceramic data thus reflects clear continuities from the Protoclassic Mount Hope phase to the Hermitage phase. As Willey et al. (1965:565) accurately concluded, “The picture is that of a definite mingling and fusion of the new with the old.”

Pacbitun

At Pacbitun, Paul Healy (1990a) employed a chronology that closely resembles that of Willey et al. (1965) at Barton Ramie. Here the Terminal Preclassic or Protoclassic period, which was designated as the Ku phase, extends from 100 BC to AD 300. This is followed by the Early Classic Tzul phase that spans from AD 300 to 550.
Excavations in the site core at Pacbitun revealed considerable construction activity during the Early Classic. Healy et al (2004:210) note that by the middle of the Ku phase, the in-line tripartite eastern buildings reached heights of between 3 and 6 meters above plaza level. To the southwest of Plaza A, construction of the palace complex (Str. 23) began in the Late Preclassic /Early Classic transition” (Healy et al. 2004:211). The first phase of the Plaza E ballcourt was also constructed during the latter part of the Ku phase (Healy 1992). A cache in the eastern structure of the ballcourt contained two ceramic vessels placed “lip to lip”. Within the vessels were approximately 200 shells of the freshwater snail known as *jute*. Other objects in the deposit included the following:

...polished celt; jadeite bead; large, finely chipped green obsidian bipoind; large, stemmed, plano-convex chert point; stingray (Rajiformes) spine, fitting valves of a small thorny oyster (*Spondylus americanus*), and six small (< 3 cm) flat, notched, lozenge-shaped objects (possibly abstract human forms) made of slate (2), white shell (2); and orange/pink shell (2).

The discovery of the green, Pachuca obsidian, leaf-shaped bi-point, and the stemmed, plano-convex point in the same context is particularly important because it provides evidence that both projectile forms were being produced in Early Classic times. At Altun Ha, Pendergast (2003) also discovered several eccentrics made from green Pachuca obsidian, suggesting that settlements along the Belize River may have participated in a trade network that had expanded considerably following the end of the Late Preclassic period.
Investigations at Pacbitun recorded 20 stone monuments. These include 13 stelae and 7 altars. Three of the monuments, Stela 6 (Figure 2), as well as Altars 3 and 4, bear evidence of carving and were dated to the Early Classic Tzul Phase. Based on their interpretation of the inscriptions, Healy (1990b; also Healy et al. 2004:214) proposed that Stela 6 commemorated an event celebrated about A.D. 475 (or 9.2.5.?7). A more recent re-examination of this monument by Christophe Helmke, Nikolai Grube, and Jaime Awe recorded many more details of the glyphic text on Stela 6, and secured a Long Count placement of A.D. 485 (or 9.2.10.0.0), obviously at odds with Healy et al.’s (2004) proposition. Our recent illustration also produced considerable more detail than was captured by the earlier field drawing of the monument. Deciphered portions of the text appear to refer to a mythological episode as a prelude for the historical event commemorated by the erection of the stela itself (Helmke et al. 2004). In addition, the lord of Pacbitun depicted on the stelae may be titled as a *yajaw k’ahk’* or ‘Lord of Fire.’ The subsidiary text that serves as a caption to the iconographic program refers to an accession ceremony (perhaps to the rank of ‘Lord of Fire’?), which may have taken place under the agency of an overlord; though on account of erosion this interpretation must remain tentative (Helmke et al. 2004). This evidence indicates that, as a seat of royal power, Pacbitun played an active role within wider networks of elite interaction, a point also highlighted by the cohesiveness and broad geographic distribution of shared ceramic modes and forms at the time. Despite these relations, the absence of any Teotihuacan iconographic elements or themes on the carved monuments of Pacbitun is notable—a feature also shared by contemporary monuments at Blackman Eddy and Caracol. This absence indicates that the Belize Valley sites, and perhaps Caracol, may have formed a more localized and cohesive network of interaction, and were less exposed to central Mexican influences like the sites under hypothesized Teotihuacan control.

![Figure 2. Pacbitun Stela 6 as found in situ (photograph by J. Awe)](image)

**Buéavista del Cayo**

At Buéavista Ball and Taschek (2004:156) report that “There is little evident change in the overall archaeological material record” from the Terminal Preclassic Xakal to the Protoclassic Madrugada (ca. 100-50 B.C.-A.D. 150) ceramic phases, “…but those changes that did occur were culturally profound”. They add that:

> while there is overall a smooth continuity in the material cultural record of the valley,
analytically noticeable (Preclassic/Protoclassic) changes did occur, and while some of these likely were no more than “natural” local evolutions in ceramic technology and style, some may have had considerable local, social or political significance (e.g. the limited importation of Peten Gloss Ware black Balanza and polychrome Dos Arroyos group dishes, bowls, and other vessels.)

In contrast to the Terminal Preclassic/Protoclassic phases, Ball and Taschek (2004:157) argue that the subsequent Early Classic Ahcabnal ceramic phase (ca. A.D. 240-420-540) “was marked by dramatic discontinuities in long-established ceramic types, groups, wares, and functional forms in use at both elite and commoner levels...”. Ceramic discontinuities that occur between A.D. 240 and A.D. 420 at Buenavista “ranged from replacement of the ... Tumbac ...and Chan Pond unlipped domestic utility ceramic tradition by the Uaxactun Unlipped Ware Triunfo-Cayo tradition”. Likewise, the Early Classic witnessed the complete disappearance of the longstanding “waxy” tradition and its replacement by the new Peten gloss ware tradition. The Ahcabnal phase also sees the production of polychrome pottery and high quality black-ware and brown-ware vessels in forms that included basal-flanged dishes and bowls, tripod cylinder vases, and flat-base cylinder vases and bowls.

Ball and Taschek (2004:157) claim that there is considerable evidence for Early Classic architectural activity in the Buenavista site core and sustaining area. They (Ball and Taschek 2004:157) argue that there is “marked augmentations in the size and distribution of the resident zonal population and with a proliferation in the numbers of new suburban residential patio groups...”. They also report that in the site center finding evidence for “major surges” in the construction of monumental public and residential buildings.

**Baking Pot**

At Baking Pot a substantial body of data has been recorded, both within the site core and the periphery, which provides evidence for Early Classic developments at the site (Aimers et al. 2000; Audet 2000, 2004; Audet and Awe 2004; Bullard and Bullard 1965; Colas et al. 2002; Conlon and Powis 2004; Conlon et al. 1994; Powis 1993; Ricketson 1931). In Group 1 of the site core, excavations at the base of the in-line triadic eastern shrine uncovered two crypts containing slab-footed (Teotihuacan inspired) Balanza Black and Pucte Brown cylinder vases. The presence of these Early Classic pottery types and forms suggests that this, E-Group-like, architectural configuration was likely formalized by at least the 6th century A.D. Other excavation in the main plaza recovered a variety of Early Classic ceramic types and forms, indicating that one or more of the plaza floors were constructed during this time. At the base of Str. E, a sub-stela cache containing the remains of two infants and lip to lip Hewlett Bank unslipped vessels, provide additional evidence for Early Classic ritual activity in the site core.

Within the sites sustaining area investigations recorded Early Classic components in two plazuelas and at a sacbe terminus complex. At the Yaxtun Group, located northeast of Group 1, Audet (2000, also Audet and Awe 2004) reported that ceramic remains below the sealed floor of Str. 198/3rd contained a mixture of Late Preclassic and Early Classic pottery. The ceramic types identified included vessels of Sierra Red, Polvero Black, Dos Arroyos Orange Polychrome, Balanza Black, Lucha Incised and Minanha Red Groups.

Approximately two kilometers southwest of the site core, investigations at...
the Bedran Group (Audet and Awe 2004, Colas et al. 2002, Conlon et al. 1994, Powis 1993) have also uncovered considerable evidence for Early Classic development. On Structure 2, the eastern shrine of this formal plazuela group, excavations revealed that the first construction phase was represented by a circular platform. The discovery of a cache containing an Aguacate Orange vessel helps to date this construction phase to the Protoclassic – Early Classic transition. Within the subsequent architectural phase, another cache and a burial contained a Balanza Group Lucha Incised vessel and an Urita Gouged Incised bowl. Both of these Early Classic vessels were decorated with Primary Standard Sequences just below their rims. The presence of these glyphic-inscribed vessels is notable because they bear some of the earliest examples of PSS texts in Belize and certainly in the Belize Valley. The texts further point to the crystallization of ritual practices and expressions – apparently developing over the course of the Late Preclassic – with which vessels were dedicated. Equally important is the fact that the vessels make reference to royal patrons or owners holding Emblem Glyphs and, if the vessels were locally produced, as they seem to be, they mark Baking Pot as the central node of a royal realm.

More recent investigations on Structure 190, an architectural complex at the terminus of a sacbe that originates at Group 2 in the site core, has produced additional new data for Early Classic activity at Baking Pot (Audet 2004). Excavations in the mound revealed that Str. 190/1st was represented by a low rectangular platform with a large circular altar at its summit. Associated with the platform were two stelae (Figure 3), one axially located at the northern base of the platform, and a second at the northwestern base of the structure. Excavations below the floors of the altar and platform uncovered more than a hundred lip to lip vessels of the Early Classic Hewlett Bank Unslipped type. Most of the vessels within the altar contained human phalanges, constituting the earliest reported example of finger bowl caches in the Belize Valley. At the base of the northwestern Stela we also uncovered numerous ceramic vessels, including several censers with some affinities to Late Early Classic Candelario Appliquéd specimens from Caracol (A. Chase 1994:163, fig. 13.2f).

Figure 3. Stela 2 associated with Structure 190 at Baking Pot. Note the exposed sub-stela cache (photograph by C. Audet).

Cahal Pech

Several years of research at Cahal Pech by Awe (1992) and his colleagues (Cheetham 1995, 2004, Healy and Awe 1995, 1996, Iannone 1996, Powis 1996) has recorded evidence for dynamic growth at this site between A.D. 300 and 600. As
Table 1 indicates, this growth was also not limited to the site core for there is substantial evidence for coeval developments throughout the site’s periphery.

Within the central precinct just about every excavation revealed evidence for architectural modifications and cultural activity during the Early Classic (Awe 1992). In Plaza A, Structure A1, A2 and A4, all contained Early Classic period components, and the courtyard were resurfaced at least once. In the more public Plaza B, Structure B4-11th and B5 Sub were both constructed during Early Classic period. The latter building has a small vaulted room with a narrow, low doorway and unusually high bench. It is possible that this room may have served as a sweat bath. Within the eastern half of the central acropolis, the floors of Plaza’s C, D, F and G were resurfaced, one of the first phases of the Eastern Ballcourt was constructed, and at least Structures F1, G1 and G2 were modified. On the western half of the acropolis, excavations also exposed a large vaulted and painted building deep below the present floor of Plaza D.

Investigations outside the site core recorded Early Classic components at the Tzinic, Zotz, Tolok, Cas Pek, Zubin and Zopilote Groups. Except for Cas Pek and
Zopilote, all these settlements contain formal patio clusters and all of them have relatively large architecture. At Tzinic, Structures 1, 2 and 5 were modified during the Early Classic. Structure 1 was subsequently transformed into an imposing, vaulted, eastern shrine. Coeval changes at the Tolok Group resulted with modifications in at least 90% of all the structures, and similar activity was noted at Zopilote, Zubin, and Cas Pek.

Evidence for Early Classic burials and caches at Cahal Pech has a similar distribution to that of architecture. Within the core and periphery they were discovered in both elite and non-elite domestic contexts. One cache within Structure G2 contained five Hewlett Bank Unslipped bowls nested on each other. In the site core, burials are reported from a tomb in Str. A1 Sub and possibly in structure B1. In the periphery they were recorded in a crypt at Zubin (Ianonne 1996) and in a simple, sub-floor, burial at Cas Pek (Lee and Awe 1995). One of the vessels from the A1 burial was a Balanza Black slab-footed cylinder vase and the Zubin burial contained a Pucte Brown, effigy enema pot.

Non-ceramic cultural remains at Cahal Pech reflect a similar repertoire of objects as that recorded for the Hermitage phase at Barton Ramie and Pacbitun (see above for details). The latter include stemmed projectile points, bark beaters, turtle back metates, and green, Pachuca obsidian, blades. The pottery at both sites is also relatively indistinguishable. The Cahal Pech assemblage includes basal flange bowls of the glossy Actuncan and Dos Arroyos Orange polychrome types, as well as monochromes of the Minanha Red Group. Other Peten Gloss Wares are present in specimens of Balanza Black and Pucte Brown, occasionally in the so-called Teotihuacan inspired slab-footed cylinder vase form. Unslipped types are represented by jars of the Mopan and Succotz Groups, and bowls of the Hewlett Bank Group. At Cahal Pech, the ceramics from the Hermitage phase Mopan and Succotz Unslipped Groups were relatively indistinguishable from Barton Ramie’s Floral Park Stumped Creek and Old River Unslipped Groups. These similarities at the latter site led Willey and his colleagues (1965:337, 350) to classify the unslipped pottery from both phases as Uaxactun Unslipped.

Caves in the Macal Valley

Cave sites in western Belize contain a rich body of data that has rarely been incorporated in previous assessments of local cultural development. This neglect is unfortunate for the materials within them shed important light on synchronic and diachronic ritual activity in the Belize River valley (Awe 1998). On this premise the Western Belize Regional Cave Project (WBRCP) spent several seasons conducting intensive research at Chechem Ha Cave, Actun Chapat, Actun Halal, Stela Cave and Uchentzub, all located within the hills flanking the western banks of the Macal River. Ongoing analysis of cultural remains from these sites indicates that, at least in Actun Halal, prehistoric human utilization of these subterranean sites began as far back as pre-ceramic times. The other sites contain evidence for ancient Maya use spanning from the Middle Preclassic to the Terminal Classic Period.

Of all the subterranean sites investigated by the WBRCP, Chechem Ha presently provides the best picture of prehistoric Maya cave use in the upper Belize Valley. Spatial analysis of the cultural materials at this site indicates that the entrance to the cave began to be used from Middle Preclassic time, while utilization of the deeper dark zones increases in the Early Classic to Terminal Classic
periods (Ishihara 2000). Interestingly, Protoclassic and Early Classic remains were concentrated in Chambers 1 and 2 and on Ledge 10 (See Table 2). These activity areas are located near the entrance to the cave, and approximately midway between the entrance and furthest accessible point in the site respectively. In contrast, ceramic remains within the deepest sections of the cave only date to the Terminal Classic period.

Analysis of the ceramic remains in Chechem Ha suggests that more than 300 pottery vessels may have been taken into the cave. The vast majority of the vessels were large, Late Classic, Cayo unslipped jars and Mount Maloney Black bowls. Early Classic vessels predominantly included basal flanged polychromes with a few red and black monochromes and unslipped jars. The Early Classic Polychromes included specimens of Dos Arroyos and possibly Actuncan Orange types, and the monochromes were primarily represented by vessels of the Balanza Black Group.

### Discussion

The preceding study of cultural remains for selected sites in western Belize serve to demonstrate that there is considerable data for Early Classic Maya settlements, artifacts, architecture and ritual activity in the upper Belize River Valley. The settlement data for at least Barton Ramie, Baking Pot and Cahal Pech indicate that throughout the valley there was a substantial increase in population. This is clearly borne out by Willey et al.’s. (1965) settlement survey, which noted that 50 of the 65 mounds tested at Barton Ramie produced evidence for occupation at this time. It is further supported by the increase of construction activity within the site cores of Cahal Pech, Buena Vista and Pacbitun.

In the case of non-ceramic artifacts, the Early Classic period witnesses a continuity of certain Late Preclassic forms, such as manos and metates, and the introduction of several new types and modes. At Barton Ramie, for example,
Willey et al. (1965) suggest that there is an increase in the popularity of bark beaters and stemmed projectile points. At Pacbitun, the discovery of a Pachuca obsidian, laurel leaf-shaped point alongside a stemmed point in Early Classic context suggests that both of these forms were contemporaneous. At the same time, the presence of Pachuca obsidian (at Pacbitun, Cahal Pech and Altun Ha) suggests that local elite were seeking new sources from which to acquire and appropriate exotic status symbols. Furthermore, the eccentric forms of the green obsidian artifacts from Altun Ha may likely indicate the incipience of the eccentric lithic tradition at sites in the Belize River drainage.

In the case of ceramic artifacts, there is considerable evidence for typological continuities and discontinuities in the Belize Valley. For at least Barton Ramie, Cahal Pech and Baking Pot, it appears that pottery from the Sierra and Aguacate Groups may have continued into the early facet of the Hermitage Phase. Comparison between unslipped Protoclassic pottery with specimens of Early Classic date at the three sites demonstrates that the ceramics are relatively indistinguishable. This situation led Gifford (1976) and Willey et al. (1965:337, 350) to classify pottery of the Mount Hope, Stumped Creek and Old River Ceramic Groups and the Hermitage, Mopan, Suctoz and White Cliff Groups as Uaxactun Unslipped Ware. Noteworthy ceramic innovations are reflected by the introduction of glossy wares such as pottery from the Balanza Black and Pucte Brown Ceramic Groups, and the Actuncan and Dos Arroyos Orange Polychromes.

The Early Classic, monumental, architectural tradition of the Belize Valley also reflects some divergence from Preclassic architecture forms and styles. By the end of the fourth century there appears to be a cessation of circular platforms with their appended rectangular ramps, and we see the introduction of the first vaulted buildings and tombs. Despite the latter, however, flat-topped, terraced pyramids remain the predominant form of most temples. Other Early Classic changes may have resulted with the formalization of inline triadic structures, which appear to have functioned as eastern family shrines in the central precincts of site cores and in many formal (i.e. Plaza Plan 2) plazuela groups.

Perhaps of greater architectural significance in the Belize Valley is the apparent absence of Teotihuacan-like Talud-Tablero architecture. While Peten sites such as Tikal and some of its neighbors appear to embrace this style with relative eagerness, there are simply no examples reported in western Belize (Figure 4). Interestingly, the introduction of the Talud-Tablero form of architectural terraces has been correlated with the appearance of certain historical figures on the inscriptions of some Peten monuments. One such character is Siyah K’ahk’ or “Smoking Frog”, an elite character who is assumed to have had Teotihuacan connections (Martin and Grube 2000:30-32). Recent investigations at La Sufricaya, close to the Peten-Belize border, by Francisco Estrada-Belli (this volume) have also brought to light a monument (Stela 6) that makes contemporary mentions to Siyah K’ahk’. These references, coupled with other evidence, suggest that the furthest eastern extent of the influence of this individual, and the associated Teotihuacan symbolism, was the Peten-Belize border. This dividing line of sorts is significant as none of the monuments from Pacbitun, Blackman Eddy, or Caracol exhibit Teotihuacan motifs in their iconography or make reference to that site in their glyphic texts. Indeed, evidence for connections between the Belize Valley and Teotihuacan is limited and is primarily evidenced by
portable objects that were likely acquired by direct or indirect contact.

Early Classic ritual activity in the Belize Valley appears to follow the same developmental trajectory as that of other cultural characteristics. Burial patterns continue to be predominantly represented by extended burials with head to the south, but there appears to be greater differentiation in grave goods (in both quality and quantity).

Figure 4. Examples of round structures in the upper Belize Valley, at the sites of Barton Ramie and Cahal Pech (Tolok).
Dedicatory caches appear to increase in number, but innovations include the introduction of finger bowls and eccentric flints. There is also an apparent increase in the dedication of inscribed monuments, followed by a cessation of these carved monuments at the end of the Early Classic period. At the same time, the two Hermitage Phase ceramic vessels from burials at Baking Pot suggest that the Primary Standard Sequence dedicatory formulae on ceramics was introduced at this time, and that this tradition continued well into the Late Classic period. Finally, data from several of the subterranean sites in the lower Macal drainage provide a growing body of data that reflect increasing Early Classic ritual activity in caves.

Conclusion

In the past, a number of Mayanists have reported that few sites in the eastern lowlands appear to have been occupied during the Early Classic period. In some cases, these claims were even made for sites that were unequivocally thriving during the Late Preclassic. In an effort to address this apparently enigmatic issue, we decided to conduct a study of published data for several sites in the region. Rather than confirming the lack of Early Classic occupation at the sites in question, our analysis indicates that the Early Classic was actually one of the most dynamic periods in the development of the Belize Valley. There is overwhelming evidence for a substantial increase in population, the introduction of inscribed monuments, considerable production of monumental architecture, growing complexity in ritual activity, and clear evidence for cultural continuities and discontinuities. Despite this improved vision of the Early Classic Belize Valley, however, there still remain important questions that require further scientific attention. One of the most crucial topics is the reason for the limited nature of Teotihuacan-inspired cultural traits in western Belize. We believe that the Teotihuacan connection has very likely been overstated in the Central Peten, but only future research will confirm or negate this assessment.

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3 THE ROLE OF PUBLIC ARCHITECTURE AND RITUAL IN THE RISE OF COMPLEXITY: AN EXAMPLE FROM BLACKMAN EDDY, BELIZE

M. Kathryn Brown and James F. Garber

The nature of Middle Preclassic architecture and associated ritual deposits has been difficult to study due to overlying Classic Period remains. Recent investigations at the site of Blackman Eddy have revealed a developmental sequence of Middle Preclassic public architecture and associated ritual deposits, which suggests that the function of these buildings change dramatically through time. Low, broad platforms dating to the early Middle Preclassic functioned as integrative features within the community, which served multiple functions including the location for communal ritual feasting activities. The pyramidal architecture style appears for the first time at the end of the late Middle Preclassic, which also corresponds to the introduction of sub-floor cache deposits. The elaborate architectural form and associated sacred rituals reinforces the adoption of new ideological concepts to legitimize a changing social order and uneven wealth distribution within the community. Evidence suggests that the consolidation of wealth, prestige, and power by emerging elite over time, culminated in the use of public architecture and material culture as mediums to transmit ideologically related messages pertaining to the social order of the community.

Introduction

The study of public architecture and defined sacred space is of great importance to the understanding of the development of complex societies because it provides physical manifestations of labor and resources. This, in turn, reflects aspects of the social order of a society. As the society becomes more complex, architecture plays a role in perpetuating the new ideology of order, which legitimizes status differences. Ritual associated with special architecture sanctifies status differences within the community, allowing these differences to be socially accepted. The nature of Middle Preclassic architecture and associated ritual deposits, however, has been difficult to study due to overlying Classic Period remains. This has caused a sampling bias with respect to our understanding of this critical time period. Recent investigations at the site of Blackman Eddy have revealed a developmental sequence of Middle Preclassic public architecture and associated ritual deposits. Evidence suggests that the consolidation of wealth, prestige, and power by emerging elite over time, culminated in the use of public architecture and material culture as mediums to transmit ideologically related messages pertaining to the social order of the community.

The architectural sequence from Blackman Eddy suggests that the function of public architecture changed dramatically through time. Low, broad platforms dating to the early Middle Preclassic functioned as integrative features within the community and served multiple functions including the location for communal ritual feasting activities (Brown 2003). The excavation evidence from Blackman Eddy suggests that through time public architecture became more elaborate while ritual deposits shifted towards a more restrictive form. The pyramidal architecture style appears for the first time at the end of the late Middle Preclassic, which also corresponds to the introduction of sub-floor cache deposits.
(Brown 2003). The construction history of Structure B1 spans over 2000 years and is associated with numerous ritual deposits, which change in form through time. Through the analysis of this early public architecture and associated ritual deposits, we argue that the basis for late Preclassic kingship and ritual activity in legitimizing the role of the king developed out of an earlier communal ritual and feasting tradition associated with early public architecture. We suggest that the role of ritual and public architecture changes through time and reflects the rise of social/political complexity within the community. We also suggest that early public platforms functioned as integrative facilities, while later more elaborate pyramidal structures functioned as ritual performance space restricted to use by elite members of the society. Schele and Mathews (1998:23) state that “Maya architects designed their buildings to encompass motion and performance so that they operated like stage sets in which drama and ritual unfolded”. During the Maya Classic period access to the elaborate pyramidal buildings was limited to the elite segment of the population, which in turn reinforced their exalted position. The community may not have had physical access to the monumental buildings; however, visually these buildings would continue to integrate the community by merging the supernatural and natural landscape thus maintaining a sense of place that was established early in the community's history (Brown 2003).

**Architectural Sequence from Structure B1 at Blackman Eddy**

The site of Blackman Eddy is located on a hilltop overlooking the first alluvial terrace of the Belize River. It is a fairly small ceremonial center, although it exhibits all the features of a major ceremonial center including, large monumental architecture, a number of stelae, and a ballcourt (Figure 1) (Garber et al. 2004a). Unauthorized bulldozing activities during the 1980s partially destroyed Plaza B at the site. Structure B1 was literally cut in half. The bulldozer cut profile was cleaned and mapped (Figure 2). The remaining portion of the mound was at risk of complete destruction due to erosion. At the request of the Department of Archaeology, the Belize Valley Archaeology Project redirected the project goals and began excavating Structure B1 down to bedrock (Brown and Garber 2000). Structure B1 presented a rare

![Figure 1. Blackman Eddy site core.](image)
opportunity to investigate Maya architecture using extensive horizontal/clearing excavation methods. This allowed an examination of the depositional context of ritual remains in association with early public architecture.

The initial occupation at the site, designated the Kanocha Phase (1100-900 B.C.), began towards the end of the Early Preclassic and lasted into the early Middle Preclassic (Garber et al. 2004). The sequence began with a series of bedrock level constructions that are evident through postholes carved into bedrock (Figure 3). One of these, Structure B1-13th had a plaster floor surface. Evidence suggests that the first occupants modified bedrock by leveling and filling in low areas. The presence of the posthole patterns within the Structure B1 sequence indicates a number of wattle-and-daub constructions. A number of domestic features were cut into bedrock including a two-chambered chultun.

Although it is clear that chultuns had a domestic function within household groups, these features appear to have symbolic ideological meaning as well. Brady and Ashmore (1999:138) argue that
chultuns “could plausibly be an artificial cave, next to the domestic mountain of a household platform”. Both archaeological and iconographic evidence suggests that caves were symbolically viewed as portals to the otherworld and figure prominently in Maya ideology. Puleston (1965) notes that chultuns are a common feature within residential household groups at Tikal as well. The early chultun found within the B1 sequence may be a symbolic representation of a cave or portal, which established the sacred nature of this location from the Early Preclassic. Similar bedrock features were also found at the site of Uaxactun. These included pit-like features cut into bedrock which were filled with domestic artifactual debris including conch fragments and clam shells, bone needles, carved bone, grooved stones, figurines, a bird whistle, and chert flakes and bifaces (Hendon 1999).

Numerous artifacts were encountered associated with the Kanocha Phase occupation at the site including; bone needles, stone spheres, lithic debris, a stone tecomate, manos, a complete colander vessel, as well as numerous Kanocha ceramic sherds. Remains of marine shell beads were found in various stages of production and numerous small chert drills and awls were also located, which suggests early craft specialization (Brown 2003; Garber et al. 2004).

Household level ritual activities are evident at Blackman Eddy from the numerous figurines found associated with the early deposits. These figurines are similar in style to Early and Middle Preclassic figurines found in other regions of Mesoamerica including Central Chiapas, Honduras, and the Northern Guatemala Highlands (Garber et al. 2004).

Early structures at Blackman Eddy appear to be associated with numerous exotic items that include obsidian, greenstone, and marine shell. The evidence of equally numerous exotics from the nearby site of Cahal Pech indicates that the early inhabitants of the Belize River Valley were tied into a larger long-distance trade network (Awe 1992; Garber et al. 2004). The early ceramics of the Kanocha phase are very similar in form and surface decoration to early Cunil Phase ceramic material uncovered at Cahal Pech. The Kanocha phase ceramic material comprises two wares, one utilitarian with calcite and quartzite temper, and the other a dull-slipped ware characterized by ash temper (Brown 2003; Garber et al. 2004). Two apsidal or circular-shaped platforms were encountered above the early bedrock constructions at Blackman Eddy and appear to be domestic in function, as suggested from comparative data at other Middle Preclassic sites.

During this time period, new ceramic types appear in the record including Savana Orange types and the first appearance of spouted chocolate pots. Residue analysis conducted by Powis et al. (2002) on a Middle Preclassic spouted vessel from the site of Colha suggests that this form of vessel was used to serve chocolate at this early date. This establishes the use and importance of this commodity early in the Prehistory of the Maya and may be associated with early ritual feasting activities.

The early inhabitants erected low rectangular platforms over the earlier domestic apsidal platforms and perishable structures (Brown 2003; Garber et al. 2004). Structures B1-7th and B1-6th were larger and more finely constructed than other structures dating to the early Middle Preclassic and represent a considerable increase in labor investment. The platforms appear to be public in function.

Structure B1-7th had an interesting feature built into the summit surface that consisted of a plaster-lined, bathtub shaped basin which may have held water for some
special purpose. Taube suggests that in Mesoamerica, water-filled bowls were symbolically related to mirrors and were often used for divinatory scrying (1992:189). Similar water basins were found at the Middle Preclassic site of San José Mogote in Oaxaca associated with domestic households. One basin there had a diameter of 1.2m, and was covered in lime plaster and painted red. Marcus (1999) suggests that these basins may have been used for ritual divination similar to ethnohistorically documented water basins. Although the San Jose Mogote examples appear to be related to household ritual behavior, the feature from Structure B1-7th may have been used for public rituals within the community.

Located on the summit of Structure B1-6th was the basal wall of a circular platform. Although this feature had been almost completely dismantled in antiquity, making it impossible to determine its dimensions, the placement of a circular platform on top of a well-constructed and plastered rectangular platform suggests a ritual function. Similar Middle Preclassic circular platforms interpreted as ritual structures have been uncovered at Cahal Pech (Powis 1996), Rio Azul (Hendon 1989), and Uaxactun (Smith 1950). The circular platform at Rio Azul not only was heavily plastered but also was painted red on its surface (Hendon 1999). Hendon (1999:112) suggests that the “energetic investment, decoration, and lack of a superstructure point to these round platforms as having a different purpose from houses”. She suggests that round structures without superstructures may have been a form of Middle Preclassic ceremonial architecture possibly functioning as performance space (Hendon 1999).

Structures B1-7th and B1-6th appear to represent an increased emphasis on communal ritual activity within the community. This is reflected in the ritual deposits associated with these low rectangular platforms. Evidence of feasting was located west of the platforms in the form of a deposit that consisted of smashed vessels, numerous riverine bivalve and jute shells, faunal remains, lithic flakes and debris, as well as small amounts of exotic items such as marine shell and obsidian. The deposit extended over a wide area and appears to be the debris left from a feasting event (Brown 2003).

Another ritual deposit encountered south of the platforms consists of a basin-shaped depression cut into the bedrock. This feature was cut into the bedrock and layered with approximately 15,000 riverine shells. Other artifacts present consisted of marine shell fragments, faunal remains, lithic material and numerous ceramic sherds, consisting mostly of broken water jars. This deposit indicates the importance of water symbolism to the early inhabitants (Brown 1998).

The following construction phase, Structure B1-5th, clearly served a public non-domestic function as can be seen through its size complexity and associated ritual deposits (Brown 2003; Garber et al. 2004a). Structure B1-5th had a linear triadic arrangement consisting of a central platform flanked by two lower platforms to the west and east (Figure 4). The eastern platform did not support a perishable structure, as no postholes were located. The platform appears to have functioned as performance space, and may represent an early version of a dance platform. The openness and unrestricted nature of this platform arrangement suggests that this structure may have functioned as both a special ceremonial location and as an integrative feature within the community (Brown 2003). This is further supported by an elaborate ritual deposit which was
Public Architecture at Blackman Eddy

encountered within the core of the central platform.

This deposit was placed horizontally across the inner base of the platform. The deposit was spread over the base of the building indicating that the ritual act occurred after the construction of the building had started but before the building was finished. The variability of the material remains suggests a communal ritual event that coincided possibly with the construction effort. It is conceivable that the local inhabitants participated in a communal feasting ceremony which corresponded with the construction of the building, as numerous faunal remains, smashed ceramics, and carbon were encountered. Wealth and labor from the community were invested in the construction of the building which in turn reinforced group identity and solidarity and increased the prestige of the individual sponsoring the event (Brown 2003).

The ceremonial and public function of Structure B1-5th is further supported by the physical layout of the platforms. The inline triadic arrangement appears to reflect the Maya worldview and may symbolize the three-stone place of creation (Brown 2003; Garber et al. 2004a). Two ritual deposits were encountered above Structure B1-5th. The first deposit was encountered in the “alley” between the central and eastern platforms of B1-5th and consisted of smashed vessels, faunal remains, riverine bivalve and jute shells, lithic debitage, and carbon (Brown 1998; Garber et al. 2004). Only a few sherds could be refitted and only one complete vessel was present. A polished deer metapodial bone implement, possibly a bloodletter, was placed at the base of the deposit. Also, several small marine shell beads and a bone bead fragment were found scattered throughout the lens. Several mammal species have been identified by Norbert Stanchly from this deposit including domestic dog, rabbit, white-tailed deer, brocket deer, peccary, and armadillo.

This ritual deposit at Blackman Eddy may represent a ceremonial feasting event, which corresponds to the termination, or ritual ending, of the structure. Dumped as it was in the alleyway, the ritual feasting debris would symbolically represent the termination of the use of the structure.

An elaborate offering was encountered above and to the east of the termination deposit between the two platforms. This offering appears to be a consecration or dedication feasting deposit related to the subsequent construction phase, Structure B1-4th. The deposit extended over several square meters and consisted of four restorable vessels, several partial vessels, a jade bead, a deer mandible and scapula, numerous ceramic sherds, a broken mano, and the inner core of a conch shell (Brown and Garber 1998; Brown et al. 1998, 1999). The jade bead was placed upon a partial

Figure 4. Isometrics of Structure B1-4th and Structure B1-5th.
ceramic plate, which appears to have been broken in half. Several other partially restorable vessels were excavated including two unusual Savana Orange: Rejolla Variety stirrup-spouted vessels. Overall, the ceramic data from the deposit constitutes an assemblage dating to the break between the early and late Middle Preclassic (700-600 B.C.). It is interesting to note that all of the restorable and partial vessels were serving vessels (Brown 2003).

Constructed above Structure B1-5th is Structure B1-4th, a Middle Preclassic single-tiered rectangular platform with an inset staircase and an extended basal platform which was decorated by a stucco mask façade (Figure 4). This is the earliest documented architectural mask found within the Maya Lowlands as of yet, dating to the Late Middle Preclassic (Brown and Garber 1998; Brown et al. 1998). The summit surface of Str. B1-4th was heavily burned and the mask façade was desecrated in antiquity possibly indicating warfare activity at this time and unfortunately, no iconographic evidence could be recovered from the mask façade (Brown and Garber 2003; Brown et al. 1998). However, the ideological implications of a god mask flanking a Middle Preclassic platform include emerging elitism and the use of public architecture to legitimize the elevated status of the elite (Brown 2003).

The origins of mask facades in the Maya Lowlands have been difficult to understand due to the lack of evidence for an earlier mask tradition. The discovery of a Middle Preclassic mask indicates that Late Preclassic and Classic architectural decoration actually evolved out of an earlier mask tradition and, hence that the material symbol system of kingship had antecedents in the Middle Preclassic (Brown and Garber 1998; Brown et al. 1998). This is not to suggest that the institution of kingship was present at this early date, but rather that the ideological concepts which would have allowed the transition to, and acceptance of, the institution of kingship were in the early stages of development at this time.

Structure B1-3rd was erected above Structure B1-4th and marks a shift in construction materials and architectural style involving an increase in labor and material investment. Structure B1-3rd, involved six additions to the original structure, four of which date to the Late Preclassic (Figure 5). The earliest three sub-phases, B1-3rd-g, B1-3rd-f, and B1-3rd-e, date to the late Middle Preclassic and indicate a dramatic increase in rebuilding activities. The basal platform of Structure B1-3rd is a large rectangular structure with outset platforms that flank an inset staircase. These platforms were constructed of large monolithic cut limestone blocks and appear to have functioned as formal performance space (Brown 2003). Located on the summit of the basal platform was a deposit of several whole and partial vessels dating to the late Middle Preclassic, numerous riverine bivalve and jute shells, a chert blade, faunal remains including rodent bones, and carbon fragments. This deposit represents the last event of this nature within the Structure B1 sequence. Above it, a small cache was found associated with the addition to the summit platform. It consisted of a single carved shell pendant and an obsidian blade placed within the fill of the platform that appears to represent a modest dedication deposit.

Structure B1-3rd-d signals a change in architectural style to a more pyramidal form (Brown 2003). Evidence discussed below also indicates a shift in ritual behavior as well. A single Joventud vessel was placed in front of the building intrusive into the associated plaza surface and appears to be associated with Structure B1-3rd-d. The single-vessel dedication cache is important because it signals a change in ritual behavior.
from communal ritual activity to a more restrictive form of caching behavior that appears for the first time at the end of the Late Middle Preclassic (Brown 2003). Caches placed within buildings and under associated plaza surfaces become the dominant form of ritual deposits during the Late Preclassic and Classic periods, as opposed to deposits placed on top, between, and in front of platforms. Baines and Yoffee (2002) argue that many symbolic and aesthetic items produced solely for elite use were often deposited in restrictive places. It is interesting to note that this pattern is also seen at other sites in the Belize Valley. For example, at Las Ruinas de Arenal, a plaza dedicatory cache dating to the Late Preclassic was found beneath the plaza surface in front of Structure 1-3rd. It consisted of 19 ceramic dishes, one of which had a single jade bead placed inside (Taschek and Ball 1999). Awe (1985) notes that at the site of Caledonia ceramic vessels were the central objects in Classic period caches and Thompson (1931) noted a similar pattern at the site of Mountain Cow.

Structure B1-3rd was modified repeatedly in order to increase the height of the ceremonial structure, suggesting that the inhabitants of Blackman Eddy needed to invest more labor and material goods in order to compete with neighboring communities. There does appear to be substantial expansion in labor costs due to the increased size of the structure and the quarrying and transportation of the monolithic stones used in the construction. Larger architecture begins to appear elsewhere in the Belize Valley during the transition from Middle to Late Preclassic as seen at Actuncan, Cahal Pech, Paibitun, El Pilar, Buenavista del Cayo, and possibly Xunantunich. It becomes apparent that the inhabitants of Blackman Eddy were struggling to compete with several sites within the Belize Valley that may well have been gaining power during this time.

The construction of Structure B1-2nd marks a significant change in the sequence, with the addition of large stucco mask facades flanking the central staircase of the pyramid (Figure 6). Structure B1-2nd has two sub-phases, of which the earlier version dates to the Late Preclassic/Protoclassic time period and the later version dates to the
Early Classic time period.

The central section of the mask on Structure B1-2nd represents a head of an anthropomorph. The basal section of the mask is well preserved and iconographic elements are present. A bowl is seen in cross-section with an outwardly flaring rim. Three dots are depicted on the bowl (Garber et al. 1995). The face of the mask is poorly preserved and very little detail could be ascertained, but the face does appear to have featured some form of helmet or headgear given the double course of outset stones that were encountered above it (Garber et al. 1995).

The iconographic theme of the mask facade exhibits a head emerging from a bowl in profile. Garber et al. (2000, 2004) suggests that the central head represents a prominent figure within the Maya creation story, the father of the hero twins, who was sacrificed by decapitation by the lords of the underworld. The mask facade illustrates the head of first father emerging from a bowl or a portal place. This emergence or symbolic birth reflects the transformation of the severed head into the Maize God (Garber et al. 2000). The bowl represents a bloodletting bowl from which the head is emerging. Bowls with bloodletting paraphernalia placed inside are common within the corpus of Classic Maya iconography (Freidel et al. 1993). Also of importance, three stucco dot elements reflecting the three stones of creation are located on the bowl beneath the head. The three stones of creation symbolically reflect the hearthstones at the center of a Maya household, which, in turn, represents the centering of the cosmos and the separation of the earth and sky at the moment of creation (Freidel et al. 1993).

Maize god insignia are intricately tied to the institution of kingship and are seen throughout the Classic period on a variety of media, which indicates the importance of this iconographic display on Structure B1-2nd. Such decoration on the architecture clearly communicates the significance of sacrifice and bloodletting rituals, which in turn helps maintain the social order (Brown 2003). The ruler would perform sacred rituals on this building, linking himself to the supernatural and therefore legitimizing his role within the community.

The ritual deposits associated with Structure B1-2nd further illustrate the restricted nature of the newly defined sacred space. An interesting cache consisting of an infant burial and a Protoclassic vessel was encountered beneath the plaza surface in front of Structure B1-2nd. This cache was most likely a dedication deposit associated with the initial construction of the pyramid, Structure B1-2nd-b. The burial was housed in a partial crypt and the vessel was placed in the lap of the infant. The infant remains were poorly preserved and the cause of death could not be determined. However, infant sacrifices are commonly used in dedication rituals during the Classic period and therefore it seems probable that the infant was sacrificed during the consecration of the building.

A single-vessel cache was also encountered intrusive through the lower tier summit surface and contained a Santa Elena Orange: Dos Arroyos Variety polychrome basal flange vessel. The vessel had a kill hole slightly off center, and was associated with freshwater shells and carbon.

Other evidence at Blackman Eddy such as the erection of a ballcourt and the flurry of construction activities in Plaza A indicates an emphasis on reinforcing sacred power at the site. That Early Classic inhabitants were attempting to compete for power within the Belize Valley is suggested by the addition to B1-2nd. Early Classic monuments including a carved stela were also found in Plaza A indicating the acknowledgment of its prominence. This is
the earliest stela with a long count date within the Belize Valley. The monument was carved in an earlier tradition (Garber and Brown 2000), which may be an effort to deliberately reflect on a previous time when Blackman Eddy was a relatively powerful center within the valley. However, it is quite apparent that Blackman Eddy was unable to compete with several major polities located in the upper end of the valley. The political and social landscape within the valley was transformed during the transition from the Protoclassic to the Early Classic and a number of more powerful centers emerged and erected massive monumental architecture.

There does appear to be a short hiatus in construction on Structure B1 during the latter part of the Early Classic and the early part of the following Late Classic period. The Late Classic at Blackman Eddy witnessed the continuation of construction within Plaza A and the ballcourt was also modified at this time, so it seems that the focus of activity at the site shifted to the southern section of the site core.

Several problematic deposits were encountered in association with the Late Classic construction phase, but appear to have been dumped on the side of Structure B1-2nd during the short hiatus of construction (Pagliaro et. al 2000). These deposits may reflect ceremonial rituals occurring at the source of ideological power located at the northern end of the site (Structure B1). These deposits contain large quantities of broken ceramic sherds and an array of other cultural materials in various stages of use. Preliminary analysis of the ceramic material indicates a Late Classic date, which suggests that this deposit was placed in the alleyway after Structure B1-2nd was no longer in use but prior to the construction of Structure B1-1st.

The final construction phase of Structure B1 (B1-1st) was erected hastily. Due to deterioration and poor preservation, little is known about this final phase. The dimensions and position of the intact remains of Structure B1-1st relative to the contours of the mound suggest that it was probably a two-tiered structure reaching a height of approximately 4.2 meters from the associated plaza surface. Seven partially preserved steps were encountered although excavations at the top of the structure clearly showed that more steps would have been necessary to reach the summit of the building. The building was constructed of finely cut limestone masonry of variable sizes. This may indicate that the pyramid was erected so quickly that building stones were borrowed from previous construction phases.

Another interesting deposit was encountered at the base of Structure B1-1st. Here, a dense deposit of ceramic sherds was uncovered which is similar to terminal deposits found at Blackman Eddy Group 1 (Garber et al. 1992) Ontario Village (Garber et al. 1994) and Floral Park (Brown et al. 1996; Glassman et al. 1995). This deposit appears to be the final ritual act at the site and may represent an abandonment termination ritual which in essence “deactivated” the sacred space of the site. No further construction was encountered on Structure B1 or elsewhere at the site.

By the Late Classic it is evident that the inhabitants of Blackman Eddy played only a minor role in the sociopolitical landscape of the Belize Valley although the final construction of Structure B1 may reflect a futile last-ditch effort to proclaim their authority (Brown and Garber 2000). Shortly thereafter, during the Terminal Classic period, the site was abandoned.

**Summary and Conclusions**

In this paper we examined the role of public architecture, defined sacred space, and ritual in the rise of complexity at the site...
of Blackman Eddy. The examination of architectural styles and associated ritual deposits from a diachronic perspective provides insight into the transformation of ideological concepts which support developing social ranking within the society. Ancient Maya ritual behavior may be inferred not only from the direct material remains of ritual acts, but also from the attributes of architectural features such as the arrangement of structures, architectural decoration, and performance space.

The recent investigations of Structure B1 at Blackman Eddy have provided an unprecedented database of Preclassic architecture and ritual activity. This new evidence suggests that emerging elites initially used low platforms to host communal feasts, which bolstered their prestige within the community. As certain individuals gained support and more power, new architectural forms and ritual caching behavior were introduced which reflect a change in social order. This manifests itself in the archaeological record as limited access to both public architecture and associated ritual activities. The introduction of new elaborate architectural forms, such as the pyramid, reinforces the adoption of new ideological concepts to legitimize a changing social order and uneven wealth distribution within the community.

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Our preliminary investigations at Actuncan in 2001 confirmed that the Early Classic period was indeed a time of significant demographic shifts. Only one out of three households that we sampled in the northern portion of the site showed evidence of long-term habitation that spans the Formative and Classic periods. It is intriguing that the processes that gave rise to the systemic state (sensu Blanton) in the Belize Valley may have done so under circumscribed conditions. This season’s research at Actuncan sampled a wider array of elite and commoner house mounds, as well as a previously identified Early Classic ceramic dump, in the northern civic area. This paper reports our findings concerning the spatial and contextual extent of Early Classic deposits from this important center and presents ideas about factors that gave rise to institutionalized kingship at Actuncan.

Our research at Actuncan attempts to understand the processes associated with the institutionalization of Maya kingship during the Early Classic period from A.D. 250 to 600. Actuncan is an excellent location to study the maturation of Maya statecraft since its occupation spans the Late Formative and Early Classic periods (Figure 1).

According to Joyce Marcus (1993:115), part of the process by which Maya rulers institutionalized their positions involved severing the bonds of kinship that had once linked leaders to community members. This action resulted in a two class-endogamous society and a well-developed ideology of stratification by which upper-stratum noble’s claimed separate descent from lower-stratum commoners. According to Quigley (1993:127), “kingship is the denial of kinship, an assertion that not all men are brothers, and that kinship does not have the power to operate throughout social life”. This said, the dominance of state administration over kinship does not mean that kin relations are no longer a source of power in state-level societies. Maya kings coaxed and coerced kin leaders, who were immersed in community relations, to organize hinterland tribute and labor, just as they called on their own kin to provide sumptuary goods and loyal courtiers (see Inomata and Houston 2001).

An equally important process was the creation of hierarchies; a characteristic that Marcus (1993:116) has concluded exemplifies archaic states. This organizational mode is lacking in middle range societies such as chiefdoms where power is concentrated in the hands of an elite lineage whose paramount leader is at the head of the political, social and religious orders. These individuals wield great personal power, very similar to kings in state-level societies, but in state-level societies the sources of power increasingly are centralized and segmented.

We believe hierarchies developed when expanded state responsibilities at the local and regional level forced Maya rulers to delegate decisions and authority to individuals outside his or her immediate family, in essence creating new positions within a growing political apparatus (LeCount 2004). This process results in the promotion and linearization of political positions into a hierarchical arrangement of
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For instance, kings required loyal office holders, who could be trusted to enforce the laws of the state. Certainly, some office holders may have been recruited from cadet lines within the leader’s extended family; however, these people also would have been the king’s most potent rivals. Promotion of non-kin might have been the safest and most effective way to install officers.

Households, therefore, should hold a key to understanding the processes associated with the institutionalization of political power. Many large households, especially those associated with founding families, might have had the most to lose in the political and social transformations associated with Maya statecraft. If kings effectively instigated strategies that limited control over land, labor, and wealth by traditional kin-based leaders, then the influence of many previously powerful lineages would have contracted rather than expanded during the Early Classic period. On the other hand, some upstart households may have gained authority and wealth as officer holders and supporters of the state by siding with the ruling lineage rather than traditional kin-based leaders. If this is indeed the case, the Early Classic period should be marked by the appearance of what

Figure 1. Map showing the location of Actuncan in relation to nearby archaeological sites.
we might think of as nouveaux riches households that look larger than expected given normal developmental cycles. Support for this hypothesis come from this year’s conference participants (Pyburn this volume; D. Chase this volume; and Sullivan this volume), who comment that the Early Classic period is marked by conspicuous differences in accumulated wealth among households and the appearance of a striking gap between rich and poor households.

In sum, the difference between Formative leaders and Classic rulers might have hinged upon the ruler’s ability to delegate at least some modicum of power and privilege to non-kin officers. Therefore, the archaeological evidence for the Maya state will be written not only in the institutionalization of Maya kingship as an aristocratic position with all its hereditary privileges and trappings of royal power, but in the promotion and proliferation of new houses and new wealth among commoner families.

Research Design and Previous Research

Actuncan is arguably the most impressive Late Formative center in the upper Belize valley as it contains 14 ha of civic and domestic structures. In comparison, Xunantunich, 2 km to the south, covers 14.9 ha. The site is situated on a long, low ridge overlooking the Mopan river valley, and is divided into two sections: Actuncan South (the well-known Formative temple complex) and Actuncan North (the Classic period civic center).

Actuncan South is dominated by a massive triadic temple complex, which is 72 by 120 m in size and rises 32 m above the surrounding terrain. The temple complex rests on an expansive Middle Formative basal platform that forms the elevated surface of Plaza A. Sitting on this basal foundation are three pyramids placed in a “Capitoline” arrangement (von Faulkenhausen 1985:120), the largest of which is Structure 4 located to the south. Structure 4 is surmounted by a second set of three pyramids arranged in a U-shaped pattern. According to von Faulkenhausen (1985:120), this arrangement is diagnostic for the Early Classic period and is found throughout the Maya lowlands.

The Formative ritual center was connected to a northern civic center, Actuncan North, by a wide causeway, and it is here that we have focused our efforts. The large formal civic zone is complete with a ball court, range structures, and pyramids, some as tall as eight meters. Plazas D, E, and F to the north and east contain small pyramidal structures and elite residential compounds. Small plaza-focused house mounds are located to the extreme north and west of the civic center.

We began limited testing small plaza-focused house mounds at the northern end of Actuncan in 2001 (LeCount and Blitz 2001; LeCount 2004). Only one out of three households that we sampled showed evidence of long-term habitation that spans the Formative and Classic periods. Actuncan Plazuela Group One (AP-1) is the largest multi-mound group (Structures 59, 20, 61, and 62) in this area. A patio unit excavation (Op. 1A) revealed a long occupational history beginning in the Late Formative period and ending in the Terminal Classic period. Three major construction episodes are exemplified by thick plaster floors and their associated sub-floor fills: Plaza Floor 1 dates to the Classic period, Plaza Floor 2 dated to the Terminal Late Formative (approximately A.D. 0 to 250), and Plaza Floor 3 dates to the Late Formative period date (approximately 300 B.C. to 0 A.D.). Floor 3 is underlain by a compact yellowish brown living surface also dated to the Late Formative.

Two other plazuela groups appear to have been built predominately in the Late
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Classic period with only ephemeral early occupation. Actuncan Plazuela Group Two (AP-2) is a three-mound group (Structures 50, 51, and 52) located on the southern periphery of Plaza G. AP-2 is open to the south and thus, its inhabitants face the largest range structure (Structure 19) in Actuncan North, presumed to be the royal palace. A single one-by-two meter test pit (Op. 2A) in the patio revealed that Structure 51 and patio was constructed entirely in the Late Classic. Underlying this patio is a 20-cm thick occupation surface of compact brown clay that contains a few basal flange bowl fragments and a possible Balanza black sherd. These sherds lead LeCount to suggest that this initial occupation surface dates to the Early Classic.

Actuncan Plazuela 3 (AP-2) is a northwest to southeast trending patio group located on the northeastern periphery of Plaza G. It consists of three low mounds (Structures 45, 46, and 47) around a patio. A single one-by-two meter plaza test pit (Op. 3A) revealed that most of the patio was built in the Late Classic period. However, sitting on the lowest plaza floor is a thin layer of occupation material possibly dated to the Early Classic period. Below it lies in situ occupation debris containing Late Formative and possibly Early Classic materials used as ballast for the initial plaza floor. Apparently, many of the small plazuelas on the extreme northern end of the site present a Late Classic expansion into this previously underutilized area of the ridge top.

New Excavation Data from Actuncan

This season we sampled a wider set of archaeological contexts in order to recover Early Classic remains from a broader set of social strata.

The Palace (Structure 19) and Its Northern Courtyard

The most likely candidate for an early palace is a complex of buildings, Structures 19, 20, 21, and 22, defining the northern boundary of Plaza C. Structure 19 exhibits the high, long substructure that supports a set of masonry rooms typical of a ruler’s residence. Abutting the northern exposure of Structure 19 is a set of low platforms that form an elevated plaza and enclosed courtyard. James McGovern (1994:114) tested the southern façade of Structure 19 and found an Early Classic staircase overlaying a Formative plaza floor. We excavated a 2-by-2 meter unit (Op. 4A) near the southwest corner of the northern courtyard and found three floors: one Tiger Run floor and two floors containing Floral Park materials, which in Gifford’s (1976) chronology would be assigned to the Protoclassic period. However, in this paper, we use the term “Protoclassic” to signify a ceramic assemblage that contains “Floral Park” or “Holmul I”-like ceramics, rather than a general developmental stage between the Formative and Classic eras or a chronological period extending from approximately 50 B.C. to A.D. 250 (see Brady et al. 1998:18).

We also trenched across the top of Structure 20, the small western platform in the northern courtyard (Op. 4B, C, D and E). Here, the terminal phase architecture dates to the Late Classic Hats’ Chaak phase (A.D. 660-780). We did not conduct penetrating excavations below the first plaza floor or into platform fill to find earlier materials. However, looters dug into the platform during the last weekend of the 2004 field season. Based on inspection of the looter’s trench profile, we know that the terminal platform was constructed using large boulder wall foundations and small cobble core material. Above these boulder wall foundations, faced limestone blocks were used to construct the masonry superstructures. Behind Structure 20, a
thick lens of cobbles packed against the rear wall bolstered the platform itself. One wonders if the ancient Maya covered this crude sloping rear façade with plaster. These architectural construction techniques were also encountered at Structure 41, an elite residence described below.

**Elite Residences**

Two elite residences bordering Plaza D and the eastern edge of the site were tested: Structures 41 and 29. We excavated either behind or beside the actual residences in an attempt to locate stratified trash deposits and to date plaza floors. Both these structures are large tiered buildings built on cobbled terraces. Structure 41’s substructure is 5.25 meters high and likely supported a corbelled arched superstructure since “key” stones were found tumbled down the rear of the building. An elevated (> 4 m) front terrace faces the major temple at Actuncan; while in the back there is a low (< 2 m) L-shaped terrace. Structure 29’s substructure stands only 2.6 meters above the present ground surface at the back of the building; however, the dwelling presents an imposing façade since the front terrace takes advantage of the rise of the hill slope. The lower eastern terrace completes the C-shaped dwelling. Like Structure 41, Structure 29’s staircase orients the dwelling toward Actuncan South.

At the rear of Structure 41, the main platform was built on two, closely spaced floors. The top floor (Op. 6A6, 6B4, & 6C4) dates to the Early Classic period and terminates at a small midden (Op. 6D2 & 6D3) of the same age off the back end of the patio floor. This midden contained many obsidian blades, an expended core, and a large, slightly chipped cylindrical jade bead. It is surprising that the ancient Maya would have intentionally discarded such a large piece of jade, but its presence in the trash may be indicative of how the Maya may have seen such items as disposable wealth during the Early Classic period. Sometime during the Late Classic Hats’ Chaak phase, the Maya built a low foundation wall of large limestone blocks on top this floor that might have acted to contain the cobbled buttressing at the rear of the building. It may also have served to restrict access to the building itself. Below the first floor is a patchy *sascab* floor (Op. 6A7, 6B5, & 6C5) dating either to the initial part of the Early Classic period or slightly earlier. Plaza Floor 2 rests atop a sterile stratum of yellowish clay. Given our limited testing, it is possible that an earlier Formative platform is deeply buried under the substructure at the southern end of the dwelling.

At Structure 29, the eastern terrace was built of massive river cobbles during the Early Classic period (Op. 7E1-7). This construction engulfs an earlier platform that can be seen running diagonally across the southern most portion of the unit at 1.30 meters below present ground surface. Unlike the cobbled architecture of the eastern terrace, the wall of this earlier platform was constructed of large cut-limestone blocks. Given its distinctly different orientation and construction materials, it is unclear at this time if this wall represents an earlier construction phase of the terrace or a deeply buried structure. It is possible that this deeply buried platform represents the earlier, Formative period occupation of this area.

**Actuncan Plazuela 1**

We continued our excavations at AP-1 begun in 2001. At that time, we encountered two impressive stone crypts cut into Plaza Floor 2, both of which contained Protoclassic materials. These crypts were located 25 cm apart along a north/south axis just one meter east of the western platform (LeCount and Blitz 2001). We excavated only the southern crypt (1A7B1) due to time
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In 1998, constraints that year. This year we excavated the second stone lined crypt (Op. 1D25B4).

In order to reach Burial 4, we excavated a portion of the small northern structure, which covered at least half this burial. Structure 59 was a wattle-and-daub house that spanned the early and late phases of the Late Classic period and contained at least three floors. Abundant trash was tossed in the alleyway between it and the western platform (Structure 62). Beneath the western wall of Structure 59-3rd was a modest burial (1D20B3) of an individual marked only by the presence of a single upright limestone slab. This individual may have been an offering to the house at the time of its initial construction during the Early Classic period. The house was built on top large rock fill 40 cm above Plaza Floor 2. We did not excavate below Plaza Floor 2 this field season, but rather, concentrated our efforts around the second crypt (Op. 1D25B4).

Like the individual in crypt 1 (Op. 1A7B1), the person interred in crypt 2 lay face down, with the head –what little remained of it– to the south. Only small fragments of the occipital plate and a few teeth were found in association with the body; however, more cranial fragments were found in the pot placed over the person’s head. Three pots (Figure 2) were positioned in the crypt with this individual: 1) a Chan Pond jar placed over the knees; 2) an Aguacate Orange Z-angled dish with four broken hollow supports, presumably mammiform in shape, covered the missing head and contained cranial fragments; and 3) an Aguacate Orange effigy chocolate pot situated to the right of the individual’s missing cranium. This pot may have acted as a symbolic substitute for the missing head. Both Aguacate Orange vessels exhibit hard, “glossy” slips and fine light colored pastes; however, neither exhibits the distinctive white to buff undersurface of Early Classic types.

According to James Gifford’s (1976) Barton Ramie scheme, these pots belong to the Floral Park subcomplex; however, LeCount is reluctant to assign a Protoclassic date (approximately 50 B.C. to A.D. 250) to these burials. Although these pots taken by themselves appear to be good examples of “Protoclassic” types, they lie at the same stratigraphic level as the brown-ware effigy lid associated with crypt 1 (Figure 3). As LeCount (2004) has suggested before, this pot appears similar to Tzakol 1 effigy lids at other sites. Thus, like other “Protoclassic” assemblages across the eastern periphery of the Peten (Brady et al. 1998), Classic and Formative ceramic modes co-occur in vessels from the same excavation lot at Actuncan. According to Brady and colleagues (1998:34), however, Protoclassic assemblages chronologically overlap the Late Formative and Early Classic periods as traditionally defined. Given the ambiguities in defining the “Protoclassic”, more detailed ceramic analysis and radiocarbon dating are needed to securely place these pots into a ceramic complex. This will require additional excavation at this stratigraphic level to retrieve a larger sample of pottery, preferably from domestic middens, in order to better understand assemblages associated with the transition from the Formative to Classic period.

What is interesting about these crypts is their impressive size and construction techniques and the richness of their burial goods. Apparently this household was influential during that transitional period from the Terminal Formative to the Early Classic period, later, however this family seemed to have lost much of its authority since we have yet to find evidence of those highly diagnostic basal flange bowls so characteristic of the later phases of the Early Classic. Nor did
the Late Classic *plazuela* members bury their ancestors in the same plaza location as earlier members had, although it is entirely possible that they might have buried them nearby. These patterns are indicative of the types of processes we associate with the
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shift away from kin-based authority and the widening gap in wealth among households in early state-level societies.

Off-plaza Trash Deposit

Two 2-by-2 units were placed off the edge of Plaza C in a ravine below Structure 15, a pyramidal structure that defines the nexus between Actuncan North and Actuncan South. Here, a 60-cm deep Early Classic trash deposit was encountered beneath a small residential platform, Structure 18, and spreading down slope into the ravine. Structure 18’s platform dates to the early part of the Late Classic and a single floor caps this trash deposit. The ancient Maya interred at least two individuals in simple side-by-side graves lined with small limestone slabs and river cobbles (Op. 5A6B2 and 5A7B2) into this trash deposit. Parts of a third individual were encountered immediately above these graves in and around a cairn of three limestone slabs (Op. 5A4B2). Other human bones were found randomly scattered throughout the Early Classic deposit. These individuals do not appear to be directly associated with the Late Classic platform above them since they were clearly interned underneath the platform and did not intrude through it.

The origin of the Early Classic material in this trash deposit is an important question to address because the crux of hypotheses concerning the nature of elite and common Early Classic pottery assemblages hinge on context. We suggest that this material originated from activities on the civic plaza rather than those associated with Structure 18. Structure 18 is a low platform built in a ravine below the northern civic center. Although we originally assumed it represented a commoner house, it is also possible that this platform served a specialized function, such as a kiosk for a gatekeeper or temple guard. None of these interpretations are congruent with the materials found underneath it because the Early Classic deposit contains mostly elite materials, such as large basal flange bowls and painted plaster, and little household trash, such as manos and metates. Jason Yaeger (pers. communication 2004) suggests that this deposit might be the result of temple or civic building remodeling because large chunks of painted plaster are rarely found in domestic trash. Thus at this juncture, we suggest this material represents the remains of elite activities, although we cannot specify what kinds of activities they represent.

Discussion and Conclusions

In summary, we excavated in three types of residential groups—a palace courtyard, elite residences, and commoner
residences—associated with the Early Classic period. Materials recovered from these contexts clearly indicate that Actuncan was a major site during the Late Formative and Early Classic periods; nonetheless, the Late Classic component of the site represents Actuncan’s population maximum.

Non-royal residences at Actuncan appear to fit into two architectural layouts: plazuela (plaza-focused mounds) and terraced dwelling. In general, we associate plazuelas with Haviland’s (1988) and Tourtellot’s (1988) rendition of the developmental model in which a founding family grows from living in a single structure to a descent group whose members live in multiple buildings around a patio. Unlike these plaza-focused groups, terraced dwellings appear to be more akin to Levi-Strauss’ model of a house, recently revisited by Susan Gillespie (2000). According to Gillespie (2000:468), houses are corporate, long-lived units that utilize relationships of consanguinity and affinity, real and fictive, to express unity and perpetuity for specific ends.

Examining these two kinds of household organizations at Actuncan is beyond the scope of this talk, but what we may be looking at here is not only differences between elite and common modes of living, but also differences between agrarian and urban families. Our guess is that these households are fundamentally different in the way family labor is organized. But it is important to note at this juncture that the architectural layouts—plazuelas and terraced dwellings—need not conform exclusively to a single organizational model. Based on our excavations, it is clear that the historical trajectory of AP-1 spanned many centuries, but it is nearly impossible to envision how the entire use-life of this plazuela, which was occupied for over a 1000 years, could be attributed to the developmental cycle of a single localized patrilineage. Later residents may have ritually constituted themselves as the “descendants” of AP-1 founders in order to anchor themselves to this specific place, but if this was indeed the case, then we must evoke the concept of the house to explain the later history of this plazuela.

It is equally interesting to note that AP-1 pre-dates Structures 29 and 41, both of which were built during the Early Classic expansion of the site. It could be suggested that Structures 29 and 41 were the houses of nouveaux riches families, which, at least archaeologically, appear to have had no antecedents at the site. Yet these families prospered during the time in which kingship became institutionalized, whereas the fortunes of AP-1 members waxed and waned through the Classic period. Clearly, some founding families did not gain status because of their long-term standing in the community as kingship became more entrenched during the Early Classic period.

The off-plaza trash deposit contains the best sample of Early Classic material we have excavated to date. Sherds are large and abundant, and there are many rims representing domestic forms such as large striated jars, simple bowls and bolstered cauldrons. Characterization of domestic wares is critical for better recognizing Early Classic components in commoner households where basal flange bowls are less abundant. Pottery from this trash deposit is not only impressive because of the quantity of “standard” Early Classic types, such as Balanza Black and Dos Arroyo Polychrome, but also because Sierra Red sherds are so scarce in these lots. Although detailed analysis has yet to be performed on this collection, LeCount would estimate that less than 10 percent of the sherds can be classified as such. There is a healthy amount of waxy wares, but they do not appear to be Sierra Red varieties. Rather, the Paso Caballo waxy wares in this
collection look less mottled and more homogeneous in color, display more orange than red slip colors, and have simpler lips and thinner bodies than those indicative of the Sierra Ceramic Group. Further analysis of this assemblage should help broaden our understanding of the Early Classic pottery assemblage in the upper Belize valley.

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EARLY CLASSIC MANIFESTATIONS AT EL PILAR AND MOUNTAIN COW

John Morris and Anabel E. Ford

Defining the Early Classic is problematic and many scholars have argued for a population decrease, decline in settlement, and a general cessation in construction activities across the eastern Maya lowlands. This paper is an attempt to shed new light into our inquiries of the Early Classic and to portray how traditional models relied too much on ceramics defined in the central core area of Tikal and Uaxactun. Settlement based on one type of ceramics has obscured and prevented researchers from exploring other strategies outside these established parameters to redefine the Early Classic period. In addition, researchers often argue that the lack of the stela cult in other areas is symptomatic of a decline or lack of sophistication and relegation to the periphery. Data from two sites, El Pilar and Mountain Cow, particularly architectural styles, which are unexplored as a criterion is utilized to buttress our arguments.

Introduction: How is the Early Classic traditionally defined?

To address the problem of the makeup of the ancient Maya society Early Classic period in the Belize River area we will focus on two centers along with their settlement zones, El Pilar and Mountain Cow (Figure 1). These centers represent the northern and southern boundaries of the Belize River catchments and exemplify the development progression that underscores the issues of delimiting the Early Classic Period in this region. Both El Pilar and Mountain Cow were established in the Preclassic, have long building sequences that continue through to the Late Classic, clearly identified E-Group complexes, yet the ceramic assemblages of both sites have not been adequately documented to demonstrate definite Early Classic occupation especially when based on the traditional ceramic assemblage used to demarcate the Early Classic period.

What are the main issues with the identification of Early Classic in the Belize River area? To begin with, the Early Classic has been defined based on developments in the Uaxactun-Tikal area, where the ceramic assemblage involved an incremental, yet total replacement of all types and shapes, both utilitarian and decorated of an earlier period (Culbert 2003:59). Characteristics of the more elaborated vessels include the Z-angle and basal flange bowls, which dominated the initial facets of the Early Classic and the Teotihuacan style cylinder tripod appearing in the later facet (Figure 2), (Culbert 2003:59-60). Interestingly, the transition from the Late Preclassic to the Early Classic at Tikal has been described as gradual, with the addition of many “Early Classic” characteristics along with the Preclassic forms (Culbert 2003:59, emphasis ours). The complete replacement of the Preclassic Chicanel tradition is known to be concentrated in the interior core area, with no parallels in the east into Belize or the west along the Pasion (LaPorte 2003:289-290). What is the significance of the Early Classic Tzakol ceramic assemblage and its distribution? And why has it been assumed that its absence at sites in the Belize region implies abandonment?

Bearing in mind the trajectory of consistent use of the same locales and centers from Late Preclassic to the Late
Early Classic El Pilar and Mountain Cow

Figure 1. Map of the eastern Peten and adjoining western Belize showing the location of El Pilar and Mountain Cow.

Classic, this begs the question of continuity. All major archaeological investigations within eastern Maya lowlands periphery demonstrate a broad distribution in both periods and a more intense occupation for the Late Classic in the same zones, buildings and plazas that were occupied earlier. Construction sequences at centers evince clear building continuity over the same time frame, consistency of place for centers and settlements. The anomaly however, is in the Early Classic where the core area assemblage at Belize River area centers and settlements is recorded as barely a minor component of the collections. Inscriptions and the “Stela Cult” are rare? Do we have a complete ceramic assemblage defined for the Early Classic period in the area? Are we satisfied with the evidence for inscriptions and if there is a lack what alternative explanations might be offered, rather than embracing the idea of retarded development or abandonment?

Taking into account architectural continuity is one way to scrutinize the question of abandonment. The establishment of centers in the Preclassic and their continuity of use over the next 1500 to 2000 years suggest a long-term investment in urban planning and use (see von Falkenhausen 1985). Growth and accretion are outstanding features of all Maya centers. Plazas established in the Late Preclassic are still plazas in the Late Classic. Thus architectural construction and use do not support for the interpretation of abandonment. Architecture styles such as corbelled vaulted buildings and the ubiquitous Teotihuacan talud tablero and subsequent imitations abound. Let us examine in detail the E-Group complex. This set of buildings is identified as a diagnostic architectural style commemorating ritual, perhaps associated astronomical observations or the beginnings of a definitive pattern of social and economic hierarchy (Chase and Chase 1995). The E Group complex, identified at Calakmul (Lundell 1933) and first excavated at Uaxactun, has been identified at many major centers throughout the Maya lowlands (Ruppert 1940; Chase and Chase 1995; Aveni and Hartung 1994; Wernecke 1994; Laporte 2003). Argued to serve as public ritual areas to commemorate or observe astronomical events, these complexes generally initiate in the Late Preclassic and their forms are elaborated, enlarged and superimposed with later constructions evidently conserving the same essential forms from the earliest times (Chase and Chase 1995). This demonstrates how early architectural forms are integrated into new forms of the successive constructions, and implies significant continuity and maintenance of ritual systems across the Preclassic and Classic periods. But at the same time can obscure Early Classic representations unless the methodology is fine grained to tease out lesser inconsequential differences. We need to
J. Morris and A. Ford explore the ramifications presented by the architectural evidence but do so outside the established paradigms ascribed to the Early Classic period by the Tikal/Uaxactun data.

For instance, when correlating the architectural order to the chronology, important architectural construction technique, the corbelled vault, is widely adopted in the Early Classic Period (von Falkenhausen 1985; see Hansen 1998). While it is clear that building with thatched roofs as well as platforms continues to be

Figure 2. Representative sample of Early Classic basal flange bowls and Teotihuacan-inspired tripod vessels from Uaxactun and Tikal, respectively.
built in the Classic Period (von Falkenhausen 1985:124), the elaboration of the simple thatched model can be traced as a feature of accretion, building upon the last construction in the limited defined spaces of the Preclassic. This is observed dramatically at Tikal, for example at the central acropolis (Harrison 2003). The development of the vaulted architecture is seen as a functional architectural evolution (von Falkenhausen 1985). Interestingly too, the development of mortars is associated with the Early Classic vaulted architecture, required to retain the superstructure mass that was used in finishing of the Maya vault (von Falkenhausen 1985). The use of “dry fill” is universally encountered in the substructure of mounds (von Falkenhausen 1985:129; Miguel Orrego and Rudy Larios pers. comm.) is still a part of the Early Classic construction suite (see Valdez 2000). These constructions styles are know from all over the Maya region, and are not restricted to the Tikal core area. Examination of other construction techniques and creating a checklist of other criteria to define the Early Classic period is therefore necessary.

What, then, are the implications for settlement patterns and land use from the Preclassic to the Classic Period? Settlement centralization models are also based on Tikal data. Can we interpret continuity in settlement in the Belize Valley area? Once again, relying on the strict Early Classic ceramic diagnostics, more anomalies appear for the Belize River area. In the core area around Tikal, settlements are distributed in all central zones in the Early Classic. Between 65-75% of the 135 residential unit excavations exhibited Early Classic, more than double that of the Late Preclassic at Tikal (Haviland 2003:1176). This contrasts to the occupation of the rural zones where 92% were occupied in the Late Preclassic and 77% were occupied in the Early Classic, and these are all at minor center locations (Ford 1986 2003). Although there appears to be less growth the evidence indicates as much a shift in organization (Ford 1986, 2003). We argue that the wide distribution in the Preclassic is consolidated with more nucleation around centers, which is noted for the Tikal peripheries where the major Early Classic assemblages are from the minor centers (Fry 2003:148). The growth of Early Classic in the vicinities of Tikal, then, are more a re-organization of settlement from the rural to the central zones, perhaps because of the overt strife recorded in the stela of that time (Ford 1985:81-82).

In sum, the seed of the problems of the Early Classic can be detected from relying too much on the core area of Tikal and Uaxactun, where the period diagnostics were defined. Planning and construction of centers date to the Preclassic, when massive plaza foundations were founded and established. Plaza systems, such as the E-Group date also to the Preclassic, and the fundamental forms are built upon from the inception to the collapse, thus obscuring developments in the Early Classic period. In terms of ceramics, there is the acknowledgement that there is a gradual replacement of the Preclassic forms with the Early Classic forms, and this interpretation could be more pronounced as one moves more distance from the trend setters of Tikal. Amorphous characterization of Tzakol 1 and 2 ceramics also created significant problems for researchers trying to document the Early Classic period in their area. Finally the continuity of place, of plans, and of spaces initially defined in the Preclassic through the Late Classic period suggest that the architectural signals are significant in determining the investments in the Early Classic.
Location, Chronology, Construction and Settlement El Pilar

El Pilar is a major Maya center comparable to many of the centers of the interior Peten. El Pilar is larger than Uaxactun, but smaller than Yaxha. The monuments of the core center cover more than fifty hectares (120 acres), one-third the size of Tikal. This size makes El Pilar among the largest in the region with more than seventy major structures situated around a minimum of twenty-five plazas. The monumental architecture area is divided into three majors sectors, the restricted Xaman in the north and two large public areas in the south: Nohol and the western Poniente connected by a causeway from Nohol. The core zone of monumental architecture in eastern El Pilar is approximately 800 m by 300 m and includes seventeen major plazas with another 200 by 300 area on the west (Figure 3). Today, the site straddles the adjacency zones of Belize and Guatemala and is embraced by protected areas in both countries incorporating 2000 hectares (Ford and Wernecke 2002).

Pilar is located in the northern catchment area of the Belize River. Numerous small creeks and springs in this region provide, for the Maya lowlands, an unusually plentiful fresh water supply. El Pilar’s water supply forms the upper reaches of the Belize River, the most important river in the country that effectively cuts Belize in two as it winds its way from the Guatemalan Peten to the Belizean Caribbean. El Pilar’s location is within 20 km of Naranjo and 50 km of Tikal at the eastern margin of the greater Peten region. The proximity of Naranjo to El Pilar may prove to be very significant as it is generally accepted that Naranjo was an important regional capital with ties to Tikal. Situated with a view from the escarpment of the northwest to an unobstructed east, this site commands a vast area of the eastern periphery of the Maya lowlands. From the Spanish Lookout and Yaloch area, El Pilar dominates the skyline and certainly would have been awesome in its day.

Figure 3. Map of the monumental architecture of eastern El Pilar.

The center has a long chronological sequence of construction and occupation beginning in the Middle Preclassic and extending uninterrupted over 18 centuries through the Terminal Classic Period. Settlement in the Belize Valley region is recognized by BC 1200 (Awe 1993) and the construction at El Pilar follows that presence. By the Late Preclassic we found evidence for intensive construction at the center of El Pilar (Ford and Fedick 1992).
The constructions continue without interruption from that time forth. The chronology of El Pilar is based on ceramic data from looter’s trench profiles (1986), test excavations and soundings across the plazas of the site (1993-94), a major temple tunnel (1995), and excavations in the acropolis area of Jobo. These investigations have found that construction of El Pilar began in the Middle Preclassic and continued with major remodeling into the Terminal Classic. This long sequence is evidence of a local commitment to the importance of the place (cf. McAnany 1995) and for the continuity of the occupation in the area (Ford 1992). Based on the sequence of construction at El Pilar, construction was continuous and uninterrupted from the Middle Preclassic through the Terminal Classic, circa 800 BC to AD 1000.

The chronologies of the constructions of El Pilar are based on relative associations of the ceramics. Preclassic constructions are found in all the major soundings around Plaza Copal. Middle Preclassic building phases include a fine limestone faced foundation base located below the Ball Court alley on the south, a clay core structure at the lowest levels of the eastern temple Xikna (EP7) in the middle, and a round structure below the SE corner of Xbalanque (EP9) in the north of Plaza Copal (Figure 3). The Late Preclassic period is recognized from examinations of data that came from over the entire site. The base of looter’s trench profiles provides evidence of Late Preclassic constructions from Plaza Axcanan in the south to the H’mena in the north. Further, cumulative sequence of Late Preclassic throughout the multiple sequence of the severely looted Ball Court, south of EP7 on the southeast of Plaza Copal, was examined before stabilizing the gaping holes left there by the looters.

Investigations in Plaza Axcanan and Plaza Copal reveal a long sequence of Late Preclassic construction, beginning with small structures that are periodically remodeled and culminating with the latest efforts that establish the expansive plaza foundations that were the base of all the Classic Period construction. This begins a trend towards massive plaza construction that encases, or preserves earlier constructions and creates new relationships between structures, such as with EP7 and EP10. The final Late Preclassic constructions are massive and fundamental, suggesting a long-term planning for the monumental and civic ceremonial spaces of El Pilar. The major plaza extension dates to Late Preclassic and is characterized with construction “cells” filled with what the El Pilar team calls “clean cobble fill”, a fill that is dominated by chert cobbles and boulders, with plenty of Late Preclassic ceramics and little or no soil or marl matrix. This is comparable to the Late Preclassic and Early Classic “dry fill” referenced by von Falkenhausen (1985) and recognized from the greater Maya area (Freidel 1986; Ellis and Dodt-Ellis 2000; Forsyth 1993). This construction style typifies the southern areas of the El Pilar, including Axcanan, the Ball Court, the foundations of Plaza Copal, as well as the early constructions of the western temple EP10 and fits the construction typology of von Falkenhauser (1985).

Construction appears to continue unabated with maintenance and major remodeling in the Late Classic, along with Terminal Classic construction capping the Late Classic in most excavations of the south and a few in the north. There are only a few locations where Early Classic ceramics are collected in association with constructions. Noteworthy in the assessment of the Classic Period construction is that constructions dating to the Late Preclassic are directly below ceramic associated constructions dating to
the Late Classic. Exceptions are from Plaza Faisan, where looters trenches on an eastern structure revealed an early remodeling that included basal flange bowls and the first major range-palace structure at Plaza Jobo in the H’mena. The Jobo construction represents the first Classic construction in the areas that were later enveloped with sequential remodeling, which filled in all the open spaces and was limited to the existing space defined in the Early Classic. The final buildings at El Pilar date to the Late and Terminal Classic. There are several areas, including the eastern temple of EP7, Xikna, where Terminal Classic constructions were interrupted in process and there are areas, specifically in the north, where Postclassic ceramic debris was collected on the Classic Period floors. The fact that Terminal Classic remodeling efforts were arrested before completed, as seen in the profile at EP7 of Plaza Copal, is strong evidence for continuity in occupation at El Pilar from the Preclassic through the final throes of the Classic Period.

Settlement areas related to El Pilar show significant development across the same long temporal sequence. Residential occupation from the BRASS surveys and in the Belize River area in general demonstrates a solid occupation by c. 1200 BC, supporting the early occupation evidence form other excavations in the Belize River area (Awe 1993). Residential settlements are known from all major resource zones from the earliest time periods, yet the overall density and intensity is low. Expanded occupation intensity dates to the Late Preclassic, when the settlements of the area extend over the whole river area.

Early Classic data are, no surprise, problematic. Comparative ceramic diagnostics for this period are limited making an appreciation of settlement distribution difficult. The comparative dating relies on the key features of basal flange bowls, a decorated form with limited distribution even in the core Peten area. Despite the paucity of Early Classic materials, data are present in about half of the residential excavations of the BRASS surveys. These are generally the residential units with the longest sequence, beginning in the Middle Preclassic, and the largest extent, before abandonment in the Late/Terminal Classic. Interestingly, nearly all excavations yield ceramics of the Late Classic, and most are in the same areas occupied in the Late Preclassic. Expansion is identified in terms of occupation of agriculturally more marginal lands, which does imply growth. Late Classic ceramics are represented in high density at the majority of residential sites and intensity of land use concentrates on the same resources occupied and used in the Preclassic. This suggests a continuity of occupation and land use until the dramatic interruptions that followed the Terminal Classic.

Architecture, Site Plans and Settlement at Mountain Cow

The Mountain Cow sites are located in an area of upland plateau in the Maya Mountains that dominates the southwestern Cayo District (Figure 1). The site is located at latitude 16° 47’ North and Longitude 89° 00’ West, 12 kilometers east of Caracol and 22 kilometers from the Belize-Guatemala border and is situated on the Macal River drainage, on the highland watershed between the Macal and the Rio Chiquibul, the eastern tributary of the Mopan River. Mountain Cow consists of four groups that are relatively in close proximity to each other, and have been designated names such as Tzimin Kax, Cahal Cunil, Cahal Pichik, and Hatzcap Ceel. Since all the groups are close together, the entire area was given the name Mountain Cow, which is the English translation of the Mayan word Tzimin Kax (Thompson 1931:238-248). Recent research
and survey has indicated that all four groups are part of one major site herein referred to as the Mountain Cow sites. When reference to the entire site is made the term Mountain Cow sites will be used. Where reference to a particular group within the site is made we will retain Thompson’s designation for each of the groups located within.

A new survey has amplified the site parameters. Whereby Thompson (1931) had described that there were four sites, two ceremonial centers, Hatzcap Ceel and Cahal Pichik, and two domestic residential groups, Tzimin Kax and Cahal Cunil the survey has demonstrated that all four groups are part of one large center with two major ritual/administrative complex connected by a causeway (Figure 4). The group of Cahal Pichik is an elite residential/ritual acropolis that is connected to Hatzcap Ceel by a ten-meter wide, 1800 meter long causeway. The unmapped features encompassed both public and private architecture, including pyramidal structures of varying sizes, range-type structures with possible administrative functions, secondary and tertiary residences, and one major causeway. Several other courtyards were mapped and a small causeway or “Via” identified. The following is a description of the Mountain Cow sites as recorded in our recent survey.

The group that is known as Cahal Pichik is an elite residential/ritual acropolis, which connects to another group Hatzcap Ceel by a twelve-meter wide, 1.9 kilometers long causeway (see Figure 4). Cahal Pichik is approximately 550 meters west of the Mountain Cow Water Hole (aguada). At the point where the causeway commences at Cahal Pichik there are two parallel parapets and on the raised platform that extends thirty meters out, a residential plazuela group was located. The site epicenter consists of a raised elite residential ritual acropolis on the southern end that comprises of eleven structures, including an E-Group complex (CP-Plaza 1). This plaza extends 65 meters east to west and 57 meters north to south. Outside the epicenter, but still within the site core is CP-Plaza II that is situated to the north and five meters above CP-Plaza I which comprises of seven structures, a series of residential and administrative buildings, of which pyramid Q was excavated by Thompson (1931). The newly surveyed CP-Plaza III is located about 30 meters east from Plaza II and forms part of the causeway. CP-Plaza III comprises of a large eastern pyramid (11m high), with two smaller buildings (5m, and 6m) on the north and south side. The western building is a small three-meter high structure. Approximately 7 meters east is a solitary range-type building. In addition, approximately 500 meters along the causeway is another courtyard group located on the south side of the causeway (CP-Plaza IV). In this area settlement extends southward towards the Tzimin Kax courtyards.

A causeway not recorded by Thompson connects Caracol to Cahal Pichik (A. Chase and D. Chase 2001). This causeway, 7.6 km long enters from the northwestern end of the main complex and runs through an elaborate courtyard. The Caracol causeway also connects to the Hatzcap Ceel causeway near the Cahal Pichik ball court. Another small formally constructed roadway (via) connects Cahal Pichik to the residential courtyard groups of Cahal Cunil that lies to the north. This roadway has not been systematically surveyed to define the degree of settlement or the actual parameters of the “Via”. At Cahal Pichik Thompson (1931) recorded the existence of pyramids, platforms, a ball court, and stelae. Seven of the nine un-sculptured stelae found at the Mountain Cow sites were located at Cahal Pichik, the most important plaza for the group in the Late
Mountain Cow, Belize
Thompson’s map vs. Resurvey

Figure 4. Map of the Mountain Cow sites.
Classic. Five of the plain stelae flanked Pyramid A and two were placed on a small platform labeled G that fronts the E-Group complex in the site epicenter. The survey has identified all locations. About halfway along the causeway, settlement extends southward towards the Tzimin Kax courtyards. Where this main causeway enters the raised platform on which the Hatzcap Ceel complex is located, there are several structures that Thompson did not document, through which the central courtyard at Hatzcap Ceel is entered.

Hatzcap Ceel (cold dawn)

This complex is located 1.9 kilometer in a south-southeasterly direction from Cahal Pichik and connected to it by an intra-site causeway. The main causeway enters the raised platform on which the Hatzcap Ceel complex is located near the ball court. Hatzcap Ceel comprises of ritual, administrative and residential components. Twelve mounds are built around a large ceremonial plaza (HC-Plaza 1). A flight of steps is situated on the northwest corner of the terraced pyramid A, which at one time supported a stone superstructure on the west side of the plaza. The stairway at the back of this building leads down to an aguada. A small platform B is attached to the southwestern end of Pyramid A. This small annex was added to this building at a later date.

A 4.25-meter high substructure H occupies the north side of the plaza. On the western side of H is a smaller platform building that runs parallel to it. On the eastern side of the plaza is a long platform that contains substructure F with a single chamber superstructure, and pyramid E which, sits on the south end of the platform, forming the eastern building of the site’s E-Group complex. In a formation similar to that of the main plaza at Cahal Pichik, pyramid F is flanked to the west by low platform G, in front of which stood two plain stelae and three rectangular plain altars.

On the southern border of the plaza are three structures. Structure D, which faces north, combines with Structure C to form Hatzcap Ceel ball court. A small annex D1 was added in the Late Classic to form this ball court. Behind Structure D and C lies Structure L, which was built in the Late Classic to complement the ball court and also to restrict access to the main plaza. Of the five altars found at Hatzcap Ceel two are carved, which date to A.D. 810 and A.D. 835 (Morley 1937-38: 218; Grube 1994; Simon and Grube 2000) (Figure 5). These altars are significant because they contain information on Lord K’an III (Tum’ Ohl K’íinich), the same ruler depicted on Caracol Stela 17.

Approximately 125 meters to the southeast of Hatzcap Ceel main ceremonial complex is a small acropolis of five mounds upon a low natural hilltop. These mounds form two plazuela groups (designated Group 11 in Thompson 1931). The first plaza comprises of one pyramid on the east side, Mound M; a low–lying platform, labeled O to the west, and a 4 meter high structure, Mound N, on the south. The second plaza comprises of a terraced pyramid Q and a small two meter by two meters long square platform mound. This second plaza is separated from the first by a rectangular platform on the south side that had a stairway, which allowed for access.

Tzimin Kax (Mountain Cow)

The mounds and courtyards that Thompson designated as Tzimin Kax are a series of courtyards all located in a continuous and dense settlement along terraces and hilltops. He identified thirteen courtyards but there are over thirty although in no instances are any tall pyramids located on any of these courtyards comparable to the
Figure 5. The carved altars of Hatzcab Ceel.

**Altar 1, Hatzcap Ceel**  
Silverprint: J. E. S. Thompson 1931: Plate 28.  
Drawing: Courtesy of Nikolai Grube.

**Altar 2, Hatzcap Ceel**  
Drawing: Nikolai Grube  
Silverprint: J. E. S. Thompson 1931: Plate 29.
site center at Cahal Pichik. The plazuela groups range in size from as few as two to as many as six buildings arranged around a single, central plaza. Seventy-eight (78%) percent of the groups have between three and six structures. The terraces at Tzimin Kax were used for intensive agriculture rather than for settlement defense. The terraces were integrated with the residential settlement. These terraces are readily identified by retaining walls ranging from 0.4 meters to approximately 1.50 meters tall. The Tzimin Kax group reveals the widespread distribution of burials in plazuela groups, which varied in size and complexity. The majority of the plazuela groups were built and occupied between A.D. 550 and A.D. 700, although there is significant evidence of Late Preclassic occupation. This confirms well with an increased population posited by A. Chase and D. Chase (1987, 1994) that documents a rapid 325% increase in population of Caracol, 150 years after Caracol defeated the city of Tikal in A.D 562. Many of the terraces and courtyards at Tzimin Kax were built during this time and exhibit burial and ritual activities similar to Caracol.

Cahal Cunil

This residential area was named after one of the workmen on Thompson’s 1930 field season. Cahal Cunil is smaller than Tzimin Kax but was occupied the earliest by the Maya. Thompson (1931:290) dates several caches and burials he located here to the Middle and Late Preclassic (Pring 2003). In addition, a corbelled vault burial chamber as well as other deposits, revealed tetrapod bowls, pot stands, “chocolate pots”, Aguacate ceramic group, and Orange polychrome, all indicative of a Protoclassic ceramic phase. The area comprises of eight courtyards ranging from two to five buildings surrounding a plaza area. Unlike the Tzimin Kax settlement, at Cahal Cunil there are many single, isolated mounds and paired mound groups. These mounds are not uniformly dispersed throughout the area and no settlement pattern could be discerned except for the fact that they tend to be located near the top of the ridges. Unfortunately, our block survey has not been completed in this area to determine the density of these isolated mounds and paired mound groups. Test excavations reveal Late Preclassic to Early Classic middens as well as a Late Classic period of occupation.

Architecture and Monuments: E-Groups and Inscribed Celt

There are two E-Groups at the Mountain Cow sites. The E-Group at Cahal Pichik is located in CP-Plaza I at the site’s epicenter. It is characterized by an eastern platform structure (L) oriented north-south that is 3 meters tall, and divided into three parts; a central pyramid (E) is 9.7 meters high, flanked by two lateral platform constructions, Structure D on the north end of the platform and a smaller Structure F (2.5 meters) that flanks the southern end, but faces to the east (Figure 6). The western pyramidal structure that encloses the E-Group is 13.5 meters high and had an eastern stairway and rounded corners. The southern structure pyramid A is 12 meters tall. Structure G, a small building in front of the eastern platform, had two plain stelae erected on it.

The E-Group at Hatzcap Ceel is located in the main plaza HC-1. The center of the eastern configuration of this E-Group is a long platform on the eastern side of the central precinct, surmounted with a large pyramidal building Structure F that was 10 meters tall. On the north end of this platform a long range-type Structure I is located and flanking the F structure on the southern end is another pyramidal type building Structure E, 6.3 meters tall. In front of this long eastern platform is a small
The western structure (A) that encloses the plaza is a 10.3 meters high pyramid.

**Inscribed Celt**

A highly polished celt made from hard green and black diorite found by Thompson (1931) in Cache 1 from Hatzcap Ceel reveals interesting information (Figure 7). The celt is carved with a hieroglyphic inscription and was broken into three pieces so that it could be inserted into the tall cylindrical cache vessel. The cache was found in Pyramid Q of Group 11 at Hatzcap Ceel below five floors that showed no sign of the floors having been broken to allow the insertion of the cache (Thompson 1931:270). Thompson suggested a tentative Terminal Classic date for the inscription based on the fact that the other dated monuments from Mountain Cow are from the Terminal Classic. But based on the style

**Figure 6.** Comparison between the eastern tripartite structures (“E-Group type groups”) at Uaxactun, El Pilar, and Mountain Cow.

building G, similar to the one at Cahal Pichik on which several altars were placed. A long terrace/platform (K) runs the entire length of the eastern platform at the back.

**Figure 7.** Glyph-inscribed celt from Hatzcab Ceel Cache 1. Silverprint from Thompson 1931:Plate 33, drawing by Nikolai Grube.
of the hieroglyphs, the inscription can be attributed to the earlier Preclassic period (N. Grube pers. comm.). Characteristic features of the inscriptions from the Late Preclassic and Early Classic periods are single column texts, the use of depictive signs as main signs, the small number of affixes and therefore, an absence of grammatical representation, and an odd spacing of signs (Coe 1976; Houston 1989). The use of polished celts as a medium for inscriptions is also widespread in the Late Preclassic (Schele and Miller 1986:83). The left column ends with the *yakil* “his tongue”; a compound, which is found often in bloodletting contexts. This glyph is fairly common in final position of Late Preclassic and Early Classic hieroglyphic inscriptions (Schele and Miller 1986:120). The celt is a typical example of a Late Preclassic portable object, which was probably used as a kind of elite currency with an inscription referring to the donor and the ritualistic use of the object. Hatzcap Ceel, where the celt was found, had an important occupation in the Late Preclassic period. West of Group 11 Thompson excavated Hatzcap Ceel E-Group, which seems to date into the same time as the inscribed celt (A. Chase and D. Chase 1995:93).

**Chronology**

The excavations Thompson conducted at the Mountain Cow site revealed simple burial patterns in the residential centers such as chultuns, cist, and funeral chambers. Funerary offerings are described as devoid of wealth and quality ceramics. An important element in the artifactual assemblage however, is the presence of pottery that date to the Late Preclassic or Holmul 1 Phase (400 B.C to A.D. 250). A corbelled vault burial chamber at Cahal Cunil as well as ceramics that date to the Early Classic (A.D. 250- A.D. 350) present evidence of continuity and a continuous population into the Classic period at these domestic centers as evidenced by ceramics of the Tepeu period (A.D. 600- A.D. 900) accompanying burials. Thompson also noted that the ceremonial centers at Cahal Pichik and Hatzcap Ceel indicate much later ceramic phases. No evidence exists for Early Preclassic remains at these two ceremonial centers. Thompson (1931) has posited that the sites of Mountain Cow date from the Late Preclassic and as population increased and expansion occurred, the site in the Early Classic functioned as a unit with domestic and civic components. This was evidenced by ceramic materials and supported by carved altar inscriptions.

A modified chronological time frame for the Mountain Cow sites indicates that occupation commenced sometime in the Middle Preclassic at the Cahal Cunil and Hatzcap Ceel groups (Table 1.1; after Pring 2000). Ceramic evidence at both locations however, suggests that Mountain Cow saw its first large-scale occupation during the Terminal Preclassic period (ca. A.D. 100-250). But, the presence of Middle Preclassic sherds (ca. 900-400 B.C.) in the construction fill from later contexts does support an earlier date for the initial occupation of the area. Late Preclassic types of ceramics are: Sierra Red, Polvero Black, Sapote Striated, and Society Hall Red waxy surfaces. Sierra Red is the most common type with a high percentage (68%) of sherds recovered (Gifford 1976). A variety of forms dominate, such as shallow flaring-walled dishes, plates with wide everted and thickened rims, and spouted vessels. In the so called Protoclassic and the Terminal Late Preclassic ceramic assemblages include mammiform supports bowls, spout and vessels, basal flange bowls, ring base jars, and basal angle bowls (Brady et al. 1998). The Protoclassic presence at Mountain Cow however, consists solely of grave goods or
In terms of construction styles, thick plastered architecture with squared corners and edges and no rounded corners are in contrast to Late Preclassic architecture at Caracol, where rounded corners are prevalent. With regards to stone tools, lithics such as large oval bifaces, tranchet tools, and stemmed macroblades are plentiful in the Late Preclassic/Early Classic period, clearly part of the widespread trade and interregional communication networking throughout the Maya Lowlands.

Temporally diagnostic ceramics were collected at (60%) of mound groups identified in the 1999-survey area. The dates given below for temporal periods at Mountain Cow are approximate and based upon relative dating with the exception of the early Late Classic (A.D. 600-700) and late Late Classic (A.D. 700-800, and Terminal Classic (A.D. 780-890). Dates from these three temporal periods are absolute based on radiometric research conducted by A. Chase and D. Chase (1987, 1994) at Caracol. Vessels or sherds possessing characteristics of the Floral Park Horizon at Mountain Cow are similar to those found at Nohmul, Barton Ramie, Holmul, Altar de Sacrificios, El Pozito, Kichpanha, and the Upper Belize Valley.

As Pring (2003) has noted, these eastern sites possess evidence of Holmul 1 style ceramics, whilst in the Peten and Pasion river drainage, the reverse is true, with the Holmul style virtually excluded. Perhaps the most significant differences in ceramics between the two sites are the Late Preclassic to Early Classic assemblages. The Mountain Cow sites exhibit many Protoclassic forms that were found in burial chambers beneath plaza floors and burials within vaulted chambers (Thompson 1931, 1939; Pring 2000). At Caracol, the few Late to Terminal Preclassic caches that have been found were in a chultun burial belonging to the same period, and in an outlying group that contained Late Preclassic vessels (A. Chase 1994:163).

Early Classic residential settlements at the site do not generally have the same east-structure focus as occurs throughout Caracol during the Late Classic. Only the Tzimin Kax area demonstrates the same pattern although to a lesser degree than at Caracol. Late Classic burials at Mountain Cow show more utilitarian ceramics and not "prestige" types. This pattern of utilitarian types used in elite contexts in the Late Classic is a pattern not observed in the Early Classic and significantly it appears to be distributed across a number of different contexts (i.e., not just elite) in the region ranging from small rural sites, to ritual use in large centers (see A. Chase 1994 and D. Chase 1988; King and Potter 1994; LeCount 1999).

Based on surface collection and test pit data, occupation begins at the Mountain Cow sites in the Middle Preclassic period (ca. 900-600 B.C.) when 20% of mound groups were initially occupied. Occupation increases substantially in the Late Preclassic/Protoclassic (ca. 600-B.C.--A.D. 250) and Early Classic (ca. A.D. 250-600) periods when 50-60% of mound groups, respectively, were occupied. There is a dramatic increase to 90% occupation in the early Late Classic period (A.D. 600-670) coeval with the rise of political authority at Caracol and with a leveling off to 75% in the late Late Classic period. A sharp decline occurs in the Terminal Classic period (A.D. 780-890) to about 40%, leading to abandonment during this period. With regards to settlement, the distribution of groups show a sparsely settled area between Cahal Pichik and Hatczap Ceel, but this might be an impression based on the survey and not necessarily a real representation of the settlement distribution. I surmise that the causeway built in the period just around
Early Classic El Pilar and Mountain Cow

600 A.D. reflects a transformation of the area seat of administration from Hatzcap Ceel to Cahal Pichik. Although the placement of the carved stelae suggests that the ruling elite still resided at Hatzcap Ceel.

Conclusions

To conclude, in the Late Preclassic the sites of Mountain Cow were autonomous and the main public ceremonial center was at Hatzcap Ceel; settlements at Cahal Cunil and at Tzimin Kax were dispersed. During the Late Preclassic and moving into the Protoclassic, Mountain Cow sites experienced a marked increase in populations as well as cultural, social, ideological, economic and settlement complexity characterized by monumental constructions such as temples, E-Group structures, ball courts, and trade in exotics such as jade, obsidian, and shells. These developments are similar to El Pilar. It is illuminating to compare Mountain Cow’s two main plazas, Cahal Pichik and Hatzcap Ceel, with El Pilar E-Group. Plaza 1 at Hatzcap Ceel and the E-Group at El Pilar resemble one another, which is not surprising given the fact that both have their origins in the Late Preclassic/Early Classic. These communities became part of a complex ideological system fully integrated with that seen throughout the Maya area (Coe 1993; Freidel 1992; Pring 2000; Thompson 1931; Coe 1993). Additionally, when we examine both sites architecture, the similarities allow us to suggest that new integrating architectural forms such as E-Groups abound and with its concurrent artifact assemblages can be used to demarcate the Early Classic. Given the dependency on ceramics, such as Z angles forms and Teotihuacan-inspired styles, a much more context specific and clearly defined ceramic trait list is required that takes into consideration that same ceramic styles are equally represented in the Late Preclassic and in the Early Classic and that there may be no clear cut break in the ceramic traditions. As we find new evidence and data in the Belize valley and more settlement patterns are mapped patterns emerge that argue for strong continuity in population from the Late Preclassic to the Early Classic period, a time of increasing development across the Maya lowlands.

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The Early Classic has been often defined chronologically and by certain material culture. The specific make-up of the period remains somewhat obscure. Archaeological research from north and northwest Belize may provide some new insights for describing and defining the Early Classic in Belize and more generally for the lowlands. Landscape patterning as well as material culture serves as significant indices of Early Classic life. Technological developments and the contexts found for the Early Classic serve to define activities for the period. Ceramics, lithics, architecture, etc. indicate a rather robust Early Classic that has been poorly understood or perhaps more specifically, poorly identified. Several categories of Early Classic material culture, the context(s) of the remains, and the interpretations of these findings are reported. The implications of these interpretations are also addressed for northern Belize and the surrounding regions.

Introduction/Background

“Early Classic Manifestations in Northern Belize” provides an overview of some significant markers of the Early Classic Maya in northern Belize. The patterns observed and presented are taken primarily from the sites of Colha and Kichpanha combined with findings from sites in the Rio Bravo Management and Conservation Area (RBMCA, Figure 1). The RBMCA is a protected area under ownership and management by the Programme for Belize, a non-profit organization. While some exceptions to the general descriptions provided may exist, the patterns resulting from this analysis are significant and appropriate. This paper does not pretend to cover in any comprehensive manner the Early Classic as represented or assessed for every site in northern Belize, but represents our current understanding of this enigmatic period in Maya prehistory.

Each area, Colha-Kichpanha and the RBMCA, are discussed in terms of locality (physical and cultural environment) as well as material representations of the Early Classic. A generalized picture of the Early Classic is then presented as understood across this north to northwest area of Belize. Archaeological research from north and northwest Belize may provide some new insights for describing and defining the Early Classic in Belize and more generally for the lowlands.

Colha and Kichpanha are located south-southeast of Orange Walk in northern Belize (Figure 2). Colha is approximately 20 km from the Caribbean Sea and bisected by Rancho Creek. The Rancho Creek drains east into the wetland area of Cobweb Swamp. By the Early Classic the physical environment is an open savanna that prevails along side patches of “high forest”, “dry forest”, and “bajo forest” (Vaughan et al. 1995:82).

Early Classic sites, located in the Rio Bravo Conservation and Management Area, are on a 260,000-acre parcel of land in northwestern Belize bordering Peten, Guatemala. There are approximately 60 known archaeological sites found on the property. This conservation area is located within the Three Rivers Region (Figure 3), a geographically defined area bounded by the Rio Azul and its associated features on the northern and western margins, the Booth’s
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River on the eastern edge, and the site of Chan Chich which arbitrarily marks the south border (Adams 1995:5). Three relatively steep escarpments, the Rio Bravo, Booth’s River, and La Lucha escarpment, form the dominant topographic features of the RBMCA. The vegetation of the region is defined by a varied tropical forest environment, shallow soils, and a high topographical diversity (Lundell 1937; Hartshorn et. al. 1984; Brokaw and Mallory 1993; Scarborough et. al. 2003).

Recognizing the Early Classic: North and Northwest Belize

The Early Classic has been often defined chronologically and by certain material culture. The specific make-up of the period, however, remains somewhat obscure. The north Belize Colha and Kichpanha area Early Classic is first described followed by the northwest RBMCA material.

Figure 1. Map of Belize with archaeological sites (after Houk 1996).
Figure 2. Map of the Colha-Kichpanha area (after Shaw 1991).

Figure 3. The Three Rivers Region (after Houk 2003).
The Early Classic for north and northwest Belize is here dated at approximately A.D. 250 – 600, similar to many other lowland sites. During the Early Classic at Colha-Kichpanha, as determined from ceramic studies and settlement patterning, there is an apparent decrease in population, lithic production, mortuary practices, and in general, material culture.

Due to little evidence of construction and no lithic workshops identified as Early Classic, this is one of the least understood periods of occupation at Colha as well as Kichpanha. Early Classic ritual and construction activities were identified by Potter (1982) at a stepped pyramid and temple platform (known as Operation 2012). Potter (1982:104) defined a stairway, a floor, and three associated features to the Early Classic. Two of the features comprised limestone capped circular cache pits containing basal flange bowls, one Dos Arroyos Orange-polychrome (Figure 4) and one Actuncan Orange-polychrome inverted over large Aguila Orange jars. Each jar contained the possibly human remains of an immature individual. No other artifacts were recovered with these features that clearly date to the Early Classic.

Kelly excavated a Colha interment that may date to the Early Classic (at Operation 3017). This interment consisted of an individual skeleton that was relatively well preserved, several tools of generic Classic temporal assessment, and two ceramic vessels. The ceramic vessels were tripod cylinders that had their upper sections sawed creating shallower bowls and both had the tripod supports cut off and projecting segments smoothed flat. Both vessels are of the Early Classic and typical of what is often referred to as Teotihuacan style. Because of the odd treatment of the vessels and the more generic Classic lithic tools, the burial was deemed as likely Late Classic and the Early Classic vessels declared “heirloom” items. More discussion on this assessment and the need for a new evaluation is presented in an interpretive section below.

A small crypt excavated at Kichpanha revealed an orange polychrome jar (Figure 5) and an Aguila Orange vessel as well. Little other material culture was found with this burial. In both the Colha and Kichpanha cases, the mortuary practices provided minimal surviving artifact data although enough to clearly identify them as Early Classic.

Excavation and ceramic data from the RBMCA originally suggested a population decline for the Early Classic period even though the nearby site of Rio Azul was flourishing. Investigations outside of ceremonial centers and into rural areas have indicated that what originally appeared to be a population decrease was partly a misunderstanding of what ceramic types
were being utilized during the Early Classic (Lincoln 1985:73; Valdez 1987:246; Sullivan and Valdez 1996, 2004). The location of Early Classic occupation, both commoner and elite populations, outside of ceremonial centers (Pyburn 1998; Sullivan and Valdez 1996, 2004) is another aspect previously not defined in the RBMCA. Lithic tool forms, just as with some ceramic types, continue with little or no change into the Early Classic making it equally difficult to utilize this material culture as markers of the Early Classic versus the end of the Preclassic. Sullivan and Valdez (n.d.) have recently completed a more detailed analysis of this chronological issue that includes data from ceramic thin-sections. It has become evident that the successful development and adaptation of certain tools during the Preclassic are continued in use well into the Early Classic. It is this successful development and use of certain material culture that obscures the “beginning” of the Early Classic at many sites in northern Belize and elsewhere.

**Settlement and Landscape Utilization**

While Early Classic ceramics do occur throughout the site (cf. Eaton 1994:104), the numbers represent or at least indicate the smallest ceramic complex at Colha (Valdez 1994a:13). However, as noted above, it has been suggested that some of the Late Preclassic/Protoclassic material culture including the ceramics may actually continue in style and form into the Early Classic (Valdez 1987, Buttles 2002, Sullivan and Valdez 2004).

Colha is a site where the occupants through manipulation of the landscape and harvesting of its natural resources, especially cherts, sustained a society and enabled the development of craft-specialization (Hester 1985b, 1982; Hester and Shafer 1984; Shafer 1982b, 1994a; Shafer and Hester 1983). The Early Classic as presently viewed shows a shift in settlement adaptation. While certain ritual materials are present in selected contexts, it seems that the population is more consistently represented in areas outside of the ceremonial center including for example, the southwest (3000) sector of Colha. Kichpanha similarly has produced Early Classic data of significance outside of the ceremonial precinct.

The location of Early Classic occupation for the RBMCA as noted previously, and as observed for the Colha and Kichpanha area, seems more common outside of the major site centers. Early Classic elites as well as commoners may be located outside of ceremonial centers (Adams et al. 2004). Not surprising, several of the test excavations in these outlying areas have encountered Early Classic architecture. Consequently, the best evidence for Early Classic construction and elite occupation is found away from the main centers. A settlement on top of the Rio Bravo escarpment named the Barba Group (Hageman 1999), smaller sites such as Guijarral (Hughbanks 2004), El Intruso...
Material Culture and Early Classic Manifestation

Technological developments and the contexts found for the Early Classic serve to define certain activities for the period. Ceramics, lithics, architecture, etc. indicate a rather robust Early Classic that has been poorly understood or perhaps more specifically, poorly identified.

While lithic workshops identified as belonging to the Early Classic have not been identified at Colha, the greater issue remains the continuance of successful adaptations that may obscure the cultural transition between the end of the Preclassic and the following Early Classic. As in the case of the ceramics, it is likely that the production of Late Preclassic/Protoclassic chipped stone tools may have continued unchanged in style and form into the Early Classic. However, it is interesting that Early Classic intensification of lithic manufacturing has been identified for the site of Altun Ha (Meadows 2001), just south of Colha. Thus, is may be that our ability to materially identify the onset of the Early Classic is in many cases limited to elite items (polychrome vessels, eccentrics, etc.) and/or elite contexts (caches, tombs, etc.).

In the RBMCA, a Dos Hombres tomb was located in a structure, approximately two meters high, and part of a small raised platform group of four structures (Houk 1996; Durst 1998). Prior to excavation, this courtyard was defined as a residential area (Houk 1996). A Dos Arroyos Orange-polychrome basal flange bowl covered by a Yaloche Cream-polychrome scutate lid (see Sabloff 1975: 27) with a modeled macaw head handle (Figure 6) were among the vessels recovered from this burial. The Dos Arroyos bowl has been identified as very similar to a vessel recovered from Burial 1 at Uaxactun (Smith 1955: Fig. 76b5). The images on the vessel interiors from both sites depict a man in profile wearing a headdress. The individual is also depicted in a prone position on vessel exteriors (Figure 7) with what may be described as striped pants. This design on the vessel exterior, portraying a similar male figure laying his stomach with bent knees, also marks the Uaxactun connection: (Smith 1955: Fig. 3e). A similar design was also observed on a sherd from a looted tomb at Chan Chich (B. Houk, pers. comm. 1999) and on a sherd from San Jose (Thompson 1939). The macaw head handle from the lid is also similar to a handle from Uaxactun (Smith 1955: Fig. 69b4) and this imagery type was typically used by elites to link themselves with supernatural forces, in this case, the Principal Bird Deity (Schele and
Miller 1986; Kappelman 1997; Carmean 1998).

A second Early Classic tomb on top of and at the edge of the Rio Bravo Escarpment about 2.5 km northwest of Dos Hombres was excavated by Hageman (1999). A Teotihuacan-style cylinder tripod with a modeled human head handle (Figure 8) that is similar to a lid recovered from Burial A 22 at Uaxactun (Smith 1955: Fig. 1j) and several from Rio Azul (Hall 1989) was among the ceramic finds. There were also three effigy vessels in this interment including a zoomorphic shell vessel with a human head (old man) that might represent God N (Pawahutun) who is often shown emerging from a shell. The shell and God N interpretation may be associated with connections to the Otherworld through the primordial sea (Schele and Miller 1986: 54; Freidel et. al. 1993: 139). The second effigy vessel is a zoomorphic jaguar that is poly-
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Figure 8. Human (Maya) modeled ceramic head as a lid handle (by Ashlyn Madden).

This ceramic offering highlights an elite association since the jaguar is generally associated with kings (Schele and Freidel 1990). The third effigy vessel recovered from the small tomb resembles an oscillated turkey often associated/used as an offering (Freidel et. al. 1993: 40).

An Early Classic tomb was also unearthed from the site center of La Milpa. The La Milpa tomb was not, however, associated with any major Early Classic construction. Sagebiel (Sullivan and Sagebiel 1999a, 1999b, 2003) has reported on the ceramics from this tomb and the possible ties with Tikal, Uaxactun, and Teotihuacan (the latter in the form of a cylinder tripod).

Overview & Current Perspective

Having presented an array of information about the Early Classic for both the Colha-Kichpanha area and from the RBMCA it seems that the traditional view of the Early Classic should be modified. Both areas of north and northwest Belize discussed share a number of attributes assigned to the Early Classic. It is from these common manifestations that we may derive broader implications for the entire region, other areas of Belize, and perhaps the Maya lowlands in broadest terms.

Many scholars have addressed the issue of ceramic traditions continuing through time. Certainly, it is this issue that makes it harder to identify some Early Classic ceramic types. We may have originally caused the underestimation of Early Classic populations because of the difficulty in differentiating “Sierra Red” of the Late Preclassic as it continues in use into the Early Classic. The same applies to the various lithic tool forms that continue in production and use from the Preclassic into the Early Classic.

The discovery of elite deposits in “unanticipated” areas, i.e. areas where we weren’t necessarily expecting to find evidence for elite occupation has shown that several areas outside of centers was thriving in the Early Classic and that the elite were maintaining connections with established and powerful sites nearby as well as distant. As this kind of new data has been increasing, we are left with a concern over the misunderstood dynamics of population and settlement for the Early Classic. There may, in simplest terms, have been a settlement shift in the Early Classic that has been misinterpreted as a population decline. This is not to say that there wasn’t a drop in population numbers, but rather that the degree of decline may have been overstated.

In sum, one general pattern currently discernable for the north to northwest Belize area is that the Early Classic continued without disruption, but in a more dispersed presence. Material culture that had been successfully adapted during the Preclassic generally continued in use into the Early Classic in many parts of several sites. With
recent research into site areas not often explored we are finding not that the population was greatly diminished, but that they were perhaps more dispersed and chose to live in areas away from the previous site centers. While much speculation about the reasons for these changes could be posited it is clear that the new patterns remain to be investigated and defined.

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The Early Classic Period is well represented in the excavations undertaken at Santa Rita Corozal. The archaeological data from this site are particularly interesting because Santa Rita was a relatively small site throughout the Classic Period; yet, it is a site that had access to many long-distance trade goods. There also was a marked difference between the upper and other levels of Santa Rita Corozal society during the Early Classic Period. Contextual and spatial patterns at Santa Rita suggest that the Early Classic would be methodologically difficult to identify without a stratified excavation sample. The data recovered from the site also raise broader questions with regard to regional interaction in northern Belize during the Early Classic Period.

Investigations by the Corozal Postclassic Project at Santa Rita Corozal from 1979-1985 provide ample evidence of Early Classic Period occupation (D. Chase and A. Chase 1988, 2004a). Early Classic special deposits (burials and/or caches) were encountered in 8 out of 43 operations at the site or in nearly 20% of excavation locales. A total of 13 interments of Early Classic Period date were recovered. The structures containing Early Classic deposits include epicentral monumental architecture as well as low mounded and “vacant terrain” constructions. Thus, while Santa Rita Corozal is most noted for its abundant Late Postclassic Period remains, there is an appropriate amount of data from these excavations for considerations of hierarchy, heterarchy, and stratification, as well as methodological issues that arise in the dynamic modeling of ancient Maya society.

Santa Rita Corozal was a relatively small site during the Early Classic Period; we have previously suggested that its population was only somewhat over 1400 people (D. Chase 1990). Elite interments at Santa Rita Corozal clearly indicate prosperity during the Early Classic. The contrast between elite and non-elite interments and residences indicates marked status differentiation and stratification of the population. The dichotomy in statuses is far greater than in earlier or later time horizons – even though there may have been an increased number of status levels in later periods. Early Classic materials recovered from the site’s deposits suggest further that Santa Rita Corozal was well tied into long-distance trade networks. In fact, elite Early Classic interments from Santa Rita Corozal are far more impressive in their offerings than their counterparts from some larger sites such as Caracol, underscoring the need to look at multiple lines of data when making interpretations.

Early Classic Santa Rita Corozal: Structure 7

The most impressive Early Classic remains at Santa Rita Corozal were encountered in Structure 7. The earliest occupation found by our investigations in this locus dated to the Late Preclassic Period. Twentieth century remains attributable to Thomas Gann were also recovered from the front of the structure (D. Chase and A. Chase 1988, 2004a).
Chase and A. Chase 1986). However, the bulk of construction activity and special deposit placement was Early Classic in date. During the Early Classic Period, one version of Structure 7 (-3rd) is known to have been a full masonry corbel-vaulted construction with five rooms; there were three tandem central rooms and two end rooms (Figure 1). Early Classic stucco ornamentation from a fragmentary roof-comb on Structure 7-3rd and from the summit platform of Structure 7-2nd was also recovered. The images in this stucco work directly portray underworld iconography through the use of a skeletal jaw on the earth monster associated with -3rd and through the use of a prominent shell in the iconography associated with -2nd (Figure 2); this imagery is consistent with the use of Structure 7 as a mortuary building, as can be documented archaeologically.

Investigation of Structure 7 included both axial trenching and extensive areal clearing. The axial trench was 60 m in length by 1.5 m in width and was accompanied by extensive areal excavation over the course of 4 field seasons. Extensive damage had been caused to the various construction episodes evident in the Structure 7 sequence (construction sequence and special deposit location is best viewed in the axial section of the building [Figure 3]). At the beginning of the 20th century, Thomas Gann (1900:686-686; 1918:67-70) removed the majority of what remained of Structure 7-1st, finding a burial, possibly associated with -1st, and a cache, possibly associated with -2nd. At the beginning of the Corozal Postclassic Project in 1979, very little remained of -1st; only the lowest course of a single step associated with a small patch of floor were located off-axis. The combination of Gann’s excavations and Belizean road building crews had resulted in the removal of much of the front of the mound and had similarly damaged Structure 7-2nd; only the stucco mask that had once flanked the western side of the summit substructure platform for -2nd was recovered. However, much of Structure 7-3rd was recovered fairly intact. The remains of -3rd’s roof-comb stucco ornamentation was recovered and drawn in 1979 (Figure 2), along with an Early Classic cist burial (S.D. P2B-1) that was associated with -2nd. In 1984 and 1985, all of the interior rooms of Structure 7-3rd were exposed and the axial trench was continued into the core of this construction, resulting in the recovery of 2 tombs (S.D. P2B-2 and S.D. P2B-5) and 2 caches (S.D. P2B-3 and S.D. P2B-4). Structure 7-3rd was stabilized by the project during the 1985 field season.

The earliest interment recovered in Corozal Postclassic Project excavation of Structure 7 was a small Early Classic Period tomb on axis to the building, directly below the central room of Structure 7-3rd. This tomb was constructed within a cut in the building floor that was subsequently resealed, allowing continued use of Structure 7-3rd. The tomb was oriented east-west and
Figure 2. Stucco Ornamentation associated with Santa Rita Corozal Structure 7-2nd and Structure 7-3rd.
contained the supine remains of an elderly adult female whose head was at the east end of the chamber (Figure 4). Accompanying her were 5 pottery vessels, a carved *Spondylus* shell that had been placed over her face, a pair of jadeite and shell mosaic inlaid earflares portraying clawed birds with human faces and wings of overlapping jadeite mosaic pieces, jadeite ornaments, and shell beads from a necklace (Figure 5). Ceramics included 2 basal flange dishes, 2 annular base bowls, and a composite form vessel with lid. A similar composite form vessel is noted from an Early Classic Copan tomb (Bell et al. 2004).

Subsequent to the deposition of the first chamber, but still within the Early Classic Period, a second tomb was placed on axis below the front room of the building. This tomb was oriented north-south and was substantially larger in size (measuring 4.25 meters in length, 1.5 meters in width, and 2.0 m in height). A single supine adult male was inside the chamber with his head to the north (Figure 6). Numerous offerings were placed with the body inside the chamber (Figure 7); all attest to the fact that this individual was of the highest status (e.g. A. Chase 1992). A stone bowl, carved with hieroglyphs and depictions of god N that were highlighted through the use of red cinnabar, was located at the north end of the chamber along with a variety of other items. These offerings included a jadeite mosaic...
Early Classic Santa Rita

Figure 4. Plan of Special Deposit P2B-2 in Santa Rita Corozal Structure 7.

mask, 8 ceramic vessels, three complete Melongena shells, a Spondylus shell, a composite blue jadeite bird with wings affixed through the use of green stucco, the remains of 3 stuccoed wooden disks, and stucco pieces from what was thought to have been a fragmentary codex. A large chert ceremonial bar was in the vicinity of the chest. Three jadeite tinklers were below the waist and a single stingray spine was in the area of the pelvis. Three chert spear-points also overlay the pelvis area. Numerous flamingo-tongue shells were located in and around a vessel in the leg area, presumably the remains of a garment into which the shells had been sewn. Other offerings included flower-like jadeite and hematite earflares, jadeite and Spondylus beads, a cowry shell, and the remains of 3 turtles. The tomb contained indicators of elite status, rulership, and rebirth (e.g. A. Chase 1992:34-37); there was also emphasis on the number “3” (apparent in the Melongena shells, spear points, jadeite tinklers, stucco disks, and turtle remains). The ceramic vessels included one jar, one miniature olla, two basal flange dishes, one annular ring base bowl, one small copa-shaped vase (cream pitcher), and two cylinder tripods (one red and gold bichrome with effigy lid).

At approximately the same time as this tomb was sealed, a cache was placed in the fill above the chamber towards its southern end, behind a series of frontal building steps. This cache consisted of three pairs of ceramic vessels and lids (Figure 8). Each of the lids had a single distinct hieroglyph painted on it; these have been interpreted as titles and the name of the individual (“Great Scrolled Skull”) placed within the tomb below (A. Chase 1992; D. Chase and A. Chase 1986). Within the lidded vessels were a series of offerings. Each set contained burned stingray spines, natural sea shells, and some modified shells and jadeite. Each set also contained at least one small flat worked shell or jadeite piece with deity heads painted on them—perhaps representing the gods G1, G2, and G3. Other black line work was apparent on some of the smaller pieces of shells, but was more abstract and did not appear to form recognizable portraits.

Subsequent to the placement of the cache and the two tombs in its coring, the
plaster floors of Structure 7-3rd were burned, either through regular use or through purposeful termination activities. Then, large parts of Early Classic vessels (including basal-flanged bowls) were left broken on the interior building floors, incense burners with plainware dishes stacked on them were crammed into an interior central wall niche (Figure 9), and the building rooms were infilled and encased within Structure 7-2nd. The incense burners are nearly identical to one of the Early Classic Period stacked censer sets encountered at nearby Cerros (Walker 1998:92-93) as well as two sets uncovered from much further away at Uaxactun, Guatemala (Ricketson and Ricketson 1937:95, 281, Pl. 85e-g). Walker (1990:356) has suggested that stacked censers served as portals to the otherworld. Their central location in the buried Structure 7-3rd niche could support this notion.

As a result of Gann’s summit investigations and subsequent stone-robbing, the remains of Structure 7-2nd and 7-1st were not well preserved; thus, the building form cannot be easily or clearly identified. What is known is that the basal platform for the summit building was flanked on each side of its stair by stuccoed portrait masks. A final
Early Classic Santa Rita

![SD P2B-5](image)

**Figure 6.** Plan of Special Deposit P2B-5 in Santa Rita Corozal Structure 7.

Early Classic burial, a simple cist, oriented north-south was eventually cut into the core of Structure 7-2nd. An adult was placed supine in this grave with the head to the north (Figure 10). The sex of the poorly preserved skeleton could not be established; however, artifactual associations in the form of carved bone pins suggest that it may have been the remains of a woman. In spite of the fact that this interment was a cist rather than a tomb and that many of the burial offerings were broken, the contents were nonetheless impressive. There was one small stone vessel, nine ceramic vessels, several carved bone pins, jadeite and shell beads, an earflare, a bone spindle whorl, and a cowry shell (Figure 11). Ceramics consist of three basal flanged dishes, one calabash bowl, one footed plate with spout, one annular base bowl, one cylinder tripod, one basal flanged bowl, and one two-part effigy vessel (Figure 4). The two-part effigy vessel, a pregnant looking *pisote*, resembles those known from Uaxactun (Smith 1955: Fig. 5; Burial A 22). Sherds similar to the bichrome cylinder tripod were encountered at Caledonia by Sidrys (1983: 79, Fig. 54). The basal-flanged bowl is similar to one found in an Early Classic tomb at Dzibanche, Quintana Roo (Campana 1995: 30). Gann’s (1900:685-6:1918:67-70) excavations also recovered what appears to have been an Early Classic cache set into Structure 7-2nd above this burial; it is possible that Gann’s cache was meant to accompany this burial, much like the cache placed above and in the fill covering the earlier tomb in Structure 7-3rd.

**Early Classic Santa Rita Corozal: Other Deposits**

The remains recovered from within Structure 7 sharply contrast with Early Classic Period construction and deposits found elsewhere at Santa Rita Corozal. The most elaborate of the other Early Classic Period burials recovered at Santa Rita Corozal contained no more than two ceramic vessels; none contained more than a single jadeite or *Spondylus* shell bead. Several contained no preserved offerings. Some of the human skeletal remains consisted solely of a skull set within a single ceramic vessel. These were presumably skull caches, although the distinction between cache and burial is not always clear (see D. Chase 1988; M. Becker 1992). Other than these
Figure 7a. Ceramics and artifacts from Santa Rita Corozal S.D. P2B-5 (jadeite mask and most small artifacts not illustrated).
Figure 7b. Plans, ceramics, and shells related to Special Deposit P2B-4 in Santa Rita Corozal Structure 7 (most small artifacts not illustrated).
Figure 8. Plans, ceramics, and shells related to Special Deposit P2B-4 in Santa Rita Corozal Structure 7 (most small artifacts not illustrated, including a deity head on jadeite).
Figure 9. Plan, elevation, and ceramics from Special Deposit P2B-3 in Santa Rita Corozal Structure 7.
skull caches, no other Early Classic caches were encountered outside the Structure 7 locus. In contrast to the masonry Structure 7, other excavated Early Classic constructions had no more than one or two courses of stone preserved above floor level. Thus, status differentiation is evident not only in the number and kind of material offerings made in burials, but also in the effort expended in constructions and graves.

A brief survey of the other Early Classic Period deposits recovered at Santa Rita Corozal serves to emphasize the disparity between the Structure 7 interments and those from the rest of the site. Special Deposit P6E-2 was located just above bedrock within Santa Rita Corozal Platform 2. This interment consisted of a partial skull and incomplete ceramic vessel. It was located immediately above bedrock and likely was the remains of a disturbed skull cache. The ceramic vessel was a partial red slipped flanged bowl with vertical rim, round lip, and exterior groove that probably dates to the early part of the Early Classic.

Special Deposit P4B-1 consisted of a single flexed adult burial with head to north, located inside a cist in Santa Rita Corozal Structure 69. The only offering with the interment was a single shell bead.

Special Deposit P10B-9 located in Santa Rita Corozal Structure 35 consisted of a flexed adult buried in a crypt. The individual was accompanied by a single basal-flange bowl and one jadeite bead.

Special Deposits P12B-2 and P12B-3 were located in Santa Rita Corozal Structure 134; each of these consisted of a skull and a ceramic vessel. They could be considered skull caches, possibly deposited in association with another burial, Special Deposit P12B-4 (Figure 12). Special Deposit P12B-4 was also located in Structure 134 and was the most elaborate Early Classic interment known from Santa Rita Corozal outside of Structure 7. It contained an extended individual with head to the north and two ceramic vessels (Figure 12a and 12b).

Special Deposit P13B-4 was located immediately east of the Early Classic version of Santa Rita Corozal Structure 135 (this version, Structure 135-2nd, had a squared exterior with an eastern antechamber, but its interior was circular with a medial wall and an offset doorway; Figure 13), was a cist containing one individual with head to the south and a
Figure 11a. Ceramics and artifacts from Santa Rita Corozal S.D. P2B-1 (many smaller artifacts not illustrated).
single basal flange bowl (Figure 13a). Two other interments can be stratigraphically dated to the Early Classic at this locus. Special Deposit P13B-5, associated with the same building, was also located in a cist. It contained two flexed individuals, one with the head to the north and the other with the head to the south, but no remaining permanent offerings. Special Deposit P13B-6 contained one flexed individual in a cist with the head to the south, also with no preserved offerings.

Special Deposit P19A-5, from within Santa Rita Corozal Structure 159, consisted of a single flexed burial with basal-flange bowl that had been badly disturbed by a Late Classic interment which had been placed directly on top of it.

Finally, Special Deposit P20A-2 was located at the bottom of a deep trench in Santa Rita Corozal Structure 39. As most of the body lay beyond the excavation limits, the interment was not completely recovered. In addition to the human remains, one flanged ceramic vessel was encountered.

Discussion

One of the most striking aspects of the Early Classic Period archaeological remains at Santa Rita Corozal is the existence of marked stratification. There are clear “haves” and “have nots.” Effort
Early Classic Santa Rita

Figure 12. Illustration of special deposits in trench in Santa Rita Corozal Structure 134. Special Deposits P12B-2 and P12B-3 are skull caches on either side of Early Classic interment Special Deposit P12B-4; the two vessels associated with S.D. P12B-4 are also illustrated.

expended in construction, creation of burial locations, and the number and kinds of offerings in Structure 7 far exceeds that from other investigated areas of the same date. Furthermore, the only kinds of Early Classic caches encountered in other Santa Rita Corozal buildings were skull caches. No elaborate Early Classic caches were uncovered outside of Structure 7. While there are no stone monuments with inscriptions at Santa Rita Corozal, the status differentiation apparent in material remains at Santa Rita Corozal shows an emphasis on elite individuals and is in accord with interpretations of Early Classic monument history as focused on individual people and individual specific historic events as opposed to Late Classic celebrations of anniversaries and/or periods of time (e.g. D. Chase and A. Chase 2004b). Similar evidence for stratification is evident at other sites such as Caracol (A. Chase and D. Chase 1996; A. Chase et al. 2001, D. Chase and A. Chase 2004c).

Also significant are the relationships among Early Classic, Protoclassic, Preclassic, and Late Classic materials and occupations at Santa Rita Corozal, as well as comparisons of occupation and material culture similarities and differences among other sites in northern Belize. At Santa Rita Corozal, Protoclassic occupation and interments are generally encountered in the same locations as the Early Classic. A revision of population history at Santa Rita Corozal that realigns the Protoclassic with more current dating (A.D. 150-300) shows steady population in the Late Preclassic and Protoclassic followed by increased population numbers in the Early Classic Period with even more growth in the subsequent Late Classic (e.g. D. Chase 1990). By far the largest populations at Santa Rita Corozal, however, existed in the Late Postclassic Period.

Protoclassic occupation and material remains at Santa Rita Corozal are viewed as an (identifiable) extension of the Late Preclassic. Protoclassic interments, while not abundant, are notable for combining Late Preclassic and Protoclassic ceramic markers in a single context. These interments suggest smooth, rather than abrupt, temporal divisions and the probability that ceramics may be differentially distributed in accord with status (see below).

Investigations at Santa Rita Corozal point toward difficulties in the identification of Early Classic remains. Research at the site further indicates the significance of and problems with sampling. Early Classic remains are easily apparent at some sites, such as Santa Rita Corozal, but are difficult to document or are absent at others. One of the issues is the way in which Early Classic Period occupation is identified. Generally,
Santa Rita Corozal
Structure 135

Figure 13. Illustration of the Early Classic plan of Santa Rita Corozal Structure 135. Also illustrated is a ceramic vessel associated with Special Deposit P13B-4, a burial placed in front of this version of Structure 135.
temporal placement in the Early Classic is established by use of ceramic markers that are often found in burials and elite contexts, but that may be absent in other contexts. Early Classic ceramics thus appear to be status linked (A. Chase and D. Chase 2004; see also A. Chase for a similar discussion of Terminal Classic status-linked ceramics at Caracol). Thus, Early Classic occupation may be missed if special deposits are not encountered and if elite contexts are not investigated – or if there is not a substantial excavation sample – especially as Early Classic remains are often not as abundant and may be more deeply buried than those of subsequent periods.

Uncritical comparisons of burial assemblages among sites also may be problematic. The relative wealth of the Structure 7 interments at Santa Rita Corozal compared with contemporary ones at Caracol, ignoring the distinctions in scale between the two sites, might erroneously suggest a greater importance to Santa Rita Corozal than the site merits. The artifactual wealth in the Structure 7 tombs is due to a host of other factors, primary among them being more direct access to trade and an elite desire to stress their importance of an area peripheral to the Maya heartland. The complete context as well as contents of assemblages is clearly important.

A regional consideration of northern Belize suggests the existence of many similarly sized, small, politically independent, but inter-connected, centers during the Early Classic Period. Louisville, Aventura, and Caledonia are not very distant from Santa Rita Corozal and were roughly equivalent in size during the Early Classic Period (see Sidrys 1983). Relations among these centers during the Early Classic were likely to some degree heterarchical rather than hierarchical (Crumley 1998), in contrast to later periods. Unfortunately, however, with certain exceptions, the economics of the Early Classic are unclear. Excavated Santa Rita Corozal Early Classic households do not provide detailed information on local production and workshops. Non-local trade items were prominent in elite contexts, but exceedingly limited in other households – again suggestive of the marked status differences at the site. While it is appealing to argue for a series of economically specialized Early Classic sites conjoined by regional trade, the proximity of sites to each other in northern Belize and the current lack of evidence for specialization or environmental differentiation among site locales suggest that this was not entirely the case. Santa Rita Corozal likely prospered due to its location on Corozal Bay with easy access to trade – much like Colha, further south, prospered because of its location with easy access to chert. However, it is unclear what different economic specializations would have been undertaken at the nearby inland sites of Aventura, Caledonia, Chan Chen, or Louisville. Many of these sites, while not overtly trade centers like Santa Rita Corozal, may have been economically redundant in function relative to each other. These sites could coexist only due to their relatively small Early Classic Period population sizes. Santa Rita Corozal was among the largest sites in the area during the Early Classic and its postulated population is less than 1500 occupants (D. Chase 1990). Thus, the heterarchical relationships postulated here for Early Classic northern Belize would likely have fractured and become hierarchical with further population growth in the Late Classic and Postclassic eras.

Conclusion

In summary, investigations at Santa Rita Corozal provide important pieces in the reconstruction of ancient Maya prehistory in Belize. While best known for its Late Postclassic remains, archaeology at Santa
Rita Corozal points to an exceedingly long sequence that includes occupation from the earliest part of the Maya Preclassic Period to modern times. Early Classic remains at the site are noteworthy both in suggesting the existence of two-tier stratification in spite of small population numbers and in showcasing Santa Rita Corozal’s access to exotic trade items.

This research points to significant methodological issues in identifying and comparing Early Classic Period remains, including the possibilities of status-linked materials, the interpretational problems caused by inadequate sampling, and the significance of context in interpretation and comparison. Excavations underscore the need to explore functional relationships among Maya sites and the changing variations among them. It would appear that the Early Classic in northern Belize was characterized by heterarchical as opposed to hierarchical relationships among sites. The Santa Rita Corozal data show that the Early Classic was a period of growth as well as a time span of political and economic differentiation, trends that were expanded and further modified in the subsequent Late Classic Period.

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8 THE EARLY CLASSIC PERIOD AT THE MAYA SITE OF BLUE CREEK, BELIZE

Thomas H. Guderjan

Research at Blue Creek in northwestern Belize provides a case example of how archaeologists can understand the structure and temporal dynamics of a Maya community through intensive, long-term investigations. During the Early Classic period, Blue Creek was a thriving, vibrant and wealthy community. The ruling elite of the site core was surrounded by a many geographically discrete and socially varying residential groups, most of which had origins in the Late Preclassic period. The ruling elite also accumulated one of the largest collections of jade in the Maya area and accomplished numerous construction projects in the site core. This wealth was certainly based upon the large-scale agricultural resources that they controlled and the export of agricultural products. Despite the disparity in power, legitimacy and wealth among the Blue Creek Maya, we can demonstrate that they bound by shared fundamental concepts of cosmology and religion.

Introduction

Blue Creek is a medium-sized Maya center in northwest Belize that has been investigated annually since 1992 (Figure 1). This long-term approach to a single site has yielded a massive and detailed database, only part of which is included in this summary of the Early Classic period at Blue Creek. Our first investigations at Blue Creek focused on the site core and yielded a series of important discoveries. Not the least of these was that much of the public architecture at Blue Creek was constructed in the Early Classic period. As the project expanded into new research domains, we also found that the settlement zone offered equally important data about the period. Additionally, we now have an occupational history of Blue Creek that begins in the early Middle Classic period at approximately 900 BC and ends with the Terminal Classic period in the mid-9th century AD.

Late Preclassic-Early Classic Continuities

The earliest construction of public architecture occurred much later, in the Terminal Preclassic, Linda Vista period, approximately AD 100/150 to AD 250. This first building was a low platform at Structure 4, on the south end of what would soon become Plaza A. This construction was celebrated by a ritual that resulted in the caching of 425 obsidian blades and flakes with 27 obsidian cores, jade earflares and beads as well as other materials and has been interpreted as a massive bloodletting ritual celebrating the installation of Blue Creek’s first king (Guderjan 1996: 8; see Schele and Freidel 1990). Also, early constructions were soon built at Structures 1 and 9. So, the public sector of Blue Creek was already established by the Early Classic period.

The transition from the Terminal Preclassic, Linda Vista period to the Early Classic, Rio Hondo period was virtually seamless. Ceramics, including dozens of whole vessels from burials and caches, grade stylistically from one to the other. It is often difficult to assign a particular vessel to either time period without strong stratigraphic and contextual information, challenging the long-held assumption that there is a well-defined change in ceramic attributes in the region.
Early Classic Blue Creek

Public Architecture in the Early Classic

The record from the central precinct (Figure 2) shows that Blue Creek was a wealthy and architecturally innovative community during the Early Classic period. The central precinct consists of two large plazas on top of the Bravo Escarpment overlooking the highly fertile agricultural lands and the headwaters of the Rio Hondo.

Plaza A covers approximately 100,000 square meters and was surrounded by only four buildings in the Early Classic. The plaza was open to the east where it overlooked the lowlands below the Bravo Escarpment. Structure 1, more than 11 meters tall, dominated the plaza on the north side (Figure 3). Structure 1 was a pyramid with a columned superstructure covered with a perishable roof (Driver 2002). Dale Pastrana has suggested that this superstructure functioned as a viewing gallery for activities in the plaza. This innovative building is the earliest columned pyramid in the Maya lowlands with the possible exception of the pyramid at Ake in northern Yucatan (Roys and Shook 1966).

The west side of the plaza was bounded by a 75 meter long range building, Structure 5, which supported a single room superstructure that was 50 meters long with seven doors facing the plaza and doors on each end, for a total of nine doors, and a relatively small central staircase. This was built in the Early Classic period in a single construction phase (Pastrana 1996).

The south side of the plaza was defined by Structure 4, which was expanded in the Early Classic to become a 5-meter tall
The Early Classic Buildings are highlighted. The most interesting feature of the building was a stone lined shaft, capped with a banner stone, immediately in front of the central entrance to the building (Guderjan 1998). As best we can tell, this shaft was created at about AD 350 and remained open until approximately AD 500. Wear marks on the interior of the banner stone indicate both vertical and horizontal activity as though the banner stone and shaft served as a base for a pole and, literally, a banner flying in front of this building. When the shaft was constructed, a significant portion of Structure 4 was removed and then replaced. At the base of the shaft, a four-pointed chert eccentric was placed, oriented to the cardinal directions. Further up the shaft, four vessels were placed outside of the shaft in the cardinal directions. All were Early Classic, basal flanged vessels and two were lidded polychromes with sacrificed pre-natal or neo-natal infants in them. The other two vessels may also have contained sacrificed infants, but without lids, their remains were not recoverable. Aside from the public display involved, this architectural arrangement clearly reflects tree of life symbolism and marks Structure 4 as the true center of Blue Creek during the Early Classic period.

Behind and just north of Structure 1 was an oversized platform supporting a ballcourt. Another of the surprising aspects of Blue Creek is that this was the only known Early Classic ballcourt in northwestern Belize. Based upon the presence of lithic workshop deposits in such locations at other sites, such as Chan Chich (Guderjan 1991: 44-46), we tested the entire platform looking for evidence of such workshops or other evidence regarding the use of the rest of the platform. However, we found nothing outside of the ballcourt except construction fill.

Approximately 200 meters north of Plaza A is the Plaza B complex, a linear array of buildings centered on Plaza B and bounded by two pyramids, Structures 9 and 24. In the Early Classic, Plaza B itself did not exist. Instead, Structures 12 and 13 bounded a small public plaza. At some point
in the Early Classic, Structure 13 was re-oriented to face north, and Structure 15, a low ramada style range building was constructed to bound Plaza B. At the same time, the former public space in front of Structures 12 and 13 was secularized and bounded by the construction of two small buildings. Finally, the platform on which those buildings stood was expanded and Structure 10, a small pyramid, was added.

**Figure 4.** Early Classic Masks at Structure 9.

Perhaps the most interesting building in the Plaza B complex is Structure 9 (Figure 4). In the Early Classic period it was a Peten style pyramid, with a steep central staircase terminating with a small, single room, vaulted superstructure (Grube, Guderjan and Haines 1995; Haines 1996). In front of the doorway of the superstructure was a staircase outset with a five-paneled plaster façade. About half of the façade had been destroyed by looting, but more than two panels were intact. The panel on the left is in the best condition and it depicts and individual wearing a large jade earflare, a bib-type garment and a headdress in the form of a “foliated ajaw”. Our initial interpretation was that this was the representation of an actual ruler of Blue Creek and that its presence reinforced the idea that Blue Creek was an independent kingdom in the Early Classic. However, more recent interpretations of similar images lean to the idea that this is a representation of the maize god. Of course, that interpretation does not rule out that the image on Structure 3 is of a ruler of Blue Creek as the maize god, a common kind of redundancy in Maya art.

**Wealth and Resources at Blue Creek in the Early Classic**

In the Maya world, there is no more clear reflection of wealth than the presence of jade. We have now recovered 1311 jade artifacts securely dated to the Terminal Preclassic and Early Classic periods at Blue Creek (Guderjan n.d.a). While the majority of these derive from predictable contexts such as caches and burials in public architecture, a surprising number do not. For example, 148 artifacts derive from some of Blue Creek’s most humble, non-elite residences. The implications of the distribution of jade at Blue Creek are beyond the scope of this paper. However, it is important that jade was so abundant that it was distributed across all social classes. While the fecundity and currency of jade is a debatable topic, I have taken the position that jade was a royal currency and was only distributed to non-royals through a process of gifting for rewards for service (Guderjan, n.d.a). In addition to jade, numerous other exotic goods such as obsidian (Haines 2000) and granite grinding stones were imported in large quantities, further supporting the notion the Early Classic Blue Creek was a wealthy community.

Blue Creek acquired such wealth due to the economic resources at its disposal. The first and most important of these was access to highly productive agricultural lands (Guderjan, Baker, and Lichtenstein 2003). The Bravo Escarpment divides two
major physiographic zones; the Eastern Peten and Coastal Belize zones. At the base of the escarpment and eastward to the Rio Bravo are the lowlands of the Coastal Belize zone, which provide some of the deepest and richest soils in Central America. However, they are prone to seasonal inundation, resulting in a high risk of crop failure. In order to control for such events, the Blue Creek Maya dug networks of drainage ditches (ditched fields). At this time, we have a reasonable estimate that at least six square kilometers of the area were incorporated into such field systems. West of the escarpment, the Eastern Peten zone is composed of karstic hills interspersed with highly fertile, low-lying areas. When these are large, flat and poorly drained, they are known as “bajos”. Given the karstic nature of area around Blue Creek, they may be better termed “mini-bajos” While the soils in these mini-bajos are not as deep or rich as those at the base of the escarpment, they are also among the most productive agricultural soils in Central America. We estimate that approximately five square kilometers of these soils around the Blue Creek site core were also under regular cultivation. Additionally, the farmers of Blue Creek implemented a wide variety of small-scale agricultural systems including farming the rich soil of escarpment rejolladas as well as terrace and check dam systems that further expanded the agricultural base. In summary, approximately 10 of the 20 square kilometers around the Blue Creek site core were under cultivation, providing a tremendous agricultural and economic output, obviously far beyond what was needed to supply Blue Creek’s relatively small local population.

Blue Creek additionally benefited from its setting at the headwaters of the Rio Hondo. This confluence and the several miles of the Rio Bravo above the confluence are well within the administrative control of Blue Creek. Further, upstream from the confluence, near the end of the navigable Rio Azul, the people of Blue Creek built a dam and dock facility which would also be able to facilitate trade (Barrett and Guderjan n.d.). Consequently, this riverine trade system linked their agricultural products into the circum-Caribbean coastal trade system and onward to communities of northern Yucatan (i.e., Andrews 1983, 1990; Guderjan 1995; Guderjan and Garber 1995; McKillop 2003). Further, Blue Creek controlled the terminus of the system. So, all goods moving into the interior of the Peten would have to funnel through Blue Creek, again giving Blue Creek a disproportionate access to exotic goods.

The Nature of the Blue Creek Polity in the Early Classic Period.

We have been able to arrive at a reasonable estimate of the geographic scale of the Blue Creek polity thanks to intensive survey efforts over a number of years. The site core is roughly in the center of an area that is bounded on the east by the Rio Bravo and the Booth’s river swamp. The Rio Azul Canyon, more than 100 meters deep in some places, forms the northern boundary. On the south, we find another canyon that is probably an ancient channel of the Rio Azul. Finally, on the west, the area is bounded by a 40 square kilometer bajo, named the “dumb-bell” bajo due to its bi-lobed shape. Beyond each of these features are other large centers, but no others exist within this area of more than 100 square kilometers. Within this area, we have intensively surveyed the central 20 square kilometers. Again, of that area, approximately half was used for agriculture rather than habitation.

Also within this area, we have identified a series of residential clusters or
components (Figure 5; Guderjan, Baker, and Lichtenstein 2003; Lichtenstein 2000). Each residential component has a unique set of attributes, attesting to the variability and complexity of Maya life. The following discussion is a brief comparison and contrast of some of these components.

Kin Tan consists of a group of elite residences approximately 1 kilometer west of Plaza B. The Kin Tan residences were built high on karstic hilltops surrounded by unoccupied agricultural lands (Guderjan, Hanratty, and Lichtenstein 2003; Hanratty 2002). In the Early Classic, the residences largely consisted of platforms with perishable superstructures. The major non-residential public building at Kin Tan is Structure 42, a 5 meter tall pyramid with a frontal platform that was built in the Early Classic. Settlement at Kin Tan was begun in the Late Preclassic, Tres Leguas phase, but was greatly expanded early in the Early Classic. The lineages of Kin Tan continued to thrive during the Late Classic period when they expanded their homes into large-scale masonry buildings. Importantly, we found a Terminal Preclassic – Early Classic burial of a lineage founder under a central shrine. Perhaps only a generation later, another elite male was buried in a tomb in front of the shrine and then the shrine was expanded to honor both individuals. The descendents of these individuals continued to reside in the Structure 37 Plazuela for several hundred more years, with the shrine for their revered ancestors central to their world. During this time, they clearly were important players in the political and economic life of Blue Creek (Guderjan and Hanratty in press).

In contrast, the communities of Chan Cahal and Sayap Ha were about 1 kilometer east of the central precinct and built on low terraces surrounded by ditched agricultural fields. They were initially occupied in the Early Middle Preclassic, Cool Shade period, perhaps about 900 BC. By the beginning of the Early Classic, there were more than 50 thatch-roofed houses in these two areas. Again, each are had its own central place. Chan Cahal had one small two room masonry building with an adjacent sweat bath on a large otherwise empty public platform and Sayap Ha had two small pyramids in the approximate center of the component (Giacometti and LaLonde n.d.; Popson n.d.).

At about the same time the lineage founder was interred in Kin Tan, another individual was buried at Sayap Ha (Guderjan, Diel, Giacometti, and Andrews, n.d.). In this case, he was buried in a small crypt under the floor of a residence. He was interred with a carved bone bib-head pendant, normally associated with royalty, and a pair of jade and coral inlayed shell ornaments with a Teotihuacan styled individual depicted on them. The presence of these grave goods, more elaborate than those found with the Kin Tan lineage founder, attest to the importance of this individual during his lifetime. However, unlike the situation at Kin Tan, his importance did not create a setting for his descendents to become important in the affairs of Blue Creek in the future. In fact, Sayap Ha and Chan Cahal remained among Blue Creek’s most humble residences during the Late Classic period.

Another of the residential components of Blue Creek is Uxulil Beh, located approximately 3 kilometers southwest of the central precinct (Lichtenstein 2000). Uxulil Beh is composed of about 20 housemounds and is unlike all other components in several respects. While all other components were occupied no later that the Late Preclassic period, Uxulil Beh was not occupied until the Early Classic and seems to be a lateral population expansion into an area of low agricultural productivity. It is surrounded on three sides by steep
slopes draining into a deep canyon. With there are two large terraces, probably for agriculture, on the west side of Uxulil Beh, there is very little agriculturally valuable soil available. These meager resources are related to the fact that Uxulil Beh is the only component without an obvious central religious, economic or political place. Of course, in contemporary Maya villages, a residence also functions as a Nikteilna, or council house, without any architectural signature that would be obvious to an archaeologist.
In general, though, all of these residential components were tethered to the elites of the central precinct through lineage-based relationships. Outlying communities had their own internal hierarchy and central places. Further, as Audet and Awe have discussed for Baking Pot (2004), and Cheetham has discussed for Cahal Pech (2004) and I have for Becan and Dzibanche (Guderjan n.d.b), these were often symbolically connected to the central precinct by causeways. In the case of Kin Tan, I suggest that the lineage of the Structure 37 Plazuela held the reins that connected the component to the elites of the central precinct. Conversely, in the Sayap Ha case, we know of an important individual who did not manipulate his importance into long-term power for his lineage.

The Shared Cosmology of the Early Classic Period

While social complexity and stratification among the Blue Creek Maya were highly variable, religion was not. Shared religious concepts function to bind and integrate people into cohesive societies. At Blue Creek, we have found powerful evidence that this was also true of the Early Classic Maya. Further, archaeologists have long understood that dedicatory caches in Maya buildings represent the embedding of sacredness into these buildings Coe 1959; Garber, et al. 1998) and that the arrangement of public architecture at Maya sites is a symbolic recreation of the landscape of creation (Reilly 1990). So, it seems predictable that if pyramids represent the “First Witz Mountain”, then dedicatory caches buried within them also have symbolic relationships to the cosmos.

At Blue Creek, we have excavated eight caches that date to the Terminal Preclassic or Early Classic periods with lip-to-lip vessels or lidded vessels with trace residues inside. In all cases, visual inspection revealed jade, sting-ray spines and other commonly encountered cache materials. However, only when the biosilicates in the residues were analyzed, could we understand the full meaning of these caches (Bozarth and Guderjan 2004; Guderjan 2004). In each case, large quantities of sponge spicules were found, indicating that these were virtually stuffed full of sponges and that the other materials were relatively minor components of the original contents.

The sponges represent elements of the Primordial Sea the preceded the last Maya creation. Also, in every case, there were terrestrial elements, such as jade or other plant remains, representing the second component of the cosmos. The final component is represented by the dome shaped lid that all of these caches shared. In essence, all three components of the Maya cosmos were represented in every cache.

More important, though, is the context of these caches. Six of these were in public architecture in the central precinct, another was found beneath the plaza floor in the Structure 37 Plazuela at Kin Tan and another was found underneath a house mound floor at Chan Cahal. The Early Classic Maya of Blue Creek shared the same concept of the cosmos and the same concept of the necessity of dedicating buildings with the ritual that results in what we term “dedicatory caches”, regardless of their status in society. This shared set of religious concepts did not divide and segregate society. Instead it served to bind and integrate all social strata of Maya society.

Late Classic Transformations

By the end of the Early Classic, Blue Creek was a very different place. A dramatic event had occurred at approximately AD 500 that included filling the stone-lined shaft at Structure 4 with nearly 1000 jade artifacts as well as numerous incensarios and other
materials. Soon after, the graceful columned superstructure of Structure 1 was demolished and a new addition built to inter a royal burial. In the Aguas Turbias period in the early part of the Late Classic, public construction did not cease, but its nature dramatically changed. Structure 9 was re-oriented and, like Structure 1, was redesigned to be a flat-topped pyramid more common in the Coastal Belize zone than in the Eastern Peten. Plaza A was greatly expanded to accommodate the construction of a pseudo-E-group on the plaza’s east side. Blue Creek no longer had access to large quantities of jade in the Late Classic. Only 29 artifacts from this period have been documented and they are small, poorly carved and of low-quality stone. While this reflects a general regional pattern, the degree to which Blue Creek lost access to jade is more dramatic than the regional pattern and is still largely unexplained.

Despite these changes that appear to reflect political re-alignment internally and externally, Blue Creek did continue to thrive. For example, the elite residences of Kín Tan were expanded into large-scale masonry structures. Elsewhere, there is evidence for population sizes at about the same level as the Early Classic. Blue Creek re-aligned and restructured, but continued to thrive.

1 All ceramic analyses and ceramic complex designations derive from unpublished work by Laura Kosakowski.

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The Early Classic Period appears to be underrepresented in the archaeological record of Northern Belize. Originally this was thought to indicate a population decline, but more recently several competing hypotheses have been advanced to account for this anomaly. In this paper I discuss the complexity of the formation processes that resulted in the archaeological record of Maya habitation at the site of Chau Hiix, Belize. Although focused on later deposits at the site, the discussion has relevance for understanding the visibility of the Early Classic, sandwiched between two much more visible eras.

Introduction

A number of competing hypotheses could explain why the archaeological assemblages designated as Early Classic might appear to represent a period of population decline:

1. The Period designated as Early Classic (A.D. 300 to 600) is shorter than the 600 year long Chicanel phase it follows.

2. Early Classic habitations are often clustered around large plazuela groups in a settlement area as densely as they are clustered around a site center; at most documented sites, settlement during the long preceding Late Preclassic (Chicanel) period was not clustered, but fairly evenly spread across a given settlement zone. Consequently, Chicanel ceramics show up in almost every excavation, whereas obtaining a representative sample of Early Classic materials depends on whether settlement analysts happen to include nodes of clustered settlement. The once popular convention of examining a settlement by means of a transect would usually underrepresent (but occasionally overrepresent) the relative extent and quantity of Early Classic material.

3. Early Classic may represent more than one type of cultural boundary: elite status, generational markers, ethnic distinctions, ceremonial functions, etc. These differences would determine when, where, how long, and how many Early Classic types were used at any particular locale. For example, what is a common utilitarian ware in one community may be a signal of elite status in a community that imports it or imitates it, or an indication of outside domination in a community where invaders symbolize their dominance by continuing to use their own cultural style in a local context at crucial public events.

4. There is a correlation between the political position of a community in a regional context or the economic position of a community in a trade network that affects the rate of change in styles of material culture. Cities at the center of a sphere of political economy are more likely to place value on innovation, whereas more rural areas are more likely to signal affiliation by conservative reproduction of regional styles (Henderson and Beaudry Corbett 1993).

5. At Nohmul and on Albion Island, I found that Early Classic material was more frequently associated with nonplatform and extremely ephemeral modest structures than earlier and later material. A greater divide between rich (visible) and poor (invisible) inhabitants would make diagnostic Early Classic material culture harder to find, and underrepresented in research designs concentrated on mounded structures (Pyburn et al 1998).

6. There is no reason to assume that the earmarks of any era, such as chronologically diagnostic pottery, will have the same relationship to population density in all time periods. Different cooking styles (roasting,
Older deposits are deeper, more disturbed, more likely completely destroyed by natural and cultural processes, and harder to find, especially (ephemeral ground surface building), super-positioned or elevated construction from later periods, so the upsurge of visibility in the Late Classic may relate at least partly to rates of disturbance and decay.

Evidence for all these processes is available from ancient and contemporary contexts in various parts of the world. As data accumulate on ancient Maya practices, the possibility of these sorts of variation over time has begun to seem more likely. My own excavations at the site of Chau Hiix in northern Belize can be used to illustrate the enormous complexity of the archaeological record of large long-lived communities.

Excavations at Chau Hiix

Chau Hiix is a site with an extensive ancient Maya occupation. Excavations have discovered early Preclassic pottery (Swasey), but also Postclassic pottery, sometimes from the same locus. Because the site has had a very long continuous occupation, data from Chau Hiix have interesting implications for our understanding of Maya history in central Belize. But also because of this very long history, the origin of the deposits at Chau Hiix is extremely complex. The site has produced artifacts dating to all ceramic periods, but not always in chronological sequence. In this paper I summarize some of the work done at Chau Hiix with emphasis on depositional processes. And I will begin with a worst-case scenario to set the stage for the other cases I will mention.

Alfredo Minetti (Minetti 2002) studied the artifacts associated with a large plazuela group (Platform 10) located on the central platform immediately south of Structure 1, Chau Hiix’s main structural monument (Figure 1). The building he focused on (Structure 2) was under investigation for several years as the location of numerous Terminal and Postclassic burials (Wrobel 2002, 2004). Minetti looked at a single area of about six meters square that contained an unusually dense accumulation of artifacts (Figure 2). Since this is technically on the edge of a residential platform it might be regarded as a domestic midden.

Careful excavation, however, showed this deposit to have multiple origins. First of all the platform had incorporated midden artifacts in each of the several construction episodes that resulted in its final form. On top of this series of platforms several superstructures superseded each other over time, the final apparently being built almost entirely of perishable materials. Residents of this final house curated several large sherds outside under the eaves of the thatched roof, just inside the drip line. Coincident with the continual refurbishing of the platform and its successive superstructures, burials were interred into the floor with subsequent re-plasterings.

After the structure was no longer used as a residence, burials continued to be added, however as these latest burials were not topped by plaster floors, they were buried somewhat deeper than (and actually cut through) the earlier interments which have been placed in very shallow cuts sealed under plaster (Figure 3). Subsequent to any reconstruction of the platform, artifacts were placed on the surface of the ground atop the abandoned building, possibly as offerings. Sometime after this, easily reached cut platform stones were borrowed from the
K. A. Pyburn

platform edge to be reused for other purposes. In about 1970, corn was planted over the whole building and throughout the 80s and 90s, cows and horses grazed in the area. Very large trees (especially cohune palms) grew on the structures, fell down or were cut, and grew back. Snail Kites, owls and vultures found these trees convenient spots to devour their catch from the adjacent lagoon, dropping fish, turtle, and small mammal bone, and freshwater shells in piles below their roosts.

“Minetti’s” midden contained midden fill from platform construction that

Figure 1. Central Chau Hiix.
is being pulled downhill out of the platform edge as the platform deteriorates. Midden fill sherds tend to be smaller than primary midden sherds, as they have been moved from their original context and probably “tamped down”, and have better preserved surfaces since they have been protected from erosion (Wilk and Kosakowsky 1978, Pyburn 1989). Their edges often show sharp breaks not always the result of enthusiastic excavators. Midden fill also includes other sorts of trash, such as broken tools and shell or animal bone, and dangerous waste, such as chert or obsidian debitage that would cut children’s feet.

Figure 2. Minetti’s “Midden”.

Minetti’s midden also contained artifacts from the many burials interred into the structure. According to Wrobel (2004) – who did the skeletal analysis – resemblances between teeth suggest people were buried over time in locations within the building determined by family associations. However, Maya excavators seem to have been pretty cavalier about disturbing the previously deceased: pots and even bones from earlier burials were often moved into later burials that disturbed them. In all, the remains of about 70 individuals (mostly associated Terminal Classic and Early Postclassic pottery) were recovered from this platform, an area of about 50 square meters best described as a stratigraphic nightmare. Since these burials had been buried shallowly under plaster floors that had eroded away from above them, many were within 10 centimeters of the current ground surface with their associated pottery actually protruding from the ground. Burial offerings from these deposits commonly include plainwares, modeled carved wares (Figure 4), various sorts of chert implements including eccentrics and ordinary choppers, ground stone pieces, jade, obsidian, carved and whole shell, and Pomacea flagellata, along with unique items such a beautiful pink granite hacha and a chert eccentric. Even though Minetti’s midden was not directly above human interments, pottery eroding out of these joined the platform fill he mapped, encouraged by gravity, stone robbing, corn planting and hooves.

Figure 3. Typical Chau Hiix type shallow interment under investigation by Della Cook.

The midden also contained artifacts curated by the final residents, some of which we were able to identify in situ, which only told us other artifacts with this origin were probably present. But we also found that
Figure 4. Artifact from Structure 2.

Figure 5. Dense artifact scatter on a demolished structure at Chau Hiix.
Complex Deposits at Chau Hiix

here, as on most large buildings at Chau Hiix, artifacts of various types were left on the ground surface by later pilgrims; interestingly, although it is difficult to be sure under circumstances of such bioturbation, these offerings appear to have occasionally included things that were very old when they were deposited, and even things that were incomplete, such as partial vessels. To these offerings are added animal bone and snail shell dropped by birds, though of course it is possible that some of this detritus was also part of an offering or even the remains of an ancient picnic. And finally, for some reason tourists seem to believe it a kindness to archaeologists to collect artifacts during their tour of the site and place them respectfully in little piles for us to find. Some of these contemporary offerings were likely added to the surface of Minetti’s midden. Since so many of the artifacts Minetti recovered were similar, he decided to try to reconstruct vessels from this assemblage, hoping for an estimate of the number of pots represented, and looking for subtle differences in type and condition that might help separate items with different origins. Despite hours of effort by both Minetti and I, almost no refits were found.

Another complex deposit is under investigation by Sarah Wille. Hurricane damage knocked down trees all over the site in 2001, one of which uprooted a dense artifact scatter deposited over the remains of a demolished structure in the center of the main platform not far from Minetti’s midden investigation (Figure 5). In this scatter Wille has found the density of blackwares that is characteristic of Chau Hiix (Wille and Fry 2002), occurring with jade beads, shell gorgets, blades and cores of obsidian, bone needles and hairpins, human jaws, and whole conch shells stirred together by tree roots with a large number of undistinguished lithic tools and plainware vessels sporting a surprising number of mend holes. Since a mended vessel would not have the same utility as a whole pot, it seems logical that only vessels of some significance would be mended, so I have been surprised to find that it is mostly the ordinarily shaped redwares that were mended. I was also surprised to find so many old broken pots (sometimes incomplete) were offered with the exotic goods and the labor intensive modeled carved vessels that were broken in situ and mixed into this deposit.

Since the deposit is in the center of the main platform and was created not long before that platform was refurbished, I find the idea that these mended vessels were heirlooms, and therefore of special value, appealing. Such an interpretation resonates with the apparent Maya emphasis on ancestors that has been commented on by many archaeologists. But my less romantic graduate student Lydia Garver pointed out that the valuable thing might have been what was in the pot. Being required to give something to be smashed, a parsimonious person might pick the least valuable pot in the house and either cover its flaws with contents or smash it quickly concealing the fact that it was already broken. To quote Garver, “like those people who just pass their hand over the collection plate in church but don’t really put anything in.”

The important point here is that this deposit was probably created for a special purpose in what is arguably an elite context though it contains a mixture of artifacts that would not all be recognized as elite or special purpose goods, nor the artifacts were either contemporary or diagnostic. Wille is comparing the Chau Hiix deposit to those from other sites that appear similar by looking at the range of variation in vessels and other artifact types. She hopes to come up with a typology of special deposits, and perhaps a typology of middens.
A superficially simple type of deposit was investigated by Patricia Cook (P. Cook 1997), who focused on the distribution of carved shell. From the start of our work at Chau Hiix we have been surprised at the quantity of carved marine shell found on the ground surface. It now appears that shell ornaments were being manufactured at some parts of the sited during the last occupation, leaving the debris on the ground surface. Although shell is ubiquitous at Chau Hiix, it is somewhat more prevalent in deposits associated with large platform groups located within 100 meters of the site’s center. In fact, seven out of eight of these large centralized groups yielded evidence in shallow deposits of shell carving, including tool kits and unfinished pieces, in what appear to be activity areas located in the center of large platforms. The suggestion here is that rather than being forced to specialization by resource shortages or economic pressure, wealthy families were often those with sufficient household labor to allow them to diversify their production, which they do voluntarily.

Netting (1993) identified this strategy as characteristic of a smallholder economy, although I am particularly interested in evidence suggesting that some of the residents of Chau Hiix were smallholders, I am bothered by a simple assumption of house association attributed to the shell carvers, since I find it difficult to envision people making delicate ornaments in the middle of a busy house group, much less leaving their tools and materials where they would get kicked around and stepped on. I think it more likely people sat on uninhabited platforms, out of the way. But this means that it is impossible to date these superficial activity areas with associated domestic artifacts, since they may postdate the final occupations of the houses, which were mostly in the Terminal Classic and Early Postclassic. I do think these assemblages represent activity areas, simply because the same configuration of artifacts was found in roughly the same location on several platforms (P. Cook 1997).

Human remains seem to have been maintained in systemic context by the ancient residents of Chau Hiix (D. Cook 2002). The cavalier treatment of earlier interments by Chau Hiix people burying their more recent dead is contextualized by the fact that many burials contain extra bones. At the base of Structure 1, in a tomb covered by arcs of obsidian and chert flakes (Tomb 1), a 40 year old gentleman was interred with pyrite (Rosemary Joyce identified this material type during her reconstruction of the artifact) and hematite mirrors, jade, pearls, blades, and pots (Figure 6) at the end of the Protoclassic, but was disturbed in the Early Classic with the addition of a Teotihuacan style lidded vase and a neatly arranged pile of human bone that was substituted for his left leg bones (D. Cook 2002, Wrobel 2002). Portions of at least 12 individuals were included in the bone bundle; treatment and differential preservation suggested strongly to Cook and Wrobel that these were from previously interred individuals, not a primary inhumation. We speculate that the occupant of Tomb 1 provided a leg to go in someone else’s burial.

Figure 6. Artifacts from Tomb 1.

A similar pattern is evident in more ordinary burials, that along with Wrobel’s dental analysis (2002), suggests the sort of emphasis on hereditary connections to place,
which is another characteristic of smallholders. Of particular interest is the discovery of the interment of a mature male buried with the remains of a much older woman, and artifacts such as conch shell scoops and a bell-shaped axe indicating significant social status, despite his final destination in a rather undistinguished plaza group. He was laid to rest wearing a hair pin carved from a human femur. The glyphs on this artifact refers to the item itself as an ornament and record an important service done by a person named “Sky” for the ruler of Tamarindito. The more interesting thing about this discovery is the fact that this Classic Period object was buried in the Terminal Classic after it was almost 200 years old (R. Joyce pers. comm.). The inscription does not refer to the bearer, but to some important predecessor, and was no doubt kept in circulation until reference to Tamarindito no longer impressed anyone. In this case, Grant is apparently not buried in Grant’s tomb.

Discussions and Conclusions

Early recognition of Chau Hiix as a site with relatively little disturbance since its Postclassic abandonment encouraged us to begin many excavations with unrealistic expectations. Lack of evidence of recent looting promoted the assumption that we would have the luxury of intact deposits. Investigation of Structure 9 (Figure 1) provides a good example of the difficulties resulting from our failure to anticipate the complexity of the deposits we would encounter.

In late 1989 (the year Rudy Crawford, representing the Crooked Tree Village Council, first took me to Chau Hiix) and early 1990, a number of incensario fragments (Figure 7) and other interesting items such as jade beads, molcajete fragments, and tapir teeth were collected from the surface of Structure 9. A small disturbance to the east side of this tiny structure, which is itself only about 6-8 meters in diameter, was investigated in 1991 in an effort to date the final occupation of the site without unnecessary disturbance of its deposits. My aim was to recover stratigraphic data and datable artifacts from what was probably damage caused by a hunter pursuing an animal underground into the loose fill of the ancient construction. This cleanup effort revealed 2 complete Terminal Classic vessels immediately below the leaf litter and humus that was reforming at the base of the disturbance. In 1993, David Pendergast examined Structure 9 and surmised that the building itself was a Postclassic shrine made of cut stone robbed from the decaying facade of Structure 1. Since its casual conformation implied an expedient construction strategy, we proceeded to record and dismantle the upper layers, which had been dramatically displaced by a lineage of Cohune palms growing out of the structure’s center.

Figure 7. Fragmentary offerings from the surface of Structure 9.

We anticipated finding some sort of alignment at least at the base of the construction, and were sensitive to the
possibility that the feature might have more than one construction phase, since we knew that both Terminal and Postclassic material had been recovered in association with Structure 9. Consequently no stone was removed without careful exposure and recording, which meant that season after season, went by as we gradually proceeded with our investigation, ever hopeful of discovery but progressively more resigned to the fact that Structure 9 is most accurately characterized as a rock pile.

Despite its architectural shortcomings, Structure 9 has continued to reveal interesting items of material culture, most of which were originally surface offerings that presumably entered the interior deposits by the action of plants, animals, hunters and the force of gravity. The pottery recovered in 1990 from the base of the disturbance turned out to originate from the shallow interment of an adult male into the surface of the main platform during the Terminal Classic, presumably before Structure 9 was built (or, more accurately, piled). Testing on the western edge of Structure 9, in the hope of identifying a discrete building edge, encountered the remains of a disarticulated human skull, extremely poorly preserved and shallowly buried. It now appears likely that this burial dates to the final or nearly final period of Terminal Classic activity in the site center that was reoriented in the Postclassic when patterns of access and visibility were dramatically and intentionally altered (Andres 2004).

In 2001, continued investigation of Structure 9 discovered a seated burial intruded into the southern side. This interment was so close to the modern ground surface that the upper cranium was missing and the upper mortuary furniture was dislodged from its original context. Nevertheless, offerings from below the shoulder area were in situ and proved to be some of the most intriguing material thus far encountered from Chau Hiix’s Postclassic period (Figure 8), including a shell gorget with a graffito earth monster, a carved deer bone flute depicting profiled faces emerging from the mouths of a double headed serpent, *Olivella* shell tinklers (from around the ankles), a drilled dog tooth, a ladle *incensario*, and about a dozen articulated snake vertebrae (from around the waist).

Figure 8. Artifacts from seated burial in Structure 9.

In 2003, final removal of the stone pile and careful cleaning of the deteriorated platform surface onto which it had been placed, revealed evidence of two poorly preserved human skulls placed cranium down (palate up). These, with the skull recovered in 1990, suggest that Structure 9 was placed atop an area of the Terminal Classic platform that contained a ring of skulls; from their distance apart, we extrapolate that there were originally 7 or 8; future investigation may clarify this feature.

Structure 9, despite its single phase construction, has turned out to be a very complex deposit, which up to the final preserved stratum of the main platform represents a considerable sequence of events; beginning with the newest these include:
Complex Deposits at Chau Hiix

- Disturbance by natural processes, especially tree growth
- Disturbance of eastern side of structure and prone burial by hunters
- Postclassic offerings placed on surface of building: tapir head, animal teeth, jade beads, broken blades, smashed incensarios, marine shell (whole conch and carved beads)
- Postclassic seated burial with grave goods intruded into the southern edge of the building: flute, olivella tinklers, ladle incensario, jade bead, incised shell ornament, snake
- Construction of a “building” with cut stone and rubble taken from Structure 1
- Terminal Classic resurfacing of the central platform covering both a prone burial and skull circle
- A Terminal Classic prone burial with grave goods placed in the platform immediately in front of Structure 1: obsidian blades, a stingray spine, a chamfored blackware vase, and a redware bowl
- A circle of skulls placed on the Terminal Classic platform

The implications of these natural and cultural processes, bearing in mind that only those from the latest period of Chau Hiix’s occupation have been described, are serious for our understanding of the representation of deposits from any period, but especially the earlier periods. Archaeologists routinely analyze material culture by asking:

- What is it?
- How old is it?
- Where did it come from?
- How did it get where it was recovered?
- Was it buried as what it was made for, or with a different significance?

But we must also ask:

- How does its period of manufacture relate to its period(s) of use and the period of its final deposition?
- Why did this item, feature, or structure survive into the present?

Ideas about the continuity of the archaeological record, about the origin of complex, deposits, and about the meaning of juxtaposed material culture can only rarely serve as underlying assumptions to arguments about cultural process. Most ideas unfortunately must continue to be the bases of hypotheses requiring testing and verification before they achieve the status of accumulated knowledge of the behavior of ancient Maya people and the general outlines of ancient Maya culture. While the difficulty of disentangling the elaborate stratigraphy of an ancient urban setting occupied for 2000 years may be frustrating, it is exhilarating to realize that despite all our efforts, there is so much left to know.

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John Jex visiting Chau Hiix in his truck, and Jester Tillett making Creole bread in her Chau Hiix kitchen.

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EXPLORATIONS OF AN EARLY CLASSIC COMMUNITY AT CHAU HIIX

A. Sean Goldsmith

Fieldwork in the rural settlement of Chau Hiix, in north-central Belize, has uncovered evidence of a local community that dates primarily to the Early Classic period. Central to the fieldwork methodology is a systematic large-area approach to subsurface sampling, which has allowed the tentative identification of several house lots within this community, and has also enabled data collection at a scale appropriate to understanding household activity. Data derived from these house lots suggests that economic strategizing was not homogenous across the community, and may have lead to the differential accumulation of wealth by individual households. At the same time, these diverse economic strategies were socially integrated at the community level through public architectural construction and shared material values. The house lot-based approach to data collection offers a glimpse into the strategic decisions that created such grassroots communities at Chau Hiix and elsewhere.

Introduction

This article summarizes research I have conducted in the rural settlement area of Chau Hiix during the 1999, 2001, and 2003 field seasons. Termed as the Chau Hiix Houselot Project, this research was conducted under the larger auspices of the Chau Hiix Archaeological Project, directed by Dr. Anne Pyburn of Indiana University. My research at Chau Hiix is intended to improve our current knowledge of the extended site settlement area, and builds on the previous work of other researchers in the rural parts of Chau Hiix (Cook 1997; Cuddy 2000). Chau Hiix is situated in North Central Belize approximately equidistant from the larger Maya centres of Lamanai and Altun Ha (Figure 1), and lies on the western shore of the seasonally inundated Western Lagoon (Figure 2). Research at Chau Hiix to date indicates a relatively long period of occupation that stretches from the Middle Formative through the Late Postclassic. The political relationship of Chau Hiix to these and other nearby sites has not been clear, with the evidence to date suggesting a chronology of shifting alliances. The observation of an extensive network of hydraulic features in the vicinity of the site suggests the control of water resources for agriculture and aquaculture, postulated to be the economic mainstays of the city itself (Pyburn 2003). Research in the rural parts of Chau Hiix has the potential to contribute to the interpretation of its role in a regional setting, through the examination of archaeological materials reflecting economic choices, political connections, and the development and maintenance of local social identities.

The Chau Hiix Houselot Project

As the name suggests, the Chau Hiix Houselot Project has been based on a field methodology, which employs the concept of the house lot as a basic perspective for data sampling strategies. House lots include the built environment as well as large tracts of land devoted to gardens, outdoor productive activities, and the disposal of refuse. House lots may or may not be walled or contain other means of boundary marking. There may be several structures within the area of a house lot that are not used for residential purposes. A house lot may contain the members of a single household or many, but it is assumed that if multiple households are
present within a single house lot, they are bound to share a range of corporate activities.

Research at Mayapan (Bullard 1954), Sayil (Smyth et al. 1985), Coba (Folan et al. 1983), and other centres in the Yucatan has long suggested that house lots were a typical ancient Maya residential pattern. Current research at Mayapan (Hare 2002) is highlighting the utility of using house lot boundary walls to delimit analytical units for residential studies. The dispersed nature of most lowland Maya settlements invites the inference that, although presently buried by soil depths not observed in their northern counterparts, house lots (whether walled or not) likely surrounded surface-visible rural mounds across the region.

Ethnoarchaeological studies in the past twenty years suggest that house lot behaviour creates complex and often obscure patterns of material deposition (Deal 1985, 1998; Hayden and Cannon 1983; Killion 1990) and that refuse disposal, recycling, and removal in modern communities is at the same time intricate and highly idiosyncratic. Because house lot activities generate patterned material over large areas (Figure 3), it is unlikely that archaeological data derived from housemounds alone can allow fully meaningful discussion of daily social and economic practice at the household level. A house lot approach, on the other hand, tries to gather data from the same level of inclusiveness as the spatial behaviours that characterized the household. A few scholars have suggested that a house lot approach might be worthy of exploration (Bullard 1954; Tourtellot 1983; Alexander 1999; Becker 2001), but the practical field value of such a perspective remains almost completely untested in the Maya area (but see Robin 1999 for a significant exception).

The three seasons of the Chau Hiix House lot Project focused their attention on the rural areas to the north of epicentral Chau Hiix, and ultimately gathered data from a coherent cluster of surface remains that probably corresponds to a single local community. By examining material variability among the house lots within the cluster, my intention was to pry out clues to the nature of social negotiation among the non-elites of this part of the city. I have contextualized the results of my project in an explicitly agent-centred approach, and have focused in particular on the notion of how the often-overlooked strategies of non-elite agents may, over the long term, have influenced the development of sociopolitics within the ancient Maya state.
Figure 2. The site centre and mapped settlement of Chau Hiix.
The specific methodology of the project was a three-pronged approach which included surface mapping, systematic subsurface testing, and targeted test excavations. The intention of the work has been first to define the spatial configuration of house lots as they existed on the ground at Chau Hiix, and then to identify specific house lot elements within each on the basis of comparison to modern examples. I have then contextualized my interpretations of the data from subsequent targeted excavations by reference to that total house lot picture. The field methodology has been based primarily on systematic large-area subsurface sampling through the use of posthole augers. Augering is a method, which has proven very cheap and effective for subsurface sampling at sites around the world (Fry 1972; Percy 1976; Stein 1986; Howell 1993; Cannon 2000 and many others). By spacing the postholes at regular ten-metre intervals across a defined study area (Figure 4), my intention has been to avoid conscious attention to the surface mounds themselves, and to let the subsurface artefact patterns emerge independently of my preconceptions of where they should be. Certainly my expectation was that the visible mounds would mirror the patterning of artefacts to a large extent, but I left open the possibility that I would find densities of material not easily explained by direct reference to surface features.

Results of the Project

The data from the 2001 field season of posthole augering were fed into Golden Software’s Surfer software to visually
represent spatial patterning of artefact type densities. Figure 5 represents a comparison of lithic spatial patterning versus that of ceramic material. Areas of greater contour represent locations of greater artefact density; fewer contours reflect areas with few or no artefacts. The result is a dramatic illustration of the fact that, contrary to a homogenous dispersal of refuse around the edges of surface-visible mounds, artefacts are instead distributed in highly patterned clusters throughout the study area, including areas that are relatively distant from any of the features initially noted during surface mapping in 1999.

This patterning is similar to patterns of surface artefact scattering at sites in the Northern Yucatan where soil development is light. However, while surface walls define the house lots at Mayapan, for example, at Chau Hiix wall remains were not observed either on the surface or in any subsurface
Figure 5. Comparative spatial patterning of lithic and ceramic densities.
tests. As a result, house lot definition in the Chau Hiix Houselot Project area has been based entirely on the subsurface distribution of artefact densities. The tentative outlines of the house lots that incorporate visible architecture are shown in Figure 6. While patio-focused groups are usually assumed to define entire residential compounds on the basis of their architecture alone, the data illustrated in Figures 5 and 6 do not support that assumption. It is probable that the construction of enclosed patios served to create socially restricted spaces within house lot compounds, but the house lots themselves are shown by artefact patterning to have been spatially more expansive than their surface mounds indicate. Modern house lots invariably show the same trend: structures are situated within much larger areas that contain, among other things, pockets of refuse indicative both of domestic activity and the complex process of refuse discard (Hayden and Cannon 1983).

Figure 6 also shows that toward both the west and east edges of the study area, subsurface testing revealed concentrations of artefacts not directly referenced to surface mounds. It is suggested here that they are also the patterned refuse of house lots, but ones where the structural remains of their houses are virtually absent on the surface. (The western locality, termed M363, does, in fact, show a very subtle rise of terrain that excavation proved to be architectural, but the eastern one – M367 – lies simply on a low ridge with no surface indications at all.) The excavation of test-pits in those two areas revealed plaster floor and cobble fill layers typical of architectural remains throughout Chau Hiix, and strongly implicates both M363 and M367 as previously unsuspected house lots. If that is the case, then the total number of house lots in this small community was five, and not three as suggested on the surface. Population estimates do not figure to a large degree in my own research at Chau Hiix, but even so, increasing the house lot count in this small area by two fifths seems to me to have a strong implication for anyone making cultural interpretations on the basis of population estimates.

The third season of the project (2003) included the excavation of targeted test-pits in several locations within each house lot. The analysis of the ceramics demonstrated that all five were occupied primarily during the Early Classic, with the initial establishment of this local community probably late in the Late Formative Period.

Much of the emphasis throughout the Chau Hiix Houselot Project was to document material variability among these closely grouped house lots. The project was designed to explore the possibility that among the multiple causes of such variability, one of the key elements was latitude in action (cf. Dobres 2000:140) among the individual, entrepreneurial, creative, adaptive, and ultimately influential non-elites of this part of the city. Variability in architecture was apparent without any digging. The number and volume of component platforms is variable within the three surface-visible patio groups, with M314 being the largest. The addition of the two house lots not clearly identified by surface indications adds another element to that range of architectural variability. Surface exposures, on the other hand, seem to indicate that as far as masonry materials were concerned, the structures of the M328 house lot may have been built with the best stone. Not all of the above point in unilinear fashion toward a rank ordering of social standing by the occupants of one house lot as compared to another.

The testpit data provide another line of evidence for material variability (or in some cases, a lack thereof) among the house lots in the study area. Material “richness” is greatest in the M314 house lot, as evidenced
by significantly higher quantities of polychrome ceramic sherds, more obsidian, and more marine shell. This also happens to be the house lot with the greatest volume investment of architectural energy. But contrary to a straightforward rank ordering of architecture and refuse material, further examination reveals a somewhat greater complexity to the results. In this same house lot (M314), for example, the lithic debitage component includes the highest percentage of poor-quality local chalcedony. The presence of a significant quantity of debitage overall does suggest tool manufacture, but not using materials that were highly prized for their quality or exotic origin. The highest proportion of good quality and imported chert material came

Figure 6. Extrapolated boundaries of house lots and other features of the cultural landscape.
from the M331 house lot instead, one of the smaller house lots in the sample.

Quantities of polychrome ceramics in each of the remaining house lots were similar. Quantities of obsidian were also similar. But other differences are worth mentioning: there were substantially more net weights in the M314 house lot. There were many more mano and metate fragments in the vicinity of M363. The M367 house lot contained a significantly greater quantity of lithic debris among its refuse than its neighbours. Large and dense strata of freshwater shell remains were only found in the vicinity of the M328 house lot.

Tentative Cultural Interpretations

The passage from material to interpretation, from the tangible to the abstract, is a roadway fraught with uncertainty, and in this article only the briefest of outlines is offered, as follows. The M314 house lot seems to exceed its neighbours in the disposition of exotic materials and fancy polychrome ceramics, and one interpretation would suggest that its occupants were more engaged in a political network that included the elites of the site centre than were the other house lots of the community. Alternatively, however, a link between increasing quantities of refuse (whether fancy or otherwise) and duration of occupation would weaken that argument, if it were shown that the M314 house lot was established early and occupied longer. Current analysis of the ceramics of the project overall does not reveal fine-grained distinctions in the roughly Early Classic period occupation for all of the five house lots in question, but the M314 house lot is the only compound with a completely enclosed patio – a suggestive point if referenced to studies that posit a connection between developmental cycle and patio compound construction (Tourtellot 1988).

The data from the other house lots invite further interpretations. The M328 house lot is physically connected to what is suggested here was a public area that may have been used for the maintenance of social bonds at the local level, and so the role of the householders here may have been special in some way connected to that. The modesty of the architecture within the M363 house lot seems belied by the presence of the highest ratios of serving vessels to total house lot ceramic assemblage, although I leave open the possibility that wealth is not the only reason why a house lot might have high numbers of serving vessels. The M331 house lot contained the highest quantity of lithic tools imported from outside the city, a fact that may reflect greater external economic ties by these householders.

It is hard to place these different lines of material evidence into a linear ordering of rank, wealth, or position, and such an effort might lead us into something of a blind alley in any case. The multivariate strings which inter-related the different strategies of the people who lived in these five house lots may be best explained from the perspective of heterarchy, a concept which has already been shown to have a concrete utility in social reconstruction (Crumley 1995; Potter and King 1995). A heterarchical perspective allows us to view the non-elite agents of Maya society as acting in a variety of interests, and making choices for household action which may at times have been economic, at other times political, at other times religious, or even sentimental, greedy, hungry, lazy, traditional, emulative, reactionary, and just plain irrational. Household strategies may at times have been self-serving or at other times highly altruistic, sometimes beneficial and occasionally disastrous.

Thinking about people as agents is important because it allows us to explore the probability that people are not automatons, and that households in the ancient world
were not simply adaptive receptacles to cultural change, as our popular systems models have gotten us accustomed to thinking. It is easy to think of people living in black boxes, but agents aggressively force their way into our interpretations of what made society run. In the case of the data that have come out of the Chau Hiix Houselot Project, it is possible to build a tentative model in which a cooperative strategy among several households lead to the construction of a local community identity. This community was probably held together by public ritual and events, and made economically successful through the diverse but mutually integrative strategies developed within each household. In the politically volatile Early Classic Period, when power inequalities were becoming more pronounced in Maya society than ever before, the strategic creation of local corporate neighbourhoods would very likely have served as a grass-roots counterpoint to that power in ways that were beyond the wherewithal of individual households. In these local communities, the balance of power would likely not have been distributed equally among all member households, nor indeed, among the members of any one household. Certainly in the case of this particular Chau Hiix community, material variability evidences probable inequalities in the accumulation of wealth among the households there during the Early Classic period, a situation that likely relates to the differential success of strategic decisions made within the households themselves. What kept these small communities together, though, was the conscious recognition by all members that corporate activity was more successful than individual effort, even if it meant the sacrifice of a certain amount of agency for most of the members of the group.

The suggestion of grassroots agency is an expansion from more traditional models of Maya civilization, which have placed most (if not all) civilization-shaping power in the hands of the elites, who controlled production, politics, and settlement, and who manipulated ideology to keep the peasantry in line. Admittedly, there can be little doubt that the priorities of a self-promoting elite were influential. The mechanism through which elites exercised their authority, furthermore, likely included the insertion of lesser elites into rural communities as local cacique administrators. Such a strategy is at least potentially implicated in the nodal distribution of large architecture throughout the rural settlement areas of many lowland sites (Arnold and Ford 1980; Smyth et al. 1995).

But what of the smaller “local” communities, like the one in which the Chau Hiix Houselot Project collected its data? While two-tiered models of elite-commoner politics still seem entrenched in the current interpretive paradigm, in almost no cases where substantial settlement research has been conducted do rural excavations suggest a homogenous low-level of access to wealth across the board. Traditional models interpret nodes of power as indicative of a top-down political control infrastructure, with local community leaders responsible for feeding an elite political economy, and all probably related to the elite by some direct kinship. The model proposed by the Chau Hiix Houselot Project suggests that the creation of social structures within small local groups was tied to the strategic decisions of householders with a vested interest in their own communities. There are, certainly, few indications that any of the Chau Hiix Houselot Project households enjoyed an “elite” status, since the material remains of no one house lot stand out in remarkable fashion from the others. All appear to have been involved in a range of domestic activities that suggests it was...
necessary for each household to support itself – small-scale lithic production, agriculture, food preparation, and so on. All had access in some way to exotic goods – obsidian, marine shell, and polychrome ceramics, but none of the house lots far outstrips all the others in the quantities of these types of materials in their domestic refuse. There are definite differences among the material assemblages of each house lot, but these appear mainly to reflect variations in the nature of the domestic economy. Differences in the quantities of wealth indicators (such as fancy serving vessels), do exist, but as ratio differences which are more subtle than one might expect between elites/sub-elites on the one hand, and commoners on the other.

Conclusions

Naturally the non-elite agents of Chau Hiix did not exercise total control over the course of history at that city, and it has not been my intention to argue that point. There is some good evidence that the Early Classic co-opting of political power by these savvy farmers did not survive long into the Classic Period. The households of my small area of Chau Hiix appear not to have been occupied during the Late Classic. Excavations by others at the site seem to suggest that the consolidation of elite power in the site centre during the 5th to 8th centuries AD swept away the earlier non-elite infrastructure and drew most wealthy non-elites into close proximity to the monumental core of the city.

The settlement of Chau Hiix is sharply contained a north/south strip on the shore of the Western Lagoon, and echoes the spatial extent of fertile soils there. That settlement boundedness supports Pyburn’s (1998) assertion that the city of Chau Hiix was fundamentally founded in an agricultural surplus economy rather than one based primarily on specialized goods or services. It is not clear how the production of agricultural surpluses at Chau Hiix mitigated power relations between this city and other nearby centres like Altun Ha, and this is a question well beyond the scope of the Chau Hiix Houselot Project. What is of more immediate interest here is the process by which the agents of production (those being the rural householders) negotiated elements of the political economy among themselves and between commoner and elite priorities. The material correlates of agency are difficult to discern in the archaeological record at the best of times, but we can improve our chances by using a spatial unit of analysis that reflects daily practice at the household level. The house lot approach as developed and used here illustrates how that goal may be operationalized in a practical field methodology.

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Recent archaeological data is expanding our understanding of the Early Classic in southern Belize. Long considered backwaters, we now know the region had ties to the Peten, the Belize Valley, and Stann Creek. Epigraphic data from Uxbenka indicates it may have been allied with Tikal during the Early Classic. A newly investigated Early Classic site, Ek Xux, appears more closely linked to rural Early Classic polities near the Stann Creek Valley. With the arrival of the Late Classic, both the population and the number of communities grew rapidly. Data indicate these may represent new ethnic groups moving into the region.

Introduction
Despite nearly a century of archaeological work in the region, the Early Classic period in Southern Belize remains poorly defined. Until recently most discussions of this period (AD 200-500) centered on epigraphic and iconographic analysis of monuments from two sites, Uxbenka and Pusilha, as well as limited data from a handful of cave sites (Prüfer 2002). We now know that another center, Ek Xux, located in the Maya Mountains was occupied during the Early Classic and there is growing evidence that Pusilha may not been heavily developed prior to the fifth century (see Bill and Braswell, this volume).

In this paper, I discuss the current state of archaeological knowledge on the Early Classic Maya presence in southern Belize and its implications for the extraordinary growth of regional Late Classic populations. Clearly, Southern Belize had a meager beginning, but grew to be an important region for resource exploitation and a home to several important polities. I suggest that the population of southern Belize was not, over time, homogeneous, but instead composed of different, possibly competing, ethnic groups. Early Classic immigrants formed small populations that were relatively stable over time. The Late Classic growth appears related to the movement of new groups into the region, and resulted in rapid peopling of new sites, that in some areas eclipsed the earlier populations.

The Early Classic developments in southern Belize set the stage for the later explosive growth of a region rich in important economic resources which were in demand at urban centers across the Maya lowlands. Southern Belize is home to a number of different ecological zones and resources vary from local to local. The distribution of sites across coastal, lowland, and montane landforms in southern Belize indicates specialized exploitation of localized resources (Graham 1987; McKillop and Healy 1989; Prüfer 2002). For example, the hills around Uxbenka contain some of the richest soils in the Maya lowlands and may have been important for cultivation of cacao and other agricultural products (Wright et al. 1959: 146). Geological and botanical resources from the volcanic Maya Mountains may have played a role in the development of montane sites (Dunham and Prüfer 1998). Riverine access to the coast may have facilitated trade between southern Belize and other regions (McKillop 1996). Thus the landscape may have functioned as a commodity. With the Maya Mountains representing the largest
relief feature in the Maya Lowlands, the cave-riddled massif would have undoubtedly drawn religious pilgrims from some distance, a proposal supported by the wide range of foreign materials found in cave contexts (Prufer 2002). Indeed, some of the best archaeological evidence for Early Classic interregional interaction comes from ceramics recovered from cave contexts. Unfortunately, given the elusive nature of Early Classic settlement (and a paucity of archaeological research) there are few vantages from which to analyze the Early Classic developments in southern Belize. This paper focuses on the two sites that have confirmed Early Classic components: Uxbenka, located near the western border along the Rio Blanco, and Ek Xux, located in an upper drainage of the Monkey River (Figure 1). Both sites present different data sets. At Uxbenka there is the earliest iconographic evidence for Maya settlement and political interaction in southern Belize. At Ek Xux there is archaeological data, supported by radiocarbon dates, from both the site and nearby caves, indicating a substantial Early Classic presence.

The Populating of Southern Belize

The Early Classic in southern Belize is best examined in the context of its meager beginnings as well as though developments in neighboring regions. If a Preclassic population resided in southern Belize we have no evidence of their settlements. Both Leventhal (1992) and Dunham (Dunham and Prufer 1998) speculated that there may have been indigenous groups living in the area prior to the Classic Period, though no supporting evidence has been produced to date. It does seem likely that this rich area was not vacant. To the north, in the Stann Creek drainage and along the Placencia coast, there is clear evidence of settlements beginning in the Middle Preclassic and extending through the Postclassic (Graham 1994). The Late Classic materials from Stann Creek differ considerably from those excavated at sites in southern Belize (Prufer 2002), indicating that there is little linkage during that time period. However, ceramics recovered from cave sites in the Maya Mountains clearly indicate Preclassic visits by Stann Creek residents (Prufer 2002: 278, 387), which makes sense given the proximity of the two areas.

Figure 1. Southern Belize sites mentioned in the text.

In the southwestern foothills of the Maya Mountains in the Peten, the Atlas Arqueológico de Guatemala documented a number of Preclassic settlements suggesting the presence of stratified rural communities by at least AD 100 (Laporte 2001). While the southern Peten, like southern Belize, was densely populated during the Late and Terminal Classic periods, only a few sites have even ephemeral evidence of Early Classic Tzakol ceramics (Laporte 2002). At some sites Early Classic assemblages were best defined in cave contexts, which are
generally small and associated with communities (Laporte 1996a). In Naj Tunich Cave, a major pilgrimage site with a long history of elite use, Early Classic ceramic assemblages were not as robust as those from the Preclassic, Protoclassic, and Late Classic (Brady 1989: 207). The general lack of Tzakol ceramics at surface sites and in some caves may not point to an absence of 4th through 6th century settlement in the area. Across the western Maya Mountains of Guatemala, including sites along the Rios Machaquila, San Luis, and Pusilha, Preclassic ceramics persist well into the Early Classic, marked by what Laporte calls the “Peripheral Chicanel” sphere (2001: 17), defined by continued use of Chicanel combined with limited adoption of Tzakol orange wares or flanged forms (which may have been considered exotic) and foreign trade goods.

Laporte sees the appearance of pottery associated with the Tzakol ceramic sphere as evidence of interaction between large centers in the northeastern Peten, primarily Tikal and Uaxactun, and rural elites in the hinterlands (Laporte 1996b: 261). However, these rural communities appear to continue using Chicanel waxy wares through much of the Early Classic, a time of increased outside influences, while Tzakol ceramics are infrequent, even in typical “elite” contexts, such as tombs and caches. Eventually Chicanel gave way as sites became full participants in the stelae tradition and regionalized ceramic spheres that characterize the Lowland Late Classic (Laporte 2001: 28). Laporte’s accounts correlates with outward expansion of Tikal’s influence to the southeast (Mathews 1985). As Tikal rose as a “dominant power in the Maya Lowlands” during the Early Classic, it expanded its influence southward during the late fourth century, eventually extending its influence to Copan and Quirigua by AD 426/427 (Sharer 2003: 320, 322) and indeed may have been instrumental in the founding of both Quirigua and Copan (Sharer 2002). Throughout this time period it is likely that Tikal increased its economic and political influence in the southern Peten, likely consolidating networks of tribute and loyalty throughout those sites on the western fringe of the Maya Mountains and into southern Belize. Despite this expanding influence, few Early Classic Tzalkol assemblages have actually been found. It may well be that local ceramic traditions based on Chicanel and other waxy wares gave way not the full blown Tzakol traditions but to other local ceramic types, such as Ixobel Orange a common Early Classic ware from Naj Tunich Cave in southeastern Peten (personal communication, James E. Brady, May 2004). It is also possible, as suggested by Rice and Culbert (1990: 23) that Early Classic sites may sometimes be ephemeral or obscure, with poorly defined settlements and contexts, perhaps due to smaller more mobile populations and perishable structures.

In southern Belize the search for the Early Classic has also been elusive. Uxbenka, along with Pusilha and Ek Xux are the only surface sites known to have settlements that predate AD 500, though cave investigations in all areas of southern Belize have produced Preclassic and Early Classic materials (Prufer 2002). It may well be that the relative isolation of the region played a role in producing a unique developmental trajectory. Southern Belize is circumscribed geographically and difficult to access, both now and in the past. To the north it is bounded by inhospitable pine-barrens, to the west by the formidable Maya Mountains, to the south by the swampy Temash and Sarstoon River basins, and to the east by the Caribbean Sea. Though it would be imprudent to suggest that these geographic features posed barriers to communication or trade, they may well have
Early Classic Southern Belize

served as impediments to social contacts in the past, much as they did during the 19th and 20th centuries (see Thompson 1930). For residents of the Peten, southern Belize is most easily accessed through a passage from the low hills into the southern Peten (Hammond 1978). The passage runs directly by Uxbenka, and is may have been a factor in the founding and long occupation of the site.

Whether Pusilha had a notable Early Classic component seems increasingly unlikely (see Bill and Braswell, this volume). Excavations at the site going back a century have produced a substantial body of data, almost all related to the Late Classic (Braswell et al. 2003; Joyce 1929; Joyce et al. 1928; Leventhal 1992). Two monuments, Stelae C and Z may date stylistically to the very end of the Early Classic and Stela K, a Late Classic monument, refers retrospectively to an event that occurred in AD 159, though the nature of this event, or if it directly involved Pusilha, remains undetermined. While numerous Early Classic ceramics have been recovered from caves (Joyce 1929) in the area around Pusilha, none were recovered during Braswell’s 2001 and 2002 excavations at the site (Braswell et al. 2003: 96). It is possible that local southeastern Peten ceramic complexes may differ from the northern Peten, and as such we may not yet know what the local Early Classic looks like. However, the lack of waxy preclassic ceramics may indicate the area around Pusilha was settled later, sometime after AD 400 (see Wanyerka, this volume).

Uxbenka represents the earliest known site in southern Belize, although this assessment is based almost entirely on stylistic dating of monuments documented in the site core. The site itself is diffused across a series of low hilltops in a wide valley cut by the Rio Blanco. The valley is part of a corridor between steep limestone ranges that links the littoral plain of southern Belize to the Peten in Guatemala, located approximately thirteen km east of the Uxbenka. This valley represents the easiest means of foot travel between southern Belize and the Maya Mountains and neighboring regions to the west, a point discussed by Hammond (1978). Uxbenka itself consists of several architectural hilltop groups. The largest and best known was home to three-dozen stelae, at least twelve of which were carved (Figure 2). Of these, the vast majority date to the Late Classic, but three are early and represent the oldest evidence of settlement and political complexity in the region. In addition, they provide compelling data that, during the Early Classic Period, Uxbenka had close ties directly to Tikal at the time of Tikal’s most rapid expansion. Uxbenka Stela 11 has been

Figure 2. Plan of the Stela Plaza at Uxbenka (base map courtesy of Richard Leventhal).
K. Prufer

stylistically dated to between 8.16.3.10.2 and 8.17.1.4.12 (A.D. 360-378) and records the name and possibly the death of the final ruler of the first Tikal dynasty: Chak Tok Ich’aak I (see Wanyerka, this volume). Two other stelae, 18 and 21, date between 8.17.0.0.0 and 9.0.0.0.0 (AD 376-435). While the nature of the contact between these sites remains undefined, it is clear that the earliest political statements out of southern Belize speak to relationships between the early Tikal dynasty and this hitherto unsettled region.

To date, this epigraphic data from Uxbenka has not been confirmed with corresponding archaeological data. In 1984 the Southern Belize Archaeological Project (SBAP), under the direction of Richard Leventhal, surveyed portions of the site (Leventhal 1992). SBAP returned briefly in 1989 and 1990 to conduct limited off-structure excavations, including extensive test-pitting in the main plaza. However, the identification of the Early Classic component at the site proved quite elusive despite the intensive test pitting carried out. With the exception of very small amounts of diagnostic materials in fill, no Early Classic contexts were identified, and no Early Classic material was recovered from the stela plaza group. The ephemeral nature of the Early Classic contrasts with the substantial Late and Terminal Classic occupation, which is defined both by the remaining nine carved monuments and extensive architectural features and several dedicatory caches.

The only other site in southern Belize that is, as yet, known to have an Early Classic occupation is Ek Xux, located in the Maya Mountains along a tributary of the Bladen Branch of the Monkey River. The Bladen Branch is home to a number of sites that have been mapped, but are otherwise uninvestigated. Rugged and remote, the Maya Mountains constitute one of the last regions in the Maya area to be explored (Dunham 1996). The only prominent range in the lowlands, it has the highest rainfall and coolest temperatures. Largely a carbonate massif overlaying older igneous formations, the region is home to a variety of biological and mineral resources unavailable elsewhere in the lowlands (Dunham and Prufer 1998). These include materials for grinding stones (volcanics in the Bladen and granite in the Cockscomb Basin), pigments (hematite, limonite, goethite, and manganese oxide), high quality travertine and pyrite, and a range of plants including extant groves of remnant cacao trees. The Ek Xux valley is extremely fertile and largely composed of soils derived from volcanic materials from the mountains to the north and carbonates from the hillsides.

The site of Ek Xux consists of 189 nucleated structures in a small valley ringed by mountains. Only five structures at the site have been excavated, yielding primarily Late Classic materials. The earliest known context at Ek Xux comes from Structure 23, where a cache found on a burned and buried floor produced several heavily eroded black and red on orange bowls and dishes similar to those identified by Smith (1955: Fig. 30) for Uaxactun, and a single diagnostic Early Classic “shoe-pot.” Radiocarbon dates from associated features produced two dates of AD 240-440 (AA 40672) and AD 530-670 (AA 40674). Other radiocarbon dates placed elsewhere from test-pits produced a range of dates from extending 1500 BC to AD 1950, making them difficult to reconcile with the ceramic data (Kindon 2002).

Both radiocarbon dates and ceramics from a dozen caves literally surrounding the site indicate an Early Classic through the Late Classic presence at the site, as well as possible ties to Stann Creek sites to the north (Figure 3). Particularly interesting are a number of Petroglyph Red-rimmed jars identical to those found in the Stann Creek
Early Classic Southern Belize

Further, a large number of sherds from partially slipped and striated jars date to the late Protoclassic or early Tzakol 1 period based on comparison with materials found in the Stann Creek Valley (Graham 1994: 157-160). Caves also yielded a Protoclassic Caribal Red bowl like those from Naj Tunich (Brady 1989: 173), numerous fragments of Aguacate Orange jars, and several Paso Caballo Waxy ware sherds diagnostic in the Belize Valley (Gifford 1976: 129-130, 85-101). Ties to the Stann Creek Valley sites should not be seen as surprising. That region sustained the largest Preclassic population with which Ek Xux could have maintained regular contact, based on proximity and ease of travel.

The occupation of Ek Xux appears to have persisted into the late 7th or early 8th century (Prufer 2002). Sometime around the beginning of the 8th century less than two kilometers from Ek Xux a new site, Muklebal Tzul, was founded. The new site quickly eclipsed Ek Xux both in terms of size and complexity. Excavations at Muklebal Tzul and surrounding caves produced Late and Terminal Classic assemblages that showed clear links to the Belize Valley. Though Ek Xux and Muklebal Tzul may have briefly coexisted, it appears the founding of Muklebal Tzul coincided with the decline of Ek Xux and the rise of what became the largest Late Classic site in the southern Belize.

Social Identity in Early to Late Classic Southern Belize

A number of facts suggest that more than one group originally settled Southern Belize during both the Early and Late Classic, and that these groups were markedly different. During the Early Classic Uxbenka may have been settled as an offshoot or by exiled members of the Tikal dynasty, which ended with the death of Chak Tok Ich'aak I. While excavations at the site have yet to produce substantial material evidence of links between the Peten and Uxbenka, the iconographic evidence is compelling. Cave sites to the north of Uxbenka, near the headwaters of the Machaquila River and the border of Guatemala have produced numerous examples of Tzakol ceramics (Prufer 2002: 226), including several Dos Arroyos polychrome bowls that may have formed a type of Peten-centric currency during the Early Classic (Reese-Taylor and Walker 2002: 107).

In the Maya Mountains, Ek Xux was settled during the Early Classic and persisted as a small yet important center until the middle of the 8th century. Ceramic data from the site and nearby caves indicates this region was utilized by Stann Creek residents as far back as the Late Preclassic and there is little evidence of contact between the Maya Mountains and the Peten during the Early Classic. Like small polities in the Peten, this region may be seeing local Preclassic variants persisting well into the Early Classic. Contrasting this is the ongoing presence of contact between Ek Xux and the Belize Valley, with economic ties that appear to strengthen throughout the Classic, culminating with the abandonment of Ek Xux.

Throughout the Late Classic the social fabric of southern Belize was in a state of constant growth and flux (Figure 4). In the littoral plain, the foothills, and in the Maya Mountains the expansion of existing sites and appearance of new centers was nothing short of explosive. Sites with monuments along a series of ridges near Uxbenka carry no mention of Tikal or the northern Peten dynasties. At Nim Li Punit three-dozen monuments were erected, four of which contain references to an Ik' Xukpi?

Figure 3. Early vessels from caves surrounding Ek Xux. Protoclassic Caribal Red bowl (a) Late Preclassic Uaxactun Unslipped (b), Aguacate Orange jar (c), and Paso Caballo Waxy Ware (d-g), unspecified Late Preclassic or Early Classic striated jar fragments (h) and Late Preclassic waxy jar fragments (i).
Ajaw, (Copan lord), a royal title restricted to Copan. These monuments also make reference to a location known as the Ux Witik, a Copan toponym, and to a Copan Ajaw who was present at Nim Li Punit for a monument dedication ceremony (Grube et al.1999). At Pusilha, Late Classic monuments make numerous direct and indirect references to Copan and Quirigua (Guenter 2001: 9-10; Marcus 1976: 45).

Unfortunately, the Late Classic monuments from Uxbenka are too fragmentary or eroded to interpret. Interestingly, limited excavations at Nim Li Punit, Lubaantun, and Uxbenka have not produced any material evidence of links between southern Belize and the Copan or Quirigua, though a few of the Late Classic polychrome ceramics from Pusilha have decorative elements that may have their origins in the southeastern Maya area (Braswell et al. 2003).

In the Maya Mountains there is neither Late Classic inscriptions or ceramics that would indicate any ties with the southeast, including those materials recovered from almost 75 cave sites (Prufer 2002, Prufer et al. 2003). Ek Xux’s neighbor, and likely successor for prominence in the Monkey River drainage, Muklebal Tzul has associations related to Lubaantun and the Belize Valley. With the eventual abandonment of Ek Xux (following the rapid growth of Muklebal Tzul) the Maya Mountains began to more closely resemble its idiosyncratic Late Classic neighbors in the rest of southern Belize.

Several dramatic differences exist between Ek Xux and Muklebal Tzul, particularly in terms of architecture, mortuary practices, and the use of nearby caves. Mukelbal Tzul is dispersed over several long ridges, while Ek Xux is nucleated around a central plaza in an alluvial valley. At Mukelbal Tzul, all structures have sub-surface chambers, many of which functioned as tombs. Conversely, at Ek Xux, excavations in residential buildings failed to produce any evidence of burials, though a series of nearby rockshelters appear to have been used repeatedly as cemeteries. These may indicate that Muklebal Tzul was settled by new social or ethnic groups entering the region during the Late Classic. Overall Muklebal Tzul fits well with other Late Classic sites in southern Belize which share a number of features which have periodically been pointed to as defining the “southern Belize” region (Braswell 2001; Hammond 1975; Leventhal 1990, 1992; Prufer and Wanyerka 2001). These include: walled and enclosed ballcourts; modified hillside and terrace facades meant to imitate labor-intensive architecture; sequential tomb use; a general lack of corbelled arches; and no stone superstructures. These features are absent at the earlier site of Ek Xux.

Conclusions

Prehistorians have generally assumed that the Early Classic in southern Belize was confined to the area around Uxbenka and Pusilha, both situated along well-established trade routes into the Peten (Figure 4). However, recent archaeological investigations in the Maya Mountains suggest a far more robust Early Classic, revealing interactions with neighbors near and far. At the close of the Early Classic southern Belize underwent a series of demographic and political disjunctions reflected in rapid population increase and the appearance of a number of new polities, likely representing the movement of ethnically foreign groups into the region. While the causes of these movements into the region are tied up in the larger macro-Mayan growth phenomena called the Late Classic, they are reflected locally in settlements near valuable resources and along excellent trade routes and participation in pan-Maya trade.
Uxbenka was the founding center in southern Belize and persisted until the Terminal Classic, reflecting the entire span of the Classic Maya settlement in the region. Early on it appears to have been closely linked to Tikal and the expansion of Peten-centric influences across the Lowlands. The Late Classic interactions of Uxbenka are not well understood. Its closest Early Classic contemporary in Belize was Ek Xux, which may in turn have been settled by neighbors to the north. Ek Xux persisted, but with little growth, for several centuries until the appearance of a new and possibly foreign group that settled less then 2 km away. At Mukelbal Tzul, clearly this site was part of the larger regional and pan-Lowland changes occurring during the 7th and 8th centuries. Spurred by internal growth and external interest in its economically important resources, southern Belize became an important regional zone, exporting resources across the Mundo Maya.

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12  EPIGRAPHIC EVIDENCE OF MARCO-POLITICAL ORGANIZATION IN SOUTHERN BELIZE: A VIEW FROM THE EARLY CLASSIC PERIOD

Phillip J. Wanyerka

The southern Maya Mountains, located within the Toledo and Stann Creeks Districts of southern Belize and adjacent Dolores and Poptun region of eastern Guatemala, was once considered by some archaeologists to be relatively unimportant in the overall development of Classic Maya civilization. Yet, this region contains a multitude of important natural resources found nowhere else in the Maya Lowlands. To date, archaeologists have now identified more than 200 surface sites in the southern Maya Mountains region suggesting it was heavily occupied during the Classic Period. Given the variety and highly restricted distribution of the resources, along with the complexity of sites within this region, strongly suggests that resource procurement and exchange may have been the socio-economic and political stimulus for the development and growth of polities and trade routes in southern Belize. Recent epigraphic evidence from Uxbenka, one of the earliest sites in southern Belize, now provides an intriguing and tantalizing glimpse into the early dynamic nature of secondary “hegemonic” states. This new evidence suggests that the Early Classic rulers of Uxbenka may have been participants in Tikal’s early formation of a macro-political or hegemonic system. This paper will discuss the current epigraphic and archaeological evidence surrounding Uxbenka’s developmental history as well as discuss the critical role of the southern Maya Mountains region in the formation of Classic Maya macro-political states.

The Southern Maya Mountains Region

The Southern Maya Mountains Region, located in the Toledo and Stann Creek Districts of southern Belize and adjacent Dolores and Poptun region of eastern Guatemala, was considered by some archaeologists to be unimportant in the overall cultural development of Classic Maya civilization. However, archaeologists have now identified more than 200 surface sites in the region. Many of these sites’ economic activities appear to be tied to resource exploitation and exchange (Dunham et al. 1989; Graham 1987, 1994; Hammond 1975; Laporte and Mejia 2000; Leventhal 1990, 1992; MacKinnon 1989; McKillop and Heally 1989). The archaeological evidence suggests that the Southern Maya Mountains Region were heavily occupied during the Classic Period. Numerous sites have been identified that feature elite groups with specialized areas or workshops that appear to be the loci for intensive resource processing for the manufacture of specialized resources (Prüfer and Wanyerka 2001). Research conducted, by Marc Abramiuk, of the Maya Mountains Archaeological Project (MMAP), has suggested that Lubaantun may have been a central distributor of vesicular basalt artifacts for the region based on macroscopic examination of ground stone tools (mano and metates) from numerous sites throughout Belize (2004:65). Abramiuk’s research also proposes that a flourishing network of both intra/inter-regional exchange was taking place in the Bladen Drainage involving the manufacture and exportation of volcanioclastic artifacts. It appears that the sites of Quebrada de Oro, Ramos Quebrada, and the RHF Site were most likely the agents responsible for exporting most of the volcanic artifacts coming out of the Bladen region. Furthermore, he suggests that volcanics found outside the Bladen region came from
mountains range in the southeastern Maya Lowlands and they sit atop an ancient uplifted geological fault composed of Late Paleozoic sedimentary and volcanic rocks belonging to the Santa Rosa Group (Abramiuk 2004:53). Among other resources, there are huge deposits of granite, volcanics, volcaniclastics, mudstones, siltstone, and limestone used for grinding stones; pyrites, slate, and hematite for mirrors; high quality clays for ceramics; and a host of other minerals for pigments. Chert and obsidian are two resources noticeably absent from the geological record of the southern Maya Mountains. Nearly all of the obsidian found at sites throughout the Maya Mountains have been sourced through neutron activation or x-ray fluorescence to three distinct sources: El Chayal, San Martin Jilotepque, and Ixtepeque, all located in the Highlands of Guatemala (Graham 1994:90; McKillop and Jackson 1989:62). Trade and exchange appears to have been an important economic and political mechanism for the rise and prosperity of sites in this region. Given the wide variation in the distribution and appearance of both local and non-local natural resources in this region suggests that resource procurement and exchange may have been the main economic stimulus for the development and growth of polities and trade routes in the Southern Maya Mountains Region.

The Site of Uxbenka

Uxbenka or “Old Place” (Figure 1) as it is known to the local Mopan Maya, was discovered in 1984 by the Southern Belize Archaeological Project (SBAP). Located near the modern village of Santa Cruz, some 15 km east of the Guatemala border, the site is spread atop a series of steeply sided north/south ridge tops that form the southern foothills of the Maya Mountains. Outlying portions of the site, known as Santa Cruz North and East, were previously reported by

![Figure 1. Plan Map of Uxbenka’s Central Stela Plaza (Modified after Leventhal 1992: Figure 11.1).](image-url)
Hammond (1975:289-290) in 1971 as part of his comprehensive archaeological investigations of Lubaantun. Unfortunately, the SBAP conducted only limited archaeological investigations in 1989 and 1990. Nearly all of their efforts were aimed at investigating the central stela plaza where the remains of more than twenty-two stelae –three Early Classic in origin– were identified (Leventhal 1990, 1992). Based on the architecture, the appearance of a royal tomb, and the number of stelae, the stelae plaza group itself appears to be the ceremonial core for Uxbenka’s ruling elite. The stela plaza group is situated atop a steep natural hill that has been intentionally modified to create the illusion of a larger labor-intensive construction. The entire south face of this hilltop has been artificially faced with large rough-cut stones. A central stairway leading up from the south end of the plaza is the only access to this group. The hilltop itself was leveled to create a large open plaza area and is surrounded by six irregular-placed structures (Strs. 1-6), the largest of which is Structure 1 located to the north that features flanking east/west terraces.

All of the stelae at the site are in poor condition, having suffered the ill effects of looting and continued exposure to the elements. The majority of the stelae appear to have been erected along two east/west lines facing, outward to the south, in front of Structure 1 (Figure 1). A third line of monuments was also erected along the west side of the stelae plaza, stretching along the eastern face of Structures 2 and 3. Two additional stelae were located along the south face of the medial terrace leading up to the stelae plaza. In total, there are eleven carved stelae at Uxbenka, most of which date to the Late Classic Period. In addition, there are ten miscellaneous carved sculpture fragments, most of which appear to be Early Classic in origin (see Wanyerka 2003, 2004). It is also critical to note that there are more than 80 broken monument fragments scattered around the stela plaza. Unfortunately, most of these fragments have been moved from their original locations, but given the inordinate number of stelae and stelae fragments at the site suggests that Uxbenka, like its neighbor Nim Li Punit, were notorious monument builders.

**Early Classic Evidence of Macro-political Intrusion in Southern Belize**

Both archaeological and epigraphic evidence confirms that Uxbenka, like many of its Early Classic neighbors in the central Peten, emerged on the political scene during the late 4th century. The emergence of Uxbenka as a primary, emblem glyph-bearing polity, corresponds directly to the sudden emergence and prosperity of Tikal as the preeminent hegemonic power of this era. The presence of subordinate glyphic expressions on several monuments erected at sites located in the environs of Tikal, like Bejucal, El Zapote, Uaxacatun, Uolantun, Xultun, and Yaxha clearly indicate that these polities were subject to Tikal control during this era (Mathews 1985; Schele and Freidel 1990). Uxbenka’s rise may have been facilitated by the central Peten as both a key strategic ally and as an intermediary for exchange between the southeastern Maya Lowlands and Tikal. Uxbenka is strategically located near the Rio Blanco drainage that extends westward unimpeded into eastern Guatemala. This drainage system, still utilized by Mopan and Q’eqchi’ traders today, allows for easy access around the southern flank of the Maya Mountains. By avoiding a direct route through the mountains, movement of raw or finished goods could easily be transported overland or by the various waterways to sites throughout the central Peten and Petexbatun regions. Therefore, Uxbenka may have been established as a resource procurement or...
distribution center for either raw materials or finished products coming from extraction or processing sites within the interior of the Maya Mountains (Wanyerka 2004).

The archaeological evidence for an Early Classic component at Uxbenka can best be seen in the stratigraphic record of the stela plaza itself that features two plaster floors; an lower floor corresponding to the Early Classic Period and an upper floor corresponding to a later Late Classic construction (Jamison et al. 1991:2). Several of the stelae in front of Str.1 were clearly set into this lower floor during the Early Classic Period floor at the time of its initial construction. Stela 7 also included a unique dedicatory cache containing a large quantity of chert flakes, obsidian prismatic blades, and several chert eccentrics (Jamison et al. 1991:3; SBAP Excavation Forms dated 4/18/1990). Coe (1962:498) noted that similar caches of this type have been observed with many of the Early Classic stelae at Tikal. The SBAP also reported the presence of eroded, but highly diagnostic, Early Classic ceramics, most of which consist of large and small basal flange sherds (Jamison et al. 1991:3). The paste associated with these basal flange sherds includes a “high proportion of calcite and ferruginous nodules, a laminar appearance, and thick firing cores” that was noticeable

Figure 2. A detailed analysis and comparison of Uxbenka Stela 11 and Tikal Stela 31
(All drawings by John Montgomery).
different from the Late Classic ceramic assemblage from the site (ibid.). In addition, the slip associated with these sherds appeared to be an intermediate form “on the continuum from the Late Preclassic waxy wares to the gloss of the Classic in the central Peten” (ibid). While the ceramic sample is admittedly small, the presence of these Early Classic ceramics clearly indicate an Early Classic component and presence at Uxbenka.

The stratigraphy associated with Uxbenka’s largest structure (Str. 1) also suggests an Early Classic date. According to Jamison et al. (1991:4), the Early Classic plaza floor extends to the lowest step of an earlier central building within Structure 1 suggesting an Early Classic date for its initial construction. The stratigraphy associated with a massive looter’s trench, along the south side of Structure 1, revealed that the original construction probably incorporated three separate buildings similar in shape and form to that of Str. A-V of Uaxactun (ibid). At some point during the Late Classic Period, a much larger superstructure was built over these three buildings representing the final building phase of Str. 1. The archaeology shows that the Early Classic component of the site appears to be restricted to the stelae plaza group itself. Turning to the epigraphic evidence, it is clear based on the early style of iconography, the pose of the rulers, and the appearance of a well-known Early Classic ruler’s name, that at least three of the twenty two stelae at Uxbenka are Early Classic Period in origin (Wanyerka 1996, 2003, 2004). Stela 11, 18, and 21 are clearly the earliest monuments in southern Belize and some of the earliest outside the central Peten. The historical importance of at least two of these monuments (Stela 11 and 21) cannot be understated for they contain profound information concerning one of the most controversial historical events in Mesoamerican history: that being the arrival of the Teotihuacanos in A.D. 378. Proskouriakoff (1993) was the first serious scholar to suggest that this important date (8.17.1.4.12 – 11 Eb’ 15 Mak) signaled a dramatic change and departure from the existing socio-religious, political, and military ideology that profoundly impacted and changed Maya society. This date signifies the start of a rapid and sudden appearance of Teotihuacan-style iconography, architecture, and artifacts at sites throughout the Maya Lowlands. Though space prohibits a full discussion of the historical events surrounding the Teotihuacan “arrival” event here, a number of important articles have been written describing the circumstances surrounding the “arrival” event and the resulting change to the dynastic order of sites throughout the Maya Lowlands (Coggins 1975, 1979; Schele and Freidel 1990; Stuart 2000).

However, based on new interpretations of the hieroglyphic inscriptions of Uxbenka, a new and exciting additional piece of historical information has been found that explicitly links Uxbenka to both Tikal and to the infamous entrada event. This new epigraphic data, though provisional, suggests that Uxbenka, an emblem glyph-bearing polity in its own right, was probably the first “vassal” dependency in the southern Maya Mountains region subject to the greater Tikal sphere. The implications further suggest that Uxbenka could have been “founded” under the aegis of Tikal’s Early Classic hegemonic expansion during the late 4th century either by Chak Tok Ich’aak I or his immediate successor Yax Nuun Ayin. While our understanding of the macro-political environment of the southern Maya Mountains region is well documented for the Late Classic where hegemonic power and intrusion were clearly emanating from both Copan and Quirigua, little is known for the
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Early Classic (see Grube et al. 1999; Wanyerka 2003, 2004). These findings suggest that a dramatic and profound political and hegemonic shift occurred just prior to the beginning of the Late Classic Period that loosened Tikal’s grip and influence in this region. Beginning around A.D. 600, dozens of new sites, including the emblem glyph-bearing sites of Lubaantun, Nim Li Punit, and Pusilha, suddenly appear on the southern Belize landscape with clearly established ties to the southeastern Maya Lowlands. What precipitated this dramatic turn in political affiliations and hegemonies is unclear, but we do know from the epigraphic record that Tikal was actively engaged in keeping its hegemonic network in the central Peten intact while succumbing to riveting defeats by its archenemy Calakmul.

Perhaps the most important link connecting Uxbenka to Tikal can be found on Stela 11. Stela 11 was discovered by the SBAP in 1984, in three pieces, lying facedown near the northeastern corner of Str. 2. Carved on its surface is an elaborate portrait of an Early Classic ruler standing atop a toponymic location with a short ten glyph-block text running along the left edge of the monument. Perhaps the most recognizable feature on Stela 11 is the “Jaguar Paw” motif hanging from the ruler’s royal belt assemblage. Schele was the first scholar to recognize the significance of this rare and unusual motif as that of the 14th ruler of the Tikal dynasty Chak Tok Ich’aak I or “Great Jaguar Paw” (Leventhal and Schele n.d. 6). This iconic motif appears on only two other monuments associated with Chak Tok Ich’aak I; Tikal Stela 39 and Uolantun Stela 1 (Figure 3). Additional support for this identification can be seen in the actual glyphic expressions of the Chak Tok Ich’aak I’s name phrase (Figure 4). There are at least nine examples of this name recorded at Tikal and its environs. Two of these examples (Tikal Stela 39 and Corozal Stela 1) clearly show the inclusion of the Founder’s name of the Tikal dynasty, Yax Ehb’ Xook, as part of his formal regal name phrase. Both names also appear on the belt assemblage portrayed on Uxbenka Stela 11 and thus there is no question that the name featured on Stela 11 is that of the 14th ruler of the Tikal dynasty Chak Tok Ich’aak I.

The appearance of this motif on a monument in southern Belize may be another in a growing list of examples of what Simon Martin (2000:58) believes was the intentional movement, displacement, or “exiling” of existing royal monuments from the site of Tikal to peripheral sites following the Teotihuacan entrada. Martin suggests that the movement and placement of these pre-378 monuments to sites in the periphery may represent a pattern “where the king demonstrated his authority over distant outliers by placing monuments in their midst” (2000:58). This type of “exiling” behavior has been documented at other sites during the Early Classic such as El Encanto (Stela 1), Corozal (Stela 1), El Temblor (Stela 1), and Uolantun (Stela 1) (Martin 2000:51). In addition, all of Chak Tok Ich’aak’s accession monuments were found at distant peripheral sites outside Tikal, those being Corozal Stela 1 and El Temblor Stela 1. It is also critical to remember that all of Tikal’s pre-378 monuments were discovered broken, displaced, and ritually cached in secondary deposits scattered around site core (Martin and Grube 2000:30). The importation of monumental sculpture is also well-documented in the archaeological record of sites like Naranjo. Peter Mathews was the first to recognize that the main protagonist featured on the Naranjo Hieroglyphic Stairway was the king of Caracol K’an II. An additional piece of the Naranjo hieroglyphic stairway was also found at Ucanal suggesting that some
monumental sculpture may actually represent “conquest-trophies” which were taken back to the victor’s site as spoils of war (Martin 2000:58). Thus, given the explicit Peten-style of carving, their condition, and the name of Chak Tok Ich’aak I recorded on Stela 11, it would not be surprising to learn that these monuments may have been “exiled” from Tikal.

Martin also correlates the movement of monumental art with a “literal movement of people” (2000:59) and the glyphic text on Uxbenka Stela 11 may provide direct evidence that this may have been the case. Though poorly preserved, the text on Stela 11 appears to describe the resulting consequence of the Teotihuacan entrada to the ruling elite of Tikal. The text states that aj miiin “the people of noble descent” och b’ih “enters the road” which is in fact, an accurate description of the carnage that presumably occurred at Tikal on the very day of the Teotihuacan “arrival” (Figure 5). Coincidentally, the text on Tikal Stela 31 is explicit in the fact that on the very day of Siyaj K’ahk’s “arrival” the current king of Tikal (Chak Tok Ich’aak I) died. Though, the agent presiding over the reference to the “death of the people of noble descent” on Stela 11 is completely missing today, the remains of a small Tikal emblem glyph can be seen in the upper right-hand corner of the

Figure 3. Monuments featuring the Chak Tok Ich’aak I motif
(All drawings by J. Montgomery except for Uolantun Stela 1, drawing by William Coe).
last glyph block. Although lacking a precise Long Count date, the appearance of the Chak Tok Ich’aak name, along with its early iconographic style, and accompanying hieroglyphic text, strongly suggests that Stela 11 was created at or near 8.17.1.4.12 perhaps as a funerary monument to commemorate the death of Chak Tok Ich’aak I.

This unusual and explicit reference recorded on a monument located some 120 km southeast of Tikal at the small site of Uxbenka is extremely curious. It may simply represent another monument “exiling” as Martin proposes for many of the pre-378 monuments at Tikal, but it may also signify something completely different. Certainly, the ruling elite at Tikal would have received word of the impending “approach” of the Teotihucanos in January of 378. It is doubtful that the aristocracy would have been caught off guard. Therefore, it is also likely that perhaps members of the aristocracy fled Tikal prior to or shortly after the carnage began. Realizing that they had no place to hide in the central Peten, it is possible that some of Tikal’s aristocracy may have sought refuge in southern Belize. This could explain the close similarity in sculptural style and it may help to explain why the death of Chak Tok Ich’aak I was mentioned here at Uxbenka. It is important to emphasis that on the very day of this “arrival” event at Tikal, Chak Tok Ich’aak I, in his 18th year in reign suddenly and without explanation dies. Not only is the current king of Tikal presumably killed, but he is replaced by a new dynastic order with a new successor line. Remembering that all of the dynastic monuments erected prior to 378 were also destroyed and others dispersed to distant peripheral sites provides strong evidence that the entrada event was truly a violent episode resulting in the complete and total upheaval of the existing political order.

Stela 21 is another Early Classic monument at Uxbenka that may provide additional support of a Tikal presence in southern Belize (Figure 6). Again, based on the early prose and iconographic program that features a portrait of a finely attired ruler cradling an undulating double-headed serpent bar, Stela 21 is clearly Early Classic in origin. The monument, while broken, features an intriguing short glyphic text that again includes the mijin glyph followed by preposition mal. Together this passage reads u-mijin mal meaning “within noble descent” which can be taken as further evidence that the text on Stela 21 may be referring to the same episode as that recorded on Stela 11. A previously unrecognized fragment of Stela 21 (formerly known as MT #1) contains an Early Classic version of the “tuun-over-hand” expression read u-k’al-aw tuun meaning “the stone/year was bound or wrapped.” This statement can either refer to the “wrapping of the stela” as a ritual activity as a means of protecting and containing the divine “holiness” embodied within the stone itself or else as a direct
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Although the monument is clearly broken and no further calendrical information survives, one could speculate that this verbal expression may actually refer to either the 8.17/8.18/ or 8.19.0.0.0 period ending.

The last of the Early Classic monuments at Uxbenka is Stela 18 that features an elaborate portrait of a ruler wearing the personified headdress of “Skycracker Chaak” who is holding a rigid double-headed serpent bar (Wanyerka 1996). The “Skycracker Chaak” headdress consists of a twisted hank of rope running down the side of the face that may or may not contain a small skeletal head, an elaborate chinstrap assemblage decorated with mat signs, large earspools, and a unique shell ornament. Similar versions of this costume can clearly be seen on Tikal Stelae 31 and 40. Stela 18 contains the vestiges of a short glyphic text that can be seen along the right side of the monument. Unfortunately, due to the severity of erosion nothing can be read today.

**Summary and Concluding Remarks**

Both archaeology and epigraphy confirm that Uxbenka was “founded” in the late 4th century and fully participated in same monument erecting traditions and iconographic programs as the rest of the
Maya Lowlands. Though now eroded, the presence of its own emblem glyph on Stela 22 clearly indicates that the rulers of Uxbenka viewed themselves as divine lords. Furthermore, the text of Stela 22, a Late Classic monument dating to 9.16.0.0.0 2 Ajaw 13 Sek (5 May 751), features an interesting and curious spelling of the month name Sek. During the Classic Period, the month name Sek in all of the Ch’olan languages was kasew (spelled glyphically as ka-se-wa). However, the example recorded here at Uxbenka clearly lacks the ka prefix indicating a pure Yukatekan spelling of Sek. Similar spellings of the month name Sek have been found in the codices perhaps indicating that a form of Yukatekan, perhaps Mopan, was spoken at the site during the Late Classic Period. This may coincide with the dramatic shift in the political allegiances and affiliations that occurred at sites throughout the region just prior to the start of the Late Classic Period. The hieroglyphic inscriptions of southern Belize may also provide further insights as to the possible ethnicity of the populations in the region and may be the fundamental underlying cause of all the internal antagonistic tensions among the various sites in the region. Epigraphic and linguistic analysis all the hieroglyphic texts in the Southern Maya Mountains Region seems to indicate that at least three
distinct linguistic boundaries may have existed in the region during the Classic Period based on lexicon and verbal morphology (see Wanyerka 1999, 2004). These differences in the epigraphic repertoire of sites in this region may reflect differences in the languages of its speakers. Little is known of the exact linguistic boundaries during Classic times, but new evidence is beginning to show that language and ethnicity may have been a critical factor in the formation of political alliances and the establishment of hegemonic networks in the Southern Maya Mountains Region.

Uxbenka’s three Early Classic stelae are clearly the earliest monuments in southern Belize and some of the earliest monuments outside the central Peten. Together, these monuments are now providing new and important historical insights as to the nature and formation of an early macro-political environment in the Southern Maya Mountains Region. The archaeology confirms that many of the sites located in this region were actively engaged in resource exploitation and exchange. Uxbenka’s rise appears to coincide directly with Tikal’s Early Classic rise as the preeminent political and hegemonic power of the era. Strategically located to facilitate the movement of goods between the interior of the Maya Mountains and the rest of the Maya Lowlands, the incredible number of stelae and stelae fragments at the site clearly indicate that Uxbenka prospered well into the Late Classic Period. Furthermore, new interpretations of Uxbenka’s Early Classic texts clearly link the early history of the site to Tikal’s 14th ruler Chak Tok Ich’aak I and to the famous Teotihuacan “arrival” event. These new insights, while controversial, hint of strong hegemonic ties between the Southern Maya Mountains Region and the central Peten during the Early Classic Period.

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13 CIVAL, LA SUFRICAYA AND HOLMUL: THE LONG HISTORY OF MAYA POLITICAL POWER AND SETTLEMENT IN THE HOLMUL REGION

Francisco Estrada-Belli

This paper summarizes results of ongoing research in the Holmul region, a Maya kingdom strategically located between the central Peten and the Belize coastal areas. The beginning of ritual and political activity at the newly found site of Cival reaching back to the Middle Preclassic period attests to a surprisingly early development of Lowland Maya civilization in this area. Patterns of monumental sculpture, iconography and public architecture are among the earliest evidence of centralized power and ideology for Lowland Maya kingship. Excavations of an Early Classic palace at La Sufricaya and a small temple at Holmul, document the emergence of Holmul as a Classic Maya dynastic center and attest to its participation in the Maya-Teotihuacan relationships with Tikal and Uaxactun. Finally, excavations at Holmul’s palace and main plaza reveal a Late Classic flourish and ensuing demise during the Terminal Classic period and may link the site’s fate to major war events in the late history of the Maya Lowlands.

Introduction

This essay outlines general trends in the cultural-history of Maya polities in the Holmul region of the NE Peten discovered during five seasons of fieldwork by the Vanderbilt University Holmul Archaeological Project.

In 1991, Harvard University’s Raymond Merwin pioneered work at Holmul establishing that: the site had a long sequence from the Late Preclassic to the Late Classic; there was a Protoclassic florescence of elaborate burials; and that there was a new florescence in the Late Classic period, with elaborate polychrome ceramic styles, and palace architecture. Ninety years after Merwin’s first excavations, many basic questions about this great site remained unanswered. The size of the site was unknown and there wasn’t any indication of how the site fit within the Peten region as a civic/ceremonial center. Along with answering these questions the Holmul Archaeological Project has sought to learn more about the intriguing Protoclassic ceramic florescence so peculiar to Holmul and to the eastern part of the Maya Lowlands. For us, Holmul, with its relatively long sequence of development, a geographically well defined hinterland and numerous surrounding minor centers, presented an excellent laboratory to explore how the ancient Maya negotiated power relations within the city and between cities using natural and built landscapes.

Defining the Holmul Polity and its Hinterland

In 2000 we began a regional survey with GIS mapping and satellite image analysis designed to understand Holmul’s history within its geographical and cultural setting (Figure 1). Our implementation of GIS and satellite data attempted to solve the problem of tunnel vision, a frequent problem for Peten Mayanists as we are forced to look at settlements and inter-settlement areas through narrow transects in the thick forest.

The survey determined that Holmul was the center of a large political domain closely corresponding to a broad upland ridge bounded by the Holmul River to the
east and wetlands and escarpments to the south, west and north. Within this well-defined geographical setting, a number of other centers are located within an hour’s walk from Holmul: K’o, Riverona and T’ot. The new site of Cival was discovered thanks in part to Ian Graham’s maps, and finding its signature lagoon on a LANDSAT image. Having a GIS algorithm find optimal paths though the terrain around Holmul we discovered two other sites, Haha Kab and Hamontun (Estrada-Belli 2003). The survey made it clear that all sites were located on defensible locations looking out towards the swamps that encircle Holmul. Indicating that defense was an important function of these sites in addition to control of rural resources.

The mapping project, undertaken by Jason Gonzalez and later by Kristen Gardella has shown that Holmul itself has a sprawling settlement area indicative of a large city (Estrada-Belli 2003, Gardella 2004). Gardella’s transects have extended to a distance of 4 km without finding a decrease in the density of housing (Figure 1). As the peripheral centers are only 5 km from Holmul it is clear that most of the upland area and perhaps the edges of the bajos surrounding it were all continuously occupied in the late period. What is also striking about the transect data is the great frequency of high-quality masonry buildings and formal plaza groups in the residential/rural areas. The largest and most complex of these groups appears to be nodes for the administration of the rural resources, one tier below the minor centers. We saw a similar hierarchical arrangement of nodes around La Milpa, Belize suggesting a very tightly organized rural hinterland, down to

Figure 1. Map of Holmul study region derived from radar topography (courtesy NASA 1999), showing known sites, extent of mapped transects and GPS points.
the smallest territorial unit, that of the household group (Tourtellot et al. 2003).

The high point of Holmul was in the 8th and 9th centuries, although new major construction in the main groups did not continue after the end of the 8th century. In Group III, the main palace, several middens were found within the sunken patio of Court B (Figure 2). It is likely that the last occupants of the palaces only used part of the complex leaving other parts in ruin. By about A.D. 900 this palace was finally abandoned, as was the rest of the city. The settlement data suggests a collapse of central authority and of the rural elites around A.D. 800, after which a population of farmers lingered at and around Holmul for about 100 years.

Recently, Harvard University student Alex Tokovinine brought to our attention a monument at Tikal depicting a captive lord, Chak Tok Wayib’, from the region of Naranjo (Tokovinine 2005). Chak Tok Wayib’ was a Naranjo lord who had claimed independence in a kingdom nearby after the destruction of Naranjo by Tikal in A.D. 744. Because the name or title Chak Tok Wayib’ now occurs in two separate contexts at Holmul and La Sufricaya, in the Early Classic, we believe that this could be a common title in the Holmul line indicating that Holmul was where the last Naranjo lord was captured. Tokovinine’s suggestion would explain the sudden end in major construction, and the slow disappearance of elites from the palaces in the century following A.D. 748. His excavation later confirmed the existence of a Late Classic defensive wall across the main plaza.

The Preclassic Antecedents of Holmul

While the reasons for Holmul demise were becoming clearer, many question about its initial occupation remained unclear. We initially expected to find early occupation at Holmul because of its location on the river, which provided a natural path for colonizers to the interior from the coast (Estrada-Belli 2002).

I have previously argued that Holmul has one of the longest occupation sequences in the Peten dating from the Middle Preclassic to the Terminal Classic (Estrada-Belli 2002). I should clarify that this is correct only so far when we examine Holmul’s culture history from a regional perspective and not as a single site. The histories of Holmul and its minor centers are intricately linked and each cannot be understood independently of the others.

Merwin’s sequence for Holmul begins with the Holmul I Protoclassic phase and our probing in the Holmul plazas has found no occupation predating the Late Preclassic period. We however, have found several foci of occupation dating to the Middle Preclassic. These have been located, primarily, outside of Holmul at the minor centers of T’ot and especially at Cival (Merwin and Vaillant 1932, Estrada-Belli 2000, Kosakowsky 2001).

Cival is an impressive ceremonial center with broader plazas and larger temple buildings than even Holmul. The site is located only 6.5 km north of Holmul. (Figure 1). Evan Farley, a 9-year-old member of the first group of extreme eco-tourists to visit the site this past April asked me a most interesting question. How could these two large sites co-exist in such a small area? We believe they are not contemporary and that the buildings at Cival largely predate anything seen at Holmul. In addition, Cival plazas are enclosed by a stone wall several meters high (Figure 3). Preliminary data indicate that the wall was built sometime at the onset of the Early Classic period and we surmise that the ceremonial area, at least, was abandoned after a violent attack.

We know Cival had been a place for Maya ritual and public architecture since
Middle Preclassic times, and remained so for at least 800 years. Its beginnings are documented by Molly Morgan’s and Jeremy Bauer’s spectacular finds in the main plaza, which is a functional E-Group, one of the largest and oldest in the Lowlands (Bauer 2005, Estrada-Belli 2003, Estrada-Belli et al. 2003). The E-Group centerline is aligned to the equinox. The first evidence of ritual activity dates to about 500 B.C. and consists of large cruciform cut into bedrock, with five water jars, five upright celts and 114 jade pebbles. The second ritualistic event uncovered was the erection of a large broken stela in the centerline of the eastern platform, followed by the construction of a rectangular platform in front of this eastern building and finally the erection of a carved stela.

The symbolism of the E-Group offerings has multiple aspects and is fascinating. All offerings were placed in the centerline of the E-Group, whose azimuth points to 87 degrees or virtually due east. The jars and jade offerings strongly refer to water and maize symbolism and the

Figure 2. Map of Holmul, as of 2003 showing wall enclosure in eastern plaza. Drawing by F. Estrada-Belli, Survey by F. Estrada-Belli, J. Gonzalez and M. Wolf.
cruciform shape references the cosmos and the quadripartite divisions of the calendar (Figure 4). As Taube (2000) has noted, among the Olmec, jade celts represent sprouting corn plants. Their position in a quincunx represents cosmological order and the axis mundi often personified in the ruler (Reilly 1986). Jade pebbles also may relate to river pebbles polished by water, or divination tools, as documented by M. Love in Pacific Coastal sites (M. Love pers. comm. 2004). In a recent article, Aveni and associates (Aveni et al. 2003) have pointed out the relationship between several E-Groups solar alignments and groups of 20 day periods preceding the arrival of the rains, and it is possible that in its early versions our Cival E-group alignment had such an association. According to Coggins (n.d.), the Las Limas figure framed by 4 heads incised on shoulders and knees – possibly representing celt– has calendrical significance as the birth of the baby-jaguar or Maize deity may also signify the birth of a new (agricultural) cycle, or the birth of a new winal-based year in the Olmec creation.

Figure 3. Map of Cival, showing locations of Stela 2 and cruciform cache in the E-Group plaza, Str. 1 further to the east and defensive wall to the south. Survey by M. Wolf and K. Gardella 2002, drawing by Estrada-Belli.
myth. The celebration of the *winal* was central to new year ceremonies among the Postclassic Yucatec Maya, and from Preclassic to Classic times the seating of a new ruler was celebrated as birth of a new *winal*-based year and the rebirth of the Maize god, all in one (Coggins n.d.). Thus, Cival’s cruciform cache and the quadripartite sun-oriented space of the E-Group in which it is located clearly relate to the fundamental quadripartite construct of the Mesoamerican calendar and the agricultural cycle of maize. These two concepts were fused in the time-space cosmological vision that the earliest Maya rulers seem to have appropriated to form a new ideology of central authority.

Moreover, a large wooden post was placed above the jade cache. Wooden posts, world trees and maize plants are often equated in Olmec and Maya iconography (Taube 2003). Maya and Olmec rulers often substituted wood posts as world trees, as in the famous statuette from Rio Pesquero, or Pacal’s sarcofagous lid (Reilley 1986), or as a center piece of a quincunx in Classic Maya stelae imagery and as in ritual landscapes such as the La Milpa cosmogram, of which the ceremonial core and the royal throne form the center (Tourtellot et al. 2000).

In sum, at Cival we have a Middle Preclassic cruciform offering within an E-Group plaza that embodies agricultural and cosmological metaphors central to the ideology of Middle Preclassic Olmec as well as Classic period Maya rulers. The well-stratified scores of offerings and floors found in this location (Bauer 2005) document the development of Preclassic Maya dynastic ideology during the transition from the Middle to the Late Preclassic period. It appears that, among the Middle Preclassic Maya and Olmec, the earliest public rituals called for the burial of large amounts of jades in cruciform openings into the earth and the erection of world trees above symbols of maize and water.

Cival Stela 2 was also found in this location (Figure 5). In Nikolai Grube’s analysis, its style predates the earliest Preclassic monuments from Nakbe and El Mirador (Estrada-Belli et al. 2003). Molly Morgan and Jeremy Bauer found the most likely floor setting and dedicatory cache along the centerline of the eastern platform, Structure 7 (Estrada-Belli et al. 2003, Bauer 2005). According to ceramic seriation, this feature dates from about 300 to 200 B.C. So far, this monument is among the earliest carved portraits of a Lowland Maya ruler. The ruler is depicted wearing a jade bird pectoral with three plaques, which is a symbol often worn by rulers on Preclassic monuments at Kaminaljuyu, Abaj Takalik and other early sites (Parsons 1986). Clemency Cogging notes that the striding position of early rulers signifies movement of time as the ruler is the embodiment of the *winal* of twenty days the most fundamental unit of the Maya calendar (Coggins n.d.). It is also worth noting that the stela’s tapered shape recalls upturned jades cels such as those in the cruciform cache. Moreover, the image of the ruler on the front of the stela may symbolize a new form of world-tree set in this location. At the time of its dedication ca. 300-200 B.C., the ideological charter of Maya kings was in place.
In Preclassic times, and possibly coinciding with the erection of the Stela 2, a major construction project was carried out on the east side of the Cival plaza. This involved the construction of a massive triadic temple group (Figure 3). Its imposing volume and position on the site’s E-W centerline, made this new triadic group the most important focus of ritual performance at Cival for the remainder of the Late Preclassic period and underwent at least three major remodeling. Clearly the construction of this group represents a major change in the scale and nature of ritual architecture at Cival, from horizontal to vertical, and from public to secluded, letting the audience from the plaza see the rituals carried out on top of the eastern temple only from a distance.

An earlier construction stage of the eastern temple of the Triad was decorated with two large and identical stuccoed anthropomorphic masks (Figure 6). The down-turned L-shaped slit eye, single bifurcated tooth, cross-band signs on the cheeks, flame-eye brow motif and curled motif in the corner of the eye are its identifying characteristics. The L-shaped slit eye is often related to solar and sky deities. Moreover the slit eye and flaming-eye combination the Cival masks are similar to that of an unidentified bundled figure appearing in the San Bartolo mural and several examples of Olmec sky dragon/serpents (Taube et al. 2004; Figure 2). Unfortunately, the particular deity portrayed in this mask still eludes certain identification, although it is safe to say that it is a heavenly entity. On the other hand, two profile almond-eyed faces of Maize gods were found painted on the temple terrace aprons and in a block in the rubble above the masks, suggesting that this building as a whole was dedicated to a Maize-related cosmological representation.

These masks date to the early part of the Late Preclassic and have several contemporary parallels. One recently uncovered example is in Calakmul Str. 2, and probably depicts the Maize god (Montano 2002). However, there is clearly much variation in the representation of supernatural entities on Preclassic temple facades, making the identities of such entities elusive.

In light of the above discussed E-Group offertory caches and monumental sculptures, it is apparent that the Middle and Late Preclassic rulers at Cival focused on maize symbolism to represent central authority, as did their Olmec neighbors. Cival’s architectural development culminated with the erection with a massive triadic complex probably dedicated to the reborn Maize god.
After AD 100, the next major building of a ritual nature occurs in a different location, 7 km to the south, at Holmul. The reasons for the shift in location of temple architecture are the subject of ongoing research in the Holmul region.

In Building B of Holmul’s Group II, excavated by Raymond Merwin in 1911 are two possible royal burials dating to the Protoclassic period, ca. 150-250 A.D. In 2003, Nina Neivens excavated an even earlier tomb in the rubble core of this building. This burial was therefore coeval with or immediately following the end of dynastic rituals at Cival and suggests that this part of Holmul became the focus of royal ritual and burial place of the elites. Neivens’ excavation also revealed two earlier phases of this building that were undetected by Merwin and date to the end of the Late Preclassic (Neivens and Estrada-Belli 2004). This appears to be the most elaborate temple at Holmul in Late Preclassic period. Its dimensions however are unimpressive when compared to coeval temples at Cival and suggest that Holmul in the Late Preclassic was no more than a secondary site in the orbit of Cival.

In the Early Classic period, additional tombs were placed in Building B. At the same time, little construction was carried out at Cival. According to the existing architectural evidence, by the 4th century all public ceremonial activities had ceased at Cival and religious and secular activities had shifted to Holmul. The reasons for this shift in the location of central authority are still unknown and may involve environmental and political factors. However, preliminary excavation data of the defensive wall encircling Cival indicates that it was built at the end of the Preclassic.
period and it may signal the end of Cival as a center of ritual and power.

What is certain however is that Holmul became the largest center of power in this region for the next century or so. In the fifth century, Building B was enlarged and used to bury a total of 22 individuals before it was finally covered by a new structure sometime in the 6th century (Merwin and Vaillant 1932).

With the exception of Building B in Group II, we have yet to find significant remains of public buildings and monuments in the Holmul site core that date to the fifth and sixth centuries, although these may be deeply buried under the massive Late Classic rubble fill of Group 1 and 2. In the western outskirts of the Holmul center, a small acropolis was built during this period. There we found a number of carved monuments with stylistic and calendar dates that span the lives of Tikal’s rulers Nuun Yax Ayiin and Siyaj Chan K’awiil. Of special interest, is Stela 6 (375-396 A.D.) in which Nikolai Grube has spotted the up-ended frog glyph of Siyaj K’ahk’ or Smoking Frog (Grube 2003). Unfortunately, the Stela 6 seven-column inscription is too eroded to tell us whether Holmul was simply another city where the Tikal warlord with Teotihuacan affiliation arrived, in a scenario similar to El Peru/Waka’, Bejucal, Tikal, Uaxactun, and Rio Azul cases (Stuart 2000).

In 2004, we uncovered two new painted walls (Foley 2005). The first one depicts a procession of Maya individuals from left to right. To the right is a Maya individual ascending a structure decorated with Mexican-style tablero frieze. In a separate room, a partially painted inscription records the famous 11 Eb 16 Mak date, according to epigrapher Alex Tokovinin. This could be part of a phrase commemorating the arrival of the Siyaj K’ahk’ Teotihuacan warlord at Tikal (Tokovinine 2005). In a separate passage in the inscription is the name or title Chak Tok Wayib’. This title possibly refers to a local ruler whose name also occurs on an imitation blood letter stingray spine from one of the tombs in Holmul Building B (Merwin and Vaillant 1932, plate 36e). Clearly this inscription could tell us a great deal about the ruling elite of La Sufricaya and Holmul and their connection with Teotihuacan when completely exposed and conserved.

According to our current understanding of this building, it appears that the rooms in Structure 1 were used for official purposes rather than residences, however further evidence may show otherwise. While two throne-like benches were found, their dimensions are unusual and no definite signs of living quarters exist in this structure. Moreover, the evidence from all the rooms exposed to this date (13 rooms) indicates that this complex was built
for an elite group that used Teotihuacan-inspired iconography for a relatively short time-span in the 5th century A.D.

After 550 A.D., a third shift in the location of major elite architecture occurs with the erection of a large palace complex, Group III, and several temples at Holmul center. In 600 A.D. the city of Holmul and its dynasty experienced a period of great prosperity. Construction projects grew exponentially until the end of the Classic Period, when a possible siege (discussed at the beginning of this report) ended Holmul’s importance as a center of elite power and ritual.

**Conclusions**

By approaching the history of urban and social development at Holmul from a regional perspective we are better equipped to understand its beginnings and its complex history than if we were using a site specific approach. It has become evident that the initial development of centralized power and dynastic ideology was at Cival, one of several Preclassic centers in this region. We are fortunate to have located a site in which the constant remodeling of the architecture and the deposition of many offerings clearly punctuate a steady increase in complexity and sophistication during the Middle and Late Preclassic periods.

The Holmul region also offers an excellent opportunity to study the long-term growth of central authority in a continuous sequence. Central power, as manifested in monumental architecture and carved inscriptions, was maintained without interruptions from the Preclassic to the end of the Classic period in this region, but not without radical shifts in location. First, at the end of the Preclassic, the region’s main
locus of ritual and power moved from Cival to Holmul, then again, in the Early Classic, from (Holmul to La Sufragaya), and finally in the Late Classic, back to Holmul. It is likely that large-scale movements of the residential population accompanied the changes in the locations of ritual and secular power. Ongoing research will delineate out the residential settlements of each period and any signatures of their economic strategy left on the landscape.

Both environmental factors and widespread political struggles seem to be at play during the Terminal Preclassic, a time in which the geo-political organization of the Maya Lowlands underwent major changes. At this time, the El Mirador basin, Cerros, Becan and other sites were in decline. Conversely, Tikal was on the rise as a hegemonic power in the central Peten (Martin and Grube 2000, Harrison 1999). If further evidence will confirm the Late Preclassic date of Cival’s defensive wall, indeed this may indicate that the Cival rulers were defending themselves from a major siege such as those mounted by Tikal against other Maya cities. Although several other centers clearly existed in the Holmul region in the Preclassic, including T’ot and Holmul itself, it is unlikely that any of Cival’s medium-to-small sized neighbors could constitute a real threat for this massive center.

For a short period after Cival’s eclipse, between 150 and 350, Holmul’s elite seem to have prospered and built elaborate burials in Building B, and Group II, by subsequent remodeling of the temple superstructure above them in the 200 years that followed.

During the 4th and the 5th centuries a Teotihuacan-style iconography was adopted at specific locations in the southern Lowlands, including the Holmul region. Beginning around 375 A.D. a group of elites built a palace filled with foreign iconography and ruled over the Holmul region from La Sufragaya for about 100 years. A unique glimpse of the ritual events and protagonists of the Teotihuacan-related “entreacte” are located at La Sufragaya in the mural paintings of Structure 1. How those events and protagonists might be related to those of coeval Tikal, Uaxactun, Bejucal, El Peru/Waka’ and Rio Azul is difficult to determine at this time. In one conceivable scenario, a foreign elite group could have taken over the Holmul dynastic line. Alternatively, a local lineage could have usurped the power from pre-existing royal lineage backed by exclusive connections with the Tikal ruling lineage and perhaps even as far as Teotihuacan in central Mexico. Whatever the nature of this short-lived shift from the Holmul descent line, it was followed by a long term period of stability during which Holmul allied itself or fell under the aegis of Naranjo, as indicated by the ceramics and architectural similarities (Estrada-Belli 2003).

The Holmul historical and archaeological record so far outlines a model of unusual longevity for central authority in a Lowland Maya polity from Middle-Preclassic to Late Classic times. It features constant relocation of the center of ritual and power within the confines of a small and well-circumscribed region. In the Holmul region, we seem to have evidence that the fragile balance of power dotted by warfare and wide-ranging alliances typical of Classic Maya states was part of Maya political dynamics since the Preclassic period. Once defined, this model of “shifting capitals” will help perhaps identify which were the seeds of destruction of Maya civilization as well as its origins.

Such a model may prove useful in other situations, such as why the focus of power and monumental buildings shifted from Nakbe to El Mirador during the Preclassic period and why the El Mirador
center later met an abrupt end (Dunning et al. 1999), and at the same time, the relatively near neighboring city of Calakmul quickly rose to prominence (Guenter 2005, Martin and Grube 2000).

At Tikal, radical shifts in the geographic location of dynastic temples did not occur. In the Early Classic period however, the ritual space of the Mundo Perdido and nearby residential groups were appropriated by a lineage with Teotihuacan connections (Laporte and Fialko 1986). At Copan, Yax K’uk’ Mo’s dynastic founder’s arrival and accession to power signaled the beginning of Teotihuacan style inspired architecture and iconography at the site. A new ritual space was built 200 m from the pre-existing Protoclassic ritual area. In the center of this space the Hunal temple served as its final resting place and the focal point for dynastic architecture in the century that followed (Traxler 2004, Fash and Fash 2000).

These patterns of short-distance relocation of dynastic temples are predicted by Patricia McAnany’s (1995) model of genealogy of place. According to this model, each time the lineage line of descent is terminated and a new lineage rises to power, a new founding event is required, with a new ancestral place and a new ancestral past to be created ad hoc by the founder and perpetuated by his successors.

On the other hand, environmental research in the Peten wetlands has shown that these fragile ecosystems were very productive and intensively exploited in the Preclassic and may have suddenly become unproductive by the end of that period. Consequently, Early Classic populations may have shifted their focus to upland soils and artificial water reservoirs for ecological reasons (Dunning et al. 1999). Were the centers of Cival, La Sufricaya and Holmul successive royal seats of a single lineage in search of an ecologically suitable location or of competing lineages rising to power? How were these major changes in the Holmul region related to the changes at Tikal and other Lowland sites in the Early Classic? Ongoing research on the ancient environment and history of Holmul will likely give us the answer to these questions.

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SECTION TWO: HISTORICAL AND COLONIAL PERIOD ARCHAEOLOGY
Overall, the three-part research strategy integrated traditional methods of survey with methods appropriate to the location and identification of sub-surface platforms, activity and refuse deposits, such as an intensive posthole excavation program combined with recovery of non-observable remains through soil chemical residues. The survey resulted in the identification of a number of previously unidentified features that have potential for understanding the Late Postclassic-Colonial transition. Variation in the frequency and distribution of artifacts and phosphate levels throughout the survey area, revealed in the posthole excavations, appear to indicate the location of potential house lots and their associated activity and refuse areas.

This chapter discusses the first phase of my dissertation research at the site of Lamanai in northern Belize (Figure 1). My aim is to obtain information on the nature of Maya household organization, and my research has been designed to provide a case study for testing current models of Maya social organization through an examination of the impact of the Spanish State on the organization of Maya household production and gender relations. Spanish colonization was a catalyst for change in indigenous societies and it had profound effects on household organization, particularly the gender relations of production (e.g., Nash 1980). Archaeological studies focusing on the transition from the Late Postclassic to the Colonial period have begun to demonstrate the impact of the Spanish State on Maya household producers and local production systems (Graham 1991; Kepecs 1998). Understanding how the impact of Spanish contact affected the daily lives of Maya people is important to our understanding of the colonial experience. Changes in household organization are therefore critical in understanding this experience.

The central question of my research is as follows: Are the hierarchical gender relations of production apparent today in Maya households a legacy of pre-Columbian gender constructions or did colonialism impact household economies, resulting in changes in gender relations between Maya men and women? In order to answer this question I would need to locate house lots as defined by Killion (1992) and others, that date to both the Late Postclassic (ca. A.D. 1450-1545) and Spanish Colonial (ca. A.D. 1546-1650) periods. Thus, the objectives of the 2003 field investigations were to identify house lots occupied during these two time periods.

Though both time periods under investigation are difficult to identify and to distinguish between them, they have one common problem: structures are virtually invisible on the ground surface. Identifying Late Postclassic and Spanish Colonial deposits is problematic because many structures dating to these time periods do not form mounds and lack artifact scatter on the
surface to indicate construction below. As a result, entire complexes of structures and features may be just centimeters below the surface (Chase 1993:201). At other times, a few stones protruding above the ground surface may be the only indication of a line-of-stone foundation (Pendergast 1985:3). Under the best of circumstances, an amorphous rise of less than 10 cm above ground surface may indicate a platform (Graham 1991:320). Therefore, traditional archaeological survey methods focused on mounds and aggregates of mounds are not adequate to the task of locating structures dating to the Late Postclassic and Spanish Colonial periods, all of which could easily fall into the category commonly referred to as "vacant" terrain (e.g., Ball and Kelsay 1992; Pyburn 1989). Pendergast, Jones, and Graham (1993) pointed out the difficulties in Belize in identifying and distinguishing between the Late Postclassic and Spanish Colonial periods. Specifically, they recognized the need to integrate traditional methods of survey – that is the recording of mounds and artifact scatters – with a variety of excavation strategies to locate deposits that may lie entirely hidden just beneath the ground surface.

In order to locate “invisible” deposits in “vacant” terrain, a three-part research strategy was devised that combined multiple methods. The following sections of this chapter describe the methods and results of the survey and post-holing strategy developed to locate house lots at Lamanai. First, I will discuss the systematic survey and mapping portion of the field season, which sought to locate house lots by visible low platforms, line-of-stone foundations, and artifact scatters. The second section discusses the posthole sampling strategy, which sought to locate house lots and their components by identification of sub-surface features and artifact densities. Next, soil samples were collected from each posthole in order assess the variation in phosphate levels for the purpose of locating possible garden, refuse, and activity areas. In summary, combining these three independent lines of evidence – the survey results, artifact densities, and phosphate levels – provided distinct spatial patterns on the landscape that contributed to identifying house lots that elude surface detection.

**Field Methods and Results of the Systematic Survey**

The survey portion of the 2003 field season consisted of systematic survey and mapping, which sought to locate house lots by visible low platforms, line-of-stone foundations, and artifact scatters. The focus of the research was centered on the N11 and N12 grid blocks, where Late Postclassic (LPC) and Spanish Colonial (SP) Period archaeological deposits had previously been
identified. A systematic survey of the northeast area of the grid, approximately 200 m (E-W) x 575 m (N-S), was completed. A survey grid was established using the southwest corner of Structure N12-13 (the second Spanish Church) as the 0,0 benchmark; it was from this point that both the North and East baselines were established. Using a Sokkia (KT5) transit and a 100 m tape to mark their locations, wooden stakes identified by their grid coordinates were placed every 25 m along each baseline. The North baseline extended 575 m to the north and the East baseline extended 80 m to the east of the 0,0 benchmark. Parallel transects (often called *brechas*) oriented along east-west lines and spaced at 25 m intervals were cut and cleared through the dense undergrowth that characterizes this portion of the site. Each *brecha* was further cleared of heavy leaf litter, completely exposing the ground surface. Each transect measured approximately 2 m in width and varied from 75-175 m in length. Pin flags identified by their grid coordinates were placed every 25 m along each survey transect and wooden stakes were placed at each 100 m. A total of 24 *brechas* were cut in the northeast grid.

Mound sites, rock alignments, terraces, artifact scatter, and other features located during survey were described and plotted onto the existing site map. During the survey, 13 previously documented structures were relocated. Thirty-six new features, primarily consisting of linear rock alignments, were described and recorded relative to their grid coordinates. Many of these were determined to be of modern construction, the product of mid-1980s occupation of the site by refugees. Nineteen of the new features on twelve transects were provisionally determined to belong to the LPC-SC periods based on construction techniques and recovered artifacts. Of these, five features (Feature N525/E175, N500/E175, N425/E10, N350/E40 and N25/E60) had the most common attributes that linked them to the time periods under investigation and were subsequently further investigated, and will be briefly discussed below (Figure 2).

During the survey eight segments of rock alignments running on a north/south axis along the lagoon edge were observed. The northernmost segments, Features N525/E175 and N500/N170, are a rock alignment that combines natural limestone boulder outcroppings with constructed modified stone segments connecting the boulders. The connecting sections comprise a 2-3 coursed mixture of large and small stones. The stones range from approximately 30-50 cm in length, 20-30 cm in width and 10-20 cm in height. These alignments do not form straight vertical sections, but follow the contours of the land. During exposure, ceramic and lithic materials that are typical markers of the Cib Phase (Late Postclassic) to Yglesias Phase (Terminal Postclassic-Colonial) (Graham 1987:88-95; Simmons 2002) were recovered.

A similar type of rock alignment construction was observed at Feature N25/E60, which also combines natural limestone boulder outcroppings with constructed stone segments. The alignment extends north to the N50 transect where it stops just short (ca. 1 m) of connecting to the southeast corner of Structure N12-17. To the south, the line-of-stones splits into two parts with both continuing to the 0 baseline, approximately 10 meters apart. The northern portion is constructed of limestone boulders with a single course of larger stones placed in between so that the alignment follows the topography. The stones range from approximately 60-80 cm in length, 25-40 cm in width and at least 20-30 cm in height. The stones were not completely exposed so at this time their full height is unknown. The southern portion is composed of a single
Figure 2. New Features Located during Survey and Discussed in the Text.
course of small stones ranging from approximately 20-40 cm in length, 10-15 cm in width and 10-20 cm in height. Several may have been slightly modified/shaped. Both Yglesias Phase ceramics and Spanish olive jar fragments (Graham 1987:91-95; Lister and Lister 1987:132-137) were collected during clearing. A line of three stones protruding less than 5 cm above the existing ground surface and running north south revealed Feature N425/E10. Exposing this feature disclosed a large U-shaped line-of-stones approximately 18 m on the north boundary, 15 m on the south and 20 m on the east section of stones. Clearing did not locate a western boundary. On the northern and southern portions of the alignment most of the stones range from approximately 80-110 cm in length, 35-50 cm in width and at least 20-30 cm in height. No excavations have taken place below the uppermost portion of these large limestone boulders, so their vertical extent is not known at this point. Several of the larger stones appear to be natural limestone bedrock outcappings, which have been slightly modified. On the east side, the facing is composed of a series of smaller rectangular blocks ranging from approximately 20-40 cm in length, 10-15 cm in width and 10-20 cm in height that have been slightly modified/shaped. The large limestone rocks may be base courses, which were placed as the initial bed or foundation for construction of a low, single course platform. At this time no upper course is present and no facing stones were observed during this initial phase of investigation. Yglesias Phase ceramics (Graham 1987:91-95) were identified during clearing. This platform is located approximately 35 m east of Structure N11-18 (Pendergast 1985, 1991:348). Cobblestone pavement areas, composed of river stones and mixtures of shaped and unshaped limestone, are characteristic of the periods under investigation. These areas appear to have served as exterior walkways between houses, courtyards, or other usable but not necessarily enclosed spaces (Graham 1991:321-323). Artifacts collected from the surface belong to Yglesias Phase ceramics and Spanish olive jar fragments (Graham 1987:91-95; Lister and Lister 1987:132-137).

**Posthole Sampling Strategy of the NE Survey Grid**

The second half of the field investigations consisted of a two-part posthole sampling strategy. First, posthole excavation was conducted every 25 m on each of the east-west survey transects to locate house lots and their components by detecting sub-surface features, refuse, and activity areas (Figure 2). Second, soil samples were collected from each posthole to determine relative phosphorous content of soils to identify potential refuse and garden areas. Following the example set by Cynthia Robin (1999:122) at Chan Noohol, Belize, four attributes were recorded for each posthole test: (1) distance to bedrock or other impenetrable surface; (2) soil texture and color; (3) quantity of artifacts, and (4) weight of artifacts. Attributes 3 and 4 (artifact quantities and weights) were used to suggest the location of potential activity areas, refuse areas, and vacant areas. In conjunction with attributes 3 and 4, a qualitative assessment of stone quantity in posthole sidewalls was used to suggest the presence of core from low platforms in
surface-invisible substructures. Attributes 1 and 2 (soil depth, texture, and color) in conjunction with all other attributes were used to suggest possible garden areas. One hundred and thirteen postholes were excavated with a total of 2,001 ceramic, 301 bone, 245 lithic, 43 glass, 23 metal, and 5 shell artifacts recovered. Sixteen of these postholes had diagnostic ceramic or lithic artifacts dating to the Late Postclassic-Spanish Colonial periods (Graham 1987:88-95; Simmons 2002).

Artifact densities varied throughout the survey area, which suggested the presence of several potential activity, refuse, and vacant areas. Total artifact frequencies per posthole test clustered in four groups. The first cluster, 0-11 (low) artifacts per posthole test, and the second cluster, 12-24 (sparse) artifacts per posthole test, contained small, worn, and broken debris. These two clusters made up the majority (71%) of the posthole tests. The third cluster (8%), 25-37 (moderate) artifacts per posthole test, and the fourth cluster (21%), 38-84 (high) artifacts per posthole test, contained larger pieces of debris in frequencies that could correspond to moderate and heavy refuse deposits. The artifacts recovered contained a typical array of domestic artifacts, including sherds, chert objects, obsidian, net sinkers, and faunal material.

Identifying possible garden areas based on attributes 1 and 2 (soil depth, texture, and color) was quite difficult. Soil texture and color was consistent throughout the northeast survey area and varied from brown clay loam to clay depending on the proximity to bedrock. Soil texture and color varied in postholes with the heaviest densities of artifacts often becoming darker, sticky clay. This is probably the result of the addition of organic residues to the soil. Soil depth varied, ranging from 14 cm to 57 cm with the average depth being 33 cm. Seventy-five percent (11 out of 17) of the deepest postholes are located in “vacant” terrain whereas the remainder are located within 25 m of structures. Not surprisingly, the seven deepest postholes also produced the heaviest densities of artifacts and diagnostic artifacts.

As for locating sub-surface features, posthole sampling was very successful. Several postholes exposed what appears to be core of platforms or ancillary structures. However, the most important feature exposed during post-holing was Feature N25/E50, located just east of the second Spanish Church (Figure 2). The N25/E50 posthole revealed a vertical rock alignment composed of two parallel facing stones 10-15 cm apart. Upon clearing the feature, it became apparent that the posthole would have been located at the center point of a semi-circular feature with a diameter of 7.8 m with the open end of the curve facing east toward the lagoon. The stones are generally roughly square or rectangular in shape and measure 20-30 cm in length, 10-15 cm in width, and 10-15 cm in height. On the outside or convex side of the alignment are concentrations of small, unmodified pieces of limestone. Both of these architectural elements have strong similarities to architectural constructions of fifteenth-century or later remains at Lamanai (Pendergast 1985; Pendergast, Jones, and Graham 1993:70; Simmons and Howard 2003:35-48). Both Yglesiases Phase ceramics and Spanish olive jar fragments were recovered. In addition, one copper pig was recovered at the midpoint of the semi-circular feature and another copper pig was detected to the northwest of the feature by Scott Simmons, University of North Carolina, Wilmington using a Garrett Master Hunter metal detector. Ongoing research by Simmons has identified copper metallurgy that dates to the Terminal Postclassic-Colonial Period at Lamanai (Simmons and Howard 2003:63-68).
Phosphate Testing

As an additional line of evidence, soil samples were collected from each posthole to determine relative phosphorous content of soils in order to provide an independent chemical measure of anthropogenic soil modification as outlined by Terry and colleagues (2000). Studies of anthropogenic soils in the Maya area have focused on phosphorous because elevated phosphorous levels can result from numerous human activities which add organic waste to soils; these activities include adding fertilizer, refuse disposal, or cooking (e.g., Ball and Kelsay 1992; Robin 1999: Chapter 5). Soil phosphorous levels increase in areas of human habitation, and leave a permanent signature that can only be removed by erosion of the soil. For example, high phosphate levels could indicate the location of garden or refuse areas, whereas, low phosphate levels could indicate areas of heavy traffic, such as pathways and entry areas to buildings.

Following Robin’s (1999:122) example, soil samples for phosphate testing were collected from three locations within each posthole: (1) below the root zone, at the level of ancient occupation; (2) 0.1 m above bedrock or other impenetrable surface; and (3) from the center of the posthole, if the depth was greater than 0.3 m. Chemical phosphate testing was conducted on 207 soil samples taken from the postholes in the northeast grid survey. The author followed the basic procedures outlined by Terry et al. (2000) with some minor adjustments. A Hach Phosphate Pocket Colorimeter Model 46700-06 was used. This colorimeter is factory calibrated to measure phosphate levels from 0 to 3.30 mg/L, which allows for quick and reliable testing in a field laboratory.

The phosphate levels varied quite dramatically throughout the survey area, from 0.0 to 5.20 mg/L. Phosphate levels were separated into four groups: Group 1: Low (0-0.99 mg/L), Group 2: Sparse (1.0-1.99 mg/L), Group 3: Moderate (2.0-2.99 mg/L), and Group 4: High (3.0+ mg/L). For the purpose of this research I was most interested in the phosphate variations within the first 10-20 cm of ground surface because deposits related to the LPC and EC periods are most often found within these levels (Pendergast 1985; Simmons and Howard 2003). Figure 3 reflects these phosphate concentrations with the average center depth being 18 cm.

Discussion

Combining the three lines of evidence—the survey results, artifact densities, and phosphate levels—revealed distinct spatial patterns on the landscape. Five broad divisions were identified (Figure 3). The shaded areas on the map indicate variations in artifact densities and phosphate levels that suggest the location of house lots and their surrounding activity areas.

Work by Killion and others has demonstrated that four broad sub-divisions in contemporary house lot spaces—cleared entry area, outdoor work areas, refuse areas, and garden areas—are identifiable in archaeological contexts based on distinctive material and chemical signatures that become embedded in the ground surface (e.g., Barba and Ortiz 1992; Killion 1992; Robin 1999). Areas of low phosphate and low artifact density are interpreted as high traffic areas, such as entryways or pathways, areas where people would have swept clean both organic and inorganic remains (e.g., Barba and Ortiz 1992). Robin (1999) found that this cleared area was consistently on a single side of a residence group and corresponded to the architectural front of the building in all but one instance. Areas of elevated phosphorous levels (2 and 3) and low artifact density (0-11) suggest outdoor work or activity areas. Here people worked...
Figure 3. Spatial Patterns in the Survey Area.
on food preparation and consumption and ceramic and stone tool production, which resulted in elevated phosphorous levels and small pieces of work debris being embedded into the ground despite sweeping. Areas of high phosphorous concentrations (levels 3 and 4) and artifact densities that are low (0-11) to sparse (12-24), suggest garden areas. In some contemporary communities garden areas are cleaned of hard inorganic refuse, in others, farmers deposit low quantities of hard garbage in garden areas to assist in plant growth (Hayden and Cannon 1983; Killion 1992). The variation seen here may be a result of individual gardening preferences. Refuse areas as indicated by high phosphate concentrations and high artifact densities are a result food and other organic waste and disposal production debris from work areas.

The survey revealed four features that appear to be built-up occupational surfaces (N500/E175, N525/E170, and N25/E60) or single-course faced platforms (N425/E10). At N500/E175, N525/E170, and N25/E60 the ancient Maya used the potential of the sloping terrain to construct low stone alignments that connected low bedrock outcrops. By following the contours of the land they were able to create large, leveled spaces that may very well have served as locations for house lots and their surrounding activity areas. In fact, these spaces probably held multiple house lots or at least house lots with more than one residence. However, combining the artifact and phosphate signatures with the survey data offered a greater clarity in discerning activity patterns on the landscape. For example, three distinct spatial patterns can be observed in the area located west of features N500/E175 and N525/E170. The first pattern indicates high phosphate concentrations with high artifact densities and suggests potential refuse areas. The artifacts recovered contained a typical array of domestic artifacts, including sherds, chert flake tools and debitage, net sinkers, and faunal material. In addition, two Yglesias bowl fragments, one with a diagnostic slit-foot base, were recovered. To the south of this area, low phosphate and low artifact densities suggest entryways or pathways. This may indicate cleared area in front of one, or several, structures. The final area is comprised of elevated phosphate concentrations with sparse artifact density suggesting the location of gardens or the possibility of activity areas.

The area that encompasses N425/E10 and N350/E50 has elevated phosphorous levels (2 and 3) and low artifact density (0-11), which suggests outdoor work or activity areas. Several other structures belonging to the Terminal Postclassic and Early Colonial periods have been identified in this area, including the cacique house (Pendergast 1985; Simmons and Howard 2003). Robin (1999) noted that work areas are located in spaces within 20 m of residences. This also appears to be the case at Lamanai. Several other distinct areas can be seen in proximity to this work area. To the east is an area that may have served as a pathway to the lagoon. The phosphate concentrations here are barely discernable and the ceramic fragments are minute. On the landscape in southern portion of the survey area are several isolated areas with high phosphate concentrations and high artifact concentrations or high phosphate with low artifact concentrations. These areas may correspond to refuse areas or garden areas that are not directly associated with surface features.

Summary

The Phase I field season in 2003 was a success. The purpose of the Phase I field season was to locate house lots that dated to both the Late Postclassic and Early Spanish Colonial Periods. The survey resulted in the
identification of a number of previously unidentified features that have potential for revealing information about household production during the Late Postclassic-Colonial transition. Posthole excavations revealed that the frequency and distribution of artifacts and phosphate levels are quite varied throughout the survey area, which suggests that potential activity areas, refuse areas, and vacant areas are not directly associated with surface features. In fact, the postholes with the highest artifact densities and most varied artifact assemblages are located in “vacant” terrain. Furthermore, the identification of the semi-circular feature that was hidden just below the ground surface attests to the value of a posthole testing strategy. Ceramic, lithic, and metal artifacts that were recovered from new features and posthole excavations have typical markers of the Cib Phase (Late Postclassic) to Yglesias Phase (Terminal Postclassic-Colonial Period), which suggests that these areas were occupied during the periods under investigation and appear promising in terms of their potential to yield additional information on household production at Lamanai. Further testing and excavation in the areas discussed above are in progress.

Methodologically, my research strategy integrates recently developed techniques of data collection with traditional techniques, and thereby provides a broad range of data bearing on the structure and organization of Maya society. Research designs of the type being implemented here can go far in defining and differentiating how the impact of Spanish colonial policies affected Maya household organization, division of labor, and gender relations, during a critical, but rarely addressed, transition in Maya history.

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15 LATE POSTCLASSIC-COLONIAL PERIOD MAYA SETTLEMENT ON THE WEST SHORE OF PROGRESSO LAGOON

Maxine H. Oland and Marilyn A. Masson

This paper presents the results of four seasons (2000-2003) of archaeological research on the Late Postclassic-Colonial Period Maya occupation of the west shore of Progresso Lagoon, northeastern Belize. We believe that this site represents the historically known encomienda of Chanlacan, known for its role in the early Colonial Maya resistance movement. Excavations at the shore settlement were concentrated in a residential area, in which three household structures were horizontally excavated, as well as in an upper status residential/ritual area close to the lagoon shore. Results from these excavations contribute to the Belize Postclassic Project’s study of the long-term political economy of the Progresso Lagoon area, and more generally, to understanding the Late Postclassic-Colonial period transition in northern Belize.

Introduction

Work at Progresso Lagoon, in the Corozal District of northern Belize, has focused largely around the Late Postclassic (13th - 16th centuries) occupation on the island of Caye Coco. Over the past four research seasons, work on the west shore of the lagoon has revealed a substantial occupation that spans the end of the Late Postclassic and the Colonial periods. We believe that this shore settlement represents the historically known encomienda of Chanlacan, identified by Grant D. Jones in his 1989 book *Maya Resistance to Spanish Rule: Time and History on a Colonial Frontier*. Chanlacan’s ethnohistory indicates that the community was influenced by both the Spanish authority and unconquered Maya neighbors in the 16th and 17th centuries. Research design at the settlement has therefore been focused on the ways that different residents of the shore community adapted to the colonial incursion into Belize. Excavations and survey at this shore settlement will be the subject of a forthcoming dissertation by Maxine Oland, of Northwestern University.

This paper will briefly describe the work that has been done on the Late Postclassic-Colonial period occupation on the west shore of Progresso Lagoon (Oland 2001, 2002, 2003) (Figure 1). It also seeks to highlight key differences between the shore settlement and the island of Caye Coco in the areas of settlement, economy, and ritual practice. First, the shore settlement shows no evidence of sudden change at the time of Spanish contact, while Caye Coco was abandoned in or before the 16th century. Second, new types of material culture are seen at the shore settlement, indicating different social and economic processes than those present at Caye Coco. Third, the distribution and disposal of ritual materials at the shore settlement is distinct from the distribution of ritual objects on Caye Coco.

Differences between the shore and island settlements are significant. They indicate a transition that occurs at the lagoon at the end of the Late Postclassic period, or the presence of distinct social entities living at the lagoon in the century prior to Spanish colonization. The study of this transitional period is essential for understanding the...
Settlement at Progresso Lagoon

The island of Caye Coco, at the southern end of Progresso Lagoon, served as a thriving secondary Postclassic center until at least the 15th century, and possibly up until contact in 1544 (Masson 1999). The island likely served as the political nucleus of Late Postclassic activity at the lagoon, with 17 mounded structures. All of these structures were substantially modified after the 13th century, and most were built entirely during the Postclassic (Rosenswig and Masson 2003).

The Colonial period shore settlement was more substantial than we expected. Ceramic and architectural evidence suggests that the shore settlement on the west shore of the lagoon was occupied from the 15th-17th century, with no identifiable 13th and 14th century occupation. This transitional Late Postclassic-Colonial occupation was spread from the water to the bluffs above the west shore of Progresso Lagoon. Much of the settlement overlays Terminal Classic occupation on the shore.

After an extensive shovel testing and test-pitting survey, two areas of the shore settlement were chosen for detailed excavation (Oland 2002, 2003). These included 1) a public/ritual area located on the shore of the lagoon at the Avila and Shangrila properties, and 2) a residential neighborhood at the Erlington property on the bluff above the lagoon. At both of these localities we excavated housemounds and shrine structures. Houses in the shore settlement were of three types of construction: reused Terminal Classic mounds, low mounds built at the Late Postclassic/Colonial transition, and off-mound houses.

A total of 528 square meters of household space was exposed for this project. Most of this exposure was in one residential area, on the bluff that overlooks the lagoon. One high status residence (Str. 1) in a more public/ritual area was excavated close to the shore of the lagoon on the Avila property. This house mound, which had evidence of ritual activity, large amounts of food consumption, and extensive Spanish contact, is analogous to the cacique’s (chief’s) residence at Lamanai (Pendergast 1986, 1991).

Notably, there seemed to be no abrupt changes at the shore settlement at the time of Spanish contact. Nor was there any evidence of a Spanish-influenced settlement layout. No church structure was ever found, although this may be the result of substantial bulldozing and modern development near the core area of the settlement. It is significant that there is no evidence of redistributing the population on the shore, as might be expected in a Spanish reducción (forced resettlement) of a Maya community. It is possible that the island of Caye Coco did suffer reducción at the time of the
Spanish incursion into the area, as the island was no longer occupied during the later 16th and 17th centuries.

Economy and Material Culture

The economy of the shore settlement was not greatly impacted by Spanish material culture, although Maya material culture did change at the end of the Late Postclassic. Overall, Spanish artifacts at the site seem to be the products of gift exchange, rather than full integration into a Spanish trade economy. Spanish artifacts come exclusively from one area of the site, on and around the possible cacique’s residence close to the lagoon shore. There were no Spanish artifacts found in the residential neighborhood that we excavated on the bluff. Although olive jar sherds from at least 10 different olive jars at Str. 1 may signify their use in utilitarian trade, most Spanish artifacts from this structure group represent luxury items or “trinkets”. These include 4 glass trade beads, a glass ornament possibly from an earring or other piece of jewelry, and sherds from two majolica plates.

New types of Maya material culture can be seen in ceramic, lithic, and copper artifacts. The main ceramic types on the shore are linked closely in form to the Yglesias phase vessels from Lamanai (AD 1450-1700) (Graham 1987). Pastes shift away from the very standardized Payil dishes and Santa/Navula ollas of Caye Coco (Masson 2002; Masson and Rosenswig n.d.) to look more like the Rita Red Ceramic Group at Santa Rita Corozal (Chase 1982) and the Yuncu utilitarian wares of northern Yucatan (Kepecs 1998; Smith 1971; Bey, et al. 1998; Brainerd 1958). Ceramic beads, which may have served as weights, or as jewelry (as suggested by one bead with a face on it), were present in nearly every single Late Postclassic-Colonial period deposit excavated in the shore settlement. While they are present in low numbers on Caye Coco, the ubiquity of ceramic beads is clearly a characteristic of the transitional shore assemblage.

Projectile points are the only formal lithic tool type of the transitional period (Figure 2). While they are present on the island of Caye Coco in fewer numbers, over 200 have been found in the shore settlement contexts. The Postclassic popularity of these points is also indicated at Mayapan, which was abandoned around 100 years before the conquest of Yucatan. At Progresso, however, their numbers increase in protohistoric/contact period contexts. These points were made from retouched biface thinning flakes and obsidian blades, and at least some of them were made locally, as indicated by a feature found in the shore settlement which resembled a knapper’s bag. This cluster of materials contained chert thinning flakes, preforms, and unused points, amounting to a total of 147 pieces of lithic material (Oland 2002). All of the unused projectile points within the knapper’s bag were made with a square base. Base form may be a marker of identity, or carry other social meaning, as suggested by Simmons (1995), who also links these unifacial/slightly bifacial points to Colonial period contexts. Spatial analysis will be used to assess clustering of base types across the shore settlement. Some contexts at Mayapan have distinct or dominant point styles as well.

Copper alloy artifacts, in the form of axeheads (N=5), a fishing hook (N=1), and a bell fragment (N=1), have only been found at the shore settlement. Copper likely represents a new type of trade commodity in the Late Postclassic/Colonial period, as has been noted at Lamanai, where there may be evidence for copper artifact production (Simmons 2001). While bells are common at Mayapan, none of these copper axes have
been found, supporting their Terminal Postclassic or Colonial Period date.

**Ritual Deposits**

Ritual deposits and burials dating to the Late Postclassic/Colonial period transition showed no evidence of Spanish influence. Instead, they reflect a continuity of Maya beliefs up until the community’s abandonment. But these local ideological customs are manifested in different patterns than are found on Caye Coco, when burials and censer distributions are compared.

Burials on the island Caye Coco were consistently found in cemeteries in front of mounds, or in open informal courtyard spaces (Figure 3). No Postclassic burials were encountered within structures on the island. In contrast, Transitional Late Postclassic/Colonial period burials in the shore settlement were found inside of structures. One set was beneath the floor of a house, and another was within a box shrine. Sampling issues do limit our knowledge of sub-courtyard features for the shore, and although several courtyard test
pits were excavated to bedrock, it is not possible to say whether burials were also placed in off-structure locations. At Mayapan, burials are found within and outside of structures.

Two of the shore burials had multiple grave goods- the shrine burial was a seated flexed middle-aged male, buried with a necklace of shell ornaments and drilled human, peccary, and dog teeth, a carved coral bead, obsidian blades, sea shells, and a drilled ceramic disc. One of the house floor burials was a side flexed, probably male, individual buried with a red-slipped tripod footed dish, a deer vertebrae, and a bracelet or anklet made of shell beads and one bone bead (rear of Figure 3a). The third burial of a young adult female, also found under the house floor, appeared to have been buried in a somewhat upside down seated position. The skull was found in a carved hole in the bedrock (possibly a posthole), although the position may be due to post-depositional shifting (front of Figure 3a). A figurine/crude incense burner foot and a circular ceramic element were found among the bones, and are the only possible grave goods. Although the location of burials differs, continuities with the past at Caye Coco are demonstrated in the burial positions (a range of flexed positions) and overall types of grave goods (shell ornaments, animal bones and bone ornaments, tripod dishes). One burial at Caye Coco was buried with at least two deer skulls. At Mayapan, two burials excavated in 2003 had deer bone offerings, including an infant with a metapodial awl and whole vertebrae and an adult with a deer radius placed alongside his/her own forearm. It is curious that this practice is shared at all three settlements. The distribution of effigy censer, and other censer fragments, is also distinct in the shore settlement. Effigy censers appear to have been removed from the island of Caye Coco, in smashing episodes such as that recovered on the neighboring island of Caye Muerto, where effigy censers were smashed and scattered, possibly as part of a new year celebration (B.W. Russell, personal communication) (Figure 4). In the shore settlement, effigy censer fragments were sometimes scattered intentionally as parts of ritual deposits, but were also found in household middens, associated with kitchen trash and other discarded and broken everyday objects. The casual discard of effigy censer fragments was widespread across our sample of household test pits.

Intentional deposits of censers were found on shrines and in houses. The first
shrine structure was a small structure (Str. 2) close to the lagoon shore, located adjacent to the possible cacique’s residence (Str. 1). On this shrine, which had remnants of a red plaster floor, effigy fragments were scattered with Spanish olive jar sherds and sherds from native redware dishes (Oland 2002). The other deposit, a box shrine located in the residential neighborhood, contained the remains of a smashed effigy on the surface of its interior box, above what we later discovered to be the burial of a middle-aged male (Figure 4). Very few censer fragments were found in the excavation of the rest of the structure, but we did discover, and partially excavate, a pit behind the southwest corner of the shrine. In this pit were what seemed to be materials associated with earlier shrine activities, including deer bones, an entire sea turtle carapace and other faunal elements, effigy censer fragments, and a red-slipped strap-handled olla that was apparently full of ashes when it was thrown into the pit.

In the houses, censer fragments were carefully placed above burials, beneath floors, and at the corners of the house. A crocodile head and cacao pod element were placed below the floor of one house, above the location of a burial. Between the first and second dirt floors of an off-mound house were the remains of two vessels, one of which was the base of a pedestal jar censer with an interesting zig-zag pattern for air holes. This cutout pattern is similar to a Cib phase (Late Postclassic) censer at Lamanai (Graham 1987:89), although the vessels are different types.

Ritual deposits including effigy fragments were found outside of the southwest and northeast corners of the same house. At the southwest corner was an informal altar consisting of a concentration of small burned cobbles with a jade bead placed inside of it, around which were scattered fragments of effigy censer. At the northeast corner of the structure, just outside of the entryway, was a special deposit consisting of four tripod dish supports, effigy censer fragments, and a peccary canine. This dispersal of censer parts around structures was also observed at Laguna de On (Str. 1), where ritual and residential behaviours co-occurred and burials were placed next to the house. Notably, Laguna de On also had a Colonial component as reflected by the presence of a late “Lacandon” type censer offering found there by Gann and a couple of radiocarbon date ranges (Masson 2000).
Summary

Located between Spanish conquerors and unconquered resistant Maya groups, the Colonial Maya of Belize were forced to adapt to multiple pressures of accommodation and resistance, while still maintaining their own traditions and identities. Archaeology at transitional Late Postclassic/Colonial sites, such as our work on the shore settlement at Progresso Lagoon, helps provide context for the Colonial histories. While many aspects of life changed forever during the Spanish occupation of the region, at Progresso Lagoon certain changes may have begun during the 15th and early 16th centuries, as noted for Lamanai (Graham 1987) and Santa Rita (Chase and Chase 1988). In this paper we have highlighted distinctive settlement patterns, material culture, and ritual features linked to the end of the Late Postclassic at Progresso Lagoon. Life remained fundamentally Maya at the lagoon until the abandonment of the shore settlement. However, differences between the island of Caye Coco and the shore settlement shed light on an era of changing social, political, and economic processes.

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16 INVESTIGATIONS IN THE CHURCH ZONE MAYA ARCHAEOMETALLURGY AT SPANISH COLONIAL LAMANAI, BELIZE

Scott E. Simmons

This paper presents a discussion of the Maya Archaeometallurgy Project (MAP), a research program aimed at studying the specialized production of copper objects and the role this craft activity played in shaping Maya political economies around the time of Spanish contact. The MAP is focused on addressing questions regarding continuities and changes in political economies during an important period of Maya cultural transition – Postclassic to Spanish Colonial times. Some of these changes and continuities can be seen in the area of craft specialization. Recent MAP research has narrowed on understanding the role that native elites may have played in administering productive activities as a means to strengthen their political and social positions within Lamanai’s contact period community. In addition, the MAP seeks to elucidate the organizational nature of copper production as a relatively new, specialized craft activity that appeared in the Maya world in late Pre-Columbian times. This paper includes a summary of the theoretical background for the work, goals of the project, current work being conducted at the site of Lamanai, and recent research results.

Introduction

The Maya Archaeometallurgy Project is a research program focused on studying the specialized production of copper and bronze objects in the Maya Lowland area during Postclassic and Spanish Colonial Periods. The project is the first and only one of its kinds in the Maya area. Since its inception in 1999 a central goal of the MAP has been to understand the relationships that existed between copper production and socioeconomic differentiation and interdependence among the Maya (Simmons 1999; Simmons and Howard 2003). Currently the project’s focus is at the Maya site of Lamanai, Belize (Figure 1), where more copper objects have been recovered from controlled archaeological contexts than at any other Maya site.

A larger goal for the research project is to provide insights into the relationships that existed between craft production, socioeconomic integration, and cultural evolution in state-level societies. Currently the MAP research is being conducted in the heart of Lamanai’s Spanish Colonial zone. It is one of several current research projects that build on twelve years (1974-1986) of archaeological research directed by Dr. David M. Pendergast, Curator Emeritus of the Royal Ontario Museum (ROM). During the course of this large-scale, ambitious project, Dr. Pendergast and his associates succeeded in defining the site’s chronology, settlement characteristics and range of material culture types and architectural features (Pendergast 1981, 1984, 1986a, 1986b, 1990, 1991). Included in Pendergast’s work on the Postclassic and Spanish Colonial Period at the site was the recovery of a variety of copper and alloyed copper objects (Figure 2).

Theoretical Foundations and Research Goals for the MAP

The relationships between economic organization and social evolution have fascinated anthropologists for some time. Production is an essential part of all
Figure 1. Map of Belize showing Location of Lamanai.

economic systems, and the study of this particular aspect of economic organization can reveal much about the nature of ancient as well as modern social and political complexity. Specialization, defined by Wilk (1996:60) as “the ability to produce more efficiently by dividing labor among individuals or groups,” is considered by many researchers to be an integral part of the political economies of complex societies (Brumfiel and Earle 1987; Clark and Parry 1990; Earle 1987; Costin 1991; Costin and Hagstrum 1995; Peregrine 1991; Stein and Blackman 1993). By studying the relationships that existed between craft production and the maintenance of socioeconomic complexity at Lamanai, the MAP research will contribute to our understanding of how human societies adapted to changing social, political and economic conditions and why this process of evolution occurred.

The main goals of the Maya Archaeometallurgy Project at Lamanai are to:

- Determine how Maya metal production was organized through time. We’re particularly interested in the context of production, and especially in determining whether coppersmiths worked independently, were attached to local elites, or worked within some other productive contexts
- Understand the specific nature of productive activities, such as the creation of molds, smelting, casting, and annealing techniques, and recycling behavior
- Examine current models that focus on the relationships between craft production, political economies and socioeconomic complexity

Figure 2. Various copper bells recovered from Middle Postclassic contexts, Lamanai.

An important goal of this research project is to examine current theoretical models focusing on the relationships between craft specialization and socioeconomic complexity. Data derived during the course of the Maya Archaeometallurgy Project at Lamanai are being used to examine four specific organizational parameters of craft specialization, described as 1) the intensity of production, 2) the constitution of the production unit, 3) the concentration of

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production, and 4) the context of production (Costin 1991:8-9; Costin and Hagstrum 1995:620). During up-coming field seasons research will continue to focus on evidence related to the last parameter of specialization, which refers to the nature of control over production and distribution (Costin 1991:8).

We want to know what role specialized crafting, in this case the production of copper objects, played in the political economy of Lamanai during Terminal Postclassic and early Spanish Colonial periods. Ultimately, we will be examining Earle’s (2002:1) assertion that the political economy is “channeled to create wealth and finance institutions of rule” in light of the data we obtain about the nature of copper metallurgy at Lamanai. Did powerful individuals in the community control or oversee the work of craftspeople engaged in this new productive activity as a way to create wealth for themselves and legitimate their rule? The identification and investigation of copper workshop remains, believed to be located in the immediate vicinity of the residence of one of the most powerful individuals in Lamanai’s contact period community, would provide key insights into this particular question.

The area of the site in the immediate vicinity of the two Spanish Churches has produced compelling evidence of Postclassic and Spanish Colonial Period elite occupation, both in the forms of architectural remains and burials. A number of the latter have yielded status artifacts including bells, tweezers, buttons, rings and other copper alloyed ornaments (Figure 2). In terms of copper production activities, all of the mis-cast pieces, prills, production failures and pieces of scrap sheet copper, as well as five ingots, have been found in this particular area of the site. Understanding the associations between copper production, elite residence and status objects of copper and alloyed copper (bronze) is an important, on-going research focus of the MAP. It is hoped that archaeological information on these associations will help provide a better understanding of how Maya political and economic realms intersected in late Pre-Columbian and early Spanish Colonial Period.

For instance, we want to know what kinds of relationships existed between craft specialization and socioeconomic complexity just before and during the Spanish Colonial Period. Specifically, did control over the production of some exotic, finely crafted goods provide a means by which Maya elites could maintain a certain degree of economic power and social status? Archaeological evidence obtained during excavations conducted at Lamanai indicates that elites living at Lamanai in Postclassic times still retained a certain degree of power and status (Pendergast 1981, 1986b, 1991, 1993). As a result, Lamanai provides an excellent venue for the study of specialized craft production and the role it played in the maintenance of social, economic and political complexity.

**Copper Production at Lamanai**

To date a total of 180 copper artifacts have been recovered at Lamanai (Table 1). All of these objects were recovered from Postclassic and Spanish Colonial Period contexts. During the latter part of the Royal Ontario Museum’s project at Lamanai (1974-1986), the Spanish Colonial Period site center became a prominent focus of research, particularly the area around the two Spanish churches for which the nearby village of Indian Church is named. A variety of copper artifacts had already been recovered in the area of Early and Middle Postclassie occupation, located predominantly north of the Spanish churches. Elaborate copper-tin and copper-arsenic bronze wirework bells, filigree
finger rings, buttons, and ornaments were recovered, almost exclusively from burial contexts, in Structures N10-2 and N10-4 (Pendergast 1981, 1986b).

These copper objects had begun to arrive at Lamanai by the twelfth century, primarily from sources in West Mexico (Hosler 1994). Metal artifacts appear at Lamanai in considerable quantity in both the Middle Postclassic period and the years of the Terminal Postclassic and early Spanish Colonial periods. The two eras of major occurrence were separated by a hiatus of nearly two centuries (ca. A.D. 1300-1475+) in which metal objects seem to have disappeared almost entirely from Lamanai’s artifact inventory, and at the same time seem to have represented at least partially, a different meaning in the community’s life (Simmons, Pendergast and Graham 2005).

Most of the copper and alloyed copper objects recovered from Lamanai (102 total or 59%) are found in the vicinity of Str. N11-18, the residence of Lamanai’s cacique, the principal Maya administrator during the Contact Period contact period. This area has been the focus of MAP research during the past three years (Figure 3). Excavations at Str. N11-18 have yielded 73 copper and alloyed copper artifacts thus far (Simmons and Howard 2003). Most of these objects were found in floor ballast and midden deposits (Pendergast 1985; Simmons and Howard 2003).

Copper does not appear in any significant quantities in the Maya Lowland area (Bateson and Hall 1977; Bray 1977; Cornec 2002; West 1994). It appears that the closest sources of copper are found to the south in the highlands of Guatemala and Honduras. During the Middle and Late Postclassic Periods (ca. AD 1150-1540) some metal objects used by Lamanai’s inhabitants represent a southeastern Mesoamerican metalworking tradition (Hosler 1994:208). That tradition’s main production technique was lost-wax casting. All of the bells, rings, axes, and other woodworking tools recovered at Lamanai were produced using the lost-wax casting method. This technique involves first creating an exact model of the object to be cast in wax. The wax object is then coated with a mixture of charcoal and clay, and the wax is then heated so that it melts out of the clay-charcoal coating, leaving a hollow that serves as a mold of the object to be cast in metal. A sprue is then attached for pouring the molten metal into the mold. Once this is done the clay-charcoal mold is broken away, leaving a metal object with an attached sprue, which is later removed (Long 1964; Hosler 1994). Numerous mis-cast bells, along with some needles, have been found in the Spanish Church zone (Figures 4 & 5). All of these lost-wax production failures came from Str. N11-18 and its immediate environs (Simmons and Howard 2004).
Chemical Compositional Analyses of Copper Artifacts

Dr. Dorothy Hosler at MIT has analyzed 45 of the 180 (25%) copper artifacts recovered from Lamanai. Data from artifact chemistries combined with observations on design features of copper objects indicate that two distinct metallurgical traditions are represented at Lamanai during Middle and Late Postclassic Periods: one West Mexican, the other Southeast Mesoamerican (Hosler 1994:210-213). Much of what we know of the sources of copper objects imported into Lamanai is derived from chemical compositional analyses, specifically emission spectroscopy, atomic absorption and lead isotope (Hosler 1994; Hosler and Macfarlane 1996). Emission spectrographic techniques yielded information on elements present in the artifacts and their relative concentration levels while atomic absorption spectrometry provided precise determinations of concentrations of major, minor and trace elements (Hosler 1994:254). Lead isotope analyses also were performed on a sample of copper artifacts from Lamanai; these data are useful in identifying the ore sources from which Lamanai’s copper artifacts were made (Hosler and Macfarlane 1996).

Lead isotope analyses (Hosler and Macfarlane 1996:1822) indicate that at least some of the copper bells imported into Lamanai in Middle Postclassic times were manufactured from ores found in the West Mexican state of Jalisco. Data from lead isotope analyses also indicate that some of the objects of imported wealth were likely derived from Oaxacan copper ores (Hosler and Macfarlane 1996:1822). Other copper status and utilitarian objects, specifically those recovered during our investigations at Str. N11-18, are currently being analyzed by Dr. Aaron Shugar at the Smithsonian Center for Materials Research and Education (SCMRAE). The published results of these analyses are forthcoming.

Excavations in 2004 North of the Spanish Churches

Excavations conducted in the large midden deposit located immediately north of Str. N11-18, located approximately 310 m. north of the second Spanish Church (Str. N12-12) have yielded a number of mis-cast bells, pieces of scrap copper, and whole copper objects such as finger rings, fish hooks and needles. Since chemical compositional analyses indicate that the Maya at Lamanai were recycling at least some metal objects, we wonder why they...
were discarding other metal objects in the refuse dump of Str. N11-18 and elsewhere in the Spanish Church zone.

Among the 14 copper finds from the 2004 field season were two copper pigs (Figure 6) found in very close association with five copper axe fragments. All were recovered from a midden deposit located close to the lagoon shore, approximately 25 m east of the second Spanish Church. Based on their very close association, the axe fragments, which clearly are sections of two copper axes (Figure 7), suggest that axes were somehow broken and used as raw material for casting activities. Analyses of artifact chemistries confirm that the Maya were casting recycled metal objects in the Spanish Colonial Periods. At least two copper pigs or ingots were made of recycled metal, and other objects were made of stock metal melted down and recast into new forms (Hosler 1994). The evidence at hand thus far for production of metal objects at Lamanai consists of:

- Eight copper pigs
- Numerous mis-cast objects, especially bells
- Chemical compositional data indicating that a number of objects were made of stock metal derived from melting down copper artifacts
- A number of pieces of scrap sheet metal
- Seven copper prills (droplets of metal that are by-products of casting)
- A probable axe or chisel blank

Was the production of copper objects a Spanish or Maya activity at Lamanai? Evidence so far suggests it was a Maya technology as Spanish presence at the site was intermittent and there is the absence of copper objects of European design, and the quantity of metal overall is relatively small.

**Summary**

Metallurgy appeared relatively late in Mesoamerica (Hosler 1986, 1994, 1995; Lechtman 1985), and copper objects did not begin arriving at Maya Lowland sites until very late in the Pre-Columbian Period (Bray 1977; Hosler 1986, 1994; Pendergast 1962; West 1994). Beginning in Middle Postclassic times, copper artifacts imported from West Mexico made their appearance at Lamanai (Hosler 1994, 1995; Pendergast 1981, 1984, 1986b, 1990, 1991). By the 13th Century AD objects made of copper-tin or bronze were arriving at Lamanai from both West Mexico and lower Central America.
ornaments; some of these were from copper-gold alloys, others were from copper-tin bronze or copper-arsenic bronze, but all were made from a very pure copper. These objects include elaborate plain-walled bells, filigree finger rings and filigree buttons (Figure 2).

At least by the Spanish Colonial Period, and probably earlier, Maya craft specialists were producing their own copper objects at Lamanai, and the importation of copper objects from West Mexico and lower Central America had ceased. The strongest evidence for copper production at Lamanai consists of eight copper ingots and a variety of mis-cast bells recovered from Terminal Postclassic and Historic Period deposits. Further research at Structure N11-18 and elsewhere at Lamanai is likely to yield more information on the organizational structure of Maya metallurgy as well as the roles that this specialized craft activity played in the social and economic life of the community.

Lamanai is the only site in the Maya Lowland area that has produced appreciable quantities of copper artifacts from controlled archaeological excavations. In fact, more copper and alloyed copper artifacts have been recovered from controlled archaeological excavations at Lamanai than at any other Maya site. Because researchers are interested in the impacts of Spanish colonialism on native groups in the New World it is important to understand the organizational structure of indigenous life just prior to contact.

Copper metallurgy appears to have played an important role in the economic life of Lamanai, but the relative value of copper in ancient Maya society has yet to be ascertained. Also, at this point we are unsure when the Maya began experimenting with the production of copper objects at Lamanai. As a result, dating the onset of productive activities is an important goal of the MAP that will achieve much more attention in the coming years. Another important goal of the Maya Archaeometallurgy Project is to assess the relative importance of copper production in the economic life of this contact period Maya community. We also want to know what role (if any) Lamanai’s colonial period native authority, the cacique, played in helping to maintain the level of social and economic complexity we see at the site during the sixteenth and seventeenth centuries. Did the cacique at Lamanai control the production of copper objects, were craft specialists working there independently, or were some other productive mechanisms at work? Finally, we are working toward understanding the ways that metallurgy, as a new Maya technological innovation, was part of the political economy of the Maya at Lamanai both before and after Spanish contact.

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The discovery of a Spanish colonial presence in Maya communities along the Sibun River of central Belize is one of the highlights of the Xibun Archaeological Research Project (XARP), headed by Dr. Patricia McAnany of Boston University. An archaeological site near the village of Cedar Bank has yielded a mixture of Maya and Spanish artifacts that are just now being analyzed, and which are providing the first glimpses of Maya life on this Spanish colonial frontier. One interesting possibility is that the site of Cedar Bank may represent the town known in the historical record as Xibun. This paper compares the historical record of the Sibun River Valley left by Spaniards against the archaeological record to provide a more complete and less Euro-centric view of cultural changes that occurred there during the period from around 1540 to 1630. It is argued that while the centers of Spanish control were located in northern Yucatan, their influence was felt far to the south along the fringes of this power base. Overall, the Spanish colonial period provides a crucial link between the precontact Maya societies of Belize and the succeeding British and African-Caribbean influence in the region.

Beginning in the mid-sixteenth century, much of the Maya-occupied territory that is now Belize was infiltrated by Spanish explorers who sought prosperity through the extraction of local resources, including agricultural goods and human labor. For the Spaniards, the Sibun River Valley, running through what is now the center of Belize, was part of a larger colonial frontier region in the Southern Maya Lowlands. This area lay on the fringes of Spanish-dominated territory, and was home to Maya who were able to resist economic and political domination to a relatively high degree as compared with their neighbors in the northern Yucatan colonial core (Jones 1989; Graham et al. 1989). Hegemony over this southern frontier region was attempted beginning in the 1540s with the establishment of an administrative outpost at Salamanca de Bacalar, near Chetumal Bay. Rather than an exercise of swift conquest, however, Spanish dominance of the area was in reality a slow struggle involving intermittent control during the next century and a half, and culminating in the surrender of the last independent Maya further west in 1697.

The Sibun Valley in Spanish Colonial Times

The historical record provides scant but crucial information about the political organization of the Maya lowlands at the time of the Spaniards’ arrival in the Sibun Valley. It appears that the Yucatan peninsula was divided into several so-called “provinces” with varying degrees of political centralization and autonomy (Roys 1957; Jones 1989). The existence of a province along the southern frontier of Yucatan, called Dzuluinicob (using the colonial orthography), was only recently discovered through documentary research (Jones 1989:100). Using these written records, it has been argued that the scope of its area “. . .must have included the territory all the way from the Sibun River north to the lower New River” (Jones 1989:98), and that its political capital was Tipu, located on its western edge. The very existence of this territory hints that parts of northern and central Belize comprised a cohesive political
Colonial Frontier in the Sibun

unit during the years of rebellion against the Spaniards during the late 16th and much of the 17th century. The name Dzuluinicob, meaning “foreign people”, may have derived from the large number of exiles arriving from northern Yucatan in hopes of escaping conflict with the European invaders. It appears, however, that a steady stream of people began to migrate from the north into Belize for similar reasons, beginning in the Postclassic period (c. 13th century) and perhaps earlier.

The constellation of small Maya populations that dotted the landscape of Dzuluinicob was in much better communication that the Spaniards understood. Encroachment by officials looking to incorporate these communities into tribute systems (e.g. encomiendas) caused nodes of this constellation to wink in and out of existence through temporary or permanent movements of people to other areas.

Though the prolonged struggle to control the Southern Maya Lowlands was due in part to Maya resistance tactics such as short-term population dispersal or permanent flight (Farriss 1984), it also had roots in the Spaniards’ particular perceptions of the physical and social landscape of the region. For them, the Southern Maya Lowlands of the sixteenth and seventeenth centuries were seen as a vast untamed jungle. It has been noted that the Spaniards “…demonstrated little sustained motivation or ability to bring their troublesome frontier under permanent control, due...to the perceived unhealthy, remote, unproductive, and ungovernable characteristics of the region...” (Jones 1989: 12). They found themselves confronted by a physical and social landscape that, from their point of view, was continually breaking down any “civilizing” order they could impose.

Known Spanish colonial documents give little direct attention to Maya specifically living along the Sibun River, and so a limited picture of what they saw there exists in the historical record. The only Spanish colonial Sibun River site that is known from the written records is the visita called Xibun, which was one of at least nine such stations in the northern half of Belize (Jones 1982). Visitas were communities visited by an itinerant Spanish religious official as part of his circuit for purposes of holding Catholic masses, performing baptisms, teaching Latin or Spanish and other forms of cultural indoctrination.

In general, visitas were established in the northern and central Belize area for two reasons. One is that it was an entry point into the Peten region of northern Guatemala, where the Itza Maya ruled from their almost mythical seat of power deep in the interior of Yucatan (Jones 1982:282). The Spaniards saw the Itza realm as the control center for Maya rebellion across the Southern Lowlands. Another reason for the establishment of such communities was that the river valleys of the area (especially the Belize and Sibun Rivers) yielded a cacao of especially good quality —“fat cacao that produces a deep color and good flavor”, according to the Franciscans Fuensalida and Orbita in 1618 (Jones 1982:283). Thus, the visitas became places where religious ideology could be disseminated and tribute collected.

The physical manifestation of the change in religious ideology at places such as Xibun was the church. Such structures housed an altar as well as religious effigies, relics, bells, and other accoutrements to aid the evangelizing process. Even the smaller, simpler Spanish churches in Belize were constructed to create as large an impact possible on local communities. For example, the earlier of two churches at Lamanai was built on top of a dismantled Maya temple, this physical replacement
symbolizing the intentions for an ideological one.

The site of Xibun likely would have been established in the 1540s or soon thereafter, and is known to have been abandoned permanently by 1631, giving at most a period of occupation of 90 years. Included in Maya testimonies given to Spaniards is the statement that the community of Xibun was surrounded by agricultural fields and cacao orchards. Also, a church, complete with a bell and ornaments, was present in the community; when Xibun was abandoned in 1630, the Maya occupants took these items with them. Based on the peripheral location and relatively small size of the village, the church likely would have been a simple structure with, at most, a low stone and mortar foundation and a thatched roof – something that might be nearly invisible in the archaeological record today (Andrews 1991; Hanson 1995).

What does the archaeological record tell us about this Spanish colonial frontier? Until recently, investigations in the Dzuluinicob territory consisted of excavations at just two sites, Lamanai and Tipu. At Lamanai, along the New River Lagoon, extensive excavations of two churches and several residences from the Spanish colonial period were completed under the direction of Dr. David Pendergast and Dr. Elizabeth Graham. Given the relatively large size of this community and the length of its occupation, European artifacts were found in surprisingly low frequencies. It has been suggested that this likely “…reflects the harsh economic realities of life in the Yucatan Peninsula, where supply lines were poorly maintained” (Pendergast 1993:116).

At Tipu, a more remote colonial village on the western edge of Dzuluinicob, several residences and a church along with hundreds of colonial burials, were excavated, but again relatively few European artifacts were found. Overall, archaeological excavations have shown that European artifacts were either associated with a limited number of elite Maya households and perhaps used as status markers, or that a few Spaniards living at the sites depended to a large extent on locally manufactured products after the limited supplies they brought with them had broken.

As part of investigations by the Xibun Archaeological Research Project (XARP) headed by Dr. Patricia McAnany of Boston University, the Spanish colonial period is being slowly uncovered in the Sibun River Valley. Excavations at the site called Cedar Bank, along the lower reaches of the Sibun River and at the edge of the hilly limestone karst (Figure 1), yielded the first evidence of Spanish colonial period occupation in the valley. The location of Cedar Bank is within the Dzuluinicob territory, yet peripheral to the New River-Belize River route commonly used by the Spaniards to reach the interior of the Yucatan peninsula (Jones 1998). Thus, Cedar Bank provides a comparative case with Lamanai and Tipu, as a village farther from this major Spanish route of travel in the region.

The most common European pottery sherds recovered in Cedar Bank excavations were from olive jars, along with Columbia Plain and Sevilla Blue-on-Blue majolica (earthenware pottery with a tin-based glaze) – these are also the most common types found at Lamanai and Tipu. Small pieces of at least two other types of majolica were recovered but have yet to be specifically identified. Vessel forms include cups, small bowls, and plates, typical of Spanish tableware from this time period. Small side-notched projectile points, indicative of late pre-contact or early colonial Maya occupation, were also among the artifacts found at Cedar Bank.
Colonial Frontier in the Sibun

From the numbers of different sherds of European wares recovered, it is clear that they were not common at Cedar Bank, a pattern that mirrors the one described at Lamanai and Tipu. Again, it may have been the Spaniards’ perceptions of the region as unsuitable for economic development that prevented them from supplying it with many goods. Dr. David Pendergast has suggested that “as people living beyond the pale, the Maya of Belize and their neighbors may have seemed worth changing in only the spiritual realm…[The Spaniards] distributed their limited largesse only where and when it was likely to bring good return on the money” (Pendergast 1991:352).

While the Spaniards struggled with the physical environment of Dzuluinicob, they seemed to make significant inroads into the religious one. Tipu and Lamanai show evidence of consistent Christian practices, with burials in the Christian style (i.e., in an extended position with the head to the west and arms folded over the chest), and with well-maintained churches (Graham et al., 1989:1255). The faintest echoes of such religious changes may also have surfaced at Cedar Bank. A particularly interesting metal artifact found there was a small, perforated copper-alloy star (Figure 2). Other examples of such stars are unknown in the Maya area, but do appear at other Spanish colonial sites such as Puerto Real,
Figure 2. Perforated hand-cut copper-alloy star found at Cedar Bank (photograph by Patricia McAnany).

Haiti, as well as Santa Elena in South Carolina (Deagan 2002). The function of such objects is not certain, though a few hypotheses have been set forth (Radisch 1986:145-151). One is that they are a type of ornamentation, sewn to leather garments or riveted on to items such as saddles through their central perforation. Another intriguing possibility, however, is that the star functioned as the metal tip of a self-mutilation device such as the “cat o’ nine tails” used by orders of religious penitents at that time (Figure 3). The Spanish Franciscans in early colonial Belize were one such group. If so, it would be a painful reminder of the program of religious indoctrination set forth by Spaniards in the Sibun Valley.

Conclusions
Spanish colonial archaeology in Belize is still in its initial stages, and many
fundamental questions remain to be answered. This crucial time period is a link between earlier pre-contact Maya culture and later British and Afro-Caribbean influences, and is a time when Christianity and other aspects of European culture first take on their own unique forms within Maya societies. Overall, excavations to this point suggest that we are not likely find many Spanish colonial sites in Belize with abundant remains of European artifacts, and that it is to the contemporaneous Maya cultural remains that we must look to gather much information about life here in sixteenth and seventeenth centuries. In this light, a major goal would be the basic but challenging task of identifying and describing early colonial Maya pottery types in Belize, which has only been carried out to a very limited extent thus far. Of course, many avenues of archaeological research, including archival work, surveys, and excavations will continue to provide important insights into life in Belize during this time period. As we can see from some of the papers in this volume, such daunting but fruitful work is already underway.

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Institutions in three major river drainages of Belize have established an archaeological framework for studying British settlers and African laborers involved in timber exploitation. The sites in each area represent different populations and activities, representing distinct and little-known facets of the nation’s history. A site on the lower Belize River known as the Barcadares was probably the first semi-permanent settlement by migrants from the British Isles. From about 1680 to 1730, a community of mariners lived in crude huts and worked cooperatively to extract logwood to sell to passing ships. Downriver is the site of Convention Town, formed in the late 18th century to accommodate evacuees from the Mosquito Shore. In contrast, seventeen sites along the New River have yielded information regarding the lives of enslaved and free African-Caribbean laborers, who lived in isolation from the coastal population. These sites offer insight into the poorest inhabitants of the settlement, many of who were involuntary occupants of communities that were organized corporately for economic efficiency. Research currently under way in the Sibun valley is yielding evidence of significant British colonial occupation, some predating officially sanctioned settlement there, offering insights into the mahogany trade not encountered elsewhere.

**Introduction**

Belize has gained international recognition for its archaeological resources that contribute to our understanding of the development of civilization. The massive Maya monuments, elevated platforms and minor house mounds each add to our cumulative knowledge of human history. But in addition, there are far more ephemeral remains in between these mounds, and occasionally even right on top of them, which reflect populations that have been far less historicized than the Maya. Aside from Belize City itself, there are few archaeological sites related to the colonial origins of modern Belize that even protrude above the ground, much less the tree line. The British colonial history of the country has traditionally been interpreted from the perspective of the coast, or even from England, with the result that life for the poorer settlers, pirates, African laborers, and refugees who settled the forest in search of logwood or mahogany has gone largely unrecognized.

This paper addresses investigations that have taken place in three major river drainages; they began in 1990 and remain ongoing. Together, they comprise a framework for studying more than 200 years of settlement associated with British colonists and African laborers involved in the exploitation of timber for European and colonial American industry. Individually, these sites represent different populations and activities, each reflecting little-known facets of the nation’s history. But as a whole, they frame the cultural development of the region within the context not only of Belize’s response to, but also its active role in, the global forces of European expansion during the modern era.

**Belize River: The Barcadares**

Popular perceptions of the cultural foundation of modern Belize rely on legends of pirates and itinerant mariners who
operated beyond the reach of the mainstream Caribbean economy and social hierarchy (Joseph 1989). To date, however, scant historical or archaeological evidence has been identified through which this early phase of settlement can be examined.

Toward the end of the seventeenth century, small groups of maritime laborers seeking alternatives to their arduous occupations began to settle peripheral regions of Spanish territory, including the Belize River valley, to cut dyewoods for the European textile industry. In the sparsely inhabited forest, the settlers created a highly collective society based on a system of rules and values that had evolved among shipboard communities in response to their dangerous work environment, low status in the economic hierarchy, and social isolation from mainstream European culture (Rediker 1987).

Captain Nathaniel Uring (1726) provided the earliest documentation for such a settlement after wrecking his ship on a voyage to purchase logwood in 1720. During his five-month stay, he recorded many interesting aspects of life among the sailors-turned-woodcutters, including their propensity to work communally. Uring also noted “the Wood-Cutters are generally a rude drunken Crew, some of which have been Pirates, and most of them Sailors” (Uring 1726: 355). His description of the rudimentary structures the woodcutters lived in gives a good sense of everyday life there:

The Manner of their Lodging is thus: They fix several Crutches in the ground about Four Foot high, and lay Sticks across, and upon those Sticks they lay a good Quantity of Leaves; and this is their Bed. There is also at each Corner of the Bed-Place, a tall Pole fixed, to which they fasten their Covering... so contriv’d that it falls down on every Side, and serves not only for Curtains, but also keeps the Flies from disturbing them (1726:182).

Uring called the settlement “the Barcadares”, and said that it was located on high banks forty-two miles upriver. Presumably this would be the farthest navigable point up river for ships of the day, as well as a convenient landing place for loading wood.

Uring drew a map of the lower Belize River, indicating the location of the Barcadares. Although the map is somewhat schematic, the approximate location of the site was identified by correlating it with the modern course of the river. Through survey and testing, the site was located only about fifteen miles up the Belize River, somewhat less than Uring claimed, just below Little Falls at the village known today as Grace Bank (Figure 1). Three weeks of excavation there yielded artifacts indicating that the site was occupied possibly as early as the 1670s, and that it fell out of use by the middle of the eighteenth century.

![Figure 1. Historical period sites investigated in the Belize River valley.](image-url)
Excavations yielded evidence of a variety of activities, and provide a window onto daily life in the first long-term European settlement in the country. Artifacts recovered include fragments of smoking pipes, some of Dutch origin and one dateable to manufacture between 1668 and 1688; iron in the form of trunk or box hinges and large quantities of hand-wrought nails that were probably used in constructing the settlers’ sleeping pavilions. Within the soil matrix were many clay concretions that appear to be naturally baked earth from open fires. Three sizes of lead gun shot were also recovered. Although the musket ball may have been for defense, the small bird shot was undoubtedly used for food collecting.

Although Uring recorded the copious drinking habits of the Baymen at length, only a small amount of bottle glass was recovered. We know that many were thrown into the river, but given the remoteness of the site in this early period; wooden hogsheads may have been the dominant method of transporting alcohol.

Among the ceramics recovered, more than 90% were blue and red hand-painted delftware. The majority of the remainder was stoneware, some decorated as well. It seems that these high-style wares were used on an everyday basis, instead of being reserved for special occasions, as they were elsewhere, since extremely few plain, undecorated or inexpensive wares were found at all.

Also, small fragments of painted Chinese porcelain were recovered. Although the simple existence of porcelain from China seems strangely incommensurate with the rough-and-tumble lifestyles of the Baymen, some of it was in the most expensive range of that artifact class, and would have been considered lavish if found in a colonial-period American mansion of the time. Whether the Baymen’s Chinese porcelain served as symbols of status, as was common elsewhere, or was employed strictly for functional purposes, the existence of such pieces indicates a certain degree of wealth among the residents – wealth that was invested in portable objects and not in architecture. This highlights an apparent notion of transience among residents of the nascent Bay Settlement. Whether they were there for a few months or years, they were not investing in their physical surroundings, and were ready to pick up and leave in response to a better opportunity or a threat to their livelihood.

Belize River: Convention Town

Toward the middle of the 18th century, a rising demand for mahogany spelled the end of the egalitarian lifestyle of the logwood cutters, and the establishment of a more traditional British colonial social hierarchy. The enormous size of the trees required significantly more labor to harvest, which was no doubt a factor in the introduction of slaves to the settlement. By 1745, slaves outnumbered free residents, and by 1779 slaves outnumbered non-slaves by about six to one (Bolland 1977:49-50; CO 137/48).

The composition of the population was dramatically altered following the 1786 Convention of London, at which settlers were granted an expansion of woodcutting rights as far south as the Sibun River. In exchange, the British evacuated the Mosquito Shore, transporting some 537 free settlers and 1,677 slaves directly to the Bay Settlement, greatly increasing, and by some estimates quadrupling, the total population (Burdon I 1931: 162). Part of this process involved a complete survey of the settlement by David Lamb, who created large and detailed maps showing the locations of settler claims along the various river courses (PRO CO700 BH no. 11; CO700 BH no. 13; CO700 BH no. 14). In almost every case, Lamb represented a settlement with the
name of the land claimant and a drawing of a single hut. In contrast, Lamb depicted a single dense population concentration along the lower reaches of the Belize River, approximately 16 kilometers up from the coast. He colored a four-kilometer stretch of riverbank red to indicate dense settlement, and identified this locality as “Convention Town.”

The name Convention Town likely refers to a community of evacuees from the Mosquito Shore who arrived in Belize and had no land claims of their own. A census of the settlement conducted during January and February of 1790 indicates that 470 people, or about 16% of the Bay Settlement population, were listed as residents of Convention Town at that time (Bolland 1977: 42). We don’t know whether the town was composed of free evacuees from the Mosquito Shore who lived there along with their slaves, or on their own, having leased out or sold their slaves to others who had claims to work. Whatever the composition of Convention Town, it appears to have been by far the largest concentrated community in the Bay Settlement, with the possible exception of what was to become Belize City.

Locating Convention Town was accomplished in a similar fashion to the Barcadares (Figure 1). The stretch of river identified by Lamb follows a distinctive southward-arcing meander that can be perceived on a modern topographic map. Most of it, though, is heavily forested and there is little vehicle access between Lord’s Bank and Burrell Boom, so survey was conducted by boat. The most productive locality tested within the parameters of Lamb’s map was at the farm of Mr. Edmund Galvez, the lone remaining resident of this former population center.

Three weeks of excavation yielded dense concentrations of artifacts that contrast greatly with the earlier site a few kilometers upriver. One important difference is in the dominant vessel forms at the two sites. The predominance of bowls at the Barcadares and of plates at Convention Town reflects a shift in the system of food preparation, from stews and porridges to meals of drier consistency. But it also represents a shift from the use of communal vessel forms in food service to individual service vessels. This reflects a well-documented social trend that is characteristic of the early modern and Georgian time periods, but regardless of the social origins indicated by this shift, it elucidates a radically different organization of domestic activities within the two sites. The broad variety of ceramic wares from Convention Town reflects selection on the part of the consumer, particularly a range of special decorative wares represented in small quantities such as agateware, and basaltware. Other artifacts from Convention Town also support this distinction between the two periods.

At 30% of the entire artifact assemblage, glass was far better represented at Convention Town than at the Barcadares. A diverse assortment of glass tableware fragments was recovered, including tumblers, stemware, decanters, rummer goblets, and flip glass forms. Many were embellished with engraving or applied enamel coloring. The extensive quantity and variety of glass and ceramic tableware at Convention Town suggests a domestic arrangement closely aligned with British households in the sugar islands and the northern colonies, as well as notions of social positioning in common with British new-world slave-owning culture. This is not only a substantial change from what was recovered at the earlier site, It also reflects great differences with sites of the same time period discovered along the New River.
New River Sites

Investigations in the New River were also aided by Lambs survey maps, which frequently proved accurate enough so that land claims could be correlated with actual locales along the modern river course. In addition, a 1790 census for the settlement enumerated the population according to household, listing men, women, and children individually by name, and identifying them as white, free or slave (PRO CO123/9). When combined, these two sources illuminate not only the locations of riverside wood-cutting claims held by the settlers during the 1780s, but also the numbers and actual names of the free and enslaved people who lived there.

A survey was undertaken via boat from the river mouth in the north to the New River Lagoon in the south, totaling approximately 60 kilometers of river. Seventeen historical-period sites were located, varying greatly in their extent and density of artifact distribution (Figure 2). According to the census, each of these sites was seasonally occupied by between sixteen and fifty-two woodcutters.

Two sites in particular yielded substantial deposits, indicating heavy occupation by slaves. One was found above the confluence of two branches of the New River, approximately twenty-six kilometers from the river mouth. This locality is identified as the camp of Matthias Gale, and named Caledonia, the Roman word for Scotland. It is several kilometers from the modern village of that name, but it seems likely that the name originated with Gale, and applied to a parcel of land far larger than just a single nucleated settlement. In 1790, Matthias Gale’s household included six white men, seven free men, twenty-six slave men and only four women—all slaves (PRO CO123/9). The majority probably resided for most of the year at Caledonia while Gale, a prominent settler who held the post of Treasurer and also Conservator of the Peace, undoubtedly spent most of his time on the coast. The site was carefully investigated through surface collection within gridded units, yielding a large assemblage of eighteenth and early nineteenth-century ceramics, glassware, pipe fragments, and gunflints. Subsurface excavations yielded remarkably few artifacts or features.

Another productive site was discovered thirty-four kilometers south of the river mouth, on a low ridge running parallel to the east bank of the river near the village of San Estevan. The site consisted of a thin scatter of artifacts dating from the early eighteenth century and well into the nineteenth century, spread over more than 12,000 square meters. The site appears to have been occupied for a longer span of time and with a greater degree of permanence than most of the others. The locale correlates
A Tale of Three Rivers

with the claim of Robert Francis O'Brien, who was a magistrate and one of the wealthiest residents of the Bay Settlement during the 1780s. He held eighty-two slaves and extensive timber claims along both the New and Belize Rivers. Since he held so much property, it seems unlikely that all of his slaves would ever have lived at this one location at any given time, but his household was equally unbalanced by gender, with sixty adult male slaves, thirteen women, and nine children (PRO CO123/9).

At both of these sites and in the New River in general, the overwhelming majority of artifacts relate to a very limited range of activities. Food preparation and consumption dominate, and if it weren’t for a few rusty fragments of what could be machete blades, it would appear that no artifacts relate to the occupational activity of cutting, shaping, and transporting wood. The mundane activity of unceremonious communal eating from extremely plain ceramics dominates the material record of these camps. Only the very occasional teapot gives evidence for any activity associated with individual choice beyond basic subsistence.

Also, key artifact categories that are common on other British colonial sites were completely absent here, such as glass lamp chimneys and lighting devices, household cutlery, window glass, coins, and clothing buttons. In contrast to the Barcadares, not a single nail was found in any New River site, suggesting that the residents here had adopted different construction techniques, drawing inspiration either from local Maya dwellings or from their own ethnic traditions.

Two artifacts from New River sites exhibit very interesting modifications. Such marks frequently appear on artifacts from communal contexts where objects are by necessity stored and treated as a single group, such as on board ship or in frontier or military camps. Scratches on the base of a food bowl and another on a dinner plate are possibly a private claim to a favored eating vessel, indicating a small assertion of individuality in a corporately organized environment (see Figure 3). Alternatively, they could reflect an expression of a more deeply rooted cultural affiliation. Ceramic bowls with X patterns, sometimes scratched inside a circle, appear in excavations of slave plantations in South Carolina. In fact, the scratches are so consistent that archaeologists there have determined they can’t be marks of personal ownership (Ferguson 1992, 1999).

Figure 3. Ceramic bowl base with incised cruciform pattern from New River Slave camp.

It’s difficult to envision the range of activities that might have taken place in these remote camps, but with a lack of first-person accounts of life there, its tempting to
think only of the economic realm and overlook evidence that might hint at social or even spiritual practices of the inhabitants. Today, African American priests in Cuba inscribe a similar cruciform pattern on the bottom of vessels when they are creating one of several charms, and art historians associate these X’s within circles with the cosmograms of the Bakongo people of the southwest coast of Africa. Many people from this region were transported in the slave trade, and Bakongo culture was so influential that many other people adopted their practices both in Africa and the Americas. Like the enslaved residents of the South Carolina plantations, the Belize laborers may have been using these vessels to make a sacred Bakongo medicine that connected the living with the powers of the dead, traversing the earthly and spiritual horizons depicted in the cosmogram. If so, these ceramics and their sacred contents were not solely remnants of cultural practices fractured by enslavement, but they represent the persistence of a worldview that varied significantly from that of those who enslaved them. Inasmuch, these ceramics were emblems of resistance to the way of life brought upon the laborers by the incessant demand for mahogany.

**Sibun River: Current Investigations**

A third major locus of British-colonial period settlement was the Sibun river valley, and historical archaeological investigations have been underway there since 2001, part of the Xibun Archaeological Research Project directed by Professor Patricia McAnany of Boston University. Although the region was actively traversed and settled by those seeking mahogany, three factors have influenced the approach to investigations here: 1) the Sibun was apparently not as densely occupied as the river valleys to the north; 2) the river was beyond the boundary of legal settlement until 1786, resulting in a paucity of documentation in the archives; and 3) unlike the deeply inscribed New River which has seen little flooding and a highly stable course over the last 200 years, the Sibun river overruns its banks annually, so archaeological deposits there are either deeply buried under silt, or they have been disturbed and re-deposited by the episodes of flooding.

Artifact analysis on 2003 season material is currently underway, but the Sibun has yielded a suite of sites that are distinct from those in the New and Belize Rivers. Though destructive to site integrity, the flooding has brought about the preservation of certain degradable material in river mud, including a large piece of shaped wood discovered in shallow water near Cedar Bank (Figure 4). It appears to be end of a squared log that has been cut to form a wedge, possibly made to prevent rolling of stacked wood. The context prevents an easy assessment of date; at least one side exhibits a whittled surface from axe heads. Another find from the river itself is a glass bottle dating from the second quarter of the 18th century, evidence of occupation prior to legally sanctioned settlement.

![Figure 4. Wood wedge recovered from Sibun River.](image)

Some locales at higher elevations are providing insights into mahogany cutter life of later periods. One excavated midden is,
As with many other sites, associated with a professional heritage of cutting mahogany. But rather than representing a seasonally occupied camp established for enforced labor, it was part of privately owned residence of a contract laborer and his extended family. They occupied it year-round over several generations, investing labor and resources into the property, the buildings, and their contents. This dramatic change in the social organization of the mahogany economy over time is echoed in the diversity of the assemblage, which includes many artifact categories not represented in the New River sites.

Conclusions

Although each one of more than twenty sites investigated offers insights into a facet of colonial-era life, together they establish a structure for examining the trajectory of Belizean history and its role in New World colonial expansion (Finamore 2004; 1994). At the outset of the project, recognition of the very existence of sites like the Barcadares was minimal, and information regarding location, approximate size, and the nature of the resident population was slender. Convention Town and the New River sites, which contrast sharply but are of similar time periods, signify the profound economic and social diversification that had evolved in the settlement by this time. On the other hand, a common aspect of these sites is that life within them has gone largely or completely unrecorded, and that they each represent the first generation of experience in the country for many modern Belizean families.

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19 INVESTIGATING HISTORIC HOUSEHOLDS:
THE 2003 SEASON OF THE SAN PEDRO MAYA PROJECT

Jason Yaeger, Minette C. Church, Jennifer Dornan, and Richard M. Leventhal

The Caste War in Yucatan and the consequent immigration of people of Maya and Mestizo heritage into British Honduras after 1847 radically transformed the British colony that would become Belize. Incorporation of these new arrivals into the socio-political and economic institutions of the British settlement proved challenging, given their distinct cultures and a general unwillingness to submit entirely to British rule. This paper discusses the results of the 2003 excavations at San Pedro Siris, the village founded by 19th-century Maya immigrants in west-central Belize. The focus of the 2003 fieldwork was the excavation of a domestic structure and associated yard spaces and activity areas, as well as the continued analysis of the historic material culture recovered from the site. We use that data here to address how San Pedro Maya immigrants became incorporated into the social and economic networks of colonial British Honduras.

Introduction

The San Pedro Maya Project (SPMP) is a multi-disciplinary study of Yucatec-speaking Maya immigrants into British Honduras during the Caste War era. Beginning in the late 1840s and 1850s, Maya people established dozens of villages in the sparsely occupied interior jungles of the Yucatan Peninsula. They settled primarily in regions that were uncontrolled by any national or colonial governments, some of it disputed territory that was split between British Honduras, Guatemala, and Mexico through international treaties in the second half of the 19th century. The particular group of immigrants that is the subject of the SPMP is known as the San Pedro Maya (Jones 1977). The San Pedro Maya split from the pacíficos of Icaiche, who were trying to negotiate a peaceful settlement with Mexico. The pacíficos’ negotiations with Mexico had earned them the enmity of the cruzob Maya who were continuing the Caste War struggle and had strong economic ties to the British settlement in Belize. In part to escape the hostilities between these two groups, the groups today known as the San Pedro Maya moved south of the Rio Hondo to found new villages farther away from the fray (Figure 1), although they retained their political and economic ties to the pacíficos.

The focus of the SPMP is to understand the ways by which the San Pedro Maya were incorporated into the colonial society and economy of British Honduras between 1855 and 1936, as we have outlined in more detail in earlier reports (Leventhal et al. 2001; Yaeger et al. 2002, 2003a). Since 2000, the project has integrated archaeological fieldwork, archival research, and oral histories to study the San Pedro Maya, although the bulk of the research has been an archaeological investigation of San Pedro Siris, the principal village of the San Pedro Maya during the 19th century. The archaeological research reported herein comprises the fourth season of our efforts to understand these Maya immigrants, especially in terms of domestic life and colonial integration.

Previous Research

The SPMP began formally in 2000, when we identified two San Pedro Maya villages, San Pedro Siris and San Jose Yalbac. As was presented in last year’s symposium (Yaeger et al. 2004), we have
focused our work on San Pedro Siris, the site that colonial documents indicate was the political seat of the San Pedro Maya during the 19th century. Four to eight weeks were spent at San Pedro Siris each summer from 2000 to 2003. During the first three seasons, we concentrated our efforts on systematic surface collection, collecting artifacts from the three spatially discrete components that together form San Pedro Siris (Figure 2). There were no surface indications of architecture, and therefore a wide range of testing procedures to identify sub-surface architecture were tried. These ranged from soil probes and shovel tests, to formal 1 x 2 m excavation units, and to soil chemistry analysis. Despite these efforts, it was not until 2002, when 10 strip trenches, 50 cm wide and ranging in length from 10 m to 38 m (Ops 12–17, 21–24), were excavated that significant numbers of buried features were recovered.

In the 2002 trenches, we discovered over 25 different cultural features, most of which are clearly associated with the domestic compounds of the village. The richness of the artifact assemblages recovered paralleled that of the surface collection, but with better context and in some cases better preservation, particularly of bone, although not of metal. The features include several lines of cobbles that were probably placed at the base of wattle-and-daub walls, several shallow pits filled with fire-grayed rocks and charcoal that we believe to be roasting pits, a few sheet
middens, and several activity surfaces, the latter identified as 5-cm thick lenses of fire-grayed charcoal rocks and artifacts that formed very distinct strata at between 10 and 20 cm below the ground surface. We also placed three excavation units adjacent to the strip trenches to examine more detail via horizontal excavations features identified in the sideways of the trenches (Ops 18–20).

**The 2003 Field Work**

In 2003, we returned to San Pedro Siris for 8 weeks of fieldwork and concurrent artifact analyses in our field laboratory in San Jose Succotz. We had four goals for the 2003 season: 1) to conduct some additional reconnaissance looking for reported historic sites around San Pedro Siris; 2) to complete the surface collection of the areas with notable densities of historic artifacts in San Pedro East; 3) to excavate a domestic compounds; and 4) to continue to analyze the artifacts recovered from the site.

**Reconnaissance**

We received several reports of concentrations of historic artifacts in the region around San Pedro Siris, and several of these reported sites were visited to determine whether there were other
significant 19th-century settlements around San Pedro Siris. None of these reported sites proved to be significant. Most were small scatters of less than a dozen artifacts, and often they dated to the 20th century, too late to have been contemporaneous with San Pedro Siris.

Surface Collection

In the 2003 season, we also finished the surface collections of artifacts and soil sampling of an additional 8 collection grids, each 25 m x 25 m, and two smaller grids (Ops 5AA–5AI and 7AA–7AI). This completed the collection of all areas at San Pedro Siris that demonstrated significant densities of historic artifacts.

Excavations

The 11 strip trenches excavated in 2002 provided us with a good sub-surface sample of the northern sector of San Pedro East, demonstrating the existence of well-preserved 19th-century features within 15 cm of ground surface. The distribution of these features, combined with differences in artifact density in the surface collections, suggested at least two areas of domestic occupation and a cemetery area in San Pedro East. Our excavations also proved that the activity surfaces and buildings at San Pedro Siris, although ephemeral, were well preserved and amenable to extensive horizontal clearing.

Given our findings, we targeted the 2003 excavations to expose one of the residential zones delineated in 2002 through excavation and surface collection. A grid of 1 x 1 meter excavation units aligned with our larger surface collection grids was laid out (Figure 3). Excavations at two loci where we had found features in our fieldwork in 2001 and 2002 were initiated. To the south, we began clearing around a fire pit (Feature 7) and occupation surface (Feature 6) that we had found in Op 15. To the north, our excavations began around the trash deposit and architecture we had identified in Op 9. Opportunistically we expanded into additional 1 x 1 units to follow out these and other features found in the excavations, gradually connecting the two areas and ultimately, clearing a total of 133 m², designated as Op 27, and each 1 x 1 unit was distinguished as a sub-operation (Figure 4).

Because of the ephemeral nature of the occupation surface identified in Op 15, we began our excavation of the Op 27 sub-ops by excavating down each 1 x 1 meter unit in 5 cm arbitrary levels or until we reached a soil change. Once a soil change was reached, we then followed the soil change into adjacent units. We screened all matrix through ¼” screens and collected all material culture, faunal remains, and charcoal and carbonized plant material. When an occupation surface was uncovered, we collected the flat-lying artifacts as a separate lot. We also took systematic soil samples on a 50-cm grid from all occupation surfaces and a number of flotation samples from occupation surfaces.

Our 2003 excavations revealed 15 new features, which included a cobble platform (Features 36, 37, & 38) that we have interpreted as a platform that held a perishable house, as well as a large part of its yard and associated features (see Figure 5). The cobble platform measured less than 10 cm in height, and it was totally invisible from the ground surface prior to excavation, even when the vegetation was cleared off. The platform consisted of limestone cobbles, probably collected from the nearby stream and eroding bedrock outcrops.

We found two postholes (Features 43 & 44) associated with the platform, suggesting the presence of a pole-and-thatch building atop the platform. We did not recover any daub that would indicate clay-plastered walls, however. Also, quite
interestingly, we found no nails, window glass, or baling wire: this house was built with forest products in the traditional Maya style. A very thin layer of pebbles over part of the platform (Features 39 & 40), together with flat lying artifacts, indicate a prepared surface of some kind, although we could not identify either a packed clay or white marl floor. Probing excavations into the platform revealed at least two episodes of construction (Features 37 & 38).

The platform was associated with a wide array of domestic artifacts –imported painted dishes, locally made ceramic jars, medicine and alcohol bottles, scissors, and buttons– that are consistent with our interpretations of it as a house. Two crucifixes and a St. Joseph medallion support oral histories that emphasize the importance of Catholicism in the community, as opposed the cruzob or Santa Cruz Maya, who followed the Talking Cross (also Dumond 1997). Immediately east of the residential platform, we found another thin surface of smaller cobbles (Feature 42) that extends to the northeast in a 1-m wide strip. This is likely a cobble walkway, but unfortunately, we did
Figure 4. Op. 27.
Figure 5. Schematic Plan of Features in Op 27.
not have time to excavate farther east, and thus we do not know where it might have led.

Extending out from the platform on three sides was a stratum of dark soil differentiated by a high concentration of limestone flecking and pebble inclusions (Feature 35). This stratum averages 5–8 cm thick and lies within 10 cm of the ground surface. We uncovered the entirety of the top of this stratum, which appears to be an activity surface, likely corresponding with the yard. The distinct limestone flecking apparently is the accumulation of different activities performed there. The stratum is associated with a relatively high density of artifacts, but they are small in average size. Trampling and constant activity in the yard apparently led to heavy breakage. This pattern of small average size of artifacts associated with Feature 35 contrasts markedly with two other types of features we excavated. The first was the zone along the edges of the cobble platform, where artifact size and density were significantly higher. This was apparently a discard zone where objects were thrown out of the way, placed for later use, and sometimes forgotten.

The other features with high average artifact size were three unusual piles of large cobbles (Features 31, 33, & 34) that were intermixed with large artifacts, including whole bottles broken in place and a lot of faunal remains. One is associated with the flecked activity surface; the other two are not. We believe that these features represent the accumulation of rocks and trash in another toss zone that was out of the way of daily movement around the residential compound, likely adjacent to hedges or fences that have left no direct physical traces. One of these rock features has two associated postholes (Features 45 & 46), suggesting either a fence or a small covered area, perhaps an animal pen. The artifact assemblage recovered in association with these features lacked domestic artifacts and had few pieces of hardware, in marked contrast to the cobble platform, where domestic artifacts and hardware were common.

In the 2002 excavations, we identified six classes of features: 1) activity surface, 2) rock line, 3) posthole, 4) sheet midden, 5) fire pit, and 6) grave. The 2003 excavations provided additional examples of postholes, as well as three new types of features: 1) flecked activity surface, 2) cobble platform, and 3) discrete rock pile. It is worth noting that some of the activity surfaces identified in our 2002 strip trenches could be outdoor activity surfaces, while others might be the edges of cobble platforms, given our observations from the correlation between activity surfaces in Op 15 and Op 27.

All of the features identified in Op 27 likely belong to a single domestic compound; we present a tentative reconstruction of the activity areas in this area on Figure 5. The compound was focused around a cobble platform that held a perishable house structure, with associated postholes, a cobble path, and a low berm (Feature 41) to divert water from the structure. Although the stratigraphy suggests at least two and probably three different construction episodes, the length of time between these phases remains unknown. The material cultural suggests a late 19th-century occupation.

The surrounding space marked by a stratum shot through with limestone flecks was apparently part of the yard area, perhaps surrounded by a fence or hedge as suggested by the accumulation of large rocks and artifacts in what might be discard zones around the yard’s edge. Considering the direct association between the flecked area, the cobble mound, the rock piles, a fire pit,
and other features in this area, they all likely represent a single occupation.

Artifact Analysis
The detailed analysis of material culture continued to be central to realizing the project’s goals (Church 2002; Church et al. 2001). In 2003, we completed the analysis of the material from Op 27 and all Op 5 surface collections from collection units associated with the Op 27 excavations.

This allowed us to make some initial comparisons between the surface and subsurface assemblages. Since only the surface lots analyzed during the 2003 season are included (which do not include all the surface lots adjacent to Op 27), these comparisons are not definitive, merely preliminary and suggestive of patterns that we will continue to explore.

In general, the diversity of artifacts collected on the ground surface parallels fairly closely that of artifacts from excavated contexts. This is to be expected, since the cultural materials are not deeply buried and are eroding to the surface with each rainstorm and land-clearing episode. Of special note, however, is the relative absence of faunal remains in surface contexts. Apparently, once these bones erode onto the surface, they do not last long at all; preservation is markedly better below ground surface. Much of the faunal remains are pig bones, and the fire pits, cast iron bake ovens, and burned limestone scrap scattered around the site suggests strongly that much pork was cooked “pibil” style by pit-roasting.

When looking at functional classes of artifacts, the overall diversity of the assemblage is again roughly parallel on the surface and in excavated contexts. There are, however, some slight differences. For example, a higher proportion of the items on the surface are “indeterminate” in terms of their class because they are more highly fragmented, partially as a result of clearing and burning the field for purposes of agriculture and archaeology.

Although there are items associated with “recreation” both on the surface and below, there are more on the surface. Furthermore, a markedly higher proportion of bottle fragments below the surface are “medicine/cosmetic” while on the surface, alcohol bottles dominate. If this pattern holds with closer comparisons using a larger sample of surface collection, explanations might range from increased alcohol consumption later in the occupation of the village to post-occupational origins for some of the alcohol, or caching of alcohol in more concentrated locales. Explanations related to gender, use of cosmetics, and alcohol consumption might also be worth exploring.

Within the broad functional category of “subsistence” there are three classes: consumption, preparation and storage. All are related to foodways, and most are ceramics and glass, as well as the cast iron bake ovens and cauldrons. More imported ceramics related to consumption occurred below surface, while the metal items associated with preparation seem to lie predominantly on the surface. The high number of “preparation” items on the surface is largely comprised of cast iron bake ovens and cauldrons in particular. These seem to be much more common on the surface than in subsurface contexts. This may be due to preservation issues, or perhaps they were used later in the total occupation span of the site, although there is significant vertical cycling of materials in the 15–20 cm of occupation-related deposits at the site.

“Recreation,” as an artifact category, includes the classes of alcohol, musical instrument, tobacco, and toys. At San Pedro, the musical instrument evidence is comprised of metal accordion reeds. How many instruments are represented in the total
assemblage is unknown, but they occur both in surface and subsurface contexts. Ethnographic evidence exists of the popularity of the accordion among the Maya of the Yucatan. White kaolin pipes of English manufacture, common in subsurface contexts, mostly demonstrate the consumption of tobacco. The toys in this assemblage are uniformly porcelain and porcelain bisque doll fragments. While we have not yet determined an MNV for dolls, this should be possible once we have the whole assemblage analyzed. There are definitely several different dolls represented in the assemblage.

It is also worth noting that the Terminus Post Quem dates of the artifacts analyzed in the 2003 season align well, and they point to an occupation date of the later 19th century, which conforms well to the dates of the village’s occupation as derived from the historical.

Summary

The 2003 season of the SPMP was by far the most successful excavation season, building on the strong methodological and empirical foundations laid during the 2002 season. We were able to excavate most of a residential structure and its adjacent yard area, revealing a diversity of features suggestive of interesting activity patterning in the domestic realm. Spatial analysis of the recovered material culture should prove illuminating in that regard.

To date, we have analyzed over half of the artifacts recovered from San Pedro Siris, and the resulting data provide important information about the San Pedro Maya and their evolving place in the British colony. A local earthenware ceramic industry and the tools needed to cultivate and process maize indicate a degree of economic self-sufficiency, and the presence of guns and machetes pointed to the villagers’ ability to fight for their independence, as recorded in historical documents and demonstrated by the recovery of parts from the early incendiary rockets used by the British in their 1867 attack on the village.

Despite open hostilities with the British during the village’s early decades, the inhabitants of San Pedro Siris developed strong ties to colonial economic networks. The high numbers of alcohol and patent medicine bottles, as well as decorated imported ceramics show that people in the village had significant disposable income or surplus to barter to obtain these items. Oral histories support this, as most people recall their parents exchanging their farm products like maize, pork, bananas, and sugar cane for other non-local foodstuffs such as wheat flour, salt beef.

Despite evidence of active Maya participation in British economic networks, our data belie any simple models of Maya assimilation. For example, the decorated wares we have recovered are primarily deep bowls or tureens suitable for serving the soups and stews that are typical of Yucatec Maya cuisine. The archaeological and oral historical data show that the San Pedro Maya actively decided which goods to purchase and incorporate in their everyday lives, choosing those that allowed them to pursue traditional subsistence activities like Milpa agriculture, as well as traditional foodways.

Furthermore, the vernacular architecture was apparently typically Maya, involving poles tied together with vines or other perishable bindings, and thatch roofs; we found almost no nails, window glass, or tying wire, such as one would expect in Anglo settlements. These data all demonstrate that the San Pedro Maya had a fair degree of autonomy in dictating their participation in the economy and interactions with outsiders, especially during
the initial decades of the settlement’s history. We look forward to exploring the details of these interactions in more depth after completion of the artifact analysis in 2004.

Acknowledgements. The authors would like to thank the Institute of Archaeology, the National Institute of Culture and History, and the Ministry of Tourism and Culture for organizing the Belize Archaeological Symposium at which we presented this paper. The landowners of San Pedro Siris and the surrounding area graciously permitted our work, and we thank them for their kind cooperation. We would like to especially acknowledge the continued support of Mr. Carlos Montalban, Mrs. Pitts, and Mr. Alwin Smith. The Trek Stop provided hospitality and good cheer, and Mr. Luis Godoy helped organize our crew, a group of skilled archaeologists and dedicated workers from Succotz, Benque Viejo, La Gracia, and Cristo Rey. Generous funding for the 2003 fieldwork was provided by the University of Wisconsin Graduate School, the School of American Research, a Fulbright–Hays Faculty Research Abroad Grant, an Ivor Noel Hume Historical Archaeology Research Grant, the University of Wisconsin Vilas Trust, and UCLA Friends of Archaeology.

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Yaeger, J., M.C. Church, J. Dornan, and R.M. Leventhal
BOTTLES, BUTTONS, AND THE BEC: THE HISTORICAL RECORD AT YALBAC

Andrew Kinkella

The Valley of Peace Archaeological Project has found a small collection of historic artifacts within the humus layer of Site 14, one of the ancient Maya structures at the Maya site of Yalbac. The collection consists of 17 glass, metal, and ceramic objects dating from approximately 1880 to 1930, with most objects dating to approximately 1920. These artifacts will be related to other historic objects found in the Valley of Peace area as well as to the known written history of the area. Connections will be drawn to early logging efforts of the Belize Estate and Produce Company (BEC). The practices of the BEC will be discussed, as will the possible life ways of the loggers and/or chicleros as revealed by the artifact assemblage.

Historic Artifacts from Site 14

The collection of historic artifacts that I have analyzed from Yalbac is fragmentary and small, coming from the uppermost layer (humus) of Site 14 (94E22N-14) (Figure 2). Site 14 is a nondescript elite mound that stands about
two meters high and is located immediately outside of the Yalbac site core between Yalbac and Yalbac creek (Figure 3) (see Lucero, this volume for more on the ancient Maya site of Yalbac). As often occurs with discoveries of happenstance, we did not set out to study the historic record of our research area; we merely realized that something had to be done with all of the historic artifacts that continued to be unearthed as we began excavating for Maya artifacts!

Figure 3. Site 14 with excavation area demarcated.

The collection consists of 17 glass, metal, and ceramic objects, with wine and medicine/liquor bottles (Figure 4), buttons and ceramic sherds (Figure 5) being the most diagnostic. In addition to these items, there is a padlock and a knife and fork (Figure 6). Because of the location of the artifacts in the humus layer, any sort of chronological control was not possible. Still, this collection of artifacts has yielded interesting questions, and I hope to pique the interest of all who work on ancient Maya sites in order to urge the collection of any historical artifacts that may be unearthed, as their analysis may lead to discoveries just as fruitful as those made for the ancient Maya (see Gasco 1992).

Based on the assemblage collected from Site 14 (see Table 1), the ancient Maya site was probably re-used as a small logging or chiclero camp that was in existence multiple times during the period between about 1890 and 1930. The range of dates comes from several lines of evidence, including a datable button, a datable sherd, and the fact that most of the bottles were made using a process that was popular during this time (see Fike 1987). As with dating ancient Maya ceramics, not all of the historic artifacts fall neatly into one narrow time band; the wine bottle, one button, and one ceramic sherd could date as early as 1870, while the bulk of the other glass bottles could date to as late as 1930. Nearly all of the artifacts could possibly have coexisted at about 1910-1920 or so. There is about a third of the assemblage that cannot be dated to any useful time period, but the artifacts could be consistent with the early twentieth century.

The reason that the loggers or chicleros who left these material traces decided to live on top of this mound can be easily explained when the surrounding environment is examined. First, Site 14 is very close to Yalbac Creek, facilitating easy
access to water for drinking and bathing. Second, the mound itself provides a nice, raised, flat area in a location that is sloping rapidly upward from the creek bed to the top of the Yalbac plaza. During the rainy season, this mound would be a comfortable flat spot located just above the high water line (the rainy season being the best time for chicle gathering) (Shoman 2000). This choice of location for the loggers and/or chicleros could possibly mirror the ancient Maya reasoning for building an elite structure at this spot.

Who were the people who lived here? The artifacts paint a picture of working class loggers/chicleros who were working for the BEC, either cutting mahogany or looking for chicle. These people consumed alcoholic beverages (the large green bottle is almost assuredly for this, as were one or more of the “medicine” bottles). They also likely carried condiments for their food. This collection also shows self-sufficiency and economy by virtue of its small number of pieces; only the necessities of life are represented (food, clothing, and alcohol). These people probably lived with Western cultural values, as a knife and fork are present (historic Maya groups would use tortillas in place of utensils) (Yaeger 2004). These people probably did not stay very long, but the amount of artifacts recovered says that they either stayed for more than a mere stopover, or came to the same spot many times (this could have been a favorite camping spot).

**Historical Background**

Today, the archaeological site of Yalbac sits within the domain of the Yalbac Cattle and Ranch Company, on land that is used primarily for logging. The use of this land has not changed much since the British gained control of Belize over 200 years ago. In the late 1700’s and early 1800’s, this area was logged by slaves working for local
owners. After the slaves were emancipated in 1838, the local owners congregated into powerful companies, the most powerful of which was the British Honduras Company, which changed its name in 1875 to the Belize Estate and Produce Company (abbreviated BEC) (Shoman 2000, ETF 1984).

<table>
<thead>
<tr>
<th>Glass:</th>
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<tbody>
<tr>
<td><strong>Object</strong></td>
</tr>
<tr>
<td>Large olive bottle</td>
</tr>
<tr>
<td>Larger aqua bottle</td>
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<tr>
<td>*Smaller aqua bottle</td>
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<tr>
<td>*Smaller aqua bottle</td>
</tr>
<tr>
<td>Aqua bottle neck</td>
</tr>
<tr>
<td>Two aqua bottle stoppers</td>
</tr>
</tbody>
</table>

*The finishes on the two above are not typically seen in the U.S. on bottles of this shape. We typically see what is on 266 on large whiskeys. These could hold medicinal or condiments.*

<table>
<thead>
<tr>
<th>Metal:</th>
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<tbody>
<tr>
<td><strong>Object</strong></td>
</tr>
<tr>
<td>Button</td>
</tr>
<tr>
<td>Padlock</td>
</tr>
<tr>
<td>Knife blade</td>
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<tr>
<td>Fork</td>
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<table>
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<tr>
<th>Ceramic:</th>
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<tbody>
<tr>
<td><strong>Object</strong></td>
</tr>
<tr>
<td>Button</td>
</tr>
<tr>
<td>Blue rim sherd (plate)</td>
</tr>
<tr>
<td>Two tan fragments</td>
</tr>
<tr>
<td>Polychrome base fragment</td>
</tr>
<tr>
<td>Tiny rim fragment</td>
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</tbody>
</table>

| Table 1. Historical artifacts from Site 14.                          |
The BEC was an immensely powerful entity, owning one fifth of the entire country. They could never possibly use all of their landholdings at once, keeping many thousands of acres undeveloped but refusing appropriate taxation on these lands. The issue of taxation of the land got so bad that in the early 20th century the Belize council blamed the BEC for retarding development of the country because of the lack of tax dollars that should have been paid. In addition, by 1920 seventy percent of all trade was with the United States, while only sixteen percent was with the British Empire. One of the driving forces of this trade shift was the American fad of gum chewing; Belize exported two to three million pounds of chicle a year to the States in the early 1900’s (Shoman 2000). The BEC lost lots of ground to the American companies at this time, so much so that the BEC was almost sold in 1930. The Creole elites of Belize preferred the American companies over the BEC, but the BEC still had enough political sway (barely) to get a massive stand of virgin mahogany from the Belize council in 1931 that kept the company alive (Shoman 2000).

An example of the control exerted over the land by the BEC occurred in the Yalbac Hills in 1867, when a group of Maya villages that happened to be standing on BEC lands were destroyed by armed force. The same thing happened again in the 1930’s to the village of Yalbac (along with agricultural villages at Lamanai and San Jose) which was destroyed at that time by the BEC (ETF 1984:36). This stranglehold that the BEC kept on this area for over 100 years has sometimes been recorded in the archaeological record as ephemeral traces of simple and hard lives.

Both chicleros and loggers working for the BEC (and most other companies) lived under the dreaded “advance” system, whereby they were paid their wages up front at the beginning of the work year (Christmas). Not only did many of them spend their money right away, but half of their pay came in the form of outrageously overpriced goods that were provided by the BEC. This system kept the workers in perpetual debt, and although there was a law passed in 1883 outlawing the payment of wages with goods, things did not change much in practice (Shoman 2000). The advance system turned the loggers and chicleros into indentured servants, never able to rise out of their situation. As the loggers and chicleros suffered, a small group of elites in Belize City and abroad prospered. The advance system stayed in place until 1943, when working conditions that had been virtually the same since 1838 (when the slaves were freed) were finally changed.

Historic Artifacts beyond Yalbac in the Valley of Peace

Although the small collection discussed above are the only historic artifacts found in situ so far in the Valley of Peace archaeology project survey area, they are not the only historic evidence in existence in our area. Several historic artifacts have been uncovered in the Banana Bank area over the years on land owned by John Carr. As Banana Bank originally got its name because of the transportation of bananas on this part of the Belize River, this area has seen a good share of activity over the last hundred years or more. Much of the land in the area is now under cultivation, and when the land is plowed, sometimes-historic artifacts are uncovered. Mr. Carr has found several interesting historic artifacts over the years, among those a large chain for yoking cattle, various gun parts, large metal hooks with chain, and a BEC stamp that was used to brand BEC logs that were brought to the river in this area for transportation.
One quirky bit of history that relates to the Yalbac area and the greater VOPA area (especially Saturday Creek –see Lucero 2002) concerns the attempt of American Methodist Minister B.R. Duval and Confederate General Colin McRae to establish the town of ‘New Richmond’ in 1867 on land that is several kilometers east of Yalbac along Saturday Creek (and where Labouring Creek and Cut-And-Throw-Away Creek come together) (Simmons 2001). Their idea was to recreate the old South, complete with hoop skirts, plantations, and slaves. This town only lasted several years, being dealt a harsh blow when their first cotton crop failed. The minister left almost immediately after this, but General McRae kept the town alive until he died in 1876. The 18 square miles of land that McRae himself purchased in 1867 for his estate still carries the name of the General; the area is simply called “McRae” today.

Future Goals

While historic archaeology is not the main focus of the Valley of Peace Archaeological Project, the experience of finding and analyzing these artifacts from Yalbac has given us a much greater appreciation for the historic archaeological record. We will continue our vigilance for historic artifacts as well as including any new finds in our reports and publications. We may also make a short trip out to the last known location of the McRae estate in an attempt to re-find the site and ascertain if there is any trace of it left on the surface.

It is important to note that, this collection has been analyzed by an American archaeologist used to American bottle types and ages. There may be slight differences in any British bottles imported to Belize in terms of age and use. Also, the age of the artifacts may not represent the time of final discard (people often re-use objects for a time). Even so, I am confident that we are looking at a pre-depression era archaeological site, and are making solid first steps to understanding a secondary use for the ancient Maya site of Yalbac. The slight traces that the loggers and chicleros left behind tells a story of a Spartan existence under the advance system where the BEC made all the profit and the workers lived hard lives for little pay.

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SECTION THREE: GENERAL RESEARCH PAPERS
CLASSIC MAYA WORKSHOPS: ANCIENT SALT WORKS IN PAYNES CREEK NATIONAL PARK, BELIZE

Heather McKillop

This paper questions the centralized model of the Late Classic Maya economy in which the urban royal Maya and their courtiers controlled the production and distribution of goods and resources. Notwithstanding the presence of attached specialists producing highly crafted goods in lowlands cities, there was considerable variability in the production and level of elite control of other, including more utilitarian goods. The existence of independent workshops not associated with household production is underscored by the discovery of 45 salt works, now underwater in Punta Ycacos Lagoon, Paynes Creek National Park, Belize. Sea-level rise inundated the workshops, preserving pots in situ.

Variability in the control of production and distribution of goods and resources supports Marcus’ (1993) dynamic model of Classic Maya political organization, with fluctuations between centralized and more de-centralized (segmentary) organization. The Classic Maya economy consisted of the political economy and the subsistence economy (Masson and Freidel 2002; McKillop 2002, 2004a). The political economy included attached specialists of the royal court who crafted goods for the royal Maya, whereas the subsistence economy was focused on basic needs of each household. Neglected in this dichotomy are various types of production beyond the household level, perhaps because there are few instances in which production or workshops have been identified. More often, it is the finished products that are discovered in burials, offerings, middens, and construction fill that indicate production elsewhere. A growing body of data indicates that workshop production beyond the household needs by specialists who were not attached to the royal courts, but the level of royal control of production and distribution of the goods has remained undefined. The discovery and excavation of Classic Maya workshops provides an opportunity to re-evaluate the dichotomy between political and subsistence economy as they relate to the control of production and distribution of goods and resources and the organization of Classic Maya society. Excavated and analyzed workshops include the cottage industry workshop production of stone tools at Colha (Shafer and Hester 1983), and independent, non-domestic salt works in Paynes Creek National Park (McKillop 2002).

At the height of the Late Classic period there were arguably up to 80 city-states within the southern Maya lowlands, each controlled by dynastic royal kings and queens (Martin and Grube 2000). Hieroglyphic records on stelae in royal courtyards proclaim marriage alliances and city-states conquered, contributing to a picture of changing alliances that variously grouped city-states into larger political and economic units. However, the degree of centralization, both within and among city-states, is a point of some discussion among Maya archaeologists. Contrasting views of Classic Maya political economy pit the centralist model of the organization of Maya society (Chase and Chase 1996) against the more de-centralized, segmentary model (Demarest 1996; Dunham et al. 1989;
McKillop 2002, 2004a). The centralist model is hierarchical, with power vested with the royal Maya in urban centers (Chase and Chase 2001). The segmentary model addresses lateral relations, and alliances, and vests power in heterarchal relations (Scarborough et al. 2003). Joyce Marcus (1993) suggests a dynamic model of Maya society, in which the political organization alternated between a centralist and more decentralized, segmentary organization, depending on spatial and temporal variability within the southern Maya lowlands (see Braswell et al. 2004).

The political economy included attached specialists for the dynastic royal Maya kings and queens. The attached specialists worked in royal court workshops in urban centers. The craft workers created fancy pottery vessels and highly crafted objects of jade. They had proprietary knowledge of written language, painted on paper books, pottery vessels, jade objects, and carved in stone (Coe and Kerr 1998; Inomata 2001). The knowledge, skills, and products of the attached specialists reinforced, modified, and recreated the authority of the ruling Maya kings and queens.

Scribes are depicted on painted pottery vessels, writing in books. Some scribes even signed their names on their works, as on carved stones at Yaxchilan (Tate 1992). Texts on Late Classic Maya vases describe the pictorial scenes of royal court life depicted on the vessels (Reents-Budet 1994, 2001). “Codex style” vases mimic the line drawings of paper books known from Postclassic codices and unfortunately destroyed and lost from earlier times. Highly crafted goods, both of locally available materials, and from imported “value-added” materials, were used during the lives of the royalty and interred with them in their graves as offerings. The 4.4 kg carved jade head of K’inch Ajaw, the sun god, from the Tomb of the SunGod; Temple B4 at Altun Ha (Pendergast 1982) is almost obscenely large and elaborate in the burial of such a valuable resource. The acquisition of highly crafted goods and imported resources was of greatest interest to the royal Maya as symbols and conveyors of their power. As such, these goods and resources were desired by others who wanted to attain power and climb the social ladder.

Potters, painters, scribes, and specialists were part of the royal court producing highly crafted goods for the elite Maya. Ancient texts recording dynastic records of Maya royalty and the important events of their lives provide important clues to the economy: We assume that economic transactions were embedded in marriage and military alliances, territorial expansion, and the maintenance of hierarchical and heterarchal relations within and between polities. These economic transactions were exotic, highly crafted, limited edition goods for elite use in life and death.

While ancient texts are virtually silent on the nature of the subsistence economy, there is much evidence on the production and distribution of goods and resources from dirt archaeology. The non-local origin of obsidian, chert, ground stone, pottery, and shells document exchange (McKillop 2002, 2004a, b; McKillop and Winemiller 2004). Plant and animal remains, relict fields, and bone chemistry identify the diet and subsistence patterns. A variety of other goods were produced for use in the daily lives of the ancient Maya, from kings to commoners. Pots, stone tools, clothing, boats, weapons, household goods and furniture, were needed by all sectors of Maya society. Some of these goods were produced by each household; some were produced in cottage industries for use by others as with the chert tool workshops at Colha (Shafer and Hester 1983). My
ongoing research in on the south coast of Belize demonstrates that there were workshops not associated with household production or cottage industries and that these workshops were geographically distant from and beyond the political and economic control of the inland urban Maya. There is extensive evidence for independent workshops in Paynes Creek National Park, where salt was produced by boiling seawater in pots over fires in Paynes Creek National Park. We have discovered and investigated 45 salt works in the park. All date to the Late Classic on the basis of ceramic and radiocarbon analyses.

In distinguishing between the political economy and the subsistence economy, we often assume centralized control by the urban royal Maya in prestige goods. In contrast, we often assume the subsistence economy was focused on household production and distribution. However, this dichotomy ignores the existence of cottage industry production as at Colha and independent workshops as at Paynes Creek. The political-subsistence economy dichotomy further masks the organization of the subsistence economy beyond the household level and/or the interest among the royal urban Maya in controlling the subsistence economy. Colha provides the best example to date of cottage industry for the ancient Maya, where stone tools were produced at household workshops for local and regional distribution (Shafer and Hester 1983).

I have previously reported and discussed 4 salt workshops in Paynes Creek National Park that provide a new dimension to our understanding of the ancient Maya subsistence economy (Figure 1). In Salt: White Gold of the Ancient Maya, I described the boiling of seawater or brine in pots over fires to produce salt, suggesting it was produced under coastal control to meet the salt needs and appetite of the nearby inland urban Maya. We documented that salt was produced and by standardization studies that the pots were standardized in size suggesting mass-production. The workshops were places where salt was produced for use elsewhere. They were workshops with no settlement. The sites lack food remains, burials, or other settlement data. The pottery assemblage is restricted in shape and types to pots used in salt making. The discovery of 8 new salt works in Paynes Creek National Park in 2003, together with 33 additional salt works discovered in 2004 underscore the extent of independent workshop production during the Late Classic on the south coast of Belize. The extent of independent workshop production supports a de-centralized organization of Maya society, with the control of production and distribution of some critical resources, such as salt, in the hands of the local producers. Due to their control of the salt works, the coastal Maya of southern Belize were politically and economically autonomous from their nearby inland city states, who negotiated marriage and trade alliances with the coastal Maya in order to obtain salt, a biological necessity, as well as obsidian and other resources traded along the coast from more distant places within and beyond the Maya lowlands (McKillop 2002, 2005; McKillop et al. 2004).

Salt (sodium chloride) is a basic mineral component of the intercellular system of the human body. The body strives to maintain salt balance: The body hoards salt when it is unavailable or under increased physical activity. The body excretes excess salt through kidneys. Salt enhances the flavor of food and as one of the four taste sensations on the human tongue, salt appetite clearly works to help the body obtain its biological quota (see McKillop 2002). There are various estimates for the amount of salt the ancient Maya needed, all dependent on population estimates of Maya
Investigations at Paynes Creek

settlements and various estimates of the body’s biological salt needs (Andrews 1983).

Where did the Classic Maya get salt? What can the production and distribution of salt tell us about the Classic Maya economy and the organization of ancient Maya society? There are two main methods of salt production that were widespread historically and prehistorically worldwide, including the Maya area: Salt was acquired by gathering salt created by solar evaporation on salt flats on the north coast of the Yucatan (Andrews 1983). Salt was produced by boiling brine or seawater in pots over fires on the coast of Belize and the Pacific coasts of Guatemala, El Salvador, and Mexico (Coe and Flannery 1967; Mackinnon and Kepecs 1989; McKillop 1995, 2002; Mock 1994; Nance 1992).

Fieldwork on the south coast of Belize has revealed extensive salt production by the boiling method in Punta Ycacos Lagoon, a large salt-water lagoon, in Paynes Creek National Park, some 25 km north of Punta Gorda. The low-lying landscape consists of a typical mangrove ecosystem dominated by red mangroves (*Rhizophora mangle*), with their phenophores in the salt water. North and east of the lagoon, the poorly drained pine savannah has scattered clumps of palmettos (*Acoelorraphe wrightii*), pine (*Pinus caribaea*), and oak (*Querus* sp.; Johnson and Chaffey 1974). In areas farther inland and where the savannah is drier, other species grow, including crabbo (*Byrsonima crassifolia*), icaco plum (*Chrysobalanus icaco*), and white poisonwood (*Caeraria belizensis*). Various deciduous hardwoods grow in the rainforest along the Deep River to the south and Monkey River to the north. The park is uninhabited and there is only one family living on the coast between Punta Gorda and Punta Negra.

Regional survey and excavation revealed that sea level has risen more than one meter since the end of the Classic

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**Figure 1.** Punta Ycacos Lagoon, Paynes Creek National Park. Drawing by Mary Lee Eggart, LSU.
period, inundating ancient sites, including salt works that are currently underwater in Punta Ycacos Lagoon. The sea-level rise was extensive and pervasive in the Port Honduras and Paynes Creek region, as demonstrated by the location a dozen radiocarbon-dated Late Classic Maya sites below sea level (McKillop 2002: 134-174, Table 5.3). There was more dry land on the coast and on the offshore cays and shallow offshore areas in the sea were dry land. The vegetation patterns were dramatically different. Whereas mangroves dominate the landscape since they tolerate salt water, plants and trees adapted to dry land and fresh water dominated the Classic and Postclassic landscape (McKillop 1994, 1996a): Native palms, including cohune (Orbignya cohune), coyol (Acrocomia mexicana), and poknobo (Bactris major), were a significant feature of the coastal landscape, despite their modern rarity.

The research is part of a long-term project in the Port Honduras coastal area between Punta Gorda and Punta Gorda. Initial fieldwork beginning in 1981 focused on the Classic to Postclassic Maya trading port on Wild Cane Cay (McKillop 2005). Subsequent fieldwork investigated the coastal area to investigate the relationship between Wild Cane Cay and other discovered sites and the role of coastal areas in ancient Maya society (McKillop 2005; McKillop and Winemiller 2004; McKillop et al. 2004). Four salt works were discovered and excavated in 1991 and 1994 in Paynes Creek National Park (McKillop 1995, 2002). Stingray Lagoon, David Westby, and Orlando’s Jewfish sites are underwater in the western arm of Punta Ycacos Lagoon. The sites were discovered by the presence of artifacts on the sea floor, observed while traversing the lagoon in the project vessels, and identified by jumping overboard to surface collect. A fourth site, Killer Bee, is in the adjacent mangroves and is identifiable by its distinctive ping-wing vegetation (wild pineapple). The underwater sites were mapped using a transit and then excavated by standing in the water and shoveling the mangrove mud from the wooden grid frame excavation units into screens.

A radiocarbon date on wood charcoal from a fire hearth at the Stingray Lagoon site of A.D. 770 ± 50 places the site in the Late Classic (McKillop 1995). The radiocarbon date is corroborated by the age assignment from analysis of ceramics from the four sites. They are single-component Late Classic sites. The top of Stingray Lagoon site at 90 cm below sea level provides a minimum indication of the extent of sea-level rise (absolute or relative) since the Late Classic. Since the Maya at Stingray Lagoon could not live directly at sea level, it was even lower. Sea level rose soon after the sites were abandoned, precluding the opportunity for post-depositional site trampling. This rapid sea-level rise is indicated by the larger size of pottery sherds at the inundated sites compared with land sites in the Port Honduras region.

The interpretation of the sites as salt works and the pottery as salt pots is based on ethnographic analogy. For example, at the modern inland salt spring at Sacapulas in highland Guatemala, some two-dozen pots are placed over a fire, with water jars used to refill the pots as the water evaporates (Reina and Monaghan 1981). This technique is common worldwide (Adshead 1992).

The artifact assemblages from the four sites were dominated by jar and bowl sherds from salt boiling pots and their solid clay cylinder vessel supports, named “Punta Ycacos Unslipped” following the type-variety system of Maya ceramic classification. In addition, there were two types of water jars used for storing seawater or brine that was poured into the pots, including undecorated “Mangrove
Unslipped” and “Warrie Red”, a red-slipped type with distinctive unit-stamped decorations on the vessel shoulder, characteristic of inland cities in southern Belize and adjacent Guatemala.

The four sites were independent workshops where salt was produced by people who lived elsewhere. There was no household garbage at the workshops, only debris from the salt boiling process. There were no houses or burials, both typical of Maya settlements. There were few food remains, apart from a limited number of palm nut shells, in contrast to inundated Maya sites elsewhere in the area. With only 4 pottery types, the sites lacked the diversity of pottery types and range of vessel forms of Maya settlements in the Port Honduras region. Perhaps they lived at the nearest known Maya community, the offshore island site of Wild Cane Cay, which likely was the entrepôt for the coastal-inland trade of salt (McKillop 1996b, 2005). With limited survey in the lagoon and no survey on the land, the home base of the salt workers is undetermined.

With only 4 salt works, there were lingering questions about the contribution of the Punta Ycacos salt to the inland Maya diet and the organization of salt production and trade in the Late Classic in the Maya area. Did Belizean salt supply the Late Classic Maya inland salt needs? Alternatively, was salt imported at that time from the salt flats on the north coast of the Yucatan (Andrews 1980)? Certainly the Belize coast was closer to the heartland of the Maya area, but long-distance bulk transport of salt and other basic commodities is documented in other ancient and modern cultures. I developed a research plan in order to evaluate how much salt was produced. Firstly, I investigated whether the Paynes Creek salt was mass-produced, implying that it was beyond the level of household production. Secondly, I planned a systematic search of Paynes Creek National Park, to see if there were more salt works, if they all dated to the Late Classic or if there were earlier or later sites, and to find the salt workers’ communities.

In order to evaluate whether or not salt was mass-produced, I evaluated if the salt pots were standardized in size and shape. I compared the salt pots with household pots that were not standardized from household middens at Wild Cane Cay, from the Bedford Unslipped pottery type. In evaluating standardization, I measured the diameter of the vessel orifices for jars and bowls and the diameter of the clay cylinder salt pot vessel supports. I used the average median variation. The average median variation reduces the effect of outlying values in a distribution, so it is better than the co-efficient of variation, often used in other standardization studies. In calculating the average median variation, each value (measurement) is subtracted from the median. The absolute value of the number is divided by the median. The average of the number is multiplied by 100. The lower the calculated value, the less variation, and hence more standardized. This statistic is appropriate for samples with distributions significantly different from normal.

The Punta Ycacos salt jars and vessel supports were significantly more standardized than the Wild Cane Cay jars (McKillop 2002). The average median variation of 9.6 for the salt pots and 11.9 for the salt vessel supports is much lower than the value of 20.6 for the Wild Cane Cay pots. The salt pots Orlando’s Jewfish, with an average median variation of 2.1, were significantly more standardized than the 10.5 at Stingray Lagoon or the 10.9 at David Westby, suggesting there were distinct work parties or different times of use. The sample at Killer Bee site was too small to provide a separate calculation. There was no significant difference in the standardization
of the salt pot vessel supports at the different salt works. The Mangrove Unslipped water jars were not standardized. Their average median variation of 20.6 is the same as that for the Wild Cane Cay pots, indicating both the Mangrove Unslipped vessels were general purpose water jars not exclusively used for storing seawater or brine at the salt works. In fact, they have been found at various settlements in the Port Honduras (McKillop 2001). The Warrie Red water jars, by way of contrast, were standardized since they were mold-made, as indicated by their average median variation of 8.2. The Paynes Creek salt pots were standardized, suggesting specialized production, even that they were mass-produced for salt making. The 4 sites provided tantalizing clues that Belizean salt was extensively used by the nearby Late Classic inland Maya, underscoring the need for further survey to see if there were more salt works.

Underwater survey in 2003 and 2004 indicates there are both more salt works and a high density of sites in Paynes Creek National Park. The ongoing survey includes the first systematic search of the lagoon, with a team using the land-based technique of pedestrian survey, walking or snorkeling in a line at arms' length and looking for artifacts on the seafloor. To date, we have discovered 45 salt works and only a small area of Punta Ycacos Lagoon has been systematically searched and land survey has not begun. Eight underwater sites were found in five days of survey in 2003, with one of the sites, the Eleanor Betty site, excavated on the sixth day. Four of the sites were discovered in the main channel leading into Punta Ycacos Lagoon, 2 were found in the western arm of the lagoon where the original sites were found, and one site was found in the eastern arm of the lagoon. The assemblages of artifacts at the new sites are the same as the previously reported sites, except there are more round-sided bowls than jars at the Eleanor Betty Site. Measurements of the salt pots and solid clay cylinder vessel supports from the 2003 and 2004 fieldwork will contribute to an understanding of inter-workshop variability in salt production.

What does the discovery of 45 salt works in Paynes Creek National Park tell use about the Late Classic political economy of southern Belize? The nearby inland cities of Nim Li Punit, Lubaantun, Uxbenka, and Pusilha farther south, are large sites with stone architecture and dominated the political and economic landscape. Three offshore island sites with stone architecture, including Wild Cane Cay, Frenchman’s Cay, and Green Vine Snake, dominated the coastal region. Everyone needed salt. The inland urban Maya negotiated trade and marriage alliances with the coastal elite at island communities to obtain salt. It was transported overland by porters or up river by canoe. In addition to the inland urban Maya’s biological need for salt, there is evidence of trade and communication between the coast and interior during the Late Classic: Inland trade goods, notably figurine whistles and unit-stamped pots, are found at coastal sites, including the salt works. Furthermore, the salt works were abandoned at the end of the Classic period, with the cessation of dynastic records at inland cities and virtual abandonment of the inland cities. With the inland market for salt gone, the salt works were abandoned, although salt continued to be produced at a household level at Postclassic communities in the Port Honduras coastal area, such as Wild Cane Cay and Frenchman’s Cay (McKillop 2003).

Ongoing fieldwork includes a systematic underwater survey of Paynes Creek National Park, sediment cores to evaluate sea-level rise and to reconstruct the ancient topography and vegetation landscape, and ultimately, survey of the land...
in search of settlements. In addition to the 8 sites discovered in 2003 and the 33 sites discovered in 2004, our 2004 fieldwork unexpectedly made a major discovery. The underwater survey focused on the eastern arm of Punta Ycacos Lagoon, at the edge of the proposed re-aligned boundaries of Paynes Creek National Park. The eastern arm of the lagoon is a peat bog that has preserved ancient wood at the salt works, including a full-size wooden canoe paddle radiocarbon dated to the Late Classic (Figure 2). The wood is fresh in appearance and plentiful, including hundreds of posts and other construction wood at 23 underwater sites. What more lies buried in the peat bog beneath the waters of Paynes Creek National Park?

What does salt production in Paynes Creek National Park tell us about the political economy of the Late Classic Maya and the organization of Maya society? First, there were at least three kinds of workshops in Late Classic Maya society. They included attached specialists at the royal courts (Inomata 2001), cottage industry production near natural resources such as the chert outcrops exploited at Colha (Hester and Shafer 1983), and independent workshops near natural resources, such as the Paynes Creek salt works (McKillop 2002). Secondly, the Paynes Creek salt works were geographically distant from urban centers and beyond the political and logistical control of the urban royal Maya. The independence of the salt works supports a decentralized –even segmentary– model of the organization of Maya society. A contrasting example is the economic and political centralized organization of Caracol, in which roadways integrated the suburban and central areas of the city, both politically and economically (Chase and Chase 2001). Who controlled the Paynes Creek salt works? While it remains to be discovered even where the salt workers lived, the maritime elite at offshore island communities, such as Wild Cane Cay, controlled the coastal economy of the Port Honduras. They controlled the inland transport of coastal goods and resources, including salt as well as seafood and ritual items (McKillop 1996b, 2002), and the trade of inland goods, such as figurine whistles and unit-stamped pottery vessels (McKillop 2002). The inland urban Maya formed trade and marriage alliances with their coastal counterparts in order to maintain a steady supply of salt.

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Figure 2. Late Classic Maya wooden canoe paddle discovered in 2004 at K’ak’ Naab’ underwater Maya site in Paynes Creek National Park (insert shows close-up of paddle blade). Photographs by H. McKillop.
Investigations at Paynes Creek


Coe Michael D. and Justin Kerr

Demarest Arthur

Dunham Peter S., Thomas R. Jamison, and Richard M. Leventhal

Graham Elizabeth and David M. Pendergast

Inomata Takeshi

Johnson M. S. and D. R. Chaffey

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Pendergast David M.

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Scarborough Vernon, Fred Valdez, Jr., and Nicholas Dunning (editors)

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Compelling evidence from our research indicates that current assessments of ancient Maya population based on mound counts seriously underestimate Maya population estimates and settlement patterns, since not all ancient structures leave mounded remains that are visible in the modern landscape. Since population estimates are at the foundation of models and hypotheses about the rise and fall of the Maya civilization, clarifying population estimates is desirable. Furthermore, documentation of this “invisible” settlement expands our understanding of the modest remains of common Maya settlement. In this paper we discuss shovel testing along transects, commonly used in forested areas in North America to discover buried settlement. Shovel testing along transects in 2003 at Arvin’s Landing on the south coast of Belize extended the known area of ancient Maya settlement well beyond the area of the site’s visible mound. Shovel testing along transects, together with GIS spatial analysis, provide a more accurate view of the extent of ancient Maya use of the landscape than traditional surface inspection alone.

Introduction

Current assessments of Pre-Columbian population and settlement patterns in the Maya area are largely based on visible expressions of ancient settlement in the landscape (Ashmore 1981; Culbert and Rice 1990). Ruins of urban centers with monumental and ceremonial architecture have drawn the most research attention. As well as these expressions of the urban royal Maya, some researchers have focused on the common Maya who lived in smaller settlements with less visible architectural remains (Iannone and Connell 2003; Garber 2004; Johnston 2004; Willey et al. 1965). The houses of the common Maya, which formed the bulk of the ancient Maya farming population, were constructed of perishable pole and thatch on low stone or earth platforms, or directly on the ground surface (Wilk and Ashmore 1988). The remains of these houses, which can be seen dotting the modern landscape in the form of “housemounds,” form the basis of population estimates (Culbert and Rice 1990).

Various researchers have cautioned that an unknown quantity of ancient Maya houses have left no mounded remains, so that population estimates are underestimated (Chase 1990; Johnston 2004; McKillop 1996; Pyburn 1990; Webster and Fretter 1990). The widespread occurrence of “invisible” houses adversely affects our ability to evaluate ecological models of the Classic Maya collapse, such as reliance on intensive agriculture and other interpretations founded on ancient population estimates. In addition to invisible structures at known sites, in some cases entire sites are invisible in the modern landscape (McKillop 2002). Our data from the south coast of Belize demonstrate how shovel testing along transects can reveal ancient Maya settlement where there is no surface evidence of settlement, either mounded remains of houses or artifacts. Spatial analysis of artifact distributions using geographic information systems (GIS) reveals the presence and abundance of ancient settlement activity, indicating places of residence and household obsidian artifact
production. In this paper we report the discovery of extensive buried settlement evidence at Arvin’s Landing, on the south coast of Belize, where surface indications indicate the ancient site is restricted to a single low earthen mound.

**Settlement Surveys in the Maya Area**

There is a long and successful tradition of cutting transects through forested areas searching for Maya settlement, ranging from large stone buildings to modest housemounds. Transects radiating in cardinal directions from the center of ancient cities such as Uaxactun, Tikal, La Milpa, and Pacbitun were used to investigate the extent of settlement associated with a single community (Healy et al. 2004; McKillop 2004; Puleston 1983; Tourtellot et al. 2003). Transects between cities, such as the Tikal-Yaxha survey (Ford 1986), investigated urban-rural settlement in relation to different landscapes. Ford’s (1990) Belize Valley transect survey cross-cut several environmental zones leading north from the Belize River. Scarborough’s (1986) settlement survey outside the ceremonial precinct at Cerros included a network of transects in a heavily forested area to discover houses of the common folk at Cerros. The transect method of surface inspection has proven successful in locating ancient Maya settlement, although the method misses an unknown number of households that lack mounded or other visible surface remains.

**Modest Architectural Remains “Invisible” in Traditional Surveys**

Traditional methods of transect survey and surface inspection is inadequate in areas with modest cultural remains that leave no visible evidence in the modern landscape. As a compliment to surface survey at Copan, Webster and Fretter (1990) found that test pitting revealed 17% more occupation sites than the surface survey indicated. Additionally, with large-scale rural excavation, Webster and Fretter’s estimate revealed 38% more settlement in the area. At Santa Rita (D. Chase 1990), Nohmul (Pyburn 1990), and elsewhere (Ford 1990; Johnston 2004; McKillop 1989), researchers increase the mound count by various percentages to account for houses without mounded remains. At Wild Cane Cay, where the six mounds indicate a population of 33.6 people (using 5.6 people per household X 6 mounds), an alternative population estimate based on household use of obsidian using the density of obsidian provided a much higher population for this 10 acre island site (McKillop 1989).

Another dimension of invisible settlement are those modest sites without any surface evidence. Those invisible sites, while representing modest remains of the common Maya, are largely undocumented in the Maya rainforest, despite successful methods to discover buried “invisible” settlements elsewhere (Krakker et al. 1983; McKillop and Garrad 1992; Plog et al. 1978; Shott 1985).

**Shovel-testing along Transects to Discover “Invisible” Settlement Remains**

Shovel testing is the common method of site discovery in forested areas in North America (Krakker et al. 1983; McKillop and Garrad 1992; Plog et al. 1978; Shott 1985). The likelihood of finding buried sites by shovel testing along transects depends on several factors, including the distance between shovel tests, whether or not the excavated soil is screened, and the density of cultural remains. Reducing the interval between shovel tests and screening excavated soil increases the likelihood of site discovery. A grid network of shovel tests at 10 m intervals was used at the Peacock Site, a late prehistoric Huron village, where the presence of a site was
known from local informants and the density of artifacts at Huron villages was known to be high (McKillop and Garrad 1992). Shott (1985) and Kakker et al. (1983) that suggest the more intensive the sampling pattern is, the more effective are the results of a shovel test survey. To further increase the effectiveness and efficiency of shovel testing for the purpose of site discovery, Krakker et al. (1983) suggest instead of sampling on a grid, shovel test samples should be staggered from row to row on the survey transect. Most of Krakker et al.’s (1983) and Shott’s (1985) suggestions are based on their search for circular sites. The optimal strategy in searching for circular sites is to stagger shovel tests in a hexagonal pattern (Krakker et al. 1983). As a discovery technique, some researchers increase the distance between shovel tests in areas considered as “low probability,” but since this decision is based on opinion, it is inadvisable since it presupposes knowledge of site locations!

Shovel testing has been used to discover invisible settlement evidence in the Port Honduras region of the south coast of Belize (McKillop 2002; McKillop et al. 2004; McKillop and Winemiller 2004). Only seven sites are visible in the modern landscape by the presence of stone, shell, or earthen mounds, and even at those sites buried settlement evidence extends far beyond the area indicated by visible mounds. Stone mounds at Wild Cane Cay, Frenchman’s Cay, and Green Vine Snake do not reveal the spatial extent of ancient settlement at each of those island settlements. Several sites marked by a single earthen mound, including Tiger Mound, Killer Bee, and Arvin’s Landing, have extensive buried settlement beyond the area of the mound without surface artifacts or other architectural features.

Apart from the Port Honduras region, shovel testing in the Maya area has not been reported, yet the field conditions would often make this test method advantageous. Anne Pyburn (1990) in her settlement pattern research at Nohmul employed systematic posthole testing to locate “invisible” features. The posthole testing revealed artifact concentrations and was used to determine where to locate further excavation.

**Shovel-Testing in a Forested Area at Arvin’s Landing**

Shovel testing along transects was successfully used at Arvin’s Landing to discover settlement not visible in the modern landscape. Arvin’s Landing is a site on Joe Taylor Creek at the north end of Punta Gorda. Named after the former landowner, John Arvin, the site was visited in 1991 after its existence was reported to McKillop by the present landowner, Jack Nightingale, at a public lecture in Punta Gorda. In addition to a low earthen mound, a scatter of obsidian and potsherds was visible in a garden near the creek. Test excavations in the mound in 1992 and 1993 included shovel testing in transects radiating away from the mound to test for further settlement (Steiner 1994; McKillop 1996). The work revealed extensive evidence of settlement in the form of potsherds and obsidian. Mound excavations directed by McKillop in 1994 revealed the mound to be a low flat substructure composed of fist-sized chert river cobbles, which are locally available. The presence of obsidian bifacial points on the platform raised the possibility that the platform was not a typical household but was wither a public or ceremonial building. The lack of other mounded remains at the site and the presence of buried deposits revealed by shovel testing called for further investigation.

The 2003 transect-shovel test program was carried out in order to investigate the extent, if any, of settlement
Hidden Landscapes in Southern Belize extending away from the cleared area of the mound by Joe Taylor Creek into the bush. An overgrown trail from Punta Gorda to Joe Taylor Creek at Arvin’s Landing was re-cut through dense secondary bush and used as the baseline for transect shovel testing. To begin the transect, a second datum was established at the trailhead located 39.1 m, 98 degrees west of north from the main datum near the Arvin’s Landing mound. Since the trail that formed the baseline meanders, side trails were aligned parallel to the first trail using a Brunton sighting compass (Figure 1a). With shovel tests measured 10, 20 and 30 meters from the baseline, shovel tests were lined up in an irregular pattern throughout the survey area. This staggered pattern was a good way to allow for the discovery of any settlement laid out in a regular pattern. Even with the slow progress in clearing the dense secondary vegetation from each side of the baseline, we extended the survey 180 m along the baseline and 30 m to each side.

Shovel tests were excavated every 10 meters on the baseline and along each side trail for a total of 126 shovel tests, covering an area of 10,800 square meters. Excavations were continued to sterile soil, which varied from 40 to 60 cm below the ground surface. The soil was screened through ¼ inch mesh rocker screens and all artifacts were kept. The shovel tests were back filled.

Upon completion of the clearing, excavating, and screening, the baseline and side trails of the transect were mapped with a Lietz™ Sokkisha Model 116 transit, stadia rod and 100 meter steel tape. Distance, elevation and bearing were recorded in a field journal. All shovel test locations were plotted according to bearings and distances using Microstation™ software. The data were transferred into Intergraph Geomedia 5.1™ and converted to a shape file. Data for each shovel test, including location, elevation, number and weight of obsidian, ceramic, chert and other items were entered into a Microsoft Excel™ file and joined to the shape file with location data in Geomedia 5.1™. Spatial analysis of the data was conducted using Geomedia Grid™ and Arc View Spatial Analyst™.

The research design called for excavating shovel tests along side trails from the baseline until we found more than one side trail in succession without artifacts. We were unable to find the boundary of Arvin’s Landing before the end of the field season. Artifacts were recovered from every trail along the transect, including 64% (n = 81) of the 126 shovel tests (Figure 1b).

The artifact data, including counts and weights of pottery, obsidian, and chert, were visually displayed in a GIS. The resulting maps showed the modern topography and the location of subsurface artifacts from shovel testing. Artifacts were present throughout the study area, although the relative abundances of different materials varied, providing for interpretations of ancient activity areas. In addition to the distribution of artifacts, the topographic map revealed a low mound that was previously unnoticed in the thick vegetation. The mound is approximately 48 cm in height and 38.5 x 37 m in dimensions.

A total of 454 artifacts were recovered. The minimum number of artifacts recovered from a shovel test was one, as was the case for 22 shovel tests. The maximum number of artifacts recovered in one shovel test was 68 from st13 (Figure 1b). For shovel tests containing artifacts, 72% had more than one artifact and 12% had more than 10 artifacts. The artifacts recovered included 295 potsherds, one formed clay net weight, 109 obsidian items, and 50 chert items.

Pottery was the most common artifact recovered in the transect shovel tests, with 295 sherds recovered from 50
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Thirty-five shovel tests had more than one sherd, 17 shovel tests had five or more sherds, and one shovel test (st13) had 54 sherds. Pottery also was well distributed within the transect survey. Out of the 126 shovel tests, 50 (39%) contained ceramics.

Surprisingly for a small settlement, obsidian was a common artifact recovery in the transect, with 41% of shovel tests (n = 53) containing obsidian (Figure 1d). There were 109 obsidian items recovered, with 23 shovel tests containing more than one item. The highest number recovered from a single shovel test was 13 obsidian items (st6d). Obsidian included six prismatic blade fragments and 103 (94%) debitage, including flakes, some with cortex, associated with production of obsidian blades and biface production and/or thinning.

Chert was recovered from 26 shovel tests (Figure 1e). These shovel tests are scattered throughout the study area. The chert distribution is sparser than the large continuous zones of distribution of pottery and obsidian. Among the 26 shovel tests containing chert, 50 items were recovered. In 10 shovel tests, more than one item of chert was recovered, with the highest recorded at st13, which contained 10 items. Much of the chert recovered in the Arvin’s Landing transect is of low quality and was likely part of the natural environment, and this is reflected in the lack of patterning in the distribution of chert, in contrast to pottery and obsidian.

GIS Spatial Analysis

The distribution of pottery, obsidian, and chert varies throughout the transect survey area, both in occurrence and density. In the transect, pottery occurs in two distinct locals in the transect, including one area in the western area previously identified as an area of artifact concentration (Figure 1c). A second area of pottery concentration is in the southeastern part of the transect, from a line connecting st4a, st5a and st6a and includes 17 shovel tests, nine of which yielded five or more sherds. Thirty-three sherds were recovered from st2f, which is the second highest number of sherds per shovel test. A smaller concentration of sherds occurs in the northwestern shovel tests of the transect extending in a northwest direction from st2. This shovel test contained the third highest number of sherds with 25 sherds. The occurrence of obsidian in the transect survey is similar to that of potsherds (Figure 1d). The distribution and density of artifacts from the shovel tests was examined using the kernel density calculation in the GIS Arc View Spatial Analyst. This method reveals the locations of ancient Maya settlement activity at Arvin’s Landing where no surface evidence is available. The weight of artifacts was selected as a better measure of density, since the artifacts are fragmentary.

Kernel density is a statistical method used to analyze the spatial distribution of data. Information is used to generalize a continuous surface density for a surrounding area with a specified search area around each grid cell and dividing by that area (Levine 2002; O’Sullivan and Unwin 2003). The user for optimal representation of the data set can modify the search area, expressed as search radius in Arc View Spatial Analyst™. For this analysis, search radii of 20, 25 and 30 were used to obtain a continuous surface density for a surrounding area of 48,127 individual grid cells. The kernel density output is estimated by summing the value of the data from each datapoint with a specified search radius in Arc View Spatial Analyst™. The output of a kernel density is a grid theme with an estimate of the density of the data from each grid cell within the area. Based on the values from the data points, the grid theme for this survey area contains 49 rows and 323 columns for a total of 16,057 individual grid cells. The kernel density output is estimated by summing the value of the data from each datapoint with a specified search radius in Arc View Spatial Analyst™. The output of a kernel density is a grid theme with an estimate of the density of the data from each grid cell within the area. Based on the values from the data points, the grid theme for this survey area contains 49 rows and 323 columns for a total of 16,057 individual grid cells. The grid theme for this survey area contains 49 rows and 323 columns for a total of 16,057 individual grid cells.

Figure 1. a) topographic map of Arvin’s Landing transect showing the locations of shovel tests (st); b) topographic map of Arvin’s Landing transect showing the locations of shovel tests from which artifacts were recovered; c) topographic map of Arvin’s Landing transect showing the locations of shovel tests from which ceramics were recovered; d) topographic map of Arvin’s Landing transect showing the locations of shovel tests from which obsidian was recovered; e) topographic map of Arvin’s Landing transect showing the locations of shovel tests from which chert was recovered.
meters were used. By using three different sized search radii, relationships of small density areas in the smaller search radius could be compared to the larger density conglomerations of the larger search radius. This tests the strength of smaller density areas with estimation over larger areas.

The output of the kernel density calculations will have an estimated distribution of data values per grid cell throughout the area of study. In this study, the values will be converted to standard deviations from the data mean. Density areas will be classified into 2 and 3 standard deviations from the mean data value. In this analysis, kernel density values above 2 standard deviations will show the upper 5th percentile of density locations. Above 3 or more standard deviations the density areas will be in the upper .3 percentile. These density areas in the upper percentiles have the highest number of estimated occurrences of artifact values for each grid cell within the survey area. This method is useful for estimating a continuous surface of data values from which hotspots in the dataset can be determined (Levine 2002; O’Sullivan and Unwin 2003). For this project, these density areas of peak data values are expected to indicate the locations of the most intense ancient cultural activity in the survey area.

Twenty, 25 and 30-meter search radii were selected to determine the strength of concentrations of pottery, obsidian, and chert (Figure 2). The calculations were made for distributions above 2 standard deviations of the mean (Figure 2a-c) and above 3 standard deviations of the mean (Figure 2d-f). The GIS analysis shows there are distinct areas of concentration for pottery, obsidian, and chert. Each material is concentrated in a different area, suggesting spatially distinct activity or discard areas for pottery, obsidian, and chert. Pottery is the only material with two areas of high density (Figure 2b). This distribution likely represents the location of two households in the transect area. There is 80 m separating the two household areas. The average weight of pottery per grid cell in the kernel density maps using the 20, 25, and 30 m search radii is 0.016 g.

The distribution and density of obsidian consists of a large continuous area that includes two areas of higher density separated by about 20 m (Figure 2a). Like ceramics, there are two obsidian concentrations above 2 standard deviations in the 20-meter search radius. The two obsidian concentrations are closer together than are the ceramic concentrations. The smaller obsidian density area to the north is weaker than the larger density area to the south. The presence of the northern density area is undetectable above 2 standard deviations in the 25-meter search radius and higher. The larger obsidian weight density area to the south is still apparent in the kernel density maps above 2 and 3 standard deviations for all search radii.

The average weight of obsidian for all search radii in the kernel density analysis is 0.005 grams per grid cell. The obsidian weight value per grid cell for density areas above 2 standard deviations is 0.018 grams for the 20-meter search radius, 0.016 grams for the 25-meter search radius and 0.015 grams for the 30-meter search radius. At 3 standard deviations and above, the obsidian weight density values per grid cell are 0.025 grams for the 20-meter search radius, 0.022 grams for the 25-meter search radius and 0.020 grams for the 30-meter search radius.

Preliminary study of the artifacts indicates they are the discarded remains of domestic life from the Classic and Postclassic periods. The potsherds are fragmentary remains of domestic wares made from locally available clay and temper. In contrast, the obsidian discovered within the transect survey was imported and
Figure 2. a) kernel densities of pottery, obsidian, and chert ≥ 2 Standard Deviations with a 20 meter search radius; b) kernel densities of pottery, obsidian, and chert ≥ 2 standard deviations with a 25 meter search radius; c) kernel densities of pottery, obsidian, and chert ≥ 2 standard deviations with a 30 meter search radius; d) kernel densities of pottery, obsidian, and chert ≥ 3 standard deviations with a 20 meter search radius; e) kernel densities of pottery, obsidian, and chert ≥ 3 standard deviations with a 25 meter search radius; f) kernel densities of pottery, obsidian, and chert ≥ 3 standard deviations with a 30 meter search radius.
includes both El Chayal and Ixtepeque obsidian from the southern Maya highlands of Guatemala (based on visual characterization). Compared with many other sites in the Port Honduras area, there is more evidence of blade and biface production at Arvin’s Landing, as indicated by the debitage. The obsidian consists of flakes, including some with cortex, and fragmentary cores, but only six fragmentary prismatic blades. Most other sites in the area have obsidian inventories dominated by finished, albeit fragmentary, prismatic blades.

What does the GIS spatial analysis tell us about ancient Maya settlement in the forested area at Arvin’s Landing? The high density and widespread distribution of pottery suggests a lengthy and permanent settlement. Two households are indicated by the two areas of concentration of pottery. Evidently obsidian blade and biface production took place as part of household activities, as indicated by the distribution of obsidian debitage overlapping the ceramic distributions.

Conclusions
Current assessments of Pre-Columbian population and settlement patterns in the Maya area of Central America are largely based on visible expressions of ancient settlement in the landscape. Ruins of urban centers with monumental and ceremonial architecture have drawn the most research attention. This is limiting in that these features are expressions of the elite, who are only a fragment of the ancient population. The study of the house mound has expanded our knowledge of ancient Maya settlement patterns, yet still falls somewhat short because in the assumption that all Maya lived on house mounds.

Shovel testing along transects at Arvin’s Landing revealed the site is much larger than the visible evidence of one chert cobble platform. The site now likely includes two more households and obsidian blade and biface production areas. The combinations of archaeological and geographical methods used in this research were useful in finding evidence of ancient settlement hidden in the modern forested landscape.

Shovel testing along transects, combined with spatial analysis of recovered material using GIS, is useful for discovering ancient Maya settlement that is invisible in the modern landscape. In addition to Arvin’s Landing, shovel testing along transects was successful for discovering ancient Maya settlement elsewhere in the Port Honduras area of southern Belize in areas where there is no visible evidence of settlement from the ground surface (McKillop 1996, 2002). Combined with traditional surface inspection along transects, shovel testing programs provide more inclusive knowledge of the extent of ancient settlement within ancient Maya communities, the distribution of households, activity areas, and ancient population.

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Recent excavations at the site of Pusilha, Belize have revealed a diverse material culture assemblage that raises intriguing questions concerning the occupational history and development of the Southern Belize subregion, located in the southeastern periphery of the Maya lowlands. Here, we describe significant findings from investigations conducted in 2004, as well as the major components of a provisional ceramic typology. The majority of ceramic material excavated so far date to the Late Classic period and reveal clear links to contemporary complexes from various parts of the Maya area, as well as to non-Maya regions in Honduras.

The major focus of the Pusilha Archaeological Project is to investigate patterns of sociopolitical and economic interaction with southeastern Mesoamerica during the history of the polity, and to determine the effects of shifting connections on local domestic and elite economy. Previous research and our own investigations at Pusilha have yielded an extensive corpus of hieroglyphic inscriptions (Braswell et al. 2004), site plan and architectural data, and a material culture inventory consisting of both locally produced and imported items. Our research goals necessitate an understanding of the degree and kind of relationships that existed between Pusilha and other sites in southern Belize. We hope that this will allow us not only to understand the development of the polity within a regional context, but also to identify broader trends in the history of the Maya lowlands and the southeastern periphery of Mesoamerica (Figure 1).

Richard Leventhal’s (1990) earlier research at sites in Toledo District, including Pusilha, led him to define southern Belize as a distinct region of the Maya lowlands. For the most part, his definition was based on three architectural features: ballcourts located in walled enclosures, a lack of corbel-vaulted structures, and the extensive use of natural topography in the built environment. A fourth important characteristic of the southern Belize zone is erroneous or eccentric lunar information recorded in hieroglyphic inscriptions. Recently discovered sites in nearby San Luis Peten, Guatemala, also share these characteristics, suggesting that the southern Belize zone may extend to the upper reaches of the Rio Cancuen. In other words, Leventhal’s archaeological region spans an important connection between the Caribbean Sea and the Rio Pasion – and ultimately, Rio Usumacinta – watersheds. The location of Pusilha at the juncture of the Poite and Pusilha rivers, therefore, placed it in a strategic position controlling trade across an important east-west trade route linking the Caribbean to the southern and central Maya lowlands.

Pusilha also may have served as an important node on a north-south trade route, articulating trade between the lowlands and the southeast periphery. The upper Mopan region is located just 20 km north of the upper Pusilha River, therefore sites in the eastern Peten and western Belize may have been connected to Quirigua, Copan, and non-Maya Honduras via Pusilha in southern Belize. Strong ceramic evidence for exchange between these regions -in
Figure 1. The location of Pusilha, the Southern Belize Region, and other regions of the Maya lowlands.
particular between northern and western Belize and the southeastern periphery—has been known for some time. The so-called Quetzal Vase, for example, which was found in a royal tomb at Copan, has been stylistically and chemically sourced to Altun Ha (Reents-Budet 1994). Red-slipped bowls of Belize Red types have been found not only at Quirigua, but also at sites in the Naco and Ulua valleys of western Honduras (e.g., Sheptak 1987). Similarly, “marble” (actually alabaster) vessels from the Ulua Valley have been recovered at a number of sites in the Maya lowlands, including Uaxactun, Altun Ha, and Xunantunich (Sheptak 1987). Thus, active exchange between the eastern Maya lowlands and non-Maya regions of Honduras occurred during the Late Classic period. The intermediate location of Pusilha suggests that this important polity may have linked the eastern Maya lowlands with western Honduras and other parts of the southeastern Mesoamerican periphery. We seek a more comprehensive understanding of the role of Pusilha, and indeed of the entire southern Belize region, in this interaction. We also are studying the chronology and effects of this exchange on local political and economic conditions.

Although we have only conducted two field-seasons of excavations and a third of survey at Pusilha, a number of patterns informing these questions have begun to emerge. We begin our report here with a brief description of some of the work carried out during the 2004 season at Pusilha, and conclude with a discussion of our analyses of ceramics recovered to date.

2004 Field Season

During the first two field seasons of investigations at Pusilha, we mapped significant portions of the site—including the Gateway Hill Acropolis, the Moho Plaza with its hieroglyphic stair, the Stela Plaza-
New Pusilha Data

Ballcourt I group, and several large settlement zones (Figure 2). In 2002, we also conducted a test-pitting program, and excavated and consolidated a partially bulldozed mound. Most importantly, Christian Prager, Co-Director and Project Epigrapher, analyzed the extensive hieroglyphic corpus of Pusilha and reconstructed much of the dynastic history of the site (Braswell et al. 2004; Prager 2002). To date, 11 rulers of Pusilha and 10 other related individuals have been identified. Seventeen more people, who are not yet chronologically embedded in the history of Pusilha, also have been identified. At least eight warfare events have been noted. The only other site in Belize for which we have a comparably rich hieroglyphic history is Caracol.

In 2004, we continued opportunistic mapping of a 1-km² area cleared and burned for milpa farming. We also excavated two range structures at the south end of the Gateway Hill Acropolis (Figure 3), as well as two additional structures in a large group 150 m west and 55 m below the acropolis. A salvage pit was placed on a third structure in this lower group. During the course of investigations, we excavated nine burials dating to the 7th to early 9th centuries A.D. Burial furniture from one elaborate crypt dating to the second half of the Late Classic period contained at least one complete pyrite mirror, hematite sequins, four polychrome vessels, shell ornaments, and two peculiar artifacts including a slate “wrench” (Figure 4). The placement of bones in this crypt suggest that it was a secondary burial. Analyses of all these artifacts, as well as of the many whole and partial ceramic vessels, lithic tools, shell ornaments, human remains, and numerous figurines and figurine molds recovered in 2004 have just begun and will be discussed at future Belize Archaeology Symposia.

Ceramic Analysis

Hieroglyphic inscriptions from Pusilha suggest that the site was occupied by the end of the Early Classic period; the earliest historical (rather than retrospectively mythological) inscription refers to events in A.D. 570. Ceramics recovered from previous explorations of several cave sites in the vicinity of Pusilha include Early Classic markers, such as basal-flanged polychrome bowls, as well as even earlier “shoe pots.” Nevertheless, the ceramic material we have recovered from architectural contexts at Pusilha all dates to the Late Classic and Postclassic periods. The following discussion of the ceramics of Pusilha is
limited to the Late Classic period, c. A.D. 600 to shortly after A.D. 800.

The Late Classic assemblage from Pusilha includes elements common throughout most of the Maya lowlands.

Such components include: (1) unslipped striated jars, some of which are decorated with appliquéd elements (Figure 5); (2) modeled and appliquéd censers; (3) both plain and decorated polished black wares.
(Figure 6); and (4) a wide assortment of orange-slipped and cream-slipped polychrome vessels in a variety of forms including bowls, cylinders, and shallow dishes or plates (Figure 7). Also present are large red-slipped bowls and red-slipped jars, some of which are decorated with impressed designs along the shoulder (Figure 8).

These same general categories of vessels figure prominently in the ceramic assemblage from the neighboring southern Belize site of Lubaantun, although specific vessel forms differ markedly between the two sites (see Hammond [1975] for a full description of ceramics from Lubaantun). This pattern may reflect separate sub-regional systems of ceramic production and distribution associated with each site or temporal differences in their periods of occupation. Nevertheless, it is clear that the ceramics from Pusilha and Lubaantun share many features in common, including the presence of coarse-pasted, short-necked jars of the Puluacax Unslipped type (Figure 9) that appear to be distinctive to southern Belize. Another commonality is the abundance of Late Classic figurines found at both Pusilha and Lubaantun, a pattern also seen in the Upper Pasion region to the west, including the site of Cancuen.

More significant is the pattern of interregional ceramic affiliation reflected in the assemblages from both sites. In terms of type and modal frequencies, the Late Classic assemblage from southern Belize has more in common with contemporary assemblages from the Pasion region and, to a certain extent, with northern Peten, than with that of the Belize Valley. The particularly close relation with sites in the central and southern
Maya lowlands, rather than with the Belize Valley, is not surprising given the ease of east-west riverine transport and the difficult topography of the Maya Mountains.

Features of the southern Belize assemblage shared with lowland regions to the west include red-slipped jars, especially those with impressed and stamped designs. Such jars are common in the upper and lower Pasion, the Dolores Valley, and northern Peten. Such vessels are rare or absent in the Belize Valley, although they do appear at sites just to the north of the Maya Mountains, including various caves in the

Figure 7. Orange- and cream-slipped polychromes from Pusilha.
In addition to these widely shared types and modes, certain components of the Pusilha assemblage have a more circumscribed distribution. Such elements include *comales* (large, shallow, griddle-like vessels), which are common at Pusilha and in the Upper Pasion and the Dolores Valley regions to the west (Figure 10; Bill 2001; Juan Pedro Laporte, pers. comm. 2000). Thus, although they are apparently absent from Lubaantun, *comales* appear to be a functional class of vessels...
characteristic of utilitarian traditions in the southeastern lowland region.

Also noteworthy at Pusilha are certain design elements on polychrome bowls that appear to be extremely rare elsewhere in the Maya lowlands but are very common in various polychrome traditions of the southeastern Mesoamerican periphery. These include the “twist-and-bud” pattern, which consists of undulating lines with small oval elements attached to them (Figure 11). This common design element at Pusilha also occurs on certain polychromes from eastern El Salvador and other parts of the southeast periphery (Andrews 1976). Additional common motifs on polychromes from Pusilha include small seated birds and seated monkeys. Seated birds are a frequent decorative element on bichrome and polychrome vessels from western Honduras and other parts of the southeast periphery. Seated monkeys also occur on incised vessels from Pusilha and other parts of the lowlands, including the Pasion River region, and monkeys are also a common motif on polychromes from Altun Ha.

Although polychrome vessels with these particular motifs are not reported from Lubaantun, it is significant that some of these same elements (including monkeys and birds) are typical of the stamp designs on the impressed red-slipped jars from that nearby site, and that these motifs do not occur on the stamped jars from other parts of the lowlands.

To date, we have not recovered any examples of Copador Polychrome, which is a distinctive southeastern periphery type characteristic of the Late Classic period in Copan and western El Salvador, and occurs only as an extremely rare import outside of those zones. Nevertheless, recent chemical
analyses of Copador Polychrome sherds collected at Pusilha by the British Museum Expedition to British Honduras in the late 1920s reveal that about half were manufactured in the Copan region (Bishop and Beaudry 1994; Bishop et al. 1986). These sherds all come from a large deposit at Pottery Cave, a context that we have re-excavated and now confidently date to near the beginning of the Late Classic period. We note, however, that none of the pieces illustrated by Thomas A. Joyce (1929) appear to be typical of Copador Polychrome that we have seen from Copan or western El Salvador, and there is some question regarding the actual provenance of Pusilha ceramics now curated at the British Museum (see Hammond 1975).

Conclusions
The ceramic inventory of Pusilha, including both elite and utilitarian wares, demonstrates significant connections with a number of different regions both within and beyond the Maya area. More work is needed to clarify the Late Classic assemblage from Pusilha and to better identify chronological differences in type and modal frequencies associated with earlier and later facets of Late Classic activity. Already, however, there exist correlations between different sets of data at the site that together suggest certain patterns in Pusilha’s regional and inter-regional affiliations during the Late Classic Period.

As reported at the 2003 Belize Archaeology Symposium, Christian Prager’s work on the hieroglyphic inscriptions of Pusilha demonstrates ties with a number of different regions, including the Petexbatun and Río Pasion zones, as well as more ambiguous links with Copan and Quirigua in the southeastern periphery of the Maya area (Braswell et al. 2004). Links to these same regions are evident in certain features of the Late Classic ceramic assemblage from Pusilha, as well as in the iconographic or material culture inventory of other centers in southern Belize.

There is some evidence to suggest, however, that Pusilha external affiliations may have shifted during the Classic period. Pasion-related types appear throughout the 7th and 8th centuries, but it is interesting to note that the possible Copador Polychromes from Pottery Cave all come from a context that is relatively early in the occupation of the site. At about this same time -- the mid-7th century -- iconographic conventions and two names that appear in the hieroglyphic texts suggest that Pusilha had important connections with Copan. It also is interesting that the Copan tomb containing the Quetzal Vase imported from Altun Ha dates to about this time (Bill 1997).

By the mid-8th century, new connections were forged with other regions. Perhaps this later period of occupation at the site was typified by greater economic and political independence at Pusilha, as well as by closer affiliations with other southern Belize centers. The most direct connections to the ceramics from Lubaantun, for example, are seen at the very end of the Late Classic. The distinctive Puluacax Unslipped type, which appears to have had a longer history at Lubaantun, is entirely restricted to surface contexts at Pusilha.

Our closest – and truly, the only – direct ceramic connection to the Belize Valley is imported Belize Red pottery. Belize Red also appears only at the very end of Classic occupation of the site, which we tentatively date to c. A.D. 770 – 830. With the exception of a whole vessel recovered from a late burial (Figure 12), Belize Red sherds are found exclusively in surface contexts at Pusilha. Hammond’s (1975) analysis similarly indicates a late occurrence for Belize Red pottery recovered at Lubaantun. Thus, during the last decades of the Classic period, the southern Belize
region became economically linked to the Belize Valley for the first time in its history.

Obsidian procurement data also suggest a reorganization of interregional exchange links near the end of the Classic period. During the 7th and 8th centuries, virtually all obsidian consumed at the site came from the El Chayal, Guatemala, source: a pattern linking Pusilha to most sites in the Maya lowlands. By the early 9th century, however, more obsidian from Ixtepeque – and even some from Pachuca, Hidalgo, and Zaragoza, Puebla – was traded to the site. As sites in the central and southern lowlands suffered demographic decline, remaining populations broadened their economic ties, shifted their trade links, and obtained obsidian from new sources. Braswell, among others, has noted a similar pattern at Xunantunich in the Belize Valley and even further west in the Peten Lakes region particularly during the 9th century. Exotic Mexican obsidian appeared at Pusilha for the first time during the Terminal Classic period, as did Fine Orange from the northwestern Maya area. Both Pachuca and Zaragoza obsidian began to enter that region in quantity at the very end of the Late Classic period, so perhaps Fine Orange and Mexican obsidian were brought together to Pusilha from the Gulf Coast.

Thus, although our analyses of the data from Pusilha have only just begun, we have already observed significant ties with certain regions during specific periods of time. Further investigation of these ties will enhance our understanding of trade connections within and beyond the Maya lowlands during the Late Classic and Terminal Classic periods. Ongoing analysis of the ceramics and other artifacts from Pusilha is aimed at determining the nature and timing of Pusilha’s regional and interregional connections – with the Pasion zone, the southeast periphery, and lastly the Belize Valley – both to evaluate their role in the developmental trajectory of the site itself and to examine the effects of sociopolitical change on interaction networks in the Maya area.

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Political turbulence incumbent upon the collapse of the southern lowland dynasties is set against the local history of the Sibun Valley, a cacao-producing region in central Belize. New data from recent excavations—closely dated by radiocarbon analyses—indicate that political influence over the valley was actively contested at the end of the Classic period. The hegemony of the Peten—attested in ceramics and architecture—appears to have been challenged by the growing power of the northern Yucatec region, likely Chichen Itza. Changing patterns of ritual architecture and mortuary practices hint at the political re-orientation of the Sibun valley inhabitants, specifically the construction of circular shrines and use of distinctive accoutrements in burial furnishings. Ironically, the largest site in the valley, the Hershey site, displays none of the northern traits and, in fact, has yielded a deposit of Terminal Classic disarticulated skeletal remains that suggests a site of conflict. Strategically located relative to the active trade routes of the Caribbean Inner Channel, the Sibun Valley enjoyed ready access to a market for their highly desired cacao crop. This study provides a textbook example of the manner in which a production locale became enmeshed in the larger webs of competing political spheres.

Background to Study

Ancient cultivation of the tree crop cacao is notorious difficult to detect; trees produce only small amounts of pollen and the pods and seeds tend to biodegrade quickly in the bacterially active tropics. To date, some of our best indicators of ancient cacao production come from evidence of its consumption. Hieroglyphic texts on Classic-period pottery vessels often include the glyph for cacao or ka-ka-wa in association with a royal title (Houston, Stuart and Taube 1992; MacLeod and Reents-Budet 1994; Stuart 1989). Cacao appears to have been a beverage in high demand at royal courts for ritual practice and sumptuary banquets. The custom of cacao drinking is now known to extend back to the Preclassic period as cacao residue has been isolated from Preclassic spouted vessels from the Belizean site of Colha (Powis et al. 2002; Hurst et al. 2002). Moreover, burned cacao wood has been identified in Preclassic deposits at sites in northern Belize—specifically K’axob and Cuello (Hammond and Miksicek 1981:260-
269; Turner and Miksecik 1984: Table 1). The presence of both residue and wood suggests that the region of Belize may have been one of the first areas in which cacao cultivation as well as the process of seed fermentation and roasting was refined and integrated into lowland Maya ritual and culinary practices.

During the time period addressed in this paper—the Late to Terminal Classic period—the population of the Lowlands can be counted in the millions and perhaps as many as a dozen seats of royal power competed for hegemony within a highly dynamic and fractious political environment. Each capital supported a palace precinct that was the locale of sumptuous feasts during which cacao was served. The events described in the text of Panel 3 from Piedras Negras, a Classic Maya city located in northwestern Guatemala on the banks of the Usumacinta River, provides a dramatic case in point (Martin and Grube 2000:149) in which a nighttime dance performance was followed by the drinking of chile-laced cacao. Ironically, the areas in which Classic Maya royal courts flourished—central Peten and the Northern Lowlands (most notably Chichen Itza)—were not zones of prolific cacao production. Consequently, we can assume that there was considerable political interest in the well-watered valleys of the Caribbean watershed (Figure 1). In one of those valleys—the Sibun drainage—members of the Xibun Archaeological Research Project are investigating a pattern of ancient settlement and cave visitation that is consonant with cacao production.

Xibun Archaeological Research Project

Dedicated to documenting the archaeology of all time periods—from Archaic through Colonial—the Xibun Archaeological Research Project is named after an early Colonial spelling of the Sibun River (Jones 1989). Initiated in 1997, four seasons of fieldwork have resulted in the survey and mapping of 22 surface settlements (nine of which have been tested through excavation) and 18 caves (Figure 2; McAnany 1998; McAnany 2002; McAnany and Thomas 2003; McAnany, Harrison-Buck, and Morandi 2004). The many components of this project include dissertation research by Ben Thomas, Polly Peterson, Steven Morandi, and Eleanor Harrison-Buck. Pottery from surface settlements and caves is currently under analysis by Sandra L. López Varela (see chapter in this volume), human bone by Rebecca Storey, and faunal remains by Norbert Stanchly. Palynological research on cores retrieved from oxbows is underway by John Jones, analysis of macrobotanical remains by Kirsten Trippelett, soils analysis by Pat Farrell, and geomorphological studies by Thomas Bullard. The imprint of the Spanish and Anglo-African Colonial periods is under study by Steven Morandi and Daniel Finamore, respectively (see chapters in this volume). Without a doubt, the most populous time period within the valley was the Late-to-Terminal Classic (A.D. 800-950), which is the focus of this paper. Although cave ritual is not extensively discussed here, it is important to note that a complementary body of evidence regarding Late-to-Terminal Classic subterranean cave ritual is currently under study by Polly Peterson.

Since total survey coverage of the Sibun valley could scarcely be completed during a lifetime of fieldwork, we selected five sampling units or transects that crosscut the valley (Figure 2). Transect 1 is positioned at the base of the spectacular Sibun Gorge; Transect 2 is located just upriver from the confluence of the Sibun and Caves Branch rivers; Transect 3 straddles both sides of the Churchyard road; Transect 4 includes the area of Gracy Rock; and Transect 5 encompasses the land around
Freetown Sibun. We have made an effort to survey for residential sites on both sides of the river but it is clear that the bulk of our documented settlements are located on the north bank of the river while the majority of cave locales have been found in the Sibun-Manatee karst which borders the southern side of the Sibun Valley (with the important

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Figure 1. Maya Lowlands showing the location of the Sibun Valley (illustration by B. Thomas).
exception of Actun Chanona, which is located in the Hummingbird karst at the base of the Sibun Gorge).

There are profound differences in Late-to-Terminal Classic material remains among settlement sites that are (a) tucked into the shadow of the Maya Mountains – Transects 1 and 2; (b) located midway along the course of the river – Transect 3; and (c) in proximity to the coast – Transect 5. Here, the highlights of this tripartite pattern are presented along with preliminary interpretations as to their significance.
Late-to-Terminal Classic Settlement in the Sibun Valley

Although caves adjacent to the Sibun Valley have yielded Preclassic pottery (see Lopéz Varela, this volume), these deposits appear to represent long-distance pilgrimage to these remarkable subterranean caverns. After four seasons of survey, mapping, and deep excavations throughout the valley, no Preclassic deposits have been unearthed and precious few Early Classic sherds have been retrieved. Excavators have probed into the alluvium underlying Late Classic constructions only to find a rapidly diminishing frequency of poorly preserved artifacts with no underlying Early Classic or Preclassic construction units. In light of this fact, our current understanding of the Sibun Valley occupational trajectory can be phrased in terms of a strong Late Classic settlement that peaked during the Terminal Classic and, in patchy locations, survived through the Postclassic period and into Spanish-Colonial times.

In the Shadow of the Maya Mountains

Decades ago, the predominant site of the upper valley was named Hershey because it was surrounded by a cacao orchard once owned by Hershey Foods, Inc. (see Figure 3 for a plan of the Plaza A monumental complex). Only the monumental core of the site is shown in Figure 3. Dispersed satellite settlements around this monumental complex extend as far as 8 km to the north where a cluster of 28 low platforms has been documented at Queso Blanco (Murata et al. 2004). As Thomas (2004) has noted, the site core of Hershey contains not only the largest mass of monumental architecture in the valley but also a built environment that appears to emulate Peten architectural traditions. Most notable in this respect is the small ballcourt (Figure 4) that is situated immediately to the southeast of the main pyramid (Figure 3) – an arrangement that is analogous to the Temple 1 plus effigy ballcourt complex of Tikal and more generally to the size and locations of ballcourts at Xunantunich and El Pilar (Leventhal and Ashmore 2004: Fig. 10.1; Ford 2004: Fig. 15.2). An axial trench placed between the two platform structures of the Hershey ballcourt revealed the presence of an earlier non-ballcourt structure and no evidence of an earlier playing surface that might pre-date the Late-Terminal Classic construction (King 2004).

Further evidence linking Hershey with the Peten sphere surfaced during excavation of a badly looted pyramid in Group B, located on a high basal platform less than 100 meters from the active (and sometimes overflowing) channel of the Sibun River (Morandi 2004: see especially Fig. 11.5). While cleaning the front façade of the structure, an incised sherd was found that bears a portion of the crossed band emblem glyph of Naranjo surmounted by a late version of the k’uhul ajaw (“godly king”) prefix (Stephen Houston, pers. comm. 2003). The presence of Naranjo has been detected at the Belize River valley site of Buenavista in the form of a polychrome cylinder with a hieroglyphic band that identifies the vessel as that of a ruler of Naranjo (Houston, Stuart and Taube 1992; Taschek and Ball 1992). Similarly, the presence of this incised emblem-glyph sherd from Hershey suggests that the political influence of Naranjo extended even further to the east, edging along the northeastern face of the Maya Mountains. From the hieroglyphic record of Naranjo, it is clear that the peak of Naranjo’s political power was achieved during the late 7th through 8th centuries; we can only suggest that cacao production near the Hershey site provided a catalyst for interest in the upper Sibun Valley.

The political turbulence of the Terminal Classic period – a time when the
influence of the Peten waned and that of the Northern Yucatec capitals strengthened— is indicated in poignantly human terms in another excavation at the Hershey site. In a narrow passageway that links the main plaza to the ballcourt area, excavators revealed several clusters of disarticulated human bone deposited directly beneath the collapse of the passageway masonry (Figure 5; Harrison-Buck and Cesario 2004). Dr. Rebecca Storey has been able to identify the partial remains of seven individuals: an 18 month-old child, a 6-year old, a 10-year old, two late adolescents who perhaps were in their early 20s, one “20-something” male, and one individual aged 40-50 years of age. Although Dr. Storey is extremely cautious regarding appellation of the term “sacrifice” to Maya skeletal remains, the presence of cut marks and “trophy” portions of the skeleton leaves little doubt as to the tragic and likely conquest-linked circumstances.
Figure 4. The ballcourt at the Hershey site under excavation (Operation 55, view from the western mound; photo by P. A. McAnany).
that produced this deposit. Ironically, the remains are highly fragmented yet the bone is well preserved, an unusual combination in a humid tropical environment. Such preservation would likely occur if the human remains in the passageway were quickly buried, perhaps by purposeful dismantling of the upper portion of the passage walls in an act of termination. The age profile of the human remains bears an uncanny resemblance to an extended family grouping and this notion is further supported by the fact that the 40-50 year-old and the “20-something” male share an unusual dental cusp pattern. Additionally, the presence of incisors with inlays indicates the high status of these individuals who likely met a violent death during a time of political turbulence.

The evidence of Terminal Classic violence and Late Classic connections with Naranjo that has come forth from the Hershey site reinforces a prevailing model of Lowland Maya geo-politics in which powerful rulers forged inter-polity alliances, sponsored acts of martial aggression against other enemy polities, and generally sought to control territories from which highly desired luxury goods—such as cacao—might be procured. Hieroglyphic texts compiled by Martin and Grube (2000) reveal the precarious position of Naranjo—a gateway site located in Guatemala immediately west of the Belizean border that sought to control the rich resources of the Caribbean valleys (Figure 1). Ten of eighteen (56%) known hieroglyphic texts that feature Naranjo in

Figure 5. Excavation of a narrow passageway (Operation 54) showing masonry sidewalls at the Hershey site (photo by P. A. McAnany).
reference to regional interaction contain statements of martial conflict (Martin and Grube 2000:21). This evidence suggests to us that the resources of the Belize zone were actively contested during the Late Classic period.

**Midway along the River Course**

Indian Creek, one of the main tributaries of the Sibun River, joins the waters of the Sibun in the middle section of the valley (Figure 2). At this confluence, the site of Pakal Na (surrounded today by a citrus orchard) was built upon the western bank. Possessing no pyramidal architecture, the site nonetheless contains an expansive 3-meter tall platform that appears to have been the residence in both life and death of a very influential Terminal Classic male. In an expanded axial trench through this large structure, we uncovered a complex mortuary deposit that included the sub-cranial skeleton of an extended male and the partial, disarticulated remains of at least three other individuals (Figure 6; Harrison and Acone 2003). In order to properly bury the focal male, a huge 1.5 m deep by 3 m long pit had been dug. Judging from the amount of charcoal beneath the skeleton, a wooden platform had been constructed to support the corpse. Ceremonially burned at some point during the mortuary ritual, charred wood from this bier yielded an AMS date with a 2-sigma range of AD 687-959 (Arizona Lab number AA55938), clearly a Terminal Classic interment.

The skeletal structure of the focal male indicates that he had well-developed muscular structure, above-average height, and is likely to have lived over 60 years (Storey 2004:274). His active lifestyle apparently had resulted in a dislocation of the posterior right humerus that had partially healed (Storey 2004:274). Perhaps a canoe paddler, a ball player, a warrior—or all three—associated artifacts indicate the high likelihood that his active lifestyle included martial activity. War trophies—specifically an intricately carved skull mask and a trophy head—surrounded this focal male. The skull mask was carved with notable iconography: a mat design on the dome of the frontal region, a k’ahk’ (“fire”) glyph on the forehead, and avian and canine/feline cartouches on the sides of the mandible that contains drilled holes for suspension. In reference to the iconographic content of the stucco frieze on the Castillo of Xunantunich, Fields (2004:186) notes that “crania torches denote ancestors” and also are associated with sacrifices that maintain the reciprocal relationship between gods and humans. The similarity of the animal iconography to that found at Chichen Itza (Tozzer 1957: Fig. 86), Tula (Healan 1989: Fig. 3.8), as well as Late Postclassic sites (where it is thought to represent martial sodalities) adds weight to
the notion that this large, robust male was a warrior who was buried with his war trophies.

Of the five pottery containers associated with the main interment, two pyriform vessels—a popular form in Yucatan—are the most distinctive and suggestive of links with the North. In short, if this distinctive individual was native to the Sibun Valley, he was surrounded in death by powerful Yucatec symbols. Alternatively, he may have been transplanted from the North, sent to supervise the transport by cargo canoe of a desired luxury good that could have been shipped down river and to the north by way of the Inner Channel, the calm waters of the intercoastal area between the mainland and the barrier reef. Oxygen isotopic analysis, currently underway by Dr. Christine White at the University of Ontario, will help to clarify the origins of this individual who was buried at Pakal Na. Regardless of the birthplace of this older male, the presence of this type of burial with the accoutrements discussed above is not typical for Terminal Classic sites of Belize and indicates that some characteristic of the Sibun Valley—likely its cacao production—had engendered a political relationship with far-flung northern cities, possibly the primate capital of Chichen Itza.

In Proximity to the Coast

Downriver from Pakal Na, settlement configuration changes and a new architectural form appears at several of the larger settlements that contain at least one focal plaza (Thomas 2004). Specifically, the three sites of Pechtun Ha, Samuel Oshon, and Augustine Obispo each contain a circular shrine structure (see Figure 2 for location of sites and Figure 7 for an example of an excavated circular shrine; also see Harrison and Acone 2002; Harrison 2003; Harrison-Buck 2004). Such buildings—highly unusual during the Early and Late Classic-periods—are suspiciously absent from Transect 4 sites in the Gracy Rock area and, of course, from the Peten-affiliated Hershey site. The only shrine structure identified at Hershey was an isolated, conical-shaped rubble mound (Structure 536) located east of the main plaza. Tested in 2003, it was found to be a four-sided eastern shrine, reminiscent of Peten and Belize Valley patterns to the west (see Figure 3 for location of Structure 536; Harrison-Buck and Buck 2004).

What then do these circular structures indicate? Each is smoothly incorporated into the built environment of their respective plazas and does not appear to be a later addition. All three excavated shrines exhibit multiple phases of construction consisting of an initial walled circular building followed by infilling and conversion to a circular platform. Excavation of the shrine at the Augustine Obispo site revealed the footprint of an earlier and completely buried circular structure. Radiocarbon AMS dates for the Obispo structure suggest 8th century initial construction followed quickly by conversion from a one-roomed building into a platform structure. Two-sigma calibrated age ranges based on radiocarbon assays exhibit complete overlap between the earlier and later construction phases: AD 758-891 and AD 758-887 respectively (lab numbers AA58920 and AA58919). Continued use through the 9th century is indicated by a third radiocarbon assay on charcoal from a midden that formed after the later construction phase and yielded a two-sigma calibrated range of AD 883-1018 (lab number AA58918). Conch shell—namely Strombus and Melongena—generally litter the surface in front of the shrines and near re-positioned, uncarved stelae (Figure 8). As the whorl of the conch elsewhere is iconic of the wind deity—an aspect of Kukulkan or
Quetzalcoatl, it is likely that the entire package—circular shrine, conch shells, and repositioned stelae—indexes a Late-to-Terminal Classic ideological shift in the lower Sibun Valley. The fact that these shrines are smaller versions of the circular shrines found in the northern Yucatan—most famously the Caracol at Chichen Itza—further intimates that this shift likely signals strengthening political influence from the North in the affairs of the Sibun Valley.

To the north of the Sibun Valley, circular shrines have been documented at Nohmul, Caye Coco, Ambergris Cay, and several other strategic locations (Chase and Chase 1982; Rosenswig and Masson 2001; Guderjan 1995). To our knowledge, those in the Sibun Valley represent the southern extent of this ideological expression. Relatively under-populated by Late Classic standards, nonetheless, the Sibun Valley contains material remains that indicate well-defined links with distant places. The most likely explanation for this pattern lies in the potential of the valley to produce cacao and the well-cultivated desire for this product in every corner of the Maya lowlands.

Concluding Thoughts

Political turbulence incumbent upon the collapse of lowland Maya Classic dynasties and the strengthening power of the Yucatec capitals has been viewed through the local history of a chocolate-producing valley in central Belize. New data from recent excavations suggest that political influence over the valley was actively contested at the end of the Classic period. The influence of the Peten dynasties—attested in ceramics and architecture—appears to have been challenged by the growing power exerted by the northern
Yucatec region. Changing patterns of ritual architecture and mortuary practices reveal the political re-orientation of the inhabitants of the lower Sibun valley.

The largest site in the valley –the Hershey site– appears to have stayed within the Peten sphere until the end. A deposit of Terminal Classic disarticulated skeletal remains found within a restricted passageway suggests that those in power at the Hershey site may have met a violent end. In reference to the Caribbean, Mintz (1985: xvi) has commented upon the manner in which production locales can be “caught up in the skeins of imperial control” spun in far away distant capitals. In a fashion parallel to the sugar production and export industry of the Caribbean region, the unmitigated desire for cacao appears to have engendered spheres of colonial influence and domination. From the perspective of Xibun Maya cacao farmers, chocolate and political power were inextricably linked.

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From the Maya Mountains into the Caribbean, the water flows of the Sibun River Valley shaped and conditioned the lives of its Maya inhabitants from the Middle Formative to Colonial times. This landscape included the natural resources that were used for the construction of the buildings and monuments. These buildings stood as expressions of the societal forces that created them. Elements of the natural landscape, such as caves, were images and engendered symbols that represented individuals’ thoughts and actions. This simultaneously natural and cultural landscape helped to maintain, promote, and undercut the power of those who ordered the modification, construction, or materialization of its contents. Research presented here suggests that the producers of this social landscape also used other practices, such as pottery making, to create ‘encultured’ places. The result of both spatial and a spatial analysis of pottery from the Sibun River Valley supports that the makers of pottery understood and manipulated the natural environment as they translated into clay representations of individuals’ lives and behaviors.

Introduction

Research along the Sibun River Valley yielded a comprehensive pottery sample from the Middle Formative to Colonial times (Figure 1). This long sequence illustrates how ancient Maya potters confronted a diversity of production challenges to meet social demands regarding everything from cuisine preferences to cave rituals. Potters appropriated and transformed the natural and social environment to make pots. Both environments are intertwined, changed through history, and evidently conditioned the production of pottery. Social space derives from a variety of individual practices and actions that give each member of society their own level of performance and competence (Lefebvre 2004:33). Each society creates its own space and translates it into symbols, artifacts, buildings, mountains or caves (see Lefebvre 2004; Low and Lawrence Zuñiga 2003). These objects are self-experienced and self-perceived within this social space, creating a sense of place (Tuan 2003). In this way, pottery is presented here as a tool to approach social space.

The understanding of pottery as embedded with social meaning blends the social concerns of post-processualism and postmodernism. The realization that pottery is produced in a social space establishes a radical departure from previous studies in the Maya region. This position is contrary to the position that the only use of artifacts is to construct and compare culture-histories by ordering artifacts through a variety of methods (for example Rice, Demarest, and Rice 2004:7). Results from these studies provide relative chronologies but do not really advance our understanding of the dynamics of pottery production, the challenges that potters faced in the past, or the sources of potter’s inspiration regarding form and design elements. Needless to say such studies are not consistent with a fundamental goal of our discipline: the study of human behavior. So, the methods used by archaeologists including systems of classification, material studies, or spatial techniques should aim to reveal the social
space where artifacts such as pottery are produced.

The essential goal of this study that conceives pottery as the result of social practice is to learn about the institutions in a society that influence individual acts, and also about the individual acts that serve to create society within a natural environment (Bourdieu 2000; Lefebvre 2004). The first assumption in our analysis is to understand that in the manufacture of an artifact several transformational stages are involved and that potters had to decide which resources to use and which form to make to satisfy social need (Lemmonier 1980; van der Leeuw 1993). The European schools studying technologies as a social practice referred to the production process as a chaîne opératoire. This approach involves the use of archaeometric techniques and experimentation that hopefully will be applied shortly to the Sibun River Valley pottery.

The technological characteristics of the pottery contain information about the economic system, influencing not only food consumption and preparation, but also constraining the production of a suitable vessel form. This correlation was noted in a previous technological analysis of Late Formative jars from K’axob, revealing potters’ knowledge of clay properties to make cooking vessels (López Varela 2004). This type of vessel requires the preparation of a clay body with a non-calcareous matrix and coarse crystalline calcite temper (López Varela 2004:162). This recipe is known to potters worldwide and is used for cooking or boiling liquids.

However, it was not always necessary to create a particular form to satisfy social demands, as reallocating a...
vessel from a settlement into a cave could change its meaning. The spatial recycling of pottery emphasized the meaning and significance of particular spaces along the Sibun River Valley. Also, potters received stylistic and form conventions from a large-scale sphere of influence that includes, at various times, the Peten, Teotihuacan, the Usumacinta-Pasion regions, and even northern Yucatan. Here, we present some examples of how pottery reproduced these distant spaces. Also, pottery performed in space, for example, as it engendered a symbolic personage represented in censers. When distinctive elements or glyphs were painted or carved in the walls of a vessel it became an element dramatizing power. In the following discussion, we illustrate how pottery contributed to the organization of space, constructed or contested power and ideology, but above all, how individual practices were lived in space across time.

The Spatial and Political Transformation of the Sibun River Valley during the Early Classic

The central portion of the Sibun River Valley is within relatively close distance to the Belize River Valley, where evidence of Early and Middle Formative settlements is increasingly growing (see e.g. Garber et. al. 2004). Shortly after the settling of Maya communities in the Belize River Valley, the Sibun River was possibly populated during the Middle Formative. Results from our previous research suggested that the earliest evidence of human occupation occurred in the caves of the Middle and the Upper Valleys of the Sibun River. Recent studies identify Middle Formative pottery at the Hershey site, located on the Upper Valley. This opens the possibility to suggest that the Middle Formative occupation of the Central Valley remains under Late Classic buildings and plazas.

The shifting into Tzakol pottery modes in the Sibun River Valley reveals a relative uniformity in the making of vessels in various regions of the Maya Lowlands. In the Sibun River Valley, Early Classic pottery follows Tzakol modes of the Central Peten (Figure 2). Ceramic indicators of Early Classic settlement within the Sibun Valley restrict to Triunfo Striated jars, Balanza Black bowls and a few red bowls of the localized ware Mountain Pine Ridge Carbonate. The caves of the Sibun-Manatee karst continued to attract ritual supplicants that deposited the pottery repertoire of the Early Classic that includes Aguila Orange and polychromes such as Actuncan Orange Polychrome and Dos Arroyos Orange Polychrome vessels.

The homogeneity in the distribution of Tzakol modes involves a centralized power exerting control over pottery production and styles. In the Central Peten, the elites ruling Tikal, for example, tried to control important lowlands-highlands trade routes and to cut-off possible competitors in the “buffer zone”, such as Seibal, by the end of the Late Formative (Sabloff 1975:234). The political control of Tikal had extended into the Upper Usumacinta region by the end of the Early Classic (see López Varela 1998). The political growth of Tikal is related to Teotihuacan elites that entered the Maya Lowlands at round 378 AD (Martin and Grube 2000:29).

During this period in the history of Tikal, pottery was used an emblem of power and identity. The adoption of the tripodal cylinder vessel, either painted, gouged, incised or with appliqués, is just an example. In the Sibun River Valley, fragments of a gouged-incised tripod cylinder lid and a rounded bowl were deposited in the cave of Actun Ibach, The pattern of crisscrossed, gouged-incised intertwined bands is similar to those found on tripod vases and lids from Teotihuacan...
Pottery Group 3 as defined by Sejourné (1988: figs. 36, 102, 107). The placing of this pottery in the sacred realms of the underworld is an indication that this Valley shared a political identity with its Central Peten neighbors. This suggestion is reinforced by the distribution of Aguila Orange in the Maya Lowlands that usually correlates to those polities under the influence of the Tikal-Teotihuacan elites (López Varela 1998). Since both types of pottery occur in the Sibun River Valley, it is possible that this area was part of the Tikal realm until the Middle Classic. By the end of the sixth century, an attack on Tikal by an allied Calakmul-Caracol (Martin and Grube 2000:29) eventually led to an increasing disengagement with a foreign identity and the emblematic pottery of the Central Highlands. This event caused a rapid settlement all along the Sibun River Valley (see McAnany et al. 2004).

**Reinstating Past Identities during the Late Classic**

During the Late Classic period, settlements were established throughout the Sibun River Valley from the base of the Maya Mountains down to the coastal estuarine environment (Figure 3). The growth of construction activities parallels that of pottery making and it reflects in a wider variety of forms, uses of applications and slips. The making of jars included new clay body recipes that conditioned its function and size. Cave and settlement assemblages include jars from the Cambio, Encanto, and Tinaja groups that were very popular, for example, in the central Peten, the Usumacinta and the Pasion regions. In
the Sibun Valley, these groups were complemented by the production of local red wares such as Dolphin Head Red and the Vaca Falls ceramic group. These jars and serving bowls and dishes satisfied the cooking and storage demands of both large and small communities for almost three centuries. When these jars were placed inside a cave chamber that symbolized the Underworld, the meaning of the “domestic formula” most certainly changed. The darkness of these Underworld caves was painted with color with the placing of polychrome pottery of the Saxche and Palmar traditions. These groups were also represented in the settlements, as such, were participating in a larger sphere of production styles that included the Usumacinta, the Pasion, central Peten, the Belize Valley and, as far south as, the Alto Salama River (Ciudad Ruiz 1988) and Alta Verapaz (Arnauld 1987).

For the Late Classic, ceramicists have observed that particular Late Classic pottery styles return to a size and shape reminiscent of Early Classic or even Late Formative styles. For instance, at the site of Pakal Na, the focal individual of a multiple interment was interred with a complete but fractured pedestal conical bowl with a restricted orifice. Like the Duck Run bottle of the Late Classic, this form seems to constitute a revival of a Formative vessel shape with the new addition of a pedestal base. Distant similarities in form can trace back to the Locona Phase (1500 – 1350 B.C.) in the Mazatan region of the Chiapas Coast (Clark and Pye 2000: Fig. 18). Vessels with a basal dome shape are also found in burials and caches at Chiapa de

![Figure 3. Distribution of Late Classic pottery.](image)
Corzo, many of which date to the Horcones phase (0 – 100 A.D.) or earlier (Agrinier and Lowe 1960; Agrinier 1964; Lowe 1960). A band of crosses near the rim of a Late Postclassic pedestal vessel appears in the Codex Mendoza (Folio 68r) carrying cacao (Berdan and Anawalt 1992: Fig. 14.9). As the vessel is identified as containing cacao, the “X” motif may well mark the function of a vessel as a cacao-drinking container. At Pakal Na, the presence of such a container in the burial of a powerful and influential male is not surprising. After all, ethnohistoric sources indicate that the Sibun Valley was an important cacao producer during the Colonial period and that production likely originated during earlier times.

The Political Turmoil of the Late/Terminal Classic

In some parts of the Maya Lowlands, the advent of fine-paste ceramics may be a hallmark of the Terminal Classic. However, potters in the Palenque region and the coastal plains of Tabasco were making Fine Brown and Fine Black wares during the Early Classic (López Varela 1998). These wares predate the later Altar, Balancán, Chablekal and Tres Naciones Groups (Rands 1973, 1987). In the Belize and the Sibun River Valley, fine paste pottery may be traced to the Late Classic, when potters were producing Belize Red vessels (Gifford 1976:226, 255). Towards the end of the Terminal Classic period in the Usumacinta and Pasion region, Pabellón Modeled-carved fine paste pottery was crafted with scenes of interaction, possibly narrating the presence of a foreign population.

In the caves and settlements of Belize, modeled-carved vessels were used for a similar purpose. These vessels, called Belize Valley Modeled-carved by Helmke, Colas and Awe (1998:96), were made with local clay resources and also tend to contain scenes of warrior confrontations –perhaps a leitmotif of the Terminal Classic. In the Ulua Valley to the south, modeled-carved vessel narratives do not always show confrontational scenes (Joyce 1987:397) notes. Clearly, Maya potters had been making and experimenting with fine paste for centuries prior to the Terminal Classic period, questioning recent assertions that the dispersal of fine paste ceramics may have been inspired by a messianic martial cult of Quetzalcoatl/Kukulcan (see Ringle, Gallareta and Bey 1998). The distribution of fine wares do tell us about the increasing political power of the elites from Palenque environs and the use of this malleable kind of pottery that was used to express different narratives or non at all.

To understand the events surrounding the 9th and 10th centuries, we should address the impact of the numerous brief alliances held by Maya, disclosing a high level of competence held among Maya rulers for power, prestige, and resources. The profound political instability, most likely affected the economy of the Maya Lowlands causing population levels to plummet, leaving Maya settlement concentrations in the Yucatan Peninsula, the Guatemala Highlands and parts of Belize. The events that follow in the history of the Maya are referred as the Postclassic. In the Sibun, Postclassic vessels reflect the persistence of production styles as potters continued to produce pyriform jars, pedestal base cylinders, and open tripod bowls with bulbous or effigy molded supports (Figure 4).

Pottery as a Performer of Different World-views

Between 1560-1630, the Spanish Caribbean colonies (including Belize) were receiving simple coarse tin-glazed wares such as Santo Domingo Blue-on-White and Sevilla Blue-on-Blue. This pottery likely
was made by Christianized Moslems of Arabic-Berber descent living in Seville. One distinctive piece of pottery is an orange, non-glazed vessel spout modeled into an open-mouthed lion (Figure 5). The open-mouthed lion was depicted in different type of pottery vessels, for example, ink holders. At some later time, this spout was deposited in the most impressive cave in the valley—Actun Chanona—that is located at the base of the Sibun Gorge. The shape and execution of this lion effigy bears a remarkable resemblance to those found in the Lion’s Courtyard of the Alhambra in Granada. The marble fountain is decorated with the 12 lions that symbolize the Koranic and Biblical images of paradise—a garden with four rivers. Water spouts from the mouths of the lions and cascades into a square pool and then into four canals

**Figure 4.** Distribution of Postclassic pottery.

**Figure 5.** Open-mouthed lion vessel housed at the Institute of Archaeology in Belmopan.
oriented to the cardinal points. All of these elements, water, plant fertility, directionality and the transition of humans into a paradisiacal world were shared elements of Maya, Spanish, and Moslem cosmologies. No wonder this extraordinary piece of pottery was placed as an offering within a portal to the Maya Underworld.

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Ritual, religion, and worldview are key aspects of any culture. Initially archaeologists shied away from studies of ritual and religion because it was thought that it would be more difficult to get at the beliefs and ideas of long deceased peoples than it would be to study more concrete and material aspects of people’s lives such as their trade and economy. It was fields such as Maya archaeology, which illustrated that we could find the evidence in the archaeological record needed to understand ancient people’s ritual and religion.

Over the past decades increasing interest and research into the subject of Maya worldviews has produced a plethora of information on the ritual practices and religion of the upper echelons of Maya society. In part this is because the Maya royalty and nobility recorded their religious beliefs and practices in hieroglyphic writing and elaborate artistic media. For these social strata, ritual was a key aspect of social and political life and the organization of large civic-centers. But given the absence of ancient texts and images about other social groups in Maya society, how can we understand their rituals and beliefs? Were Maya farmers simply the masses that filled the open plazas of large Maya civic-centers? What role did ritual and religion play in the smaller farming communities that made up the majority of the Maya countryside?

Given the absence of hieroglyphic and iconographic evidence about Maya farmers’ ritual and religion, we must look wholly to the materials and spaces of the archaeological record for evidence of their rituals and beliefs. Up until as recently as 1998, Johnston and Gonlin noted in a review of the meaning of commoner houses that our ability to understand commoner worldview through the poorly preserved remains of Maya commoner houses had yet to be demonstrated. New research in 2003 at the Maya farming community of Chan in Belize is changing this perspective by revealing information on the religious practices and views of Maya farmers including the views of the humblest farmer to the leaders of the farming community. While understanding farmers’ ritual is certainly a more difficult task than understanding royal ritual because the places and objects that farmers likely used in ritual were often ordinary and their ritual significance could be overlooked - the
Chan research indicates that a willingness to look for ritual in ordinary objects and places can reveal potent information on ritual in a farming community.

The Chan Site

Chan is located in west-central Belize, situated at the center point between larger civic-centers located 4 to 6 kilometers to the north, south, east, and west (Figure 1). To the west lies Xunantunich and Actuncan, to the north, Nohoch Ek, Buenavista, and Cahal Pech, to the east Dos Chombitos and Guacamayo, and to the south, Las Ruinas de Arenal. Chan lies in an interfluvial area of undulating limestone uplands between the Mopan and Macal branches of the Belize river in a region of high, rounded hills (with peaks less than 160 meters; Smith 1997). Across Chan’s hilly terrain its ancient inhabitants constructed and utilized a productive agricultural landscape of hill-slope and cross-channel terraces.

Figure 1. Location of the Chan site.

The 2003 season completed the settlement survey of the Chan site, identifying 583 mounds and 1258 agricultural terraces in a 3.29 square kilometer area (Wyatt and Kalosky 2003; Figure 2). In terms of residential architecture Chan was a small farming community, 83% of mounds identified at Chan are less than 1 meter in height and 40% are less than 50 centimeters in height. Chan’s farmers invested heavily in terrace agriculture, on average there were 382 agricultural terraces per square kilometer at Chan and terraces covered roughly 24% of all terrain (Wyatt and Kalosky 2003: 26). This density of terraces is higher than that reported from settlement surveys conducted in the region surrounding the Chan site which have documented densities of between 164 and 227 terraces per square kilometer (see Ashmore et al. 1994; Neff et al. 1995; Yeager and Connell 1993). Thus it appears that Chan’s rounded limestone hills many have been particularly well suited or well adapted for terrace agriculture (Juarez in Robin et al. 2002: 21-23).

Chan’s Central Group

Excavations at Chan in 2003 focused on Chan’s central platform group (group C-001), the only mound group at Chan to have mounds over 3 meters in height (Figure 3). The layout of Chan’s central group in terms of formality and directionality is comparable, albeit at a smaller scale, with that seen at larger civic-centers across the Maya area (compare Ashmore 1991; Ashmore and Sabloff 2002). The central group has an east-west focus. Current 2004 excavations have identified the eastern structure as an ancestral shrine (Meierhoff, Kestle, and Kalosky in Robin 2004 in prep.). The east-west focus of the shrines in Chan’s central group may relate to the Preclassic founding of the site as an east-west focus predominates in Maya Preclassic sites or it may relate to Chan’s agrarian specialization as the agricultural cycle has a ritual
association with the east-west cycle of the sun in Maya cosmology (Ashmore and Sabloff 2002; Hansen 1998). Along the northern edge of the central group is a structure with masonry benches that supported a wattle-and-daub building. Michael Latsch supervised excavations in the northern structure (Str. 2) in 2003 (Latsch 2003). Provisional field excavation artifact and architectural data suggest that this structure was a public residence of a leading and founding family at Chan. Throughout the Maya area leaders of major civic-centers placed their residences in northern location within their centers because north represents power in Maya cosmology (Ashmore 1991).

Excavations in 2003, in the central group focused on two locations, the aforementioned excavations of the northern structure (Operation 2) and excavations in the center of the plaza (Operation 1) supervised by Chelsea Blackmore (Blackmore 2003). Evidence for ritual from these two excavations combined with evidence from 1996 excavations for ritual in

Figure 2. The Chan Settlement Survey. Shaded areas indicated new survey areas from 2003. Arrow points to the humble farmstead discussed later in this article.
Figure 3. Location of 2003 excavations in Chan's central platform group (group C-001).

one of the humblest farming households at Chan (Robin 1999, 2002) provide new insights into domestic and community ritual in a farming community, from the homes of the humblest farmer to that of the community leader.

**House Dedication Ritual of the Humblest Farmer**

A unique find of a dedicatory cache offered following the construction of the first house at one of Chan’s humblest farmsteads located south of the central group illustrates how a humble farming family consecrated their new home (see Figure 2). Although the larger community of Chan has a long history of occupation, this humble farmstead was occupied for only a short time established late in Chan’s sequence during the late Late Classic period (670-780 A.D.). Upon building their home residents placed ordinary river cobbles collected from nearby streams and a used and broken fragment of a greenstone axe over a sealed miniature *chultun* (a subterranean chamber) that was dug at the rear of their house along its central axis. The cobbles had distinctive colorations. The north cobble had two white lines, the south cobble had one yellow line, the west cobble was half black and half red with the black half towards the west and the red half towards the east, and at the center of these was a broken and heavily battered fragment of a greenstone axe. This color-directional symbolism was being invoked by farmers to consecrate their home as the center of the world axes (located at the green center of the cardinal directions and color associations displayed by the river cobbles). In ordinary homes, across the Maya countryside, farmers consecrated their houses as a central place for the family (Robin 1999, 2002).

The color-directional symbolism displayed in this humble house dedication cache parallels that invoked by Maya royalty in their caches and organizational models of the world (e.g. Ashmore 1991; Ashmore and Sabloff 2002). Where royalty used exotic objects such as jade in their caches, humble farmers used colored river cobbles. Further, in modern Maya communities, Maya farmers have continued to use similar color-directional symbolism in rituals to sanctify their houses and fields (e.g., Hanks 1990; Vogt 1976).

**House Dedication Ritual of the Farming Community Leader**

At the opposite end of Chan’s social spectrum, community leaders residing in the central group, like the humble farmer or the regal ruler, also consecrated the construction of their homes. The northern residence in the central group was constructed at the onset of Chan’s history during the Middle Preclassic period (ca. 900-300 B.C.) plausibly by founding residents of the community. Across the subsequent generation to the Late Classic period (A.D. 600-780), a sequence of 27 structure floors
and fills were constructed in this location (Latsch 2003; LeCount 2003; Figure 4). Each new house was centered upon and superimposed above the previous house.

Residents of the northern structure placed a single piece of jade on the floor below and at the center of the first structure in this location. Construction Fill 25 (see Figure 4) covered the jade deposit. The jade piece was likely an intentional deposit because of its precise location and the general absence of jade in the construction fills of the northern structure. Again residents of Chan are marking the center of their home with the color green to consecrate their home as the center of the world axis. Perhaps unsurprisingly, community leaders are using exotic objects such as jade, while humble farmers use local greenstones and river cobbles to consecrate the centrality of their homes.

**Community Ritual in Chan’s Central Plaza**

Following the lead of evidence from contemporary Maya farming communities where people come together to worship at the center of their community (e.g., Hanks 1990; Vogt 1976), in 2003 excavations were undertaken at the center of Chan’s central plaza, which is both the social and spatial center of the larger farming community, in an attempt to locate evidence for community center ritual. The results of these excavations exceeded any outcome we could have imagined prior to our excavations. Preliminary ceramic analysis indicates that for over 2000 years, spanning Chan’s entire occupation history (900 B.C. - A.D. 1250) people from Chan came to the center point of their community to perform rituals. A complex, stratified sequence of ritual deposits was uncovered at the center of the plaza, which included an ancestral burial, 6 caches cut into or placed upon bedrock, 2 altars, a shrine, and a stela (Blackmore 2003).

Initially, in the Preclassic period (900 B.C. - A.D. 250) the physical remains of these rituals took the form of burials or caches dug into or placed on bedrock. The items incorporated into the caches include both local and non-local items such as ceramic vessels (Figure 5), incense burners, figurines, jade and greenstone ornaments, *Spondylus* shell beads and pendants, slate and obsidian objects. The most intriguing cached object was a stalactite from a cave.

Later in the Classic and Postclassic periods (A.D. 250 - 1250) ritual remains
The 2003 Season at Chan Site

Figure 5. Seven Cache Vessels from Chan’s Central Plaza (Special Deposit 4).

took the form of altars and shrines. Two altars were sequentially dedicated with two objects cached on their surface, a figurine and an incense burner (Figure 6). A single-course high square shrine was constructed around the final altar and associated with a 2 meter high stela (Figure 7). Finding a stela, probably of Terminal Classic date (A.D. 780-890) at Chan was unexpected. The stela had been broken into over 9 pieces, thus it had not previously been observed at the site. The finding of a late stela suggests that at the end of the Classic period, as the power of Classic Maya royalty was waning, the trappings of their regal political offices, such as stela, were being co-opted into the politico-ritual inventories of the leaders of increasingly smaller communities across the Maya countryside that never utilized this politico-symbolic form previously in the Classic period.

The 2000-year sequence of rituals at the center of Chan’s central plaza documents a tremendous continuity in the ritual use of a single sacred spot at the center of a farming community. Two lines of evidence illustrate how Chan’s residents maintained a social memory concerning previous ritual practices performed in the plaza. After its initial deposition the location of the ancestral burial was either remembered or rediscovered later in Chan’s history as Blackmore’s (2003) osteological and excavation evidence illustrate. The burial was re-entered at least two times and the skull and upper portions of the body were removed, plausibly for veneration. The final dedicatory offering in the center of the plaza consisted of an incense burner stand, a jade and shell necklace, a figurine, and an incense burner. Intriguingly the incense burner stand appears to be a heirloom object as only half of the stand was interred on Chan’s final phase altar, the other half having previously been interred with the penultimate altar. Like the repeated re-entering of the burial, the hierlooming of objects attests to the memory and remembrances of earlier ritual practices that formed part of subsequent ritual enactments.

Figure 6. Jaguar God of the Underworld Figure (Special Artifact A37) cached on Altar 2, the penultimate altar in Chan’s central plaza. Scale Drawing.
The configuration of ritual knowledge invoked during the rituals performed in Chan’s central plaza attest to the early development and subsequent transmission of types of ritual knowledge on the part of farmers in a small farming community that are typically attributed to the Maya royalty and nobility. The color green, in the form of jade and greenstone, is being used to mark and designate the cosmic center. The underworld in the form of the stalactite or a figural image of the jaguar god of the underworld is being used to make the center point of the community.

Discussion

Centrality was a critical aspect of ritual practices at the farming community of Chan. From humble farmers to community leaders, people consecrated their homes as representing central places in their world. Community members made the center of their community a sacred space through 2000 years of ritual practices.

The Chan data illustrates that many of the foundational concepts recorded in royal and noble Maya hieroglyphs, art, and architecture are also core concepts in Maya farmers’ religious practices. Some of these core concepts are: the importance of sacred ancestors in defining human history, the importance of the cardinal directions and color symbolism in centering and consecrating important places within the Maya world axes, the importance of central places and their association with the color green, the underworld, and the center of the universe. Maya religion was not just an elite religion or a state religion – it was practiced on a much more pervasive social scale by families in their homes and within local communities as well as at the public political forums of civic-centers.

Since Chan was occupied for 2000 years we can not only talk about the nature of farmers’ ritual, but we can find out how ritual in a farming community changed and developed through time. Our data from the Preclassic period at Chan suggests that many of the ideas that we see elites propagating in their royal ritual practices in the Classic period were in fact derived or co-opted from concepts that farmers developed in their household and community rituals. Evidence from later periods further suggests that as the power of the Classic Maya royalty waned towards the end of the Classic period, Chan community leaders re-claimed aspects of royal ritual practice, such as the use of stelae, which had not previously been accessible to members of this farming community in the Classic period.

While the rulers of larger civic-center in the Maya area may have controlled the labor of hundreds if not thousands of slaves, commoners, or volunteers to build temples and monuments within the sacred ceremonial precincts of their civic-centers,
these monumental places could be defaced, dismantled, or fall out of use after the political decline of a city and its ruling family. The farming residents of Chan were able to maintain the sacred nature of their community through more than 2000 years of rituals by consecrating the center of their community.

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EXPLORING THE ROLE OF ANCIENT MAYA TEMPLES AT YALBAC, BELIZE

Lisa J. Lucero

Throughout the world, places of worship –temples or churches– are built to honor various gods, patron deities, or as places for religious expression and experiences. Scholars’ interpretations of Late Classic (c. A.D. 550 – 850) Maya temples have been relatively vague on their roles and functions except in cases where they served as stages for royal ceremonies. Since the majority of secondary centers such as Yalbac, do not have written or obvious iconographic records, I explore the possibility of temple attributes revealing histories given their crucial role in daily social, religious, and political life. The analysis of evidence from looters trenches at Yalbac, while preliminary, has exciting implications regarding the role of temples and their potential to serve as text on Classic Maya society.

Introduction

Throughout the world, places of worship –temples or churches– are built to honor various gods, patron deities, or as places for religious expression and experiences. Temples are also major landmarks and create the need for labor, as in Egypt, Mesopotamia, and South India (e.g., Morrison 1993). Temples link towns and their rural hinterlands through periodic ceremonies, festivals and feasts, and “represent an impressive commitment of resources to … faith” (Stein 1977:25) as witnessed in their maintenance, ritual specialists, and support staff. Inscriptions and iconography note to whom the temple was dedicated as well as who constructed it, they highlight the kinds of donations including land and village revenues. Temples also serve as the core of royal public life because religion is vital for political legitimating - monarchs fund temples and conduct most of their ceremonies at temples. Rites revolve around royals and their ancestors to show that they have the ‘mandate of heaven’ (e.g., Chang 1983) because worldwide rulers are associated with prosperity (Hocart 1970[1936]: 128-155). In Egypt, for example, everyone relied on the pharaoh to perform key rites to ensure that the Nile would bring adequate water (Hassan 1994). The king was the major intermediary between heaven and earth. In brief, cross-culturally temples provide sanctuary, a home for gods, a place to worship and pray a stage for religious and political ceremonies, festivals and feasts, storage for food and supplies, workshops for the manufacture of sacred and profane goods, a depository for offerings, and a place to redistribute food and gifts.

Scholars’ interpretations of Late Classic (A.D. 550-850) Maya temples have, however been relatively silent on these matters (cf. Loten 2003; Taube 1998). While well described, discussion of temples rarely focuses on more than the basic function of serving as stages for elites and kings to perform religious ceremonies. This is somewhat surprising since Maya centers are famous for their temples, which are inscribed or decorated with vibrant scenes, focusing on the builders of temples - kings, their families, and their ancestors. Gods played a secondary role. The history or function of the temple, however, is not revealed by this monarch-centric focus.
Were all Maya temples built the same, or do temples show variability? In either case, did they serve varied functions? Were temples built for different gods, or did they all have similar functions? Were they funded by different groups of people, not just kings? Different groups could include wealthy families or elites, lesser royals or nobles, or even community members. The fundamental question is: Why did the Maya build so many temples? Before we can address these questions, we need more concrete information about temple histories. In this paper, I present preliminary data from temple looters trenches at Yalbac that show promising results regarding variability.

Since the majority of secondary centers like Yalbac do not have written records, I explore whether or not temple attributes can reveal histories indicating that temples were crucial in daily social, religious, and political life. Attributes explored include frequency of temples within centers, size differences, location with regard to other monumental architecture, layout and accessibility (private or restricted), history of use, and construction patterns including style, labor, materials, decorative features, and ritual deposits.

Yalbac

Yalbac site is located under jungle canopy, near pockets of good agricultural land, along Yalbac Creek, a perennial stream, on the eastern border of the southern lowlands (Graebner 2002a, 2002b; Lucero 2004; Lucero et al. 2004). J. Eric Thompson made brief mention of an eastern group of Yalbac in the 1930’s (1939:2, 282), but appeared to have inadvertently missed the site core (Figure 1). Plaza test pits yielded ceramics dating from c. 300 B.C. through A.D. 900, or the Late Preclassic through the Terminal Classic period.

The six pyramid temples at Yalbac range from 8 to 16m in height of which five exhibited looters trenches (LTs). The looters trenches were recorded in profiles during the 2002-2004 seasons and yielded important clues as to construction sequences. At present, the temples all appear to lack summit structures and plaster floors; some have cut-stone terraced facades and dry and mortared boulder and cobble core fill. Surface ceramics indicate the temples were used through the Late Classic period (A.D. 550-850), even though the Maya began building some much earlier in the Late Preclassic (300-100 B.C.) (e.g. Plaza 3 temples).

All temples are located on large open plazas, though Plaza 3 is slightly more restricted than Plaza 2. These two plazas contain the two tallest temples, Str. 2A (40 x 36 m, 16 m tall) and Str. 3A (45 x 25 m, 11 m tall), and Plaza 2 has the only ballcourt. Interestingly, the western structure of the ballcourt is attached to the front of the temple rather than at the back as one finds at Xunantunich and Cahal Pech; either the Maya no longer used the temple or moved the staircase to the side, or they built the temple after the ballcourt, perhaps to enclose the plaza (John Morris, pers. comm., 2004). Str. 3A and Str. 3D (45 x 25, 8 m tall) are the only temples with wings on the north and south sides, which likely contain tombs (Jaime Awe, pers. comm. 2004).

Plaza 2 temples are on average bigger than Plaza 3 temples (15,960 cm³ vs. 7,792 cm³). Plaza 2 temples have more faced stones on average (19% vs. 12%) and are thrice the average size of the Plaza 3 temples (1,318 cm² vs. 435 cm²). Shaped stone blocks are faced on all exposed sides, especially on the front sides of temples. The back or sidewall blocks appear to be faced only on one side (e.g. LT 7 and LT 29, Str. 3A). The exposed core fills at Str. 2E (40 x 36 m, 8 m tall) and Str. 2F (30 x 30 m, 10 m tall) have mortar, usually of marl, plaster, gravel, or sand. In contrast, Str. 3A and Str.
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3B (20 x 20 m, 6 m tall) have both mortared and dry core fills; while dry core fill requires less materials and labor, it is more difficult to contain and is more unstable (Schele and Mathews 1998:30). Core fill boulders are larger on average in Plaza 2 temples, averaging 569 cm² compared with 416 cm² at Plaza 3 temples, and they comprise a greater proportion (30% vs. 15%). However, Plaza 3 temples have more similarly sized (sorted) faced stone and core fills (boulders, small boulders, and cobbles); for example, the average range difference of Plaza 3 faced stone is 564 cm² compared with 1887 cm² at Plaza 2 temples. The Maya may have used more midden deposits since we found greater quantities of sherds in Plaza 3 temples (though they might

Figure 1. Yalbac.
represent items broken by looters). In sum, the Maya built bigger Plaza 2 temples using larger stone blocks and mortared fills, and used more sorted fills for Plaza 3 temples.

In a preliminary comparison with contemporary construction patterns of three residential compounds within 500 m of the site core, it is clear that the Maya used larger faced stones and boulders (length is greater than 15 cm) at temples. Small boulders (length: between 11-15 cm) and cobbles (length: 1-10 cm) are more comparable in size. For example, the eastern mound (23 x 9 m, 2.5 m tall) of Site 4, an elite compound consisting of seven structures around a plaza, has standing walls constructed with faced stone blocks. They range from 50 to 362 cm², whereas those from temple LTs range from 251 to 1678 cm². The range decreases as site size diminishes; Site 14, a U-shaped elite structure (28.5 x 18 m, 3 m tall) (Graebner and Lucero 2003), has standing walls with faced stones ranging from 40 to 350 cm² and Site 18, a commoner house (9.5 x 9.5 m, 1.5 m tall) (Lucero and Graebner 2003), has low walls with faced stones ranging from 38 to 294 cm².

Temple LTs have also revealed that construction patterns differ from acropolis type construction patterns, (Str. 1A, 55 x 45 m, 20 m tall) (Hooper 2004a, 2004b), the surface ceramics of which date to the Late Classic. The upper most acropolis LTs (1 and 2) exposed vaulted ceilings, a possible roof comb, red-plastered walls, a molded and plastered throne bench, thick walls (0.7-1 m), and standardized cut limestone (Figure 2). When the Maya filled in these rooms before rebuilding, they used sorted fill and a compact plaster mortar. Plaster floors are thick (5 cm+) and of high quality (fine, hard). Plaster has relatively high labor costs (Abrams 1998). From LT 4 on the upper west terrace of the royal residence, we recovered architectural decoration from the looter’s back dirt consisting of stucco fragments with traces of red paint. The LT on at the base of Str. 1A on Plaza 1, LT 17, exposed construction styles more similar to LTs at the temples (boulder core fill, faced stone façade, and no obvious plaster floors), as well as a speleothem fragment, (considered sacred to the Maya as portals to the Xibalba).

We do not know much about ritual deposits because looters apparently were quite successful in removing caches and grave goods. However, since looters were not interested in broken items and left them behind, we do have some idea; for example, LT 9 at Str. 3B revealed a Late Classic burial immediately underneath the eastern summit stone facade, most of which was destroyed by looters (Figure 3). The remaining lip-to-lip vessels contained drilled shell, obsidian points, and a cut and polished jaguar tooth. From a lithic concentration at the roots of an uprooted tree, (likely from over a tomb) at the northeast side of Str. 3D, we recovered thousands of thin fine-grained pastel-colored chert blades and flakes. The Maya were known to place thousands of chipped chert or obsidian flakes and blades over the lintel or roof of a tomb, in caches, such as those found at Tikal (Moholy-Nagy 1997). During the clean-up of LT 8, Str. 3D, we also recovered human skull fragments, a complete unmodified clam
shell, a slate disc (likely a mirror backing), obsidian blades, a marine shell disc, and many decorated sherds from vases, jars, plates, and bowls. During the clean up of LT 21, Str. 2F, we found a figurine fragment of a head, perhaps of God N (Figure 4). While the exact significance of this deity is not totally agreed upon, God N is definitely associated with the celestial world as, for example, a sky-bearer, and is also associated with sacred mountains (Taube 1992:92-99). God N is often depicted with Chaak, the rain god, another celestial connection. Finally, the ballcourt alley test excavations yielded several speleothem fragments.

The architectural differences among temples and between other structure types are obvious and may indicate to whom they are dedicated and by whom they were built. To address these issues, we plan in future seasons to collect more information on temple histories, architectural features including terraces, staircases and plastered surfaces and decorative features including masks, inscribed or painted walls, doorways, or lintels, as well as stelae or altars. We also intend to investigate labor expenditure which would be needed for each Late Classic building phase (e.g., river or quarried cobbles, the percentage of plaster in mortared fills, and the type of limestone used), and the location, quantity, quality and diversity of ritual deposits.

Concluding Remarks

Did Str. 2F serve as a rain/celestial
Exploring the Role Yalbac Temples

temple (God N)? It is attached to Str. 2G, which on closer inspection might turn out to be an artificial pool (it is quite steep on all sides). What is the significance of the ballcourt being attached at the front of the largest temple (Str. 2A)? Were the ballcourt and temple a stage for re-enacting creation rites, since ballcourts play a large role in origin myths (Schele and Miller 1986:243-245)? Its proximity to the acropolis might indicate it association with the ruling family. Further, its location on the largest and most accessible plaza indicates large audiences. Plaza 3 temples might represent a necropolis, perhaps for founding and royal families; the large plaza size suggests that public ceremonies took place, whatever their purpose.

Architectural and ritual data are critical when centers lack obvious iconographic and hieroglyphic records. Even when the records are present, they focus on kings, not gods. Does this mean that temples without inscriptions were built by non-royals, or were they all built by the royal family and thus did not require kings to claim the obvious? If all temples were similarly built, does this indicate that they served multiple functions—for example, seasonal ceremonies, feasts, games, royal rites, and other public events? If temples show variability, does it indicate that they were built by different groups (e.g., factions) or that they were built for different gods or functions? Do differences only indicate their being built at different times in the Late Classic (cf. Jones 1996, 2003)? These questions are critical, especially since most secondary centers such as Yalbac lack inscriptions and/or public iconography. The results presented, while preliminary, have exciting implications regarding the role of temples and their potential to serve as text on Classic Maya society.

Figure 4. Figurine fragment from Structure 2F, perhaps of God N.
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Research addressing the Late to Terminal Classic political organization of the Belize Valley has usually focused on three main loci of power: Xunantunich, Buenavista del Cayo, and Cahal Pech. While the relationship between these centers remains unclear, the Peten site of Naranjo is often attributed as the dominant polity controlling the valley at this time. Most discussions on the politics of the valley have rarely addressed the role of Baking Pot in this arena. Recent research at Baking Pot, however, has uncovered new evidence that may help illuminate its place within this inter-site hierarchy during the Late and Terminal Classic periods.

**Introduction**

Research addressing the Late to Terminal Classic political organization of the Belize Valley has usually focused on three main loci of power: Xunantunich, Buenavista del Cayo, and Cahal Pech (Figure 1). While the relationship between these centers remains unclear, the Peten site of Naranjo is often attributed as the dominant polity controlling the valley at this time. Most discussions on the politics of the valley have rarely addressed the role of Baking Pot in this arena. It is possible that the previous dearth of published material has restricted most researchers from integrating it into their proposed political landscape (Leventhal and Ashmore 2004, Ball and Taschek 2004). Recent research at Baking Pot, however, has uncovered new evidence that may help illuminate its place within this inter-site hierarchy during the Late and Terminal Classic periods (Figure 2).

Within the last few years, excavations at Baking Pot have focused on two causeway termini structures, several temples, the elite palace complex, and three plazuela groups. The evidence we have thus far uncovered leads us to suggest that Baking Pot was an important player in the local politics in the Belize Valley. The graves of three rulers and those of three additional elite individuals suggest connections with the sites throughout the Maya lowlands and beyond. In addition, the quality of the site core architecture, the caches, and the number of stela, suggest that while Baking Pot is no Tikal, it certainly was a center of importance within the Belize Valley.

**Previous Research on the Political Organization in the Belize Valley**

Until recently, Joseph Ball and Jennifer Taschek have been the most vocal advocates of the proposed Naranjo control over the Belize Valley during the Late Classic period. In their view, Naranjo administered this control by establishing a seat of power at Buenavista del Cayo. Evidence for the Buena Vista – Naranjo relationship is represented primarily by the discovery of numerous ceramic vessels, found in palace dumps and royal tombs that originated in the eastern Peten region of Guatemala. Based on the similarity of the ceramic remains, Ball argues that Naranjo controlled Buenavista, Cahal Pech, Baking Pot, and Barton Ramie.

Their breakdown of the socio-political situation within the Belize Valley is somewhat more difficult to understand. While Ball and Taschek believe that
Buenavista is the administrative center of the valley during the Late Classic period, they see a unique internal division of political and social roles between the major sites. They believe that Buenavista del Cayo was an administrative and political center while Cahal Pech and Xunantunich had a more restricted role; that of residences or ritual pilgrimage centers for local elites. Taschek and Ball suggest that Cahal Pech was the summer home for those ruling at Buenavista from the mid-seventh century onwards (1991, 2004). In their recent article in “The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research” they write, and we quote “in our reconstruction, we identify the hilltop Cahal Pech citadel as serving primarily a high elite if not regal residential and private ritual function throughout much of the year, with Buenavista providing both a theater for many important communal, administrative, economic, and public ceremonial services and activities as well as a warm and cozy rainy season residential alternative (2004: 198).”

During the same time, Taschek and Ball argue that Xunantunich was an empty ceremonial center that stood as a pilgrimage destination for the elites of the valley. They see Xunantunich superseding Buenavista del Cayo when it began to function as an administrative and public ceremonial locus for the valley around 800 A.D. They believe that these functions were moved to Xunantunich due to the unsettled and violent political climate that existed during the Terminal Classic period throughout much of the Maya lowlands: the hilltop location of Xunantunich was more easily defended than
the valley bottom site of Buenavista del Cayo. We, and others such as Leventhal and Ashmore, have serious concerns with Taschek and Balls interpretations.

In their 2004 article, Leventhal and Ashmore took much of what Ball and Taschek wrote and modified it to better fit the data they found during their seven seasons of excavation at Xunantunich. They believe that Naranjo controlled Buenavista del Cayo during the early part of the Late Classic and later, after reemerging from a period of inactivity, refocused their domination squarely on Xunantunich between 780 and 820 A.D. Instead of Xunantunich being built during a hiatus of Naranjo’s control, they see Naranjo very much as the impetus for the growth and development of the site into the form that we see today (Leventhal and Ashmore 2004). They note that the site layout, a partially legible Naranjo emblem glyph located on Stela 8, and the stylistic similarities between this stela with counterparts at Naranjo, provide convincing evidence, which suggests the subservience of Xunantunich to its Peten neighbor.

We believe that Ashmore’s settlement survey coupled with Lisa LeCount’s ceramic analysis adequately negates Ball and Taschek’s argument for Xunantunich being an empty ceremonial center before 800 A.D. Awe’s research at Cahal Pech, along with common sense knowledge of Belize weather patterns, also provides little support for their argument that Cahal Pech was merely a summer home for Buenavista elites. (Indeed, there are no variations in temperature between Cahal Pech and Buenavista at any time of the year.) An important question that thus continues to plague us is just what is the true relationship between seemingly independent Belize Valley communities during the Late to Terminal Classic period and how were these relationships affected by external influences.

**Evidence from Baking Pot**

To better understand where Baking Pot (Figure 2) fits within this changing political landscape, we turn now to the recent archaeological research that has been conducted at the site by the Belize Valley Archaeological Reconnaissance Project (Audet and Awe 2004a and b, 2003). Baking Pot is located along the alluvial banks of the Belize River, 10 kilometers northeast of the town of San Ignacio (Figure 1).

Over the past three seasons the Belize Valley Archaeological Reconnaissance Project has uncovered evidence that may clarify Baking Pot’s position within the local political hierarchy. This evidence comes from burial goods discovered within the graves of three rulers located in Group 1, numerous other elite interments, as well as construction sequences and patterns found throughout the site. Our analysis suggests that the role Naranjo played within the valley may not have been as all encompassing or as long lasting as previously indicated and that Baking Pot was likely an independent polity, at least during the Late Classic period.

**Tombs 1 and 2 from Structure E**

Tombs 1 and 2 at Baking Pot were found near the summit of the Eastern shrine in Plaza 2 of Group 1. These two burials date to the Late Classic 1 or Tiger Run phase and both contain the remains of what we believe were rulers from Baking Pot. Tomb 1 dates to between 580 and 680 A.D. This burial contained hundreds of jade objects, including three jade pectorals, a jade necklace with 54 beads, a 182 piece jade mosaic mask and a single jade earflare. Ten monochrome ceramic vessels, including 6 Sotero Red-Brown bowls and vases, three
Figure 2. Map of the monumental site core of Baking Pot.
Mountain Pine Red dishes, and an unidentified orange bowl surrounded the area where the skeleton would have laid. Nine eccentric flints carved in various shapes were discovered throughout the tomb.

Most of the skeleton had been removed sometime in antiquity, disturbing the original location of the jade mask, the pectorals and the necklace. The removal of skeletal remains from burials is well documented at Maya and Mesoamerican sites (Chase and Chase 1989, Headrick 1999). This practice was associated with the tradition of ancestor worship and the removal of an individual’s skeletal remains generally reflected a high status within the community.

Tomb 2, located just east of Tomb 1, dates to between 550 and 650 A.D. This burial contained the remains of a single individual, who, like its neighbor, was also a ruler. Unlike the large quantity of jade that accompanied Tomb 1, the individual in Tomb 2 was adorned by numerous unique shell artifacts. Seven ceramic vessels, including five Saturday Creek Polychrome dishes and two Sotero Red-Brown vases were located south of the individual’s head. The images painted on the dishes include deer, serpents, bird, armadillo, and a ‘Water Lilly’ jaguar.

Twelve carved Spondylus shells were discovered under the skeleton. Two large earflares with separate shell plugs were discovered, one near the skull and the second near the pelvis. Both were covered with thin jade flakes that were likely glued onto the shell to create the appearance of jade earflares.

Two carved shell objects of unknown function were also discovered. The upper piece is an unusual shape, with a square top and a concave lower section that allowed for easy fitting with a flat, circular piece. It is the upper section that has the intricate carving. One side has an image of a seated fox or possibly a vulture. The creature is depicted with outstretched arms and a wavy object on its lap. The eye is made from a small jade chip that was still in place when the shell was uncovered. The carved image resembles depictions of the Vulture God, who is a ruler (the image is a logographic substitute for ajaw, “king”) and a scribe (Coe and Kerr 1997).

These two tombs are ornate and certainly reflect the wealth and/or status that these rulers were able to accrue during their tenure. However, it is interesting to note that all of the ceramics within them were locally produced, with the exception of two dishes. One of these dishes was an import from either western Belize or the eastern Peten, while the second was from Buenavista del Cayo. The lack of foreign ceramics included in these tombs contrasts strongly with the grave goods discovered in the burial of a later ruler, suggesting to us that these individuals did not desire status enhancing items from one particularly powerful community, perhaps indicating its autonomy. The discrepancy between both the form of the burial, the types of objects interred, and the placement of these items suggests a break in tradition between the tombs of these earlier rulers and Burial 1 from Structure B.

**Burial 1, Structure B, Group 1**

Structure B is located in Plaza 2 of Group 2 across from the Eastern Group where we discovered the two earlier burials. While this individual was not interred within a tomb, the quality and quantity of his grave goods, along with the location of the burial, suggest he was an individual of high status within the community. Eleven vessels were discovered within the interment, along with a single elaborately carved jade pendant. Almost all of the vessels were broken, and with the exception of a miniature
polychrome vase, these ceramics were separated and placed in various locations around the body. We have no similarly styled burials from Baking Pot, even from interments of contemporaneous date.

Seven of the ceramic vessels are of foreign origin, with particularly strong ties to Buenavista del Cayo, Holmul, and Naranjo. Four are Cabrito Cream Polychrome vessels (Figure 3), including one with the image of the Holmul dancer (Figure 4), which dates to between 660 and 800 A.D. Other well known varieties from this tomb include two Belize Red dishes, a Puhui-zibal Composite vase, and a single large Daylight Orange: Darknight Variety dish. The discovery of the Daylight Orange type was surprising, considering its Terminal Classic date, pushing the dating of this burial into the 9th century.

Figure 3. One of the Cabrito Cream-polychrome vessels from Burial 1 (drawing by G. Valenzuela).

The epigraphic information deciphered from the miniature vase suggests that it was manufactured at Naranjo, as the patron of the vessel was likely K’akh’ Ukalaw Chan Chaahk, a Naranjo Lord that ruled from A.D. 693-728 (Helmke et al. 2004; Martin and Grube 2000). This vase has prompted others to argue that Naranjo had their strongest influence over the valley during the reign of this ruler, since Naranjo appears to experience a slight hiatus both before and after his reign. However this does not entirely correspond with the dating for Naranjo’s influence at Buenavista del Cayo, nor with perceived Naranjo domination at Xunantunich.

Figure 4. Cabrito Cream-polychrome vase with Holmul Dancer scene (photo by C. Helmke).

While foreign ceramics found within a tomb do not explain or clarify relationships between polities, they may suggest particular influences and perceived hierarchies among elites. During the period between 550 and 700 A.D. the artifacts found in the tombs of two Baking Pot rulers do not strongly suggest any external ties with the eastern Peten. They have all the trappings of rulers from larger centers throughout the Maya lowlands, including large quantities of exotic goods, but there does not appear to be any patron site referenced in the grave offerings. In
addition, artifacts interred with both of these rulers include the ajaw title, suggesting that they maintained at least some degree of autonomy and independence. Therefore, the evidence for Naranjo influence at Buenavista that dates to this early period does not seem to extend out towards Baking Pot, at least not in the ceramic offerings found in the graves of our elite individuals.

The ceramics interred with the individual in Structure B tell a different tale. But what does it mean to have seven vessels originating from the eastern Peten or Buenavista del Cayo in a single burial, particularly when many of these vessels were constructed long before they made it into this grave? It would be foolhardy to claim that we have clear evidence for Naranjo influence and/or domination during this Terminal Classic period at Baking Pot from the remains associated with a single ruler. However, these ceramics may have been gifted to an earlier ruler who passed them down a generation or two before they were interred within the grave. Why all these Naranjo and Homul style ceramics would have been placed with this one individual is certainly up for debate, however it is clear that if Naranjo influence was felt at Baking Pot it was not until later then we see at Buenavista del Cayo and perhaps earlier or coeval with Xunantunich.

If Naranjo did choose to exert its influence into the Valley we have few reasons to suspect it was done through diplomatic means. During much of the 8th century Naranjo was at war with one polity or another. Epigraphic evidence points to numerous burnings and conquests of communities, most of modest size, but even Tikal was not immune to these attacks. If they were interested in controlling the Belize Valley, it was likely not a peaceful undertaking nor would it necessarily have lasted for long periods of time. This may explain why we see evidence for contact vary from site to site.

In addition, our research has led us to believe that each of these larger centers in the valley, including Xunantunich, Buenavista del Cayo, Baking Pot, Pacbitun, and El Pilar were independent polities that provided their local populations with full-service functions. None operate solely as residences of elites, summer homes, or empty ceremonial centers. Differences in accessibility can likely be attributed to geographic location: sites built on hilltops were more restricted given the limited space on which to build, whereas sites like Baking Pot and Buenavista which are located on the alluvial valley can afford to be more spread out. These sites contain similar architectural forms, including ballcourts, palaces, administrative structures, temples, and shrines. The similarity of structure types and sizes indicates similar functions were likely taking place at all of these major centers.

The relative lack of carved stela dating to the Late and Terminal Classic periods in the Belize Valley makes it difficult to determine shifts in power and alliance over short periods of time. We will likely never know the political tug of wars with the same detail and accuracy as they do in the Peten region of Guatemala; however changes in caching practices, elite level ceramic trade, burial customs, architectural design and layout, as well as local ceramic spheres can be used in conjunction with each other to propose various theories. While this paper focused on only a tiny piece of the puzzle, future work will incorporate all of these characteristics in an effort to determine the shifting alliances and influences that affected Baking Pot and the Belize Valley in general.
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2000 Chronicle of Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya. Thames and Hudson, London.
This paper examines pottery from Classic period (A.D. 250-850) Maya burials and other special contexts in Group 1 at Baking Pot, Belize, located in the western Belize River Valley. The multi-disciplinary research addresses questions of the nature, direction and degree of interaction between Baking Pot and its neighbors both near and far. Our investigations combine neutron activation analysis of the vessels’ pastes with traditional archaeological type:variety assessments and art historical analyses of style and iconography. The combined research indicates that Baking Pot developed vigorous ceramic traditions in-step with those sites in its immediate cultural vicinity. The pottery also implies relatively strong and consistent relations with Buenavista del Cayo and other centers in western Belize. Long distance relations are indicated with Caracol and sites in southern Belize as well as with Holmul and other centers in the eastern Peten. The most distant relationship indicated by the pottery is with a site either in the Guaytan area of the middle Motagua River Valley of southern Guatemala or one in Veracruz, Mexico.

Introduction

Chemical analysis of 121 potsherds and whole vessels excavated at the ancient Maya site of Baking Pot, in the Cayo District, Belize by the Belize Valley Archaeological Reconnaissance Project was undertaken to address questions of the nature, direction and degree of interaction between Baking Pot and its neighbors, both near and far. The pottery came from burials and building fill deposits of architectural features in Group I, including Structure 209, Structure E, Structure B, and the adjacent Structures 196, 198 and 199.

A few general comments can be made from an overview of the chemical composition of the pastes of these samples. First, the ceramic types that we believe to be local products are characterized by broad chemical variability, which indicates the presence of a number of different paste recipes in use by Baking Pot’s potters (Figure 1a, Table 1). The variability suggests they were exploiting diverse local clay resources and tempering materials, as well as using imported volcanic ash as a tempering agent. The high variability among the 121 samples in percentages of ash versus carbonate temper similarly indicates the simultaneous presence of different paste recipe traditions among the site’s workshops. For example, Baking Pot’s ceramists sometimes added so much calcium carbonate that it comprised 50% of the paste body whereas other potters were adding less than 2% carbonate temper. The choice of carbonate or ash temper crosscuts most of the slipped wares, and sometimes they alternate in vessels of the same ceramic type. We interpret these data as a negative indicator of intensive specialization in ceramic production at Baking Pot, at least as far as is discernable from a relatively small sample base in comparison to the total Classic period output of Baking Pot’s ceramic workshops. That is to say, the chemical variability of the 121 samples points to production not in highly specialized workshops operating under the strict control of a supervisory patronage or other administrative system but instead to
The apparent lack of workshop specialization in the Group 1 pottery contrasts with our research results at neighboring Buenavista del Cayo and Cahal Pech (Reents-Budet et al. 2000). From these sites we sampled Late Classic pottery from palace middens and related elite contexts in the centers of both sites. The paste chemistry and stylistic attributes of Buenavista’s locally-made, slipped pottery are remarkably similar and consistent among the more than 230 analyzed samples, which implies shared paste recipes by ceramists exploiting the same clay resources and tempering materials. The vessels’ congruent formal features, including vessel form, slip and post-fire paint colors, use of pictorial space, and pictorial, iconographic and hieroglyphic imagery also imply the sharing of artistic canons and adherence to predetermined creative parameters. Together these characteristics suggest that the pottery from elite contexts at Buenavista and Cahal Pech was produced at workshops in close contact with each other and by artisans following the same patterns of production. In turn, these data imply that the workshops were operating under some type of controlled management, which likely was connected to the ruling elite at both sites (Reents-Budet et al 1994:36-71).

Ceramic production controlled by the ruling elite is not broadly evident among all samples from Baking Pot’s Group 1. This is not to say, however, that specialized ceramic production did not exist at the site. For example, the artistic and technical quality of painted and carved ceramics excavated in the 1960s by Gordon Willey and colleagues from burials in Group 2,
which they interpret as local wares, attest to a specialized ceramic tradition (Willey et al. 1965). Local specialization also is attested by Urita Gouged-incised vessel from the adjacent Bedran Group (Colas, Helmke, Awe and Powis 2002). Instead, the seeming lack of specialization suggested by the chemical variability in the Group 1 pottery may be a result of these samples being proportionately weighted towards ceramic types representing non-specialized wares made in a variety of local workshops rather than the products of select ateliers under the tutelage of the site’s ruling elite. Further, the kinds of ritual activities that took place in Group 1 may have dictated the use of quotidian pottery rather than that made in regal workshops such as we found in the palace ceramic collections at Buenavista and Cahal Pech. Therefore, the nature of the ritual events that took place in Group 1, including that of the burials interred here, may be a primary causative factor underlying the lack of specialization indicated by the variable paste composition of the pottery.

A second result of the sampling program is the identification of a few Group 1 vessels as imports from other sites, their origins implying interaction with these locales. The majority of the “foreign” samples came from Buenavista del Cayo, although a few others originated at more distant lowland Maya sites. This contrasts with research results from Buenavista that identified the movement of many vessels between Buenavista and Cahal Pech as well as significant numbers imported to Buenavista from sites in the eastern Peten, including Holmul, Yaloch, Naranjo, Yaxha and Uaxactun. Among the more distantly imported pottery in the Baking Pot corpus are two Cabrito Cream-polychrome vases (BVB011, BVB019; Figures 1b and 2c) and a plate (BVB009; Figure 1d) from Holmul and its immediate vicinity, and a unique tiny cylinder vase with rim whistle that was made somewhere in the Naranjo-Holmul-Yaloch area (BVB025; Figure 1e). Among the samples from nearby Buenavista del Cayo are a polychrome dish (BVB020; Figure 1f) and a groove-incised bichrome vase (BVB018; Figure 2b). From Caracol came a polychrome plate (BVB007; Figure 2a), and from an undetermined origin came an unusual 4-chambered flute (BVB026; Figure 2c). A synopsis of the workshop locations of these imported vessels is listed below. Interestingly, these non-local wares were consistently found in special contexts, including elite burials and building dedication caches in Structure B and Structure 209, both being ritual buildings with special socio-political and religious connotations (Audet and Awe 2002:1, 9-10). These vessels constitute material evidence of Baking Pot’s socio-political and/or economic interaction, their workshop origins indicating the site’s primary Classic period focus having been to sites in the western Belize River Valley and those of the adjacent region in eastern Guatemala. This pattern recalls the interaction sphere of Buenavista del Cayo and Cahal Pech (Reents-Budet, Bishop, Ball, and Taschek 2000) and, as far as is discernable from the available data, also of Caracol. The strongest, or at least the most consistent, relations were with Buenavista del Cayo during the Late Classic period. The individual interred in Structure B Burial 1 had the greatest number of imported wares in his tomb, seven of the eleven vessels having come from Buenavista del Cayo and the Holmul area. Caracol seemingly developed its own interaction spheres, through time pursuing relations variously with sites in the western Belize Valley, the eastern and central Peten, southward towards Pusilha and Copan and southwest into the Dolores region of southeastern Guatemala. Arlen and Diane Chase’s
Figure 1. a) Monochrome and polychrome sherds excavated from Group 1, Baking Pot, Belize. (All photographs by D. Reents-Budet unless otherwise noted.); b) BVB011, a Cabrito Cream-polychrome footed jar made at Holmul. From Str. B, Burial 1; c) BVB019, a Cabrito Cream-polychrome cylindrical dish made in the Holmul vicinity. From Str. B, Burial 1; d) BVB009, an orange polychrome plate whose style suggests it is a local product but whose paste chemistry does not match that of other locally produced wares and resembles only a polychrome vase made either in western Belize or the eastern Peten. From E-Group, Burial 2; e) BVB025, a tiny Cabrito Cream-polychrome cylinder vase with whistle-rim, made in the eastern Peten region but not at Holmul. From Str. B, Burial 1; f) BVB020, a Benque Viejo polychrome dish made at Buenavista del Cayo. From Str. 209, cache.
Figure 2. a) BVB007, a polychrome plate made in the vicinity of Caracol. From Str. 209, Burial 3; b) BVB018, a groove-incised bichrome vase made at Buenavista del Cayo. From Str. B, Burial 1; c) BVB026, one of a pair of thin-walled flutes made outside Belize. From Str. 209, Burial 2; d) BVB080 and BVB081, Terminal Classic fine paste sherds of the Sahcaba type from Baking Pot. From Str. 198 fill; e) BVB012, a red-slipped plate made in a local workshop. From Str. B, Burial 1.
upcoming analysis of the Caracol ceramics promises to clarify its dynamic and complicated interaction history.

The two ceramic flutes (Figure 2c) from Burial 2 of Structure 209 may indicate an international connection to the Gulf Coast region of Mexico where this style of in-line flute has been widely reported. However, multi-note, in-line aerophones were produced by many Mesoamerican cultures, and among the lowland Maya one reported from Guaytan located in the middle Motagua River Valley (Smith and Kidder 1943: Fig. 34e). More paste compositional and stylistic investigations are needed to ascertain the origin of this pair of wind instruments. Suffice it to say, however, that these two delicate flutes indicate long-distance connections on the part of Baking Pot and a special identity for the person with whom they were interred. A few Terminal Classic period fine paste sherds also were sampled (the Sahcaba type; BVB080, BVB081, BVB091; Figure 2d).

They are visually similar to Sahcaba fine paste pottery identified at Tikal, and also share the relatively high proportion of calcite temper that helps to distinguish the Sahcaba group from Pabellon pottery. However, the aggregate chemical profile of these Baking Pot fine paste sherds matches that of other pottery from Baking Pot as well as being generally similar to both fine paste and other Late and Terminal Classic pottery types from Caracol and Lamanai. Therefore, these three fine paste sherds from Baking Pot represent the products of workshops in the western Belize Valley that were making their own versions of Pabellon-like pottery.

The investigative procedure for the Baking Pot pottery began with sampling 20 whole vessels from special deposits and 101 potsherds that were thought most likely to represent local production. The sherd choices were based on Carolyn Audet’s initial sorting of the pottery followed by the senior author independently conducting the same visual inspection of the pottery from the Group 1 excavation lots. We believe this procedure provides a sufficient overview of the archaeological types and kinds of pastes that characterize Classic period ceramic production at Baking Pot as represented by the Group 1 pottery collection. A comparison of the whole vessels’ chemical compositions with those of the sherds provides the basis to determine if the vessel were locally made or imported to Baking Pot. Subsequently, their comparison with the 28,000 other examples in the Maya Ceramic Survey Project chemical database (Dept. of Anthropology, National Museum of Natural History, Smithsonian Institution) provides indications of the origins of the imported wares. The following is a discussion of the sampled pottery from each of the special deposits from Group 1 with a special emphasis on issues of site interaction and political history.

Structure B, Burial 1
Samples BVB011, BVB012, BVB013, BVB014, BVB016, BVB017, BVB018, BVB019, BVB025, BVB029, BVB101

This is one of the most interesting burials from Group1 given that seven of the eleven sampled vessels were imported to Baking Pot. The workshop origins of these include Buenavista del Cayo and the eastern Peten, especially the Holmul area. The burial was discovered 2.4 m below the surface of Structure B located on the western side of Plaza 2 of Group 1. It faces Structure E, a shrine complex. The burial was placed beneath the floor of the penultimate structure, and unlike the other tombs discussed here, was not a stone-lined or capped enclosure. The skeleton was placed on the chamber’s dirt floor and then covered with a 10 cm layer of stucco. The
body lay face up with head to the south, the most typical position for burials at Baking Pot. Ten of the eleven ceramic vessels were intentionally broken and scattered over and around the legs and feet of the interred. Only the miniature vase with whistle rim (BVB025; Figure 1e) was found intact.

The individual wore around his neck the highest quality carved jadeite pectoral bead found to date at Baking Pot, the image perhaps being that of the Maize god. The location of this burial and its rich offerings suggest this is the interment of a ruler of Baking Pot, which may date to the 9th century A.D. Four of the plates in this burial are likely local product; including three monochrome wares (BVB012, BVB013, BVB101; Figure 2e) and perhaps also the Daylight Orange plate BVB014 (Figure 3a). They are chemically similar to other Belize Red and Rubber Camp Brown plates or dishes (e.g. BVB021, BVB084) and a Floral Park rim sherd (BVB120) found in Group 1. The four plates also share paste chemistry with Sotero Red-brown tall bowls from Burials 1 and 2 in Structure E (BVB094, BVB097), with unslipped and monochrome incised jar rim sherds (BVB046, BVB073), and an un-typed plate rim sherd (BVB084).

The Daylight Orange plate (BVB014) is chemically similar only to BVB044, a sherd from another Daylight Orange plate. That they are slightly different from all other Baking Pot samples implies either a different local paste recipe or perhaps the plates had been made at another nearby site in the Belize Valley whose clays have a slightly different composition from those around Baking Pot.

Four Cabrito Cream-polychrome vessels from Burial 1 were produced outside the Belize Valley (BVB011, BVB017, BVB019, BVB025). BVB011 (Figure 1b), a tecomate-shaped vase with pedestal support, was imported to Baking Pot from Holmul. From workshops located elsewhere in the Holmul-Naranjo-Nakum triangle come a plate (BVB017; Figure 3b), a dish (BVB019; Figure 1c), and a tiny vase with a unique rim modeled to form a whistle, its paste chemistry indicating it was made from highly weathered clay (BVB025; Figure 1e). Unfortunately, the nominal phrases in the Primary Standard Sequence texts on all these vessels are mostly eroded, making it difficult to discern a personal name or title. However, Christophe Helmke (Helmke et al. 2004; Grube and Martin 2004: II-67) believes the name of the Naranjo ruler K’ahk’ Ukalaw Chan Chaahk, who ruled from AD 755-ca. 780, is recorded on BVB025. BVB011 is chemically and stylistically similar to two unprovenienced Holmul-style vases MS0603 and MS1125 (or K0703; for images, see the Kerr Maya Vase Database on the website of the Foundation for the Advancement of Mesoamerican Studies [www.famsi.org]).

Plate BVB017 (Figure 3b) and dish BVB019 (Figure 1c) likely were made in the same vicinity. They are chemically similar to some pottery found at Holmul and Naranjo as well as to “Tikal dancer plates” (Reents-Budet et al. 1994:197-199) and other cylinder vessels made in workshops located in the regions east of Tikal. Also from this eastern Guatemala area came a Chinos Black-on-cream sherd found at Buenavista (MSBX75; Houston, Stuart and Taube 1992:506, Fig. 10).

Two vessels from Burial 1 were made in elite pottery workshops at Buenavista del Cayo (BVB016 and BVB018). BVB016 (Figure 3c) is a Cabrito Cream-polychrome dish whose paste chemistry matches that of other painted pottery made in the palace workshops at Buenavista. These also are chemically similar to Saxche Orange polychrome-type vessels from the same workshops (MSBX32 and MSBX58; Figure 3d).

Additional chemical similarity is noted with an unprovenienced vase in Belize’s
Figure 3. a) BVB014, a Daylight Orange plate made locally but in a workshop using an idiosyncratic paste recipe that may relate to some type of specialized production. From Str. B, Burial 1; b) BVB017, a Cabrito Cream polychrome plate made in the Holmul area of the eastern Peten. From Str. B, Burial 1; c) BVB016, Benque Viejo polychrome dish made at Buenavista del Cayo. From Str. B, Burial 1; d) MSBX58, a Saxche Orange polychrome vase made at Buenavista del Cayo and chemically similar to BVB016; e) MSBV58, an unprovenienced vase in Belize’s national collections whose paste chemistry resembles that of MSBX58 and BVB016, indicating that it too was made at Buenavista del Cayo; f) MSBX80, a groove-incised and red-slipped vessel made at the North River Lagoon site but found at Buenavista del Cayo, its paste chemistry matching that of BVB018. From Str. 198 fill.
national collections in Belmopan (MSBV58; Figure 3e), which now can be considered a product of elite workshops at Buenavista del Cayo.

BVB018 (Figure 2b) is a groove-incised bichrome cylinder that was made at Buenavista del Cayo. Its paste chemistry matches that of many locally made Cabrito Cream-polychrome vessels and other unslipped or monochrome incised vessels. In turn, these match a Cabrito Cream-polychrome cylinder vase found at Caracol (CPO108), and monochrome groove-incised sherds found at the North River Lagoon Site 1 (MSBX80; Figure 3f) and Uaxactun (MSU216). These data indicate that all were made in the same workshops at Buenavista del Cayo.

BVB029 (Figure 4a) is a monochrome black composite-form vase with post-fire stucco decoration. It was imported to Baking Pot, although its point of origin remains undetermined. It exhibits some chemical similarity to a sample from Holmul (MSH022), although the lack of similarity with all other Holmul pottery in our chemical database implies that MSH022 was not made at Holmul. Therefore both BVB029 and MSH022 were imported to their respective sites from another locale in western Belize or the eastern Peten.

Structure E, Tomb 1

Samples BVB024, BVB028, BVB092, BVB093, BVB094, BVB095, BVB096, BVB098, BVB099, BVB100

Structure E is the primary building of an E-Group complex at the heart of Group 1. It is reached by a long causeway whose entrance into the group is guarded by Structure 209 (the so-called “Ticket Booth”; see below). The final phase at the summit of Structure E seemingly did not support a masonry building, although excavation below its stucco floor discovered a thick layer (4-6 cm) of chert flakes that had been deposited atop the capstones of two tombs. The tombs, oriented north-south and dating to ca. A.D. 650, were constructed of limestone blocks cemented with lime plaster. They are among the most elaborate tombs ever found at Baking Pot, both in terms of the chambers’ stone vaulted construction and the burial offerings. This is not surprising given that E-Groups, and especially their eastern shrine buildings, throughout the Maya lowlands are associated with elite burials and ancestral veneration rites (Chase and Chase 1995:99-101, Clark and Hansen 2001:22-24).

More than 5,000 chert flakes covered the nine capstones and floor of Tomb 1, and 240 obsidian blades were scattered on the chamber’s floor. Nine eccentric flints were placed throughout the tomb, each less than 15 cm long and made of blue-gray chert. Most of the skeletal material had been removed in ancient times, although remaining bone fragments indicate that the interred was an adult. The person was adorned with 240 pieces of jadeite, including a necklace of 54 beads, 3 large belt plaques (dimensions: 17 cm l. x 6 cm w.), one earflare (its mate being found below in Tomb 2, likely the pair’s original provenience), and 182 pieces from a mosaic portrait mask, one of which is incised with the hieroglyph $ajaw$ (“lord”). These adornments strongly imply that the interred individual was a member of the ruling elite, perhaps even the paramount leader of Baking Pot. Eight carved $Spondylus$ shells and three carved mother-of-pearl shells were also likely part of the mosaic burial mask, two of the latter being carved in the form of a jaguar and the glyph for “white” ($sak$). Together these might be part of the name or title of the interred individual, read Sak Balam. A small, circular obsidian object completes the tomb’s artifact inventory, which is of the size and shape to have been the pupil of the mosaic mask.
Figure 4. a) BVB029, a black-slipped composite-form vase with post-fire stucco decoration, its paste chemistry identifying it as an import from an undetermined site in western Belize or the eastern Peten. From Str. B, Burial 1; b) BVB093, a Sotero Red-brown dish made in a local workshop. From E-Group, Burial 1 (western); c) BVB100, a Belize Red plate made in a local workshop. From E-Group, Burial 1 (western); d) BVB006, an orange polychrome plate decorated with the image of an armadillo, its paste containing a high proportion of calcium carbonate temper. It may have been made locally or at a nearby site in western Belize. From E-Group, Burial 2; e) BVB015, an orange polychrome plate decorated with the image of a bird, the plate’s paste chemistry suggesting it may have been made locally or at a nearby site in western Belize. From E-Group, Burial 2; f) BVB010, a orange polychrome plate decorated with the image of two feathered serpents, the plate’s paste chemistry suggesting it may have been made locally or at a nearby site in western Belize. From E-Group, Burial 2.
The ten plainware and monochrome red or brown slipped pottery from the tomb date to the Tiger Run ceramic complex (A.D. 580-680). All likely represent local production. The eight vessels cluster together with many from Structure E Tomb 2 (see below), all being characterized by a proportionately high amount of calcite temper. The non-decorated nature of these vessels would suggest the burial of a lower status individual, an interpretation that clearly is not valid given the sumptuous nature of the other burial offerings and the tomb’s location in one of the most important buildings at Baking Pot. Tomb 1, then, presents an excellent opportunity to reassess assumptions of status based on a burial’s ceramics.

The Sotero Red-Brown bowls (BVB024, 092, 093, 094, 095, 098; Figure 4b) have similar paste chemical profiles, indicating the sharing of paste recipes and clay resources among their respective workshops and potters. A notable feature, however, is the variation in vessel forms among the five Sotero Red-brown bowls and a stylistically and chemically related orange ware bowl (BVB096). Similarly, the three Mountain Pine Red or early versions of Belize Red plates (BVB028, 099, BVB100; Figure 4c) each has a slightly different basal form, two have carbonate temper (BVB099 and BVB100) and one has volcanic ash temper (BVB028), yet their general paste chemistry and slip characteristics indicate they were made in workshops sharing clay resources, paste recipes and surface finishing techniques. Therefore, we may conclude that variations in vessel form, tempering material, and surface variations were acceptable features, perhaps relating to individual expression and/or workshop identity, the Baking Pot workshops seemingly not constrained to follow a single shape or color format.

Structure E, Tomb 2
Samples BVB006, BVB008, BVB009, BVB010, BVB015, BVB027, BVB097

Tomb 2 was found adjacent to the eastern wall of Tomb 1. It predates Tomb 1 (ca. A.D. 550-650), and too comprises a vaulted, stone-lined chamber covered with more than 5,000 pieces of chert flakes. Tomb 2, which surprisingly was filled with dirt, contained the remains of a female between the ages of 40-45 years. She originally was adorned with a pair of jadeite earflares, one of which was found in the tomb whereas its mate was placed into Tomb 1. This movement of artifacts likely took place when the tombs were re-entered in antiquity, the one earflare being displaced to the burial above. Other artifacts include a painted mother-of-pearl shell, 12 Spondylus shells placed underneath the body, 2 canine teeth pendants, a hematite fragment, 12 jadeite fragments glued to two shell fragments, and a large decayed object covered with stucco (initially thought to be a codex but may be some other stuccoed object or a clay laminate item such as the head piece of an elaborate headdress; H. Beaubien pers. comm. 2003). Although the burial included far less jadeite body adornments than Tomb 1, it included seven unusual pottery vessels and one Terminal Classic ceramic censer, which was placed in the tomb when it was reopened during later veneration rites (ca. A.D. 800-900 based on the censer’s date). The elaborate pottery vessels and the presence of two shell objects carved with logograms for the word “ajaw” or “ruler” indicate that, like Tomb 1, the occupant was of high status and likely a member of the ruling family of Baking Pot.

All seven vessels, including five Saturday Creek polychrome plates and two plainware bowls (Sotero Red-brown), were made in the western Belize Valley, some locally and some imported from neighboring locales. They reflect the broad variability in paste composition that characterizes Group1
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ceramics, the variability here due in large part to differences in tempering material. For example, BVB006 has 36% calcium carbonate whereas BVB009 has 2% and BVB010 has 23%, yet all three plates are stylistically similar and typologically the same. The two Sotero Red-brown plain ware bowls (BVB027, BVB097) are chemically similar to other carbonate tempered samples from Baking Pot, including three Sotero Red-brown bowls (BVB024, BVB093 and BVB094), a monochrome red plate BVB101 (from Structure B, Burial 1), a Belize Red plate (BVB021) and a Rubber Camp Brown plate rim sherd (BVB084).

A notable feature of this burial is the high proportion of polychrome plates in relation to the other pottery forms in the tomb (a 5:2 ratio). The plates also are notable for their renderings of five different animals in the center of each plate. Two have naturalistic portrayals of an armadillo (BVB006; Figure 4d) and a long-beaked bird with a black-painted cropped crest (BVB015; Figure 4e). The other two depict supernatural animals, including two entwined feathered serpents (BVB010; Figure 4f), a supernatural image elsewhere associated with the heavens, and the ‘Waterlily Jaguar’ (BVB008; Figure 5a), a preternatural being of the underworld. The center of plate BVB009 (Figure 1d) is highly eroded, and the only visible forms are what may be a long curled tail and hoof-like “foot”. In the southwest corner of the burial were stacked BVB009 on top of BVB015 (the plate with bird image). In the southeast corner were stacked the armadillo plate atop the Waterlily Jaguar plate atop the serpent plate (top to bottom: BVB006, BVB008, BVB010). The plates may pertain to a specific narrative pertinent to the deceased and/or the internment rites. These animals frequently appear in Maya myths and epic tales, including that of the 16th century Popol Vuh. However, we have found no single myth featuring this particular grouping of animals.

The paste composition of the polychrome plates (BVB006, BVB008, BVB009, BVB010, BVB015) is variable, although they likely are products of workshops located in western Belize. Their painting style recalls many others from sites in the region and spanning late Hermitage through Tiger Run phases, including Barton Ramie (Gifford 1976: Figs. 96, 115; Willey, Bullard, Glass, and Gifford 1965: Figs. 221f,h; 229), Rio Frio Cave E (Pendergast 1970: Fig. 6), Eduardo Quiroz Cave (Pendergast 1971: Fig. 8), Caracol (Chase and Chase 1987: Figs. 22e,h, 36a,d). There are no chemical matches for BVB006 (the armadillo plate) due to the high proportion of calcium carbonate in the sample, and similarly no close matches for BVB008 (the Waterlily Jaguar plate), BVB010 (the feathered serpents plate) and BVB015 (the long-beaked bird plate). Stylistic and typological features suggest they were made in the region although whether locally or at another western Belize site is impossible to determine at this time. BVB009 is chemically different from the other plates, although its congruent stylistic features might indicate all are the products of related workshops. Yet its closest chemical match is an unprovenienced Cabrito Cream-polychrome vase (MS1420, K4669 and K4619), the combined data leading to the suggestion that the vase and BVB009 were made in associated workshops that likely were located in the western Belize or eastern Peten area. BVB058, an eroded plate sherd from Str. 209, also is a member of this chemically defined group.
Figure 5. a) BVB008, an orange polychrome plate decorated with the image of the ‘Waterlily Jaguar’ supernatural, the paste chemistry suggesting it may have been made locally or at a nearby site in western Belize. From E-Group, Burial 2; b) BVB022, a monochrome red plate made locally, its paste recipe including a high proportion of calcium carbonate temper. From Str. 209, Burial 1; c) BVB001, a monochrome red plate whose style is identical to BVB022 although volcanic ash was used as the tempering material in contrast to calcium carbonate as was used for BVB022. Its aggregate paste composition indicates it was made at Buenavista del Cayo. From Str. 209, Burial 1; d) BVB079, a monochrome red, groove-incised (gadrooned) cylinder vase sherd from Cahal Pech whose paste chemistry closely resembles that of BVB001 and BVB103 and BVB121, all made in workshops at Buenavista del Cayo. From Cahal Pech; e) MS0915, an unprovenienced monochrome red, groove-incised (gadrooned) cylinder vase chemically similar to BVB001, BVB079, BVB103 and BVB121, all having been made in workshops at Buenavista del Cayo; f) MS1781, an unprovenienced polychrome bowl vase chemically similar to BVB001, BVB079, BVB103 and BVB121, all having been made in workshops at Buenavista del Cayo.
Structure 209 (“Ticket Booth”) Burial 1

Samples BVB001, BVB004, BVB005, BVB021, BVB022

Structure 209 is located on the eastern side of a 300 m long by 15 m wide causeway linking Baking Pot’s main ritual-administrative Groups 1 and 2, the structure abutting the causeway 50 m south of it juncture with Group 1. This type of entrance structure is typical of important socio-political-ritual complexes in the western Belize Valley (e.g. at Cahal Pech [Awe, Grube, and Cheetham, in press], Buenavista [Ball 1993], Pacbitun [Healy 1990:250], and Naranjo). Structure 209 comprises a series of three elliptical terraces surmounted by an upper platform with both elliptical and straight walls. Three stairways on the mound’s western side lead to the second terrace. Two altars and three fragments of a ca. 2 m. tall stela were found on the northern and western sides of the mound. No evidence of carving was evident on any of these monuments. Four burials were found in Structure 209 along its central axis.

Burial 1 was found under the terminal phase stairs on the western side of the platform, and likely dates to the Terminal Classic period (A.D. 800-900). A stone-lined cist was capped with large limestone slabs that were laid directly atop the body. A single male individual, 30-40 years of age, lay supine in the chamber. Grave goods included seven whole pottery vessels (three Belize Red plates, one polychrome dish, an orange bichrome bowl and two small ollas). Three jadeite objects adorned the body. Two fragmented earflares were found at either side of the cranium, each with six carved semi-circles lending a floral-like form to the ear flare. Inside the person’s mouth was found a small jadeite carved into the shape of a human molar. To the left of the pelvis was found a single green obsidian blade.

Five of the seven whole vessels from this tomb were sampled, including three Belize Red plates, a polychrome cylinder vase and an orange ware dish. The three similar monochrome plates (BVB001, BVB021, BVB022; Figure 5b) include two that are local products (BVB021 and BVB022) with chemical compositions similar to other Belize Red and untyped monochrome red plate sherds excavated from Group 1. Their slightly different patterns of relatedness to other Baking Pot samples results from differing amounts of carbonate temper in the samples. However, when they are normalized to a given scandium value, the data reveal their similar paste composition.

In contrast to the high amounts of carbonate temper in BVB021 and BVB022, the third plate BVB001 (Figure 5c) is tempered with volcanic ash. Its chemical profile is similar only to a couple of vessels found at Baking Pot (BVB103 and BVB121) and Cahal Pech (BVB079; Figure 5d), whose chemical compositions indicate they likely were imported from Buenavista del Cayo. BVB001 also is chemically similar to eight sherds/vessels found at Caracol (the ceramic type, painting style and photographs of these samples currently are not available to the senior author and thus of undeterminable provenience) and to scores of sherds and whole vessels from the palace middens at Buenavista, all of which have been determined to be local products (Reents-Budet, Ball, Taschek and Bishop 2000). Therefore, we believe BVB001 to be an import to Baking Pot from Buenavista del Cayo. Its chemical composition also recalls unprovenienced vases whose paste chemistry indicates they too were made at Buenavista del Cayo (MS0050, MS0915 [Figure 5e], MS0917, MS1688 / K5850, MS1781 [Figure 5f]), and two vessels from earlier excavations at Baking Pot (MSBP02 [Figure 6a], MSBP15), one from Barton...
Figure 6.  

a) MSBP02, an orange polychrome vase from Baking Pot whose paste chemistry is similar to BVB001, BVB079, BVB103 and BVB121, all having been made in workshops at Buenavista del Cayo;  
b) MSBV19, a polychrome dish found in Actun Balam, its paste chemistry being similar to BVB001, BVB079, BVB103 and BVB121, all having been made in workshops at Buenavista del Cayo;  
c) BVB004, an orange-paste dish with red slip decoration whose paste chemistry suggests it is the product of a local, specialized ceramics workshop. From Str. 209, Burial 1;  
d) BVB005, a polychrome dish painted with a Primary Standard Sequence hieroglyphic text whose paste chemistry does not match that of local production. From Str. 209, Burial 1;  
e) MSBV23, an unprovenienced polychrome dish in Belize’s national collections whose style resembles BVB005, its paste chemistry not being similar to those of ceramic production at Baking Pot, Buenavista del Cayo or Caracol;  
f) BVB003, an unusual cylinder vase with avian effigy spout and post-fire yellow and white paint. From Str. 209, Burial 2.
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Ramie (MSBR52), a painted dish from Actun Balam (MSBV19; Figure 6b), and a sherd each from Holmul (MSH450), Naranjo (MSNJ09) and Xunantunich (MSXU52).

The ash-tempered orange ware dish painted with simple geometric designs (BVB004; Figure 6c) is not chemically similar to any sample in the database other than a sherd from Barton Ramie (MSBR73) and an unprovenienced Early Classic lidded dish (MS1241). Its composition is somewhat similar to a few samples from Baking Pot, including a Benque Viejo Polychrome dish BVB030 (from a cache in Structure 209), a monochrome red plate rim sherd BVB114 (from the fill of Structure 199), and polychrome sherds from Gordon Willey’s excavations in Group 2 (MSBP01, MSBP10, MSBP11 and MSBP14). However, this chemical similarity may reflect their common ash temper rather than the potters’ sharing clay resources and paste recipes. It is possible that these Baking Pot painted ceramics are the products of local workshop(s) that specialized in the production of polychrome pottery, their chemical differences reflecting paste recipes specific to polychrome ceramics production. If this be the case, it would account for BVB004 not matching any of the 120+ unslipped and monochrome samples from Baking Pot.

The most unusual vessel from this burial is a polychrome cylinder vase painted with a Primary Standard Sequence hieroglyphic text (BVB005; Figure 6d), now highly eroded such that the hieroglyphs generally are not discernable. The vase is tempered with volcanic ash and has a corresponding low carbonate composition. It is not similar to any sample in the database, and displays only weak clustering tendencies with other volcanic ash tempered samples. The vase’s painting style, however, recalls two other polychrome vessels from the western Belize Valley, including MSBV23 (K5658; Figure 6e), an unprovenienced vase in the Belize national collections also with no matches in the chemical database, and a polychrome dish sherd from Baking Pot (MSBP14). Buenavista and Cahal Pech may be eliminated as the vases’ workshop locations due to the complete lack of chemical similarity with the hundreds of samples from these two sites. The available evidence, then, suggests that BVB005 was not made at Baking Pot, Buenavista or Cahal Pech. Its general chemical and stylistic features recall pottery associated with Uaxactun, Guatemala (MS1444, K1743; see Reents-Budet et al. 1994:114-115), although MS1444 probably was not made at the site due to its paste compositional features being different from those that typify Uaxactun ceramic production.

Structure 209 (“Ticket Booth”) Burial 2
Samples BVB003, BVB026
Burial 2 was found on the central axis of Structure 209 and laid directly on Floor 2, which is located 153 cm below the terminal floor above. A single individual was found in the cist, which was encircled and capped by large limestone blocks. Some had been laid directly on the body. The male individual of 19-23 years of age was laid prone with head to the south. His left arm and left leg bones were missing, likely removed when two later graves (Burials 3 and 4) were placed to the west of Burial 2. Offerings include three pottery vessels, two large ceramic flutes, two jadeite beads, a mother of pearl shell pendant, two conch shell “buttons”, two pyrite-inlaid ceramic disks whose position suggests their having been ear ornaments, and a large stuccoed object of perishable material (only its stucco covering remains). The object was semi-circular in form, and the stucco was painted in red, green and blue although the original
design was impossible to determine due to the mixed nature of the deposit. It is conjectured that this was a large wooden bowl or dish decorated with stucco and paint.

Two of the five ceramic objects were sampled. Most unusual is a wide cylinder vase with a modeled avian spout/handle (BVB003; Figure 6f), embellished with post-fire paint in yellow and white. Its modeled form and coloration suggest the avian represents a curassow. Although the modeled spout/handle is hollow and could function as a spout, in practice liquid would exit from the main orifice of the vessel before it would travel through the “spout” and exit from the bird’s beak. The paste composition of BVB003 has no chemical matches in our database although its stylistic and typological features suggest it is a local product. The vase clusters with Mountain Pine Red and Sotero Red-brown vessels from Structure E Burial 1 (see above) and has low linkages with BVB101, a redware plate from Structure B Burial 1, and a Sotero Red-brown dish from Group E Burial (BVB024).

Yet its chemical dissimilarity from all other Baking Pot and Belize Valley samples implies a different paste recipe. Zoomorphic spouts are rare in the Maya lowlands, but spouted vessels were relatively common during the Preclassic period and survive into Early Classic times at other Belizean sites. These include spouted vessels from Santa Rita Mound 6 (Gann 1918: Fig. 24g), San Estevan (Bullard 1965: Figs. 12a, 14d), and Barton Ramie (Gifford 1976: Figs 16n, 26b-e) where zoomorphic modeled handles extends back to the Middle Preclassic Jenney Creek phase (Gifford 1976: Fig. 17a). All considered we are unable to determine the origin of this unusual vessel although our working hypothesis considers it a western Belize, perhaps even local, product. Burial 2 included a unique pair of nearly identical four-chambered flutes (BVB026; Fig. 2c). They were placed next to the right thigh and hip of the interred body. The flutes are extremely thin-walled and were crushed into many fragments by the burial environment.

They are decorated with geometric designs in red slip paint, and a modeled representation of a human head is attached to the mouthpiece’s midpoint. Only one of the two flutes was sampled (BVB026) because their formal similarities strongly indicate a common origin and because their fragile, thin-walled condition made sampling extremely difficult. The chemical composition of BVB026 does not match anything in our database. Based on stylistic features and other archaeological indicators, we entertain the idea that they were made in the Gulf Coast lowlands of Mexico. Contacts with Veracruz are indicated by artifacts and architectural styles at other contemporaneous Maya sites including Tikal, Kaminaljuyu and Montana (Pacific Coast of Guatemala) (Braswell 2003:33, 38-39). However, multi-note, in-line aerophones were produced by many Classic period Mesoamerican cultures, the Maya among them. For example, one from Guaytan, located in the Motagua River Valley (Smith and Kidder 1943: Fig. 34e), seems to have been made locally due to the visual similarity of its paste to other vessels that Smith and Kidder believed were made in Guaytan’s workshops. More research needs to be done to determine the origin of this pair of flutes.

Structure 209, Burial 3 and Burial 4
Samples BVB002, BVB007

Burials 3 and 4 were located in the center of the upper platform and 3.2 meters below the terminal phase floor of the structure. The interments were placed next to each other in a small tomb chamber that was then filled with dirt and sealed with a
Figure 7. a) BVB002, a monochrome orangeware dish made locally. From Str. 209, Burial 3; b) MS0571, an unprovenienced polychrome plate whose paste composition recalls that of plate BVB007, both being stylistically similar to plates excavated at Pusilha by T.A. Joyce in 1929. (Photograph by R. Bishop); c) MS0920, an unprovenienced polychrome plate whose paste composition recalls that of plate BVB007, both being stylistically similar to plates excavated at Pusilha by T.A. Joyce in 1929. (Photograph by R. Bishop); d) MSBV08, a bowl from Caracol; e) MSBV53, a round-sided bowl from Xunantunich. Their chemical compositions recall those of BVB007, MS0571, and MS0920; f) MSC356/MSC388, a lidded tripod vase found in the tomb of Yax K’uk’ Mo’, the founder of Copan’s Classic period ruling dynasty, its paste chemistry indicating an origin from a site in western or southern Belize, perhaps Caracol (photograph by Ellen Bell and Robert Sharer).
series of large capstones. Burial 3 is the primary funerary focus of the tomb and Burial 4 seems to be an offering to individual 3. Burial 3 was a female individual at least 55 years of age, laid in a prone position with head to the south. Grave goods include 16 bone hairpins, 6 jadeite objects (2 large beads and two pairs of earflares), 3 obsidian blades with tapered ends, and 7 ceramic vessels. Vessel 1 (BVB007; Figure 2a) and Vessel 2 were placed next to the skeletal remains of Burial 4. Vessel 3 is a monochrome black vase with stucco decoration. Vessel 4 is a tall monochrome brown bowl in which was nested a monochrome red-orange tall bowl (Vessel 5, BVB002; Figure 7a). The burial also contained two plainware brown vases (Vessels 6 & 7). The two sampled vessels from these mixed burials represent a locally produced orangeware dish (Vessel 2, BVB002; Figure 7a) and a polychrome plate (Vessel 1, BVB007; Figure 2a) made somewhere in western or perhaps southern Belize. The paste chemistry of the plate lacks any close match in the database, but it is similar to two unproveniened plates (MS0571, MS0920; Figures 7b and 7c) that recall pottery excavated at Pusilha by T.A Joyce (Joyce 1929: Pl. XL, Fig. 4; Pl. XLII, Fig. 4). Stylistically and chemically MS0571 resembles the polychrome plate BVB015 with bird image from Burial 2 of Structure E (Figure 4e).

The chemical composition of plate BVB007 (Figure 2a) vaguely recalls pottery excavated at Buenavista and Caracol, although relatively high Euclidean distances between the plate and the pottery from these two sites likely exclude either as the origin of BVB007. Its closest correspondence is to three pottery samples from Caracol (CPO005, CPO093, CP0446), although due to the current lack of descriptive and visual data of the Caracol samples we do not know what type or style of pottery is represented by these three samples. The available data, however, suggest that BVB007 and the three sherds found at Caracol may have been made in the same locale. We hope that future research can identify this place. Plate BVB007 also chemically recalls two polychrome bowls in Belize’s national collections, including a round-sided polychrome bowl found at Caracol (MSBV08; Figure 7d) and a similar black-background polychrome bowl found at Xunantunich (MSBV53; Figure 7e). Of the Buenavista examples, the most similar is MSBX37, a black background dish that stylistically recalls the Caracol bowl (MSBV08). The Baking Pot plate’s paste chemistry also recalls a monochrome brown sherd found at the site (BVB049), neither of which resembles the paste chemistry of locally produced wares. All considered BVB007 most likely was made in the Caracol area or at a site further south near Pusilha.

A final point is the striking chemical similarity of plate BVB007 and MSC388/MSC388 (Figure 7f), an Early Classic lidded tripod dish from the tomb of Yax K’uk’ Mo’, the founder of the Copan dynasty. Previous research identified this tripod dish as an import to Copan from somewhere in the central or eastern Peten lowlands. We now can narrow its origin to western Belize, perhaps even to Caracol. Given the monumental records from Caracol, Pusilha and Nim Li Punit that indicate relations with Copan (Grube 1990; Grube, MacLeod and Wanyerka 1999; Marcus 2004:371; Martin and Grube 2000:201; Wanyerka 1996), the presence of a pottery vessel from western or southern Belize in the tomb of Copan’s dynastic founder is not out of place.

Conclusions

In summary, our investigations of the pottery from Baking Pot Group 1 indicate...
that the site had developed vigorous ceramic traditions that were in-step with those of its immediate cultural vicinity. The ceramics also point to relatively strong and consistent relations with Buenavista del Cayo, a regional center of notable power that seemingly functioned as an intermediary between western Belize and the dynamic polities of the eastern Peten. Baking Pot, too, may have been in direct contact with these other sites, especially Holmul and its nearby satellite centers. Baking Pot likely, too, had direct interaction with Caracol and likely also sites to its south and west, perhaps extending as far as the Guaytan area in southern Guatemala. In short, although the prevailing view of ancient Baking Pot may characterize it as an inconsequential, backwater locale, our date indicate instead that it was a robust population center participating fully in the social, political and economic enterprises that typify Classic Maya civilization.

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Evidence from across upper northwestern Belize indicates dramatic changes in Maya social and political organization from the end of Early Classic through the Late Classic (from ca. A.D. 450 onward). These transitions are visible in the material record through altered growth trajectories of site centers, shifting rural settlement, and in patterns of regional ceramic production. We also find evidence for differences in the ways certain natural resources came to be utilized and for important environmental changes, including rising water tables and, later on, droughty conditions. In marshalling these data, we see the Late Classic (ca. A.D. 600 to 850) organization of our study area to be the result of combined inputs from and requirements of multiple quarters of society, including urban and rural residents as they responded to both natural forces and the well-documented political developments across the Maya Lowlands.

Introduction

Over the past four seasons, our project has adopted an approach to understanding regional political organization in upper northwestern Belize that we term “political ecology.” While the primary aim of our research is to understand changes in the political organization of centers and their sustaining populations, particularly from the end of the Early Classic through the Late Classic, assumptions implicit to our approach require that we examine multiple lines of evidence from multi-disciplinary perspectives. These assumptions include (1) that local political arrangements were the result of negotiated relations between near-site and hinterland producers and site center-dwelling elites, and (2) the ability of both urban elites and hinterlanders to put into practice strategies for achieving their livelihoods and maintaining their role(s) in society was subject in part to outside forces that were often beyond peoples’ ability to control. These assumptions direct our research to both site center and outlying residential areas; move us to use comparative data on political conditions and histories from across the Maya Lowlands (such as from epigraphy and iconography, rank-order comparisons of major centers, and controlled excavations of elite contexts from palaces and funerary temples); and require that considerable attention be given to reconstructing past environments and understanding how they changed through time. This approach is particularly well suited to understanding political organization in a region of the Lowlands in which epigraphic texts and iconographic depictions of rulers and their actions are sorely lacking.

Most commoner producers were intimately linked to localized resources such as arable land, potable and agricultural water, chert outcrops, clay beds, and others (Lohse and Valdez 2004). In exploiting each resource, they enacted a variety of productive technologies and organized themselves variously so as to maximize social labor efficiency. As natural conditions changed, however, idealized technological and labor arrangements must also have changed. Conversely, central elites, who relied on utilitarian and surplus food production, often utilized exotic luxury goods as one way to engender support.
Artifacts of high craftsmanship or from non-local materials were redistributed to acquiescent followers as a means of securing loyalty. Accordingly, those of exalted status were vulnerable to disruptions in long-distance networks that supplied these important exotics. Critical services may also have been provided to the population, including sponsoring important ceremonies and rituals or organizing possible market events for the distribution of goods. Redistributing luxury items and providing services were not mutually exclusive elite strategies, though determining which was more commonly practiced in certain time periods can serve as a sensitive indicator of the nature of local political relations. From this perspective, political arrangements evident in site construction histories, including special purpose buildings and plaza spaces; the degree to which individual rulers are glorified on monuments and in elaborate burial facilities; and the distribution and size relationship of centers in a region are the result of not only elite demands of followers’ time, energy, and labor, but also of the responses to those demands. Our political ecological perspective, therefore, occupies the conceptual area of overlap between the fields of political organization and environmental resource management and exploitation and how both changed over time.

**Regional Political Geography and History**

Upper northeastern Belize lies in the Three Rivers Region, and is noteworthy for what appears to be a densely packed political landscape, at least during Late Classic times. No fewer than seven large or major centers are present, including La Milpa, Maax Na, Dos Hombres, Gran Cacao, Wari Camp, Blue Creek, and Ixno’ha (Figures 1, 2). Each of these sites has at least one ball court; Dos Hombres and La Milpa are the only centers with two courts. Additionally, Great Savanna lies only four kilometers south of Gran Cacao; while no data are available from the site, preliminary reconnaissance indicates it to be a large center. To better understand political history and environmental change, we have divided the research area into two environmental zones, the Upland Hill and Bajo Terrain to the west and the Escarpment Ecotone to the east (Lohse et al. 2004).

Little is known of the construction histories of most centers in the region, although Late Preclassic and Early Classic data from Blue Creek are fairly robust and indicate the importance of luxury goods in elite strategies for underwriting their social position. Exotic materials are frequently encountered in ritual deposits such as caches, building dedications, or burials, and are often found associated with elite activities, indicating that they were important components of strategies for currying support from locals as a means of integrating communities along lines of obligation and unbalanced reciprocity. For example, an abundance of jade (numbering over 1,000 pieces) has been recovered from excavations from a variety of contexts, including both the site center and nearby settlements. Of these pieces, over 90% were found in Late Preclassic or Early Classic contexts (Guderjan 2002). Biosilicate residue analyses of cache vessels from the site have revealed that silica-rich sponges from coastal regions were commonly included in votive offerings (Bozarth and Guderjan 2004) during the same time periods. Finally, Barrett (2004) has recorded a substantial decrease in the frequency of chert from the Northern Belize Chert Bearing Zone (also called Colha chert) from the Late Preclassic and Early Classic into the Late Classic periods. Together these data indicate that Preclassic and Early Classic long distance trade networks ran through
northwestern Belize from multiple points of origin, including the Caribbean coast, eastern Belize, and the Motagua Valley in Honduras, bringing materials important to local elites and their activities. While it is impossible to say whether these routes first went through other regions or major centers, ceramic stylistic studies show Preclassic and Early Classic affinities between northwestern Belize and the central Peten (Kosakowsky and Sagebiel 1999; Sullivan 2002), and it is likely that major Peten centers such as Tikal played a key role in organizing overland trade routes across the Lowlands at this time.

Abundant Late Classic data are available for most sites, and major construction efforts have been documented across the region, especially La Milpa and Dos Hombres. Settlement studies indicate that most of the populations surrounding these two centers dates to this period as well (Lohse 2001; Robichaux 1995; Tourtellot et al. 2003). La Milpa, in particular, was an impressive city with no fewer than 16 stelae in its main plaza and an estimated 70,000

Figure 1. Map of upper northwestern Belize and adjacent northeastern Peten, showing important centers and hinterland sites.
inhabitants at its peak in ca. A.D. 700-800. In addition to rapid site expansion, all ball courts at these two sites are from the Late Classic (Houk 1996; McDougal 1997; Schultz et al. 1994), and La Milpa rulers embarked upon an ambitious building program involving outlying minor centers at cardinal points almost exactly three and a half kilometers from the main plaza (Tourtellot et al. 2003). Water management systems were also built utilizing plazas as catchment surfaces, with runoff directed into central reservoirs. These reservoirs drained downslope through a series of terraced fields and, eventually, into the low-lying bajo agricultural systems that surround the site (Kunen and Hughbanks 2003; Scarborough et al. 1995). In this way, La Milpa evidences a well-ordered and strongly integrated community with elites providing administrative, ceremonial, and agrarian services for the population. Dos Hombres is the second largest center in the region, and based on similarity in site plan may have been integrated into La Milpa Late Classic hegemony (Houk 2003). Earlier components at both sites appear to have been utterly dwarfed by later constructions, indicating not just the to-be-expected differences in scale and magnitude, but also
changes in the very nature of the political histories of these centers as they exploded onto the Late Classic landscape.

In contrast to the Preclassic and Early Classic, Late Classic exchange networks are difficult to reconstruct, largely because of the infrequency of exotic goods. Ceramic studies, however, show strong stylistic affinities between northwestern Belize and the Belize River Valley to the south and the Becán region to the north (Kosakowsky and Lohse 2003; Kosakowsky and Sagebiel 1999; Sullivan 2002; Sullivan and Sagebiel 2003), suggesting that earlier overland trade routes were reorganized away from the central Peten. Concurrent with these shifts in exchange patterns, elite residences in central precincts become privatized, with access restricted by newly built walls or closing off of previously open stairways and ramps. This pattern has been noted across the Maya Lowlands (Joyce and Weller n.d.), and indicates a sharp increase in the social distance maintained between elites and commoners. Additionally, ball courts appear for the first time at all sites in the region except Blue Creek and Ixno’ha. The significance of the wide spread appearance of ball courts at this time is not perfectly clear, but it undoubtedly has important implications for the organization of regional politics. Additionally, surrounding settlements increase dramatically in size and density, and research has indicated that decision-making corporate groups began playing important roles in managing local agrarian resources (Giacometti 2002; Hageman and Lohse 2003; Lohse 2001).

While there is little to no evidence from within the region to explain the source of disruptions to luxury exchange systems, the transformations noted above do coincide generally with the defeat of Tikal at the hands of Calakmul and perhaps Caracol in A.D. 562 (Martin and Grube 2000). This event altered the political and economic landscape of the Lowlands, effectively ending for some time the regional dominance of Tikal. Although northwestern Belize shows no evidence of having participated in this event, even peripherally, like many other regions it is sure to have felt the ripple-like effects of interrupted trade and exchange patterns and perhaps also receiving in-migrating populations seeking to escape from areas of political violence and unrest. In any event, by the end of the Early Classic local elites appear to have lost a great deal of their ability to create and spend “ideological capital” (Inomata 2001) in the form of luxury or highly desired exotic items as a way of integrating their surrounding settlements.

Classic Period Environmental Change

While the political landscape was significantly altered by the close of the Early Classic, the natural landscape was similarly undergoing important transformations. Some changes were human induced from generations of settlement and forest clearing, while others, such as rising water tables and climate changes, were not. Regardless, hinterlanders whose livelihoods were tied to certain fixed resources were forced to respond to these changing conditions by adapting new productive technologies and by reorganizing themselves on the landscape so as to efficiently deploy their social labor. The important effect of these responses in terms of local political arrangements was that the amount of time and energy available for yielding to elite demands for participating in site center building programs or witnessing ritual ceremonies steadily diminished, contributing further to the unraveling of the relationships between rulers and subjects.

Paleoenvironmental research has been carried out by a number of researchers in the Three Rivers Region for nearly a
decade (Beach et al. n.d.; Beach et al. 2002; Dunning and Beach 2000; Dunning et al. 2003; Dunning et al. 1999; Scarborough et al. 1995). This work has recovered information from around bajo systems surrounding La Milpa and from along the base of Rio Bravo Escarpment, allowing archaeologists for the first time to be able to offer generalized environmental reconstructions for nearly the entire region (Figure 3). In both areas, deforestation began at least with the beginning of the Preclassic, ca. 900 B.C. Moderate to high soil erosion from sloping areas buried the extant ground surface, identified in soil unit profiles as the Ekluum Paleosol; this buried soil is a regional marker and dates to between 1200 B.C. to ca. A.D.80 or so (Beach et al. n.d.). Prior to this protracted process, bajos around La Milpa were perennial wetlands, with ground water seeping to the surface and running off in slowly meandering courses. Low-lying areas along the base of the escarpment were dry for the most part.

By the end of the Late Preclassic, lowland water tables started to rise, perhaps in response to sea level change. Analyses of water chemistry from across the region, by Sheryl Luzzadder-Beach, has shown that some aquifers carried an extremely heavy load of dissolved minerals and salts. In particular, this includes a series of springs that surface along the base of the Rio Bravo Escarpment. From the end of the Preclassic through most of the Early Classic, ground surfaces along the escarpment base aggraded through soil erosion from nearby uplands, periodic flood events, and from minerals, especially gypsum, precipitating out of the groundwater. This same geochemical process relating to a Preclassic sea level transgression has been documented farther downstream along the Rio Hondo (Pohl et al. 1996; Pope et al. 1996).

By close to the end of the Early Classic, soil erosion around bajo margins was severe enough to have choked off most ground water seepage within the bajos, transforming them from perennial wetlands to seasonally inundated swamps. This posed a challenge not only to agricultural production in the bajos themselves, but also on the denuded slopes surrounding bajo margins. Also around this time, farmers in low-lying areas along the base of the escarpment began to modify their fields in response to rising water tables and sediment buildup by excavating drainage ditches. As wetlands encroached upon previously dry areas, not only were new farming strategies required, but some reconfiguration of settlement patterning was also necessitated. From the end of the Early Classic onwards, only elevated terrain was suited for habitation while most of the surrounding low-lying areas were transformed into either seasonally inundated fields or parcels drained through complexes of canals (Figure 4). It is estimated that this natural process and response extends across as much as six square kilometers of low-lying area near the base of the escarpment.

Available environmental data from Upland Hill and Bajo and the Escarpment Ecotone for the later parts of the Classic period are spotty. In low-lying areas along the escarpment range, the tops of soil profiles have been plowed or cleared away by modern farming and settlement. Accordingly, we know little of how the Late or Terminal Classic Maya continued to respond to the changes noted earlier. In the Upland Hill and Bajo terrain, however, another episode of moderate soil buildup has been documented associated with Late and Terminal Classic settlements (Beach et al. n.d.). While understanding the source and nature of this process requires additional research, it is possible that the faint paleosols that have been found in these areas
Figure 3. Generalized environmental reconstructions for Upland Hill and Bajo (top) and Escarpment Ecotone (bottom) areas of upper northwestern Belize.
can be linked to the sudden increase in regional populations, perhaps including migrants into the areas around the sites of La Milpa and Dos Hombres (e.g., Dunning and Beach 2000:196; Tourtellot et al. 1995). Farmers in these areas were forced to implement such practices as they could, including expansive terrace and berm construction, to manage the remaining soils and their moisture content (Beach et al. 2002). It is our contention that these practices required changes in settlement configuration as well as new arrangements for the sharing of social labor for field management and terrace or berm construction and maintenance.

**Responses to Changes in Politics and Environment**

While our research has spent much of the past seasons gathering data on environmental change, we have also explored some responses to these changing conditions as they played a part in regional political organization. Much of this research is ongoing, and below we present only some preliminary findings. These findings include new evidence for changes in hinterland ritual behavior in the early part of the Late Classic and source analysis of pottery manufacture and raw clay resource exploitation.

**Hinterland Ritual**

Research in 2001 and 2002 (supervised by Gregory Zaro) at the non-residential Quincunx Group, and in 2003 and a nearby patio group (supervised by W. David Driver), both located two and a half kilometers southwest of the Blue Creek center, recorded important evidence for ritual activities associated with solar observations and the underworld (Driver 2003; Zaro and Lohse 2005). The
Quincunx Group is a five-mound complex dating to the early part of the Late Classic period (Laura Kosakowsky, personal communication 2002). Its asymmetrical layout (Figure 5) corresponds with Maya concepts of the symbolic structure of the universe, with a central component surrounded by four elements at cardinal or, as in this case, intercardinal positions. Our research at this important group, together with on-site observations both near (within one or two days, weather permitting) and on the summer solstice, suggest that it provided controlled sight lines for monitoring at least the sunrise on June 21. Elsewhere in the Maya world (Aveni 2001; Milbrath 1999) and in Mesoamerica (Šprajc 2001), constructions were designed and built to accomplish this task, though these nearly always consist of monumental temples, special purpose buildings, or platforms found in site centers.

Investigations showed that the nearby patio group was built and probably occupied at the same time the Quincunx Group was in used (Driver 2003). A small eastern shrine was excavated, yielding a small cyst burial containing a modest assemblage of four vessels; a fifth vessel was found outside the burial chamber in a cache deposit (Kosakowsky 2003). Among the vessels in the burial chamber was a Saxche Orange polychrome bowl (Figure 6) showing a scene of a tripartite figure believed to be God N, with his female consort, in the process of administering a hallucinogenic enema. God N is commonly associated with the Underworld as well as enema ritual, and the presence of this iconography at this small group is noteworthy. Together with the nearby solar observatory, we suggest that the early Late Classic social and political climate may have been such that hinterland farmers were either required or permitted to assume oversight over important symbolic behavior associated with calendar rituals, the underworld, and agricultural rites involving fertility and renewal. These finds provide an important indication of the (in-)ability of central elites at Blue Creek to administer such needs during the early phase of the Late Classic period.

Regional Ceramic Manufacture and Exchange

From 2001 to 2003, collaborative efforts were undertaken to study changes in the regional production and exchange of ceramic wares, particularly across the transition from the end of the Early Classic into the Late Classic (Kosakowsky and Lohse 2003; Little et al. 2004a, 2004b). Combining type-variety with instrumental neutron activation analyses (INAA), we sought to link finished ceramics recovered through excavation with local clay resources in determining patterns in the movement of certain finished goods between and among political centers and their sustaining hinterlands. (The reader is referred to Little et al. (2004b) for a discussion of the methods used in INAA and the 33 elements that were measured in short, middle, and long counts.) Through the efforts of Dr. Laura J. Kosakowsky, sherds recovered from excavations at both center and rural contexts were selected for sampling; these were limited to Aguila Orange (Early Classic) and Achote Black (Late Classic) specimens, which were found to be widely occurring across the study area. Additionally, samples of raw clay materials were taken from adjacent to each excavation area included in the sample. Over 300 individual specimens were processed at the Missouri University Research Reactor (MURR), and to this database was added a number of specimens that had been previously processed by the Programme for Belize Archaeology Project (Lyle 2000; Manning 1997).
Samples fell into six groups on the basis of their elemental composition (Figure 7), and some preliminary observations can be made of these results. First, while clays of the Maya lowlands are generally seen as badly suited to this kind of analysis because of their poorly differentiated geologic character, one of the samples taken from between Ixno’ha and La Milpa did match compositional Group 1 at better than 50% confidence. These results suggest that pottery utilizing this material had its origins somewhere in the western half of our research area. Second, the most evident pattern in compositional group distribution is the widespread adoption of Group 2 ceramics in the Late Classic. While we cannot yet say where this pottery was being

Figure 5. Plan of the hinterland Quincunx Group, believed to have served as a solar observatory during the early part of the Late Classic.
made, it is clear that dramatic changes occurred by the Late Classic in terms of regional economic patterns. Finally, sites with larger sample sizes, including Blue Creek and Ixno’ha, show fewer clay sources represented in consumed pottery in the Late Classic than in Early Classic. While additional sampling is required to verify this conclusion, it appears as if the variety of source materials represented in Late Classic ceramic assemblages was diminished from the Early Classic. This might be taken as evidence of controlled or administered ceramic production and exchange across the region. Given its rapid growth as an administrative center, it is possible that La Milpa can be associated with this development.

Concluding Comments

Given the low frequency of epigraphic and iconographic evidence, research carried out in upper northwestern Belize must necessarily rely on multiple lines of material evidence when addressing questions of political organization. In this vein, one of our guiding assumptions has been that monumental centers are but one element of social communities (after Yaeger and Canuto 2000) that extend out into sustaining hinterlands and that members of these dispersed political communities, occupying different roles and statuses in this continuum, negotiated their local political arrangements through a variety of strategies.

Tradition, heritage, ethnic and social identity, and unequal access to certain kinds of knowledge and material goods were often used to help such strategies succeed to the point where the material realities of daily life appear out of balance to outside observers, leading to misstatements about elite authority and ability to wield absolute decision-making power (Lohse and Valdez 2004). Another of our guiding assumptions has been that hinterlanders, most of whom occupied common social positions, were grounded to an extreme degree in the local environment, and that to understand their contributions to local politics, attention must be given to understanding changes in and the manipulation of agrarian and utilitarian resources.

One of the ultimate goals of our research, mapping ancient political entities onto the landscape, is no easy challenge and many of the different models that have been proposed by others for the ancient Maya are in part a product of the lines of evidence used in their definition. Adding to the complexity of this task is the fact that both communities and states are known to have fluctuated in size and sway over time (Demarest 1992; Marcus 1993, 1998; Martin and Grube 1995, 2000). Given this, we feel that integrating information gleaned from political hinterlands not only provides a firmer and more empirical understanding of the lifeways of commoner producers, but also provides a more sensitive indicator for
the ebb and flow of political tides over a region.

Below are presented three potential scenarios for how the upper northwestern Belize Late Classic region might be mapped. Scenario A (Figure 8, top) shows a La Milpa-centric landscape. This model is based partly on the rank order theory that larger sites control nearby smaller sites. This scenario receives support not only from the monumental size of the La Milpa center, but also from its vast sustaining populations, the efforts at providing an array of services including some form of water control and
Figure 8. Three potential scenarios (A, top, B, middle, and C, bottom) of the upper northwestern Belize Late Classic political landscape, based on different approaches and integration of different forms of data. Polygons are approximations only.
management, the high number of stelae (no other site in the region has more than three), the crystallization of a cruciform site plan that conforms with widely held beliefs about the order of the cosmos, and perhaps its entry into regional ceramic production and exchange markets. No data from hinterland surroundings are represented in this scenario. Scenario B (Figure 8, middle) presumes that each monumental site core was politically independent, yielding a fractured landscape marked by many small polities. Similarly, this scenario depicts no hinterland data, and it should also be stated that this model receives no real support from current theories or epigraphically-derived understandings of ancient Maya politics. Scenario C (Figure 8, bottom) depicts sustaining areas of different sizes and extents to mirror the distribution of natural resources available to different sites in their respective settings. Site catchment areas in the Escarpment Ecotone are linear and arranged in an east-west fashion to reflect not only the distance between north-south neighboring communities, but also the orientation of regional geologic features and, presumably, natural resources. Features such as escarpments and waterways run south-to-north, meaning that most natural resources will be similarly distributed and that east-west catchments would have ensured greater access to more environmental variability and, hence, community sustainability. Conversely, polygons in the Upland Hill and Bajo are more symmetrical in their extent and form, reflecting the distribution of resources in those settings.

In truth, the Late Classic reality was probably a combination of these and/or perhaps other models, incorporating different classes of information not considered here. Additionally, the Early Classic landscape was almost certainly quite different. Nevertheless, our primary point is that political organizations and communities included a very wide variety of individuals of different social positions. All faced daily challenges, held expectations that were conditioned by their previous experiences, practiced strategies for success in their endeavors, and were affected by outside forces that were often times beyond their ability to control. But to fully understand the whole, archaeologists must subject each of these parts to examination.

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Twelve seasons of archaeological research in northwest Belize allow for analysis and interpretation of many ancient Maya activities. The Programme for Belize Archaeological Project (PfBAP) has continued efforts of survey, mapping, and excavation in an attempt to understand the social, political, and economic interrelationships between minor and major settlement areas. While large site investigations have been generally assigned to specific research agendas, the PfBAP continues a significant push to researching small sites and rural settlements. Large sites and their locations across the landscape are described. Research concerning the smaller settlements and general landscape manipulation is the focus of this presentation. Where and how were the Maya utilizing the NW area of Belize for their livelihood? What kind of life did these activities provide for most of the Maya? Settlement locations, artifacts (production and consumption), and general patterns of land use all serve to help define ancient Maya life in NW Belize. While certain interpretations are presented as preliminary, many of the findings will certainly be substantiated as research continues in this special region of the Maya lowlands.

Introduction

Beginning in 1992, the Programme for Belize Archaeological Project (PfBAP) has maintained a continued presence conducting research in northwest Belize. The PfBAP is located on property owned by Programme for Belize. The research area is known as the Rio Bravo Management and Conservation Area (RBMCA, Figure 1).

The PfBAP persistent research effort includes survey, mapping, and excavation in an attempt to understand the social, political, and economic interrelationships between minor and major settlement areas (Adams et al. 1993; Houk et al. 1993; Adams 1995; Adams and Valdez 1995; Scarborough et al. 2003). The emphasis on multidisciplinary research in addition to traditional archaeological studies has provided the opportunity to see the ancient Maya from varied perspectives including soil studies, water management, and ceramic thin sectioning to mention a few. This form of interdisciplinary research is known and practiced by many projects in the lowlands (for example, recently at San Bartalo, William Saturno personal communication 2004; and at Holmul, Francisco Estrada-Belli personal communication 2004), and most notably among various programs of research in Belize (Chase and Chase 1994; Iannone and Herbert 2003; to name a few). Some of these research trajectories within the PfBAP allow for analysis and interpretation of many ancient Maya activities concerning issues that have been difficult to assess from standard archaeological research.

The interest of this presentation is to look at how various, not necessarily all, ancient Maya communities in northwest Belize may have adapted to their environments (physical, social, political, etc.). While large site investigations have been generally assigned to specific research agendas (Scarborough et al 1992, 1995; Houk 1996; Lohse 2004; King and Shaw 2003), the PfBAP continues a significant push to researching small sites and rural settlements (Sullivan 1993, 1997; Hughbanks 1995; Munoz 1995; Robichaux 1995; Walling 1995). In this paper, large sites as well as smaller settlements will be...
addressed particularly in terms of their occurrence across the landscape.

**The Prehistoric Maya Landscape**

The RBMCA area is topographically varied as defined by escarpments, west to east, the La Lucha Escarpment, the Rio Bravo Escarpment, and the Booth’s River Escarpment (Figure 2). These present an approximate elevation transition of 200 meters.
Large sites on the RBMCA currently number five known, another reported by PfB rangers, and at least two others anticipated given settlement and topography expectations. The five known sizeable sites are La Milpa, which is the third largest site in the country of Belize (following Caracol and Lamanai), Dos Hombres (Figure 3) which is about 70-75% the size of La Milpa, Maax Na, and Gran Cacao which are nearly the size of Dos Hombres, and Great Savanna (only one plaza mapped, but reported to be near the size of Gran Cacao). The intriguing discovery in the RBMCA, since the start of the PfBAP, is the number of large sites and their relative proximity. The occurrence of these large centers implied a large population, but the significance of this implication went unappreciated until settlement studies were pursued.

Having these centers in relative proximity (e.g., DH is 12.5km s/se of La Milpa, and 8km se of Maax Na, and Maax Na is 7km of La Milpa), also brings into question the numbers of elites, how they contended with each other and what/how much did they control to maintain their polities. One point is clear and verified by the several years of survey and mapping, the landscape around these centers was utilized extensively and intensively. There seemed to have been a worldview that filled all available space or in essence, a full landscape.

Commentary about smaller sites and rural settlement is warranted to help provide substance concerning issues of livelihood in
Life and Livelihood of Northwestern Belize Maya

Figure 3. Map of Dos Hombres (after Houk 2003).

The prehistoric RBMCA. It is research concerning the smaller settlements and general landscape manipulation that is a significant focus of this presentation. Where and how were the Maya utilizing the NW area of Belize for their livelihood? What kind of life did these activities provide for most of the Maya? Properly documented data concerning settlement locations, artifacts (production and consumption), and general patterns of land use all serve to help define ancient Maya life in NW Belize. It should be noted that the NW Belize area is a highly complex system of microenvironments providing varied resources that lead to broad settlement (Scarborough et al. 2003).

The landscape between the major centers is filled with smaller sites, groups, houses, terraces, and other features (Walling 1995, 2004) indicating a complete and busy utilization of the region. Several sites are lithic production zones (Lewis 1995; Tovar 1995) while others are definitely involved in intensive agricultural activities such as hillside terracing on escarpment faces and knolls (Walling 2004; Hyde and Grazioso 2004). In several locations are also ancient wells (Tovar, Valdez, and Scarborough 2004) that could have provided locations with dependable water in terms of supply and quality at least through the Late Classic.

A pattern thus far revealed for most of the rural areas (as investigated for the last decade) indicates an ancient farming and/or production community characterized by integrated hydrological and residential architecture (for example, at Medicinal Trail). Cross-channel terraces are another form of landscape modification associated with several outlier settlement zones as evidenced near the Barba Group mapped and tested by Hageman. In any case, the various features of Maya adaptation in these “away from the center areas” represent substantial ancient planning and coordinated construction.

The Rio Bravo flood plain is another area of high productivity that may have been extensively and intensively cultivated. Annual flooding that replenishes the soils are event types seen in other areas of the world. Additionally, cultivation occurred in other stream, river, and inundated areas in the form of channeled fields familiar to most Mayanists.

Unfortunately, presented here is an emphasis on agricultural activities and perhaps stone tool production. The reason behind this rather narrow information source is mostly an issue of preservation. It is likely
that within the RBMCA were many resource specialized communities. This notion may be further supported by the presence of occupied microenvironments and perhaps the differences in settlements across the landscape. Recent research into ceramic production has demonstrated that local clays are excellent for production of clay bodies as well as slips (Clint Swink pers. comm. 2004). There remains, however, no evidence for kilns or other ceramic producing signatures. One interesting find is that it may have very highly unlikely that ceramics were produced during the rainy season, presuming the past seasonality was similar to today’s. If correct, pottery production may have been a seasonal endeavor at least in terms of construction, drying, and firing.

Much of the data concerning dispersed settlements and the specific interpretation(s) of the data have been compiled by many researchers on the PiBAP. Hugh Robichaux (1995), Stan Walling (2004), Jon Lohse (2001), Jon Hageman (2004), Rissa Trachman (2004), and Richard Meadows (2004) are among those responsible for helping to expand our knowledge of the dispersed settlement (Figure 4) and some of the activities at these distant locations. Trachman (2004), for example, is taking the settlement area data and moving significantly forward to provide an analysis of issues concerning gender and identity.

Life and Livelihood

The question of “how the ancient Maya were doing” in the RBMCA remains a general reconstruction that can be modified with new data and analysis. The large centers certainly seemed to prosper throughout much of their history (Late Preclassic to Terminal Classic). Most (all upland) sites were abandoned in the Terminal Classic. Monumental construction, elite burials with significant furniture, etc. all point to an area of great significance and prosperity in the great Maya realm.

The numerous smaller sites and settlement speak to an area that was highly productive, extensively, and intensively populated. The landscape modifications along with the settlements show that most of the area was utilized in some capacity. Among the smaller settlements is that simple utilized flakes, chert debitage, and cores in most, if not all, household groups indicate probable ad hoc tool creations on a local level (Walling 2004). Although we find and identify these tools, their specific function remains unknown. These might have been everyday tools or items for a particular “perishable” production (feathers, etc.).

The skeletal remains support the notion of a generally healthy population for most of the periods. The bones also show, however, various evidences of trauma and physical ailments (arthritis) common to many populations Frank Saul and Julie Saul personal communication 2004). Another interesting issue is that at one settlement, Chawak But’óob, unlike other area, could look down into Dos Hombres (the presumed social and political superiors) about 2 km to the NE (Walling 2004). The allowed positioning must have stemmed from the value of production at the small settlement area.

The ideational landscape is also of great significance. At Dos Barbaras, a small site west from Dos Hombres is at least on small un-carved stela that may have been stuccoed and molded or painted. The Chawak But’óob settlement also displays an un-carved monument. Both finds indicate rural/distant areas recognized & involved in ritual and perhaps historical events. Stan Walling working in this settlement zone, that seems focused on terracing and related activities, has recently discovered a significant ball court. Walling (2004) will be reporting on the find shortly.
Final Comment

As a general statement, evidence from the RBMCA indicates a robust society, active in production and consumption, and one that must have been integrated into a greater whole through the involved elite. Whether the various segments of the entire region were organized in a system of hierarchy or heterarchy (or both) is not at issue here, but that the region seems to have segments dependent upon each other and thus provided for a long continuous history is of great interest. It is clear that life and livelihood in the greater RBMCA area involved daily activities of subsistence production and consumption as well as an integrated system of ritual and beliefs. Political and social integration seem likely, but the specifics of direct ties between centers small and large remain obscure. While certain interpretations are presented as preliminary, many of the findings will certainly be substantiated as research continues in this special region of the Maya lowlands.

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Reconnaissance and excavations performed by the Formalized Landscapes Project within the Programme for Belize lands in northwest Belize during 2003-2004 reveals the diversity of ancient Maya settlement over areas including the Rio Bravo and La Lucha escarpments. Over 35 structure groups were surveyed and mapped along with a variety of landscape modifications such as ramps, terracing, levelled infields, drainages, and other water management features. Excavations found extensive occupation during the Late Classic (ca. 600-800 A.D.) to Terminal Late Classic (ca. 800-900 A.D.) Certain building groups also had evidence of Early Classic (ca. 250-600 A.D.) occupation, one of the issues that we will return to investigate further. The diverse array of buildings and features, the complexity of their arrangement and the density of ancient Maya land use in this region resists traditional typological classification. Where the elements of community, economy, politics, ideology, and environment are numbered among the many variables to be included, these circumstances have encouraged us to think in terms of a highly complex cultural landscape, the settlement patterns of which exist as multiple continua of variation. These continua in turn disclose the plurality of social and political economic hierarchies that were present in ancient Maya society.

The Formalized Landscape Project
Over the last twelve years, archaeologists associated with the Programme for Belize Archaeological Project have documented and interpreted ancient Maya settlement in the Rio Bravo Conservation Area of northwest Belize and how this settlement articulates with larger centers identified in the region (Adams and Valdez 1995; Scarborough et al. 2003). The Formalized Landscapes Project, following in a similar path as previous research in the region, is focused on gaining an understanding of the complexity of ancient Maya society through an assessment of building groups and associated landscape modifications or features located away from regional centers (see Ashmore 1981; Hageman and Lohse 2003; Iannone and Connell 2003; Lohse 2001; Robichaux 1995; Scarborough et al. 2003; Schwartz and Falconer 1994; Willey et al. 1965).

By examining ancient alteration of the landscape in terms of both density and variation of ancient structures and features within the context of the diverse physiographic and environmental zones characterizing the south-central portion of the Rio Bravo and the La Lucha escarpments, researchers are moving away from a typological classification of ancient Maya settlement. In doing so, a research program was devised focusing first on documenting structure groups and features within the project study zone (Figure 1). This meant establishing a mapping and survey program, followed by intensive excavations that allow for an interpretation of feature and building function based on artifact contexts and inventories, construction and occupational histories, and architectural preservation.

The initial goal of the 2004 season was to extend the project's main transect on a 270° bearing from the Gallon Jug Road west into the interior of the Rio Bravo Conservation area to establish a route to the Belize-Guatemala border. This transect
would be the ‘main road’ so to speak for researchers looking at settlement located to the north and south of the transect, as well as begin to establish a research link between the far southwestern portions of the Rio Bravo Conservation Area and archaeological research that has been conducted at sites along the Rio Bravo. Moreover, the transect would also be the basis for initiating a research link with sites to the west, with the hope of contributing to further comparison of the numerous sites located in the Ixcanrio of northeast Guatemala and those present what is sometimes known as the Three Rivers Region of northwest Belize.

**Regional Physiography**

The main transect is a 12.0 km long east-west line that currently contains two north-south *brecha* located just to the east of the interface of the Rio Bravo escarpment and what has been designated in this area as the Bullet Tree Bajo (Figure 2). As survey work progresses over the next three years, a
total of 6 north-south brecha, each 4 km in length, will be opened at 2 km intervals along the transect.

In terms of physiography, the main transect originates in the upland portions of the Rio Bravo escarpment dividing the Rio Bravo embayment and the Bullet Tree Bajo, the large bajo separating the Rio Bravo and the La Lucha escarpments and we encountered hints of settlement within the narrow confines of our initial transect. The transect then climbs the La Lucha escarpment some 140 m above the bajo and traverses the hills and valleys of the La Lucha uplands of the far eastern Peten into the adjacency zone along the Belize-Guatemala border. Of particular interest for the 2003-2004 seasons were the areas consisting of the deeply incised uplands of the western slope of the Rio Bravo escarpment and the remnant channels that link the Bullet Tree Bajo with the Rio Bravo embayment. This cross section provides a broad perspective with respect to how ancient Maya communities organized themselves and transformed this physiography into a cultural landscape.

As has been noted in previous work, the Rio Bravo and La Lucha escarpments in Belize are in actuality the far eastern extent of the physiographic and environmental zone known as Peten. It has been suggested that the ancient settlement within this dynamic physiographic and environmental context represents the eastern manifestation of the polities that were dominated by the regionally powerful centers of Rio Azul (Adams 1999), La Milpa (Hammond 1999; Tourtellot et al. 1999), as well as Kinal (Scarborough 1994) and Dos Hombres (Lohse 2001), as well as a number of other large secondary centers. The centers in the Three Rivers Region likely participated in political and economic relationships with sites located to the east, on the coastal plain of northern Belize, as well as those located in the uplands of the northeastern Peten. How this interface influenced the settlement and social organization of local communities...
within the escarpment environment is a question that remains to be answered.

**Survey and Mapping Program, 2003-2004**

Survey and mapping methods were centered on the most efficient way to open transect for research and mapping. This meant that researchers were focused on a reconnaissance level mapping program. This mapping program was based primarily on utilizing Global Positioning System (GPS) technology as well as more traditional compass and tape. Structure groups and features were located by obtaining UTM coordinates from between 6 and 10 m accuracy. Then groups and associated features were documented using a hand held Silva compass and 30 meter tape.

The opening of the initial north-south *brecha* resulted in the location of settlement both to the north and the south. By following localized drainage system to the south, we encountered both dense and contrasting structure groups and settlement, as well as a numerous of agricultural features such as level and walled garden plots, infields, and terraces. What is important here is that at the reconnaissance level of survey researchers utilized both a systematic yet flexible methodology that focused on covering a large area and documenting location quickly and accurately.

Some 35 building groups have been mapped in the study area over the last two seasons. Over 25 of these are located in a 1 km² area on the western slope of the Rio Bravo escarpment. While 25 structure groups per km² clearly do not represent an urban environment, it might indicate a higher level of structure density than what could be considered rural, especially if densities remain constant or increase across a larger area. This line of questioning becomes relevant when one considers the size of the mapped groups and that most are interspersed with smaller house mounds and outbuildings that have yet to be mapped. The question is: would 200 people per km² over larger reflect a rural society? Indeed, the size of the building groups we have encountered over the past two field seasons are important as well. These groups include substantial structures with buildings ranging from 4-8 m in height. These groups often exhibited *chultuns*, walled garden plots, leveled infields, *aguadas* and other kinds of water retention features.

As we begin to understand the extent of these communities, establishing a local chronology became an imperative, and our efforts became focused on understanding whether these landscapes took their forms during one particular time period, or whether both structure groups and features were occupied and abandoned at different times.

**Results of the 2004 Excavations**

During the 2004 season an intensive excavation program was initiated designed to recover data geared toward addressing four primary and ongoing research goals. These were: establishing initial chronologies for individual structure groups, obtaining data with regard to construction histories, examining architectural preservation, and an initial exploration of a lithic quarry and reduction area known as the La Lucha workshops.

**Group B, Discussion of Excavations.**

Group B is a small *plazuela* located on the west side of a north-south running drainage that flows into the large westward draining *barranca* that empties into the Bullet Tree Bajo. The slopes of this drainage appear to have been terraced, evidenced by small mounds of earth and limestone cobbles interspersed across the steep banks of the drainage. The floor of the drainage appears to have been leveled and the central portion channelized. The group itself is
located some 10.0 m above the drainage floor and is comprised of four structures oriented in the cardinal directions. The north structure is the highest, some 3.5 m above the plazuela floor, but the east and west structures are also well defined, each 2.0 m in height. At the southeast corner of the group there is a small, perhaps 4.0 m in diameter depression that may have been used as a water catchment area for the group or perhaps served as a garden plot. What is clear is that this group is associated with landscape modifications along the adjacent drainage to the east indicating a significant amount of labor was necessary in the construction, maintenance, and use of both the structures and associated landscapes. Additionally, some 30.0 m south of Group B, a 1.5 m mound, some 5.0 m across was documented.

The group was selected as part of a sampling strategy that is geared toward understanding the construction history of a cross cut of structure groups in the study area. A total of three suboperations were excavated at Group B. In terms of construction and occupational history of the group, the excavations at Group B yielded some interesting, though by no means obvious results. All excavations were extended to bedrock, located 75-100 cm below datum. Due to the shallow nature of the cultural deposits, it seemed clear that the group was built and occupied in one construction phase. A thick layer of ashy soil located in the northern portion of Suboperation 3 as well as pieces of burned limestone suggest that the north structure of Group B was burned at some point in the past. Several pieces of ceramic sherds were recovered, all unslipped types likely of Late Classic origin. In terms of the lithic material, numerous pieces of debitage were recovered as well five chert biface fragments. This residential group was built on a low outcrop of limestone, was likely occupied during the Late Classic Period for no more than 200 years.

**Group E, Discussion of Excavations.**

Excavations were also undertaken at the structure group designated E located 125 m to the west of Group B (Figure 3). Group E was selected for several reasons. Initial interpretations from survey and comparison indicate that Group E represents a larger, well-constructed building group oriented around a small plaza. The group is closely associated with several smaller structure groups located to the north-northeast and a larger group exhibiting an open plaza located some 75 m to the west, designated Group F. Group F represents a marked contrast in terms of the use of space by the community who lived here, whether the groups were occupied coevally or not. We contend that they were. The close association of these contrasting groups and the surrounding landscape modifications and smaller mounds and structures, a total of six groups of at least three buildings each within a 200 m x 200 m area in occurring with over a dozen isolated mounds suggests that this was a spatially bounded community dominated by Groups E and F.

Excavations at Group E focused again on construction history and cultural chronology, preservation of architecture, and assessment of group function in cultural context. The substantial size of the buildings and restricted spatial access suggested that it was domestic locale. The large number of utilitarian ceramic sherds, lithic debitage, and tool forms recovered in Suboperations 1, 2, and 5 support this interpretation. The remains of at least three construction episodes were observed in the north building, a structure that is some 4.0 m high from the interior of the plazuela. The construction phases date tentatively to at least the Early Classic Period through the Terminal Late Classic. Red slipped and
polychrome sherds recovered in sealed contexts below floor three suggest that the occupants of this group were acquiring elaborate polychrome and basal flanged pottery during the Early Classic (Figure 4). Late Classic types of predominantly utilitarian wares, of large olla or jar forms, mark the upper strata (Figure 5) of excavations in the north structure. Chert bifaces and drills made from local and non-local material (Figure 6) suggest production activities were also occurring at Group E. It seems clear from the substantial size of the buildings at Group E, its close proximity to and association with landscape modifications such as leveled fields, a large, open plaza, and aguadas provide tantalizing evidence for localized political economic and social complexity.

Group L, Discussion of Excavations.

Group L is differentiated from Groups B and E by the size of the structures, the presence of multiple plazas, associated structure groups, and landscape modifications such as peripheral groups, level fields, terrace complexes, aguadas, and a small drainage canal (Figure 7). Group L is relatively distinct in both structure orientation and composition. The group consists of a main plaza, a secondary plaza, and a small interior courtyard. Group L is comprised of two lengthy range structures that border the main plaza around its north and east sides. These structures are some 3.0 m in height. In the southeast corner of the plaza is a large, multi-sided building over 6.0 meters in height. This structure has a looters trench in its east side, extending into the interior of the building. The trench shows the remains of what appears to be a corbelled vaulted chamber in the interior of the structure. Also of interest is the smaller range structure that extends out from the southeast building to the south and then turns west to the edge of the plaza. Group L is open to the west, a gradual down slope some 400 m to the Bullet Tree Bajo.
Figure 4. Selection of Early Classic ceramics from Group E.
In the northeast corner of Group L is a small interior courtyard behind the east range structure. Adjacent and to the north is Plaza Two that is bordered by cut limestone. Some 50 m to the north of this Plaza Two is a substantial structure group, designated Group P, whose range structure is some 3.0 m in height. There is also a smaller structure group located some 50 m to the south of Group L designated Group O. Adjacent to and south of Group O is a clearly defined channel that runs down slope from east to west.

Excavations at Group L yielded a significant amount of information regarding the construction history and occupation of the group and to a lesser degree, its function within the context of a relatively densely settled, yet non-urban landscape. The test pit in the central portion of Plaza One, the trench across the small interior courtyard, the cleaning and documenting of the looters trench, and the excavations at the base of the east structure, it became clear that the group was likely built in one construction phase. This likely occurred sometime during the early part of the Late Classic. Chronologically sensitive ceramics appear to link the fill associated with Structure One and the small courtyard in the northeast corner of Group L to this time frame. Structure One consists of a building sitting on a platform whose risers at least two courses high. This structure at one time possessed a chambered tomb that was destroyed within the last two years by the looters. The interior courtyard was likely just that, a small space off of the main plaza that was possibly the site of domestic activities for the occupants of the range structures. Utilitarian ceramics, chert bifaces, and ground stone all suggest activities associated with food processing and preparation (Figure 8). Little in the way of faunal material was preserved.

Figure 5. Selection of Terminal Late Classic ceramics from Group E.

Figure 6. Drill with truncated distal terminus made from non-local chert, Group E.
The small cache of obsidian found at the base of the east building, Structure One, was important for a number of reasons. Despite the fact that there were no ceramics associated with the concentration of blades and blade fragments, it is clear that they were placed purposefully on the primary axis of Structure One. There were at least 12 blades recovered (Figure 9). These were extremely thin and prismatic in cross section. They may have been placed in a basket or cloth that was not preserved. However, due to their tapered distal ends, it was clear that these blades were not used in a utilitarian manner, and may have been part of a termination or dedication ritual of the building. Utilitarian lithic artifacts were also recovered in the fill associated with Structure One. The tomb that was looted in Structure One indicates that the structure had clear ritual value. It is posited to have served as a shrine or temple for the inhabitants of Group L and perhaps the community that lived in the four substantial structure groups located in close proximity to Group L. Due to the site plan of Group L, with two large open plazas and small range structures, this was likely both a residential area for the local elite as well as a public space, perhaps where members of the surrounding community gathered for religious or political events, to seek the counsel of the local elite who lived here, or to present and receive obligatory tribute.

What is critical is that Group L exhibits clear association with surrounding substantial structure groups that on first glance again represent a spatially bounded community. Moreover, Group L was also associated with at least two kinds of landscape modification: level infields separating Groups P and O from Group L, a small *aguada* located 35 m southeast of the Group L, and the small canal located just south of Group O. Group L within the context of its cultural landscape was likely in place by the middle part of the Late Classic Period. It appears that the group served multiple functions within the complex social milieu that marked Maya society both within and outside large, urban centers.

**Concluding Remarks**

A critical part of this or any archaeological research project is compiling and synthesizing data collected during the initial field seasons, and utilizing that data to formulate coherent interpretations and a research framework for the coming year. What we have accomplished in the last two seasons is to initiate an examination of the complex cultural landscapes present in the south-central portion of the Rio Bravo and La Lucha escarpments in northwest Belize. These landscapes are the crystallization of social, political, and environmental processes and events that refract and oftentimes obscure the ancient communities who built, inhabited, and abandoned them.
By refocusing on structure and landscape variability and addressing perceptions, or misperceptions as the case may be, inherent in our own archaeological approaches, we have begun to consider a model of social, political economic, and ideological complexity that fits the settlement patterns we have observed. Part of re-examining the varying approaches used to address ancient Maya settlement patterns necessitates further field research, including continued investigation of structure groups along the western slope of the Rio Bravo escarpment and in the uplands of the La Lucha escarpment, in an effort to gain a more complete picture of the range of settlement variability present there.

We hope to begin to place this variability within a framework that views ancient Maya settlement as continua of variation (see de Montmollin 1989: 13-17, 207-218). By moving away from traditional settlement typologies based on an ordinal level of analysis and representing, to some degree, theoretical polar extremes, we can begin to understand the multiple levels of social and political economic complexity articulated by ancient Maya communities in the study area. This approach necessitates a shift in traditional thinking that would continue to view structure groups and settlement as divisible into larger rank order categories, yet leaving the essentializing types intact (see Iannone and Connell 2003: 2-5). While we agree that the rural/urban dichotomy must be interrogated within the context of the ancient Maya, we argue that approaching ancient Maya settlement as continua of variation might prove most fruitful in disentangling the complexity of a relatively dispersed yet highly variable settlement pattern as that observed in the Three Rivers region of northwest Belize.

Figure 8. Bifaces made from local chert, Group L.
We continue our research fully cognizant that whatever models we devise of ancient Maya society will always remain to some degree incomplete, and that the relationships that held together individuals and communities through whose remains we sift were far more subtle and sophisticated within their worlds than we will ever know. Ultimately, we believe that by participating in an inclusive intellectual project we not only gain a further understanding of the ancients, but perhaps more importantly, ourselves.

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As new ceramic data has been recovered in recent years archaeologists now have a more balanced picture relative to chronological change and the associated economic and political changes during the Late Classic to Terminal Classic period in the southern Maya Lowlands. This paper describes the ceramics recovered from coastal trading sites in north central Belize and puts them in the context of other ceramic complexes and cultural processes during the Late to Terminal Classic transition. The ceramics reveal a marked variability and unusual diversity of types, forms, and surface treatments merging the Peten and northern Lowland ceramic traditions. Ceramic diversity supports the central role of these sites in regional entrepreneurial activities and commercial circum-peninsular exchange at this time.

The Northern Belize Coastal Project (NBCP) has a long-term commitment to understanding settlement patterns, political hierarchies, and economies on the coast of north-central Belize. One NBCP goal has been to fine-tune the Terminal Classic to Postclassic period transitions on this coastal area (circa AD 850-1500) extending from the northern Will Bennett’s Lagoon to Pott’s Creek Lagoon to the south (Mock 1994, 1999).

Despite recent focus on this time period in northern Belize (D. Chase 1982; D. Chase and A. Chase 1988; D. Chase and A. Chase 2004; Demarest, P. Rice, and D. Rice, eds, 2004; Graham 1987; Graham and Pendergast 1989; Masson 1997, 1998, 1999; Masson and Mock 2002; Mock 1997, 1998, 1999; Walker 1990), there still is a lacuna in our understanding of the waxing and waning of populations in this arena, whether local or foreign. Evidence of Postclassic occupation, as elsewhere in northern Belize, has been more illusive due to the admixture of Terminal Classic and Postclassic ceramics in eroded, shallow surface deposits, and marked reduction in ceramic inventory characteristic of the period (e.g., A. Chase and D. Chase 1985:11; P. Rice1987: 99). Moreover, on the Belize coast, mangrove colonization, rising sea levels through time, hurricanes and tropical depressions have modified the landscape, thus creating interpretational problems for the archaeologist (Mock 1994b, 1999).

Ceramics, given their portability would have been crucial to the reorganization of social, political, or ethnic boundaries during the Terminal Classic to Postclassic transition. As flexible, portable “force” fields they could contain, mask, legitimate, and/or transform human action in many contexts (e.g., Arnheim 1969:276). Archaeological evidence suggests colonization and recolonization of sites in this coastal arena relative not only to environmental changes but the influx of migrating lineages from war-torn interior sites in the Peten and various ethnic groups from northern Yucatan (e.g., A. Chase 1985). Thus, categories of identity and frameworks of meaning would have been established using new and preexisting traditions (Stein 1998).

In previous papers I have discussed the remarkable heterogeneity of Terminal
Classic ceramics from coastal sites examined in the NBCP, as representing escalating presentation modes conforming to new modes of behavior and communication needs (Mock n.d.). In contrast to other sites, innovation in new surface treatments and decoration flourishes. These changes may occur even before the rise of Chichen Itza in the northern lowlands (Andrews 1990; Chase and Chase 1982; Chase and Chase 2004) around AD 900 and the influx of migrants from war-torn interior sites in the Peten.

At the same time clearly a division occurs at coastal sites between the Terminal Classic and Postclassic in that intensive salt production ceased sites were abandoned. There appears to be a period of abandonment and termination of sites by smashing pottery on the surfaces of structures.

Evidence shows that beginning around AD 1000-1100, some of the sites were reoccupied with settlement centered around lagoons. Noted changes occur suggesting the shift of political interactions, alliances and hierarchies along with reorganization of economic production and distribution. The diagnostic red slipped ceramics reflect a high degree of stylistic standardization in paste, slips, surface treatments, and decorative motifs focused on serpents, mats, and repetitive designs (Mock 2002a, n.d.; Rice P. 1989, 1983a, 1983b, 1999; D. Chase 1982).

In this paper I describe new ceramic evidence recovered in the 2001-2004 field seasons at the site of Saktunja that shed light on the Terminal Classic to Postclassic transition (Figure 1) in this coastal area. The evidence presented here is a reminder that we cannot always presume that all sites reacted similarly to changes at this time. Saktunja differs from NRL and other coastal sites in the presence of extensive Postclassic occupation in stratified deposits. Thus, the ongoing ceramic analysis permits some fine-tuned interpretations pertinent to the influx of new populations and ideas from northern Yucatan (e.g., D. Chase 1981, D. Chase and A. Chase 1982). The advent of political changes in Yucatan suggest the intriguing possibility that the expansion of a Quetzalcoatl/Kukulcan cult around A.D. 1000 (Kepecs 1998) is in part responsible for the florescence of Saktunja. New ceramic evidence from Saktunja will assist in efforts to understand broad processes of cultural transformations in this coastal arena.

Figure 1. Map of the site of Saktunja on Hidden Lagoon.

Background

Ceramic evidence suggests that the eastern coast of Belize had attracted the attention of Yucatan traders even before what we call the Terminal Classic period ended. Other sites investigated as part of the NBCP in Midwinter’s Lagoon, Will Bennett’s Lagoon, Will Edward’s Lagoon, and NRL in the Northern River Lagoon have extensive Late to Terminal Classic deposits overlain, in most cases, with surface traces of Postclassic ceramics (Mock 1994).
Unusual numbers of well-preserved Terminal Classic/Early Postclassic transition ceramics (circa AD 850-950) have been recovered at Saktunja and NRL as part of the continued NBCP survey and excavations, typical of inter-regional contacts characteristic of this time period (e.g., Chase and Chase 2004:18).

Located on ancient beach ridges stretched from Spanish Point southward to the Belize River these mercantile communities were involved in economies such as the extraction of marine resources, and production of shell blanks ornaments and tools and coastal trade. Specialized salt production by sal cocida continued through the Late Classic into the Terminal Classic (e.g., Andrews and Mock 2002; Mock 1994, 1999). This laborious method of salt production ended rather abruptly around AD 950.

Evidence suggests that NRL, located north of Saktunja, was terminated at this time, layers of unutilized ceramics, shell and bone ornaments, ornaments, obsidian blades, chert stemmed blades and points, bone needles and awls smashed on structures around the periphery of the site. The great numbers of stemmed bifaces on the surface may be related to warfare rather than trade (Mock 1994, 1999). New evidence from NBCP surveys indicates the presence of possible fortifications around the shores of Northern River Lagoon (Coco 1 and 2).

The Terminal to Postclassic period in Mesoamerica has been postulated as a time of broad new developments related to cultic (see also Epiclassic in Yucatan) activity centered on an overarching deity, the Feathered Serpent or Quetzalcoat-Kukulcan. The manifestations of this deity were spread by a cult as proposed by Ringle, Negrón and Bey (1998: 213) and allegiance spread through trade, war, pilgrimage, and movement of populations. Ringle, Negrón, and Bey (1998) argue that there was an undercurrent of shared beliefs crossing political and geographical boundaries symbolized by this cult. Spread by a messianic fervor, the cult was represented by a distinct constellation of traits such as ball courts and round structures. Continuing to thrive into the later Postclassic and crossing political boundaries, the cult was responsible also for the spread of the Mixteca/Puebla art style in Yucatan as expressed in murals, ceramic decoration and the ball game.

As addressed in this paper, ceramics, given their portability would have been crucial to the spread of a mobile cult by canoe borne traders plying the rivers and seacoast. Accessibility and sharing of esoteric knowledge would have promulgated a sense of common identity and shared values. Political alliances would have been initiated and maintained by the exchange of these material items.

Saktunja was first singled out in aerial photographs as a substantial village, one of thirteen sites located on and around Midwinter's Lagoon. Situated on a large working plantain plantation and thus, unlike other sites, Saktunja is partially cleared with good visibility (see Mock 1999). If portions of Saktunja had not been made accessible, the evidence would have led us to assume a sporadic, shallow Postclassic occupation. Similar to NRL, Saktunja has extensive evidence of Late to Terminal Classic settlement represented by, in most cases, identical ceramic types. Sterile deposits layered between Late to Terminal Classic and Postclassic floors at one structure, Chili Pepper Mound, offer the possibility that Saktunja also may have been abandoned.

Saktunja would have received attention from foreign entrepreneurs because of its central coastal location between the southern limits of Northern River Lagoon and the northern end of Midwinter’s Lagoon. The presence of ten docks around
the perimeter of the site located in the 1999 season suggest that during its heyday the community was located on either a lagoon or ocean cay with access to the only navigable river north of Belize City, the Northern River; which intersects with other creeks running east into the interior to sites at the confluence of rivers such as Colha (Mock 1994, 1999). Gabriel’s Island, located at the entry to the Northern River from the Northern River Lagoon and coast, would have served as gateway to coastal traffic transporting goods from and to interior sites. The small site shares ceramic types with NRL and Saktunja and appears to have been similarly abandoned at the end of the Classic with artifacts smashed in surface deposits. Postclassic artifacts such as Payil Red ceramics cluster around the perimeter of the island and are recovered under water.

**Terminal Classic Ceramics**

Most of the artifacts recovered in Late to Terminal (A.D.850-950) deposits at Saktunja, like NRL, are mixed with the crushed salt-boiling vessel fragments known as Coconut Walk Unslipped (or CWU, a crudely fired, thin-walled ceramic; see Graham 1989:150; Mock 1994b, 1999; Andrews and Mock 2002; Valdez and Mock 1991). Its’ presence is typical of other Late to Terminal Classic sites on the coast. The ceramics at Saktunja, like NRL, are represented by large, well-preserved sherds with sharp breaks, thus not only allowing easier assignation of types but permitting refits. Both deposition contexts prove to be informative as to modal and attribute changes occurring at this transition to supplement the type-variety mode analysis.

A noted characteristic of both sites is the incredible frequency and variety of ceramics. At Saktunja the ceramics, in some cases, are literally layered in midden deposits, more like ceramic “dumps,” the numbers clearly beyond household needs. Saktunja shares many ceramic types with NRL that are considered as markers for the Late to Terminal Classic period (Masson and Mock 2004; Mock 1994, 1999).

The red slipped Tinaja Red footed bowl and water jar (Adams 1971:235; Ball 1977; Sabloff 1975; Valdez 1987) with outcurved or vertical neck is a persistent utility form at Saktunja into the Terminal Classic transition. Paste characteristics (fine grained finely sorted white calcite paste) of ceramics recovered at Saktunja suggests Tinaja Red heralds the Payil Red utility jar of the Postclassic. In some cases, without the identification of modal attributes, it is difficult to separate the two ceramic types in terms of slip color.

A distinct set of larger vessels such as bowls with restricted or unrestricted orifices are characteristic of the Terminal Classic, as elsewhere, either for storage, preparation, or food presentation to large groups. The ceramic inventory of Saktunja includes the characteristic large Subin Red incurved-rim bowls or basins with distinctive, circumferential ridge (Adams 1971; Mock 1994a; Sabloff 1975; Valdez 1987). Changes to this ceramic type during the Terminal Classic include both a thickened interior rim and appliqué ridge and streaky orange slip.

Seemingly, attributes of this type are echoed in the newly popular basin forms in the Campbell’s Red Group, with large rolled rims, and slate-like slipped and burnished interior, reflecting the influence of Yucatan slate ware vessels (see Chase 1982; Walker 1990; Mock 1994a). Other typical ceramic forms are large, red-slipped San Jose V-type Roaring Creek (Thompson 1939) or Kik Red (D. Chase 1982) pedestal bowls with sharp medial angles that presumably were serving dishes used in commensal activities. Interestingly, two basal sherds belonging to this ceramic form, one from NRL and one from Saktunja, were recovered--both with
identical quadrilateral post firing designs scratched into the bottom of the plate.

Another large form, the Daylight: Dark Night Orange is also well represented in Terminal Classic deposits at Saktunja, distinguished though by new forms such as plain and incised rim bands on round-sided bowls (see for example, Masson and Mock 2004: Fig. 17.9). Designs of swirls replicate designs from Chichen Itza (Brainerd 1958: Fig. 92b, Fig. 15a).

Black, slipped ceramics are represented by a variety of Achote Black types such as Torro Gouged-incised cylinders and Cubeta-incised, incurved bowls (as well as a few sherds of the Tepeu II Infierno Black Group) in the Saktunja collections (Mock 1994b). The Achote Group provides the palette for additional decorative treatments at this time, including appliqué, impressions, modeling, and composite (Ball 1977; Gifford 1976; Rice 1987; P. Rice and D. Rice 1985; Sabloff 1975; Smith 1971; Thompson 1939). Slip though, as at other coastal sites, continues to be variable, ranging from opaque black to streaky black-brown, sometimes almost yellow-brown (see D. Chase 1982:507). Achote Black is common among other assemblages of Late and Terminal Classic ceramics from Belize (D. Chase 1982; Mock 1994b; Walker 1990). The Meditation Black type (see Adams 1971; Ball 1977; Gifford 1976, Valdez 1987), typified by plates or platters with incised circumferential band at Saktunja, may be related to Yucatan Herradura Brown-black, characteristic of northwestern Yucatan (see Fry 1987:116). Other black slipped ceramic types with painted, punctated, and appliqué decorations and resist appear (see Masson and Mock 2004: Fig. 17.9).

The Palmar and Saxche groups, which made their appearance in the Late Classic period, unlike other Peten sites, continue to be prominent at Saktunja as the Terminal Classic draws to a close—in plates, cylinders, and bowls (see Masson and Mock 2004: Fig. 17.7; Mock 1994). Zacatel Cream-polychrome is well represented in a small in-curved bowl forms and bowls with out-curved walls. The slip however is streaky and often brown or yellowish brown (Masson and Mock 2004: Fig. 17.10. One Terminal Classic/Postclassic polychrome type, Fat Polychrome (see Mock 1994b: Fig. 2.7), that is shared by NRL and the Salt Creek site seems to be a coastal diagnostic of the Terminal Classic (Mock 1994b). The characteristic form, only found in surface deposits is a very large basin with slightly outflared walls, thick bolstered rim and crudely painted black designs. Stylistic attributes and paste suggest it is from one northern Belize production locale, perhaps Santa Rita, where it is noted by the Chases (personal communication, Arlen Chase, 2002). This very late ceramic type also reflects the influence of Capech-related slate wares in its modal characteristics (e.g., Brainerd 1958:196-197: Fig. 43a).

So, typically, just as we see the retentions of the Late Classic canons in the ceramic assemblage, there is a transformation affected by strong Yucatecan influence from the north—in particular, in slate ware jars and bowls (or imitation in some cases) that replace glossy wares in popularity. Slate utility wares include restricted mouth jars with strap handles, thick rimmed bowls with rounded sides and flat bottoms (e.g., Brainerd 1958: Fig. 92j), and tripod, vertical walled basal break bowls (see also Nohmul and Santa Rita (Chase 1982:502-503; A. Chase and D. Chase 1987); Cerros (Walker 1990); Becan (Ball 1977) and Colha (Valdez 1987), thought to be indicative of exchange or contact with the northern lowlands. Sotuta style slate wares recovered at Saktunja include Chumayel Red-on-slate, Sacalum Black-on slate or Chichen slate, Pixton Trickle-on-Gray
Terminal Classic to Postclassic Saktunja

(Mock 1994b; see Ball 1977; Smith 1971; Valdez 1987; Walker 1990) and flaky redware (Brainerd 1958). Slate ware tripod bowls display gouge incised mat motifs typical of Tabi Gouged-incised and in one case punctuated decoration (Mock 1994b). At this time Terminal Classic ceramics also begin to take on architectural characteristics such as step frets, and panels delineated by serpent/mat iconography.

A basal break, flat, bottomed slate bowl from with slab supports recovered at Saktunja is characterized by slightly outflared walls, and round lips, attributes that are characteristic of slate ware vessels illustrated in Brainerd (1958: Fig. 67d;) and Sanders (1960: Fig. 11a1-3).

Terminal Classic ceramics diagnostics such as Peto Cream bowls, an imitation slate ware (Rice and Forsyth 2004:48) and small Sayan Red-on-cream bowls with outflared walls (displaying repetitive circumferential bands of scroll/serpent designs) occur in shallow deposits at Saktunja (see Miller 1985: Fig. 5b). This ceramic type occurs at other coastal sites such as NRL and Salt Creek and is reported to be a diagnostic of the Postclassic.

Although Encanto Striated and other Late Classic utility types continue from the late Classic, other utility forms appear at Saktunja that are identical to those of NRL; a more diminutive olla/jar form (tentatively given the type name Crabo Unslipped at NRL appears. The jar form displays a flannel-like gray surface (similar to Santa-Unslipped of the Cohokum Group), a characteristic of the Postclassic (Mock 1997, 1998, 1999; n.d.; Masson and Mock 2004). Redneck Mother Striated short-necked ollas are present as defined by D. Chase at Nohmul (1982; also see Walker 1990) (Figure 2).

At Saktunja as at NRL, comals make an appearance possibly due to contact with foreign traders or émigré residents. Comals have been reported in Late to Terminal Classic contexts from a number of sites (e.g., Ball: Albion Island; Gifford 1976:94, 97, 306; Sabloff 1975:154).

Figure 2. Redneck Mother Striated Utility ware found in Terminal Classic deposits at Cabbage Ridge.
One fundamental change to be anticipated with the arrival of new populations would be the introduction of new food technologies with attendant ceramic containers. Food was a source of power across multiple domains and could shape or reshape social behavior in commensal activities such as public feasting. In societies that did not separate secular from sacred, food traditions would have coexisted with changing ideologies (e.g., Ringle, Negrón and Bey 1998: 185, see also note 3). As Mills (1999) argues for southwestern ceramics, the transmission of new food technologies or movement of peoples also might include a variety of changes in recipes, etiquette, meal scheduling, and types and numbers of food courses.

Although drum fragments are present, censers are not common at Saktunja in Terminal Classic deposits. A peculiar flat, thick walled sandy paste ceramic with square corners and matching sherds with squared off edges (2cm thick) does appear, possibly the base to a brazier or censer (see for example, Rice 1999).

**Saktunja-Postclassic**

We had anticipated Postclassic presence in the 1994 field season at neighboring NRL, but had recovered only one (1-10cm) shallow deposit (Mock 1994b) of Postclassic ceramics layered in Terminal Classic deposits on monumental structure in the site center, that date to circa A.D. 1100-1300. The ceramics (one sherd of a Cehac Hunacti censer, a Payil Red parenthesis jar rim and small bowl sherds to an incised grater bowl with effigy support) did not indicate an occupation but rather a short visitation.

Thus we were surprised to find Postclassic artifacts mingled with Terminal Classic artifacts over the entire surface of the Saktunja site in the NBCP 1999 field season. Two structures were singled out for excavation: Chili Pepper Mound, distinguished by a high percentage of Postclassic ceramics in the initial deposits, in particular Payil Red, and Beacon Hill, an elite structure displaying an admixture of Terminal Classic and Postclassic ceramics.

Generally Postclassic slipped ceramics recovered in coastal surveys as elsewhere, are placed into the following groups: Zakpah Orange-red plain, incised, and gouge incised; and later Postclassic Payil Red ceramics, plain or incised. However, the former is very rare at Saktunja, with only an occasional rim sherd to a Lamanai style chalice or footed bowl being recovered while Payil Red is abundant.

Payil Red is a tenacious Postclassic marker occurring at the coastal sites of Los Renegados (Valdez and Guderjan 1992), Cerros (Walker 1990), and Santa Rita (D. Chase and A. Chase 1988 (assigned to AD 1150-1300 based on radiocarbon dates), and Laguna de On (Masson 1997, 1999; Mock 1997, 1998, 1999), Colha (Valdez 1987; Mock 1994b) and Ek Luum (Valdez et al. 1995:104-105). It is dated to the Middle Postclassic (A.D. 1200-1300) at Mayapan, and approximately A.D. 1140-1400 at Lamanai (Graham 1987:81-82) and Marco Gonzalez (Graham and Pendergast 1989); the latter dates correspond to the ceramics at Saktunja.

The ceramics display decorative attributes and modes that connect them to both the Buk and Cib phases at Lamanai (Graham 1987; Graham and Pendergast 1989; Pendergast 1982, Tulum (Sanders 1960) and Mayapan (Smith 1971).

Characteristic attributes of the ceramics include a standardized dark red slip that is lustrous and opaque with high burnishing. Pastes consist of two types: a fine, pink sandy paste and a fine, white calcite paste. A common production center
Terminal Classic to Postclassic Saktunja

is suggested, possibly Marco Gonzales on Ambergris Caye (see Graham and Pendergast 1989).

Not only is the ceramic inventory diminished at this time but decorative style is now limited to the exterior of vessels.Decoration is by shallow incision and there is a consistent inventory of simplified decorative clusters usually placed on bowl exteriors or in decorative bands on bowl collars. The basic unit of design on incised Payil Red vessels represents a consistent iconographic program: the double-lined scroll related to serpent/mat iconography (see Rice 1989). This apparent simplicity does not mean diminishing complexity but a type of stylistic messaging pertinent to new sociopolitical contexts. The ceramics display a focus on these decorative clusters through the Late Postclassic suggesting iconographic style as defined by Weissner (1983) conforming to certain spoken styles, "containing clear purposeful referents aimed at a specific population.

Characteristic footed serving bowls display a consistent exterior wrap around bands of entwined guilloche-serpent iconography (see Ball 1970: Fig. 39; Pendergast 1982: Fig. 10b; Rice 1989). Innovative new vessels supports include trumpet supports and later, large elongated supports typical of the later Postclassic. The ceramics are characterized by a more limited repertoire of slipped forms such as jars, bowls and footed vessels and a marked diminution in vessel size from the earlier Terminal Classic. A unique form, the red slipped parenthesis jar typical of Mayapan and Tulum (see Sanders 1960: Fig. 5a-c) makes its appearance at Saktunja displaying different rim modes. The archaeological evidence recovered from one structure, Chili Pepper Mound, suggests that the parenthesis jars and footed serving vessels were used as a prescribed set (Mock 1999, n.d.).

Ongoing excavations from 1999-2004 have expanded a large area excavation of Postclassic occupation at Chili Pepper Mound. An assemblage of ceramic types characteristic of household activities and vestiges of economic activities from fishing to shell tool production was recovered. Continuing from the Terminal Classic are comals and grater bowls that increase in frequency and stylistic modes. A number of rim and body fragments to different comals (i.e., thicknesses, pastes, and rim characteristics) were recovered on Chili Pepper Mound. Comal surfaces may be stuccoed, display a Santa Unslipped-like gray flannel surface, and coarse calcite paste. Others show a micaceous paste typical of Maskall Unslipped as defined at Barton Ramie (Gifford 1976), and Colha, Valdez 1987:218-219), and Tsabak Unslipped (Walker 1990: 92-93).

At Chili Pepper Mound and neighboring Beacon Hill, Postclassic ceramics were recovered with burials intruded into Terminal Classic deposits. In the latter structure a flat, sandy paste censer form (or lid?) with smoke hole and appliqué diving god figure with a crenellated base was recovered in association with Payil Red bowls (see Brainerd 1958: Fig. 71, e-i; also Robles 1986). The identical censer form was recovered in surface deposits at NRL in 1994. (Mock 1994b, 1999). The burial was not excavated due to time restraints. Unfortunately, the 1999 hurricane buried the excavation and we were unable to relocate it.

The diving god, or variations thereof, is another Late Postclassic motif characteristic of the Mixteca-Puebla horizon occurring at Tulum (Robertson 1970; Sanders 1961) and Mayapan (Smith 1971). Splayed figures are typical of the Late Postclassic, as seen in the Borgia Codex and perhaps they are related to the Diving God as seen in the temple of the frescoes at
This earth deity -Tlaltechhtli- as it is known among the Late Postclassic Aztec was a female earth goddess. At Mayapan there is a splayed figure in the Mural 7 of Tulum, Structure 16 that spews forth serpent-like twisted elements (Miller and Taube 1993; Taube 1992: 128-130).

At neighboring Chili Pepper Mound excavations revealed a number of small, thick walled perforated censer bowls (8-9 cm. wide) in association with Payil Red ceramics (Figure 3). The censers show two paste variants (black micaceous and carbonate/sand) (some collected with burned contents intact). Some of the censers have a long censer ladle handle, sometimes with anthropomorphic elements. Censer bowls are found at other Postclassic sites (e.g., Valdez 1987: Fig. 59h-k; Becan (Ball 1985:75) and are typical of Chichen Itza (Cobos 2004:522).

Figure 3. Perforated censer bowl recovered in ritual deposits on Chili Pepper Mound at Saktunja.

Chase and Chase’s (2004:355) observations that a great variety in censers during the Terminal Classic also appears to apply to the Postclassic on the coast. Only a few rim sherds recovered from Saktunja show a golden-red-slipped, deep-gouged incised decoration of the Zakpah Orange-red or Lamanai style, Buk period (Middle Postclassic-circa A.D. 1050-1140) censer wares or chalice bowl (see Mock1999). The chalice form does occur at other sites (e.g., Spanish Point and Coco I) examined by the NBCP and future investigations will concentrate on these sites.

Anthropomorphic censers characteristic the Postclassic elsewhere: the ubiquitous Chen Mul Modeled (Ball 1977; Smith 1971: Fig. 32g; 67a-b; Valdez 1987) and its variant; Kol Modeled (D. Chase 1982, 1985a; A. Chase and D. Chase 1985, 1987); Cehac Hunacti Composite (Smith 1971: Fig. 30g, 31a-31c); or Mayapan-like full figure effigy censers. Hourglass censers or jars (in surface contexts) with appliquéd fillets noted in profusion elsewhere at sites such as Laguna de On, Caye Coco, Santa Rita, Cerros, Colha, and to a lesser degree Lamanai. Certain sites were foci of ritual centered on ceremonies involving these censers (D. Chase 1985a, 1985b; Masson 2000).

These censer types have not been recovered so far at Saktunja. This seeming absence coincides with the peak of the production of effigy censers at Mayapan during the Tases phase circa A.D. 1300-1450 (Sidrys 1983:238) and the proposal of a wide-spread art style and regional cult referred to as the International (Robertson 1970) or Mixteca-Puebla. I mention again that round altars and ball courts typical of this effigy cult are absent at Saktunja as at other coastal sites. This absence has bothered me but again, but perhaps our ideas about retention and diffusion of cultural traits interfere with our interpretations. Perhaps the Saktunja coastal populations, even though accessible to traders from the north, decided to choose their own ceramic
forms in ritual presentations. A. Andrews asserts (190:261) despite the Itza presence at Yucatan sites local rulers were free to pick and choose among local and foreign traditions. He observes that typical Itza architectural elements and ceramics do not always co-occur at sites he has investigated.

Two vessels were recovered at Saktunja accompanying an adult female burial with dental modification (Thompson L). The burial was radiocarbon dated to A.D. 1300 (Figure 4). One vessel is a rather deep, outflaring bowl with wide crenellated basal ridge (Figure 5a & 5b). It is distinguished by both deep gouged and shallow incised guilloche bands, serpentine scrolls, large basal segmented flanges and “tau” shaped supports that resemble flanges at Mayapan (Brainerd 1958: 161, d2-3). This arrangement of the motifs on this vessel although similar, is also more complex than vessels from Lamanai (Pendergast 1985; Graham 1987), Tulum (Sanders 1960: Fig. 16) or Mayapan (Smith 1971). Rice (1983a, 1983b, 1989) has examined the permutations of the scroll motif across the Peten lowlands, interpreting the scroll pattern as related to reptilian/avian imagery in the Peten Postclassic, suggesting congruity with “ritual and symbol systems of the Classic and Postclassic Lowland Maya.” The second vessel (Figure 5c) in the grave furniture is a basal segment to a large bowl, also exhibiting a red slipped surface. The base is decorated with a basal band of alternating crude cut out circles and square panels interspaced with incised lines and punctuated incisions (see McCafferty 1996 for similar ceramic type). Remnants of blue paint suggest that the vessel may have been painted. A similar vessel type is reported from Lamanai.

**Summary and Conclusions**

The Terminal Classic period as seen from Saktunja beginning around A.D. 850 was diffuse and fragmented, the ceramics revealing an astounding heterogeneity, presumably reflecting the lucrative rewards of continued control over economic production and distribution and trade. The influx of migrants from the Peten and northern Lowlands bearing new ideas ceramics such as slate wares is certainly, in part, responsible for this eclecticism. The ceramics suggest a smorgasbord of identity possibilities related to status, bloodlines, ethnicity, and/or political affiliations. Wealth and status took new forms other than labor invested in monumental structures. During this period of political fragmentation certain traits merged that portended the subsequent Postclassic period as seen at Saktunja.

Like other Postclassic sites in north Belize, Saktunja does not fit easily into a given temporal framework, the inhabitants seemingly charting their own course. At some point around A.D. 1100, populations returned to the site, whether former locals or new migrants from the north, perhaps in conjunction with militaristic activity connected with the expansion of the Quetzalcoatl/Kukulkan cult. They bore distinctive red slipped ceramics that broke with previous traditions. As societies change or are exposed to foreign ideas, as postulated for this area, they must develop new methods of social and political communication. A messianic cult such as the Quetzalcoatl/Kukulkan cult discussed in this paper must make an appeal to a wide array of intended recipients to spread its message.

Ringle, Negrón and Bey (1998) address this concept of regional cults, saying that they are “strongly universalistic” at the same time that local systems continue to be tolerated. With the advent of these populations, a melding of mythological and historic components were reworked into a more polysemous format, the decorative scaffold became more parsimonious or
Figure 4. Adult female recovered in a Postclassic deposit intruded into Terminal Classic occupation on Chili Pepper Mound (Op. 3-C-6).

Figure 5. a: Drawing of the Payil Red vessel recovered from the Postclassic burial of an elite female in the Chili Pepper Mound; b: Photograph of the same Payil vessel; c: Roll-out drawing of the second partial vessel recovered from the burial. Scale applies to the two views of the Payil vessel only.
simplified in the display of mat, scroll, and serpent iconography on the ceramics. This apparent simplicity did not equate with decreasing societal complexity but rather a different kind of complexity, encompassing and broadening the transmission capabilities of the decorated ceramics. Thus the ceramics were an increasingly flexible media that could incorporate, cut across boundaries, or forge wider outside ties continuing into the later Mixtec-Puebla sphere.

Nor do the sites all react in the same way to its expansion, as expressed in the ceramic inventories at Saktunja. The site does not display the totality of cultural paraphernalia associated with the Feathered Serpent cult elsewhere such as the presence of ball courts or round structures. Andrews (1990) has observed that ceramics and architectural features do not always occur in northern Yucatec sites.

Ladle censers and sandy-paste flat censers were favored instead of the typical effigy censers at Saktunja. Incised red-slipped ceramics exhibit the abbreviated feathered serpent/mat motifs. These motifs were reincorporated from ancient lineage symbols into new statements of power, carefully layered on the scaffold of the Late Classic. Leaders continued to activate new strategies to reaffirm and substantiate their claims to resources and status that are reflected in alternate ways in the media of ceramics.

In sum, excavations and contextual analysis of ceramics from Saktunja, on the central Belize northern coast, have revealed a flourishing but different kind of transition Terminal to Postclassic community; a community existing “betwixt and between” the canons of the Peten and the growing influence of Yucatan.

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Terminal Classic to Postclassic Saktunja
Preceramic evidence from the Paleoindian and Archaic time periods has been recorded over the past quarter of a century by a number of projects working in Belize. This paper compiles much of the available data in an effort to bring the hunting and gathering and itinerant horticultural millennia of Belize prehistory into a broader, more accurate, and more comprehensive perspective than has been presented to date. The Paleoindian period sees influences from North as well as South America, with settlement preferences shown for river valleys and perhaps near-coastal margins. Cave sites hold promise for yielding new and well-preserved data from this early period. The Archaic, perhaps beginning around 6000 B.C., is poorly dated until 3400 B.C., and was probably characterized by mobile hunter-foragers throughout the early and middle Holocene. By 3400 B.C., however, there is evidence of habitat modification and early maize horticulture. The period beginning around 1500 B.C., called the Early Formative elsewhere in Mesoamerica but referred to in Belize as the Late Preceramic, shows intensifying maize cultivation, apparently mobile populations, and also the appearance of well-defined stone tool traditions that trend into the early Middle Preclassic. Ceramics appear unevenly across Belize from ca. 1100 to 900 B.C., when the earliest complexes (Swasey and Bolay) are reported.

Introduction

As part of the Maya World, Belize hosts numerous projects that document cultural historical events and achievements by sophisticated societies that occupied the east-central portion of the Yucatan Peninsula from ca. 900 B.C. until the arrival of the Spanish in the early 1500s. The record of human presence, however, reaches as far back as the Late Pleistocene (10,000 to 11,000 years ago); evidence is also available indicating mid- and late-Holocene occupations that extend up to the appearance of settled villages and ceramic technologies. The goal of this paper is to bring together much of the extant data and to update and clarify our understanding of Belize’s preceramic cultural legacy.

To date, two major research efforts have specifically focused on early (Paleoindian and Archaic) deposits in Belize: the four-season (1979-1982) Belize Archaic Archaeological Reconnaissance (BAAR), directed by Richard S. MacNeish (MacNeish 1981, 1982; MacNeish et al. 1980; MacNeish and Nelken-Terner 1983), and the 1993 through 1995 seasons of the Colha Project (Hester et al. 1996; Iceland 1997; Wilson et al. 1998), under the direction of Thomas Hester and Harry Shafer. Additional data have been gathered by numerous other projects, primarily through what might be considered serendipitous finds (e.g., Peter Dunham, personal communication 2003; Hester et al. 1981; Kelly 1993; Lohse 2003; McAnany et al. 2004; Pearson and Bostrom 1998), or as the by-product of research directed at topics such as early agriculture (Pohl et al. 1996) or the use of caves (Griffith and Morehart 2001; Griffith et al. 2002). A third project, still ongoing, has focused on understanding lagoon-focused settlement and political organization of the Terminal and Postclassic Maya though has uncovered a series of sites in northern Belize containing diagnostic artifacts in aceramic deposits over multiple seasons (Rosenswig 2001, 2002, Rosenswig 2004; Rosenswig and Masson 2001). In spite of the relatively thin history of research, a sizeable amount of preceramic information is available from Belize,
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particularly for the period immediately preceding the earliest appearance of pottery and sedentary villages.

Questions of Chronology

As part of MacNeish’s effort to document early agriculture in the New World, the BAAR sought to reconstruct pre-Maya history by offering a framework describing the transition from highly mobile Paleoindian big game hunters, through an Archaic period characterized by gradually increasing reliance on plants for subsistence, and ending with what was believed at the time to be the first appearance of ceramics, dated around 2000 B.C. by researchers at Cuello. MacNeish’s sequence began at 9000 B.C., and artifacts representing changes in subsistence and technological innovation defined six provisional phases. While some artifacts, including large fluted and unfluted points and constricted unifaces (called snowshoe adzes or scrapers and dated by BAAR to between 7500 and 5000 B.C.) have been verified by later research to be diagnostic of preceramic periods, many have not. Examples of these include macroblades, often used as end or side scrapers, and a range of bifaces, all of which can be found in Preclassic and Classic period deposits. Exacerbating this problem is the fact that radiocarbon dates have subsequently shown that certain artifact types, constricted unifaces in particular, while preceramic in age were made in much different time periods than originally suggested. As a result, BAAR’s provisional phases have proven impossible to identify or define at other sites, in spite of recent publications (e.g., Callaghan 2003) that employ them. While typological and dating problems undermine the validity of the BAAR chronological sequence, the work of MacNeish and his colleagues was enormously important in bringing attention to the preceramic record of Belize. It should be noted that the BAAR findings were augmented by discoveries made by the Colha Regional Survey project at important preceramic sites near Sand Hill and in the Lowe Ranch.

Excavations by the Colha Project in the late-1980s identified preceramic deposits in and around Operation 4046 (Wood 1990), adjacent to Cobweb Swamp. Operation 4046 was revisited in 1991 (Lohse 1993), at which time a radiocarbon and two soil humate dates indicated the finds, including a number of constricted unifaces, might date as late as 3000 to 1000 B.C., immediately prior to the early Middle Preclassic period. Also at this time, research carried out by John Jacob (Jacob 1995) and John Jones (Jones 1994) in Cobweb Swamp reported soil and pollen evidence of habitat disturbance and the appearance of cultigens including manioc and maize as early as 3000 B.C. Concurrent investigations by the Rio Hondo Project, directed by Mary Pohl and Kevin Pope, produced radiocarbon dates of 1275 B.C. for a constricted uniface and 2210 B.C. for a Lowe point (Pohl et al. 1996:363) from Pulltrouser Swamp.

These data showed the BAAR sequence to be in need of revision and, with support from the National Science Foundation, Hester and Shafer returned to Colha in 1993 and 1994 to expand the sample of excavated preceramic contexts, augment the number of chronometric dates, and search out late Archaic settlements and features along the margins of Cobweb Swamp and proximate to Colha’s central precinct (none were found). A brief season was carried out in 1995 examining constricted uniface production at the Kelly Site, located near present day Ladyville (Hester et al. 1996; Iceland 1997). With results from the Colha Regional Survey, in which Thomas Kelly reported abundant preceramic sites in sandy ridge settings along the chert bearing zone between Colha
and Belize City (Hester et al. 1980; Kelly 1993; Shafer et al. 1980), these data (the focus of Harry Iceland’s [1997] dissertation) indicate Late Archaic habitation along swamp margins and near-coastal areas in northern Belize. Iceland (1997:82-92) compiled nearly two-dozen radiocarbon dates from the Colha excavations, including those near Cobweb Swamp, in clarifying the regional preceramic chronology and noted a range extending from ca. 3400 B.C. until around 900 B.C., at which time early Middle Preclassic ceramic-bearing deposits are encountered at Colha and elsewhere. A gap is apparent in this sequence between 1900 and 1500 B.C.; Iceland (1997) accordingly has described an Early Preclassic (3400 to 1900 B.C.) and a Late Preclassic (1500 to 900 B.C.).

In the remainder of this paper, I summarize the culture history for the Belize preceramic (Figure 1). The Paleoindian period is dated by artifact styles and the apparent co-occurrence of cultural materials with Pleistocene fauna. The long Archaic is poorly dated at present; what is known from this period comes almost exclusively from the Early and Late Preclassic periods. Pottery and settled villages reported from the Belize River Valley appear contemporary with well-documented Late Preclassic deposits elsewhere, suggesting that the transition from the Late Archaic to sedentary ceramic-using populations did not occur at the same time across the country.

**Paleo-Indian**

The Paleoindian period in Belize is known from surface finds of fluted points and from tantalizing evidence from cave sites in the upper Belize River Valley. A possible find also comes from Chonona Cave in the Sibun River Valley. The known human record of occupation in Belize begins in the Late Pleistocene with the association of chipped stone tools with now-extinct faunal remains including horse and spectacled bear at Actun Halal, reported by the Western Belize Regional Cave Project directed by Jaime Awe (Griffith and Morehart 2001; Griffith et al. 2002). While the small lithic assemblage from Pleistocene levels at Actun Halal does not contain diagnostic artifacts, a discoidal flake core resembles similar artifacts from Early Paleoindian (i.e., those associated with fluted bifaces) assemblages from South Texas and Nicaragua (see Lohse and Collins 2004). Though undated except by faunal association, the Actun Halal finds are potentially the oldest known for the region, and raise the important likelihood that additional deposits are to be found in caves elsewhere.

A small number of fluted Paleoindian points have been reported from Belize (Figure 2), including perhaps four fishtail or Fell’s Cave points. Fishtail points are found from the southern cone of South America into Central America as far north as Los Grifos rock shelter in Chiapas, Mexico (Pearson 2002). Three specimens from Belize are previously published, among them a surface find along the New River Lagoon (Figure 2A; Pearson and Bostrom 1998), one recovered by MacNeish near Orange Walk on the New River (Figure 2C; MacNeish and Nelken-Terner 1983), and another recovered by MacNeish et al. (1980) from site BAAR 35 in the Lowe Ranch (Figure 2D). A fourth point (Figure 2B) was brought to light by Peter Dunham, who recovered the reworked specimen from a farmer who had plowed it up near Big Falls along the Rio Grande in southern Belize. Dimensions for the Big Falls point (in mm) are 41.2 (L) by 38.5 (W) by 5.3 (Th). Fishtail points are characterized by broad unbarbed shoulders, rounded tips, narrow stems with slightly out-curving “ears,” and concave bases that are thinned by fluting or channel flakes. Extraordinarily
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Figure 1. Preceramic chronologies by the BAAR (left) and Colha (center) Projects with the generalized Mesoamerican chronology (right) that accommodates existing preceramic data as well as emerging information on Terminal Early Formative ceramic-using populations from Belize.
thin dimensions are another trait of these artifacts, which can have width-to-thickness ratios of almost 8:1; these ratios are achieved by broad, flat thinning flakes that terminate just past the artifacts’ midlines. Oftentimes, these finely controlled flakes terminate by abruptly curling upwards or hinging, leaving a faint “stack” or vertical face that is removed by delicate flakes struck from the opposing margins. Many times, these points are thinner in the middle than at their edges (Bird and Cooke 1978). This method of achieving proportionally wide but thin bifaces is comparable to North American Folsom techniques for manufacturing ultrathin bifaces, whose width-to-thickness ratios range from 10:1 to 20:1 (Root et al. 1999).

At least two fluted lanceolate points are also described from Belize. One of these (Figure 2D) was recovered by MacNeish from BAAR site 191 outside of Ladyville, near the present day coast, and has been described as “El Inga-like.” Based on the artifact illustration and description, it appears to be a lanceolate specimen, perhaps

Figure 2. Fluted points from Belize. Specimens A-D are of the fishtail type; A was collected near Lamanai, B was recovered near Big Falls, C was found near Orange Walk, and D was excavated from site BAAR 35. Specimen E appears to be a broken lanceolate and was recovered from site BAAR 191, near Ladyville, and F is a lanceolate surface find from the same site.
unfinished, with slightly outcurving sides and a fluted base. The best-known lanceolate specimen is the Ladyville Clovis point (Figure 2E), recovered by Thomas Kelly from the same site (also called Ladyville 1; Hester et al. 1981). This point has slightly convex lateral edges that exhibit grinding approximately one-third of the way up from the base, which is thinned by the removal of a channel flake from one side and two from the opposite side. Stylistically, these points compare well with North American Clovis points.

A final artifact of possible Paleoindian origin was identified in the Institute of Archaeology collections during the summer of 2004 (Figure 3). This specimen was recovered from Chonona Cave at the upper end of the Sibun River Valley, though its exact provenience and context are unknown. It is broken across its medial section, has convex and contracting edges, each with a shallow notch, and a tabular end. The biface is heavily patinated to a chalky white color and has calcium carbonate deposits on both sides. While such staining and concretion buildup are suggestive of great antiquity, it should be noted that these processes can occur rapidly in karst environments. Dimensions of the artifact (in mm) are 145.3 (L) by 64.6 (W) by 9.0 (Th), exhibiting a width-to-thickness ratio of over 7:1. Most suggestive, however, are the artifact’s flaking patterns, including distinctive thinning flakes that gently dive or hinge along the midline and a series of flakes from the opposing edge, leaving its thickness at the medial point of break less than at the edges. Additionally, a small overshot flake shapes one lateral edge near the tabular end (visible in the top view in Figure 3). Controlled overshot flaking is one of the distinctive traits of North American Clovis lithic technology (Bradley 1982; Collins 1999), though it is impossible to determine if the presence of overshot flaking on the Chonona biface is deliberate or incidental. While the age of this artifact cannot be identified with absolute confidence, it is possible based on its appearance and flaking traits that it represents Paleoindian activity in Central Belize.

**Archaic**

The beginning of the Belize Archaic is placed at approximately 6000 B.C. (subject to future revision), although very little is known until ca. 3400 B.C. Following the chronology proposed by Iceland (1997) and including information recovered by the Rio Hondo Project, Belize Postclassic Project, Blue Creek Project, Belize Valley Archaeological Reconnaissance, and Xibun Archaeological Project, a Late Archaic can be identified in parts of Belize beginning by this time that includes what Iceland calls the Early and Late Preceramic, ending at ca. 900 B.C. The Archaic appears to have been a period of mobile settlement at least partly focused on key resource outcrops (including high quality toolstone) and occupying a diversity of habitats that include swamp and lagoon margins, river valleys, upland settings along ecotonal margins, and caves.

Two distinct types of points, Lowe and Sawmill points (Figure 4) have been defined (Kelly 1993) that are believed to be of Archaic age. Lowe points are the more common of the two and are characterized by broad shoulders, often with sharply defined barbs; broad stems that are parallel or sometimes slightly expanding; and, occasionally, sub-parallel oblique flaking on their blades. Lowe points are frequently resharpened on alternate sides, producing a pronounced distal bevel. Clark and Cheetham (2002:304) suggest this pattern of wear indicates their use as hafted knives rather than as projectiles or thrusting tools. The age range of Lowe points is believed to be from around 2500-1900 B.C. (Kelly
Lowe points have been recovered in large numbers and mostly from surface contexts in northern Belize, primarily in upland sandy ridge settings. Unfortunately, such settings are notoriously deflated, making it difficult to reconstruct archaeological contexts and proveniences with confidence. Several Lowe points (n=5), however, have been recovered in recent years from landowners in the upper Belize River Valley (Jaime Awe, personal communication 2004), while another heavily reworked specimen was collected in 2001 near the base of the Sibun Gorge (McAnany et al. 2004:296), indicating that this aspect of Belize preceramic history has a much broader geographic range than previously known. Sawmill points appear less frequently and are found in a slightly smaller geographic range that includes northern Belize. None have yet been reported from the upper Belize River Valley, though one recovered from the Actun Tzimin cave is among the IOA collections (Figure 5).

Among recent Late Archaic find spots is an in-filled depression along the face of the Rio Bravo Escarpment in upper northwestern Belize. Paleoecological investigations, carried out in this ecotonal setting by Timothy Beach and Sheryl Luzzadder-Beach as part of the Blue Creek Regional Political Ecology Project, directed by Jon Lohse, yielded two radiocarbon dates of 2475-2195 B.C. and 2140-1940 B.C. approximately 60 cm apart (vertical distance) in a charcoal rich zone containing no ceramics and sparse but definite lithic artifacts (Beach and Luzzadder-Beach 2004). None of the small artifact sample is morphologically distinctive, though at least one unifacially modified tool shows obvious signs of use. Although these specimens are from secondary context, they clearly indicate some human presence in this part of the country at an early time period.
Abundant pollen and paleoenvironmental data have been gathered in northern Belize revealing environmental modifications by Late Archaic peoples. Based largely on the pollen work of John Jones (1994; in Pohl et al. 1996), evidence

Figure 4. Examples of Archaic period Lowe (A-D) and Sawmill (E, F) points from Belize. A-C are previously published in Hester et al. (1980: Figure 1); D is from Pohl et al. (1996: Figure 5); E and F are from Kelly (1993: Figure 12). Kelly (1993: Figure 10) identified B as a provisional Allspice point, though it resembles a reworked Lowe point.
shows the gradual appearance of cultigens that include maize and manioc as early as 3400 B.C.; the clearing of forests by at least 2500 B.C., a process that accelerates soon thereafter; and the fairly widespread practice of maize cultivation soon after 2400 B.C. An additional radiocarbon date of 2880-2580 B.C. (calibrated, 2 sigma; Beta-176285) from a charcoal rich peaty soil buried at 3.5m near Blue Creek, northwestern Belize helps define the extent of this presence. It seems probable that Late Archaic populations were altering certain environmental niches, including those close to swamps like Cobweb and Pulltrouser or in upland settings as indicated by the Blue Creek data, to create habitats favorable to the growth of cultigens. However, habitation sites from this period have not yet been confidently identified, and archaeologists still know little about the settlement patterns or other aspects of the lifeways of these early horticulturalists.

A number of distinctive lithic artifacts have been recovered from dated contexts at Colha and elsewhere that define an Early Preceramic facet of the Late Archaic correlating with land clearance and the first appearance of cultigens. These include macroblades, macroblade cores, and pointed unifaces (Iceland 1997). The development of macroblade technology by this time is a significant achievement, as these tools often provided the basis for later tool forms; pointed unifaces, for example, were frequently crafted from large blades. Macroblade production also continues as a technological platform well into the Maya era, and reflects an important aspect of cultural continuity between preceramic and later periods. In spite of the presence of Lowe and perhaps Sawmill points at this time, bifacially flaked tools are relatively uncommon in Early Preceramic assemblages.

Harry Iceland (1997) has labeled the part of the Late Archaic that dates from 1500 to 900 B.C. as the Late Preceramic based on excavations at Colha that have consistently yielded radiocarbon dates together with a distinctive lithic assemblage that differs in important respects from that of the Early Preceramic. The Belize Late Preceramic is contemporary with the transition to full time sedentism (marked by settled villages with stone architecture), the adoption of ceramic technologies, and participation in long-distance exchange networks that characterize the Early Formative elsewhere in Mesoamerica. This period appears unique to Belize, though it seems likely that similar developments are to be found in the eastern Peten, Guatemala or southern Mexico.

Beginning by ca. 1500 B.C., distinctively fashioned constricted unifaces (Figure 6) appear across a very broad area.
that includes much of the Belize Coastal Plain, at least parts of the Belize River Valley, and a surface collected specimen from a streambed in upper northwestern Belize. These tools are the most diagnostic artifacts of the Late Preceramic, and replication and use wear studies (Gibson 1991; Hudler and Lohse 1994) show them to have been used to cut hard to medium-hard materials. Other specimens show clear signs of impact on soft surfaces such as soil, suggesting that these tools were general-purpose implements for clearing land and perhaps even hoeing earth. Refitting studies from the Kelly Site (Hester et al. 1996; Iceland 1997) indicate that these tools were often made at specialized sites close to quarries or stone outcrops where residential activities did not occur. Pollen data from northern Belize (Jones 1994; Pohl et al. 1996) support conclusions from the use wear studies, showing widespread deforestation at this time and the virtual ubiquity of certain cultigens including manioc, maize, squash, and bottle gourd. Importantly, pit features and post holes have recently been reported from Late Preceramic levels at sites such as Caye Coco and Laguna de On (Rosenswig 2004), offering possible evidence of domestic localities dating to this period.

In addition to constricted unifaces, a number of other diagnostic lithic implements are found in the Late Preceramic at sites including Pulltrouser, Colha, Fred Smith, and Caye Coco (Rosenswig 2002). These include small oval bifaces, macroblades, and very large flakes. Pohl et al. (1996) also describe occasional ground stone artifacts from this time period from swamp sites. Small blades, which are present in small numbers in the Early Preceramic, are also encountered in Late Preceramic assemblages. Virtually all of these tool forms, with the important exception of constricted unifaces, are found in ceramic-bearing deposits of the early Middle Preclassic and support arguments of relative cultural continuity between these periods (as does the reliance on maize and swidden agricultural practices). Fred Valdez (personal communication 2003) suggests that preceramic constricted unifaces are replaced in the functional inventory by early Middle Preclassic T-shaped adzes at specialized lithic production sites such as Colha.

**Discussions and Conclusions**

Although Belize’s preceramic chronology maintains some gaps and very little information is available from the southern part of the country, the region in general offers one of the most complete and robust sequences for early huntergatherer and itinerant horticultural occupations in all of Central America. Ongoing and future research and collaboration between projects will add to this body of information while contributing significantly to larger theoretical discussions such as the transition...
to sedentary lifeways, how people responded
to changing climatic and environmental
conditions, and perhaps even the question of
how the New World was settled by Early
Paleoindians. Below, I summarize what I
feel are some important research questions
to be addressed for Belize prehistory.
General topics such as charting the
geographic extent of different occupations
and filling in chronological gaps remain
important for all time periods.

**Paleo-Indian**

The presence of both fishtail and
lanceolate forms among the Paleoindian
point inventory is important, as these shapes
convey information about the sources of
early occupations and influences. Lanceolate
forms characterize Early Paleoindian (Clovis
and Folsom) assemblages in North America,
while fishtail styles originated in South
America. Although the significance of
different morphological styles among Latin
American fluted points is not perfectly
understood by archaeologists (see Faught
n.d.; Morrow and Morrow 1999; Pearson
2002; Pearson and Bostrom 1998; Politis
1991; Ranere and Cooke 1991), the co-
ocurrence of these styles in Belize reflects
not just the high mobility of New World
Early Paleoindians, but also the apparent
combination of cultural influences in Belize
at this early time. Georges Pearson (2002;
Pearson and Bostrom 1998) advocates a
model of initial southward Early Paleoindian
colonization that corresponds with fluted
lanceolate forms and a subsequent
northward transmigration following the
Caribbean and Gulf Coastal margins. This
later, second population movement is
characterized in part by fluted fishtail forms.
While the sample of fluted points from
Belize lacks robusticity, fishtail points most
frequently occur in inland settings along
river valleys like the New River and the Rio
Grande (Figure 7), while the lone lanceolate
site, BAAR 191/Ladyville 1, is situated
close to the present-day coast. This pattern
suggests that fishtail-using groups were
familiar with the environment and its niches
and were not simply pioneer populations
“passing through” or in constant pursuit of
migrating animals. Moreover, given the
higher number of fishtail find spots to
lanceolate-producing localities (at least 4:1),
it is possible that Paleoindians in Belize
shared more cultural traits in common with
populations in lower Central and South
America than they did with groups to the
north. The fact that both of the lanceolate
forms were recovered from the same locality
is significant, and BAAR 191/Ladyville 1
should probably be considered as one of the
most important preceramic sites in all of
Belize.

The association of artifacts with
Pleistocene fauna including horse and bear
from Actun Halal (Griffith and Morehart
2001; Griffith et al. 2002) is important for at
least a couple of reasons. First, these are the
first Pleistocene fauna reported from
archaeological context from the country, and
research should be directed to other cave
settings to add to this sample. Such faunal
remains from secure contexts help us
understand not just human subsistence
practices, but are also a useful source of data
on the paleoenvironment. Second, cave
settings elsewhere in the New World (i.e.,
Meadowcroft) have yielded significant
evidence concerning the Earliest Americans,
and comparable locales in Central America
could be important sources of information
for how and when the New World was
settled. Accordingly, Belizean Paleoindian
studies hold the potential to inform scholars
working at continental and even hemispheric
scales of research and analysis.

**Archaic**

Clearly, the most important research
issue for the Archaic is better defining the
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Figure 7. Preceramic find spots across Belize. Archaic points (Lowe and Sawmill) and Late Preceramic find spots are too numerous for individual plotting. Dashed lines indicate Archaic geographic reconstruction based on Early and Late Preceramic data and known areas of concentration for undated points.

long span of time represented in this period. No absolute dates are available until ca. 3400 B.C., leaving close to 3000 years uncharted from the end of the Paleoindian period (itself also undated by absolute means). A number of reasons can be offered to explain the absence of radiocarbon dates, many of them concerning the rapidly changing nature of the environment throughout the early and middle Holocene. Pohl et al. (1996) describe rising inland water tables—probably as a response to rising sea levels—during this period, producing encroaching shorelines, the appearance and spread of lagoons and inland swamps, and perhaps severely altered river and stream courses. As a result, many Archaic deposits may be buried under meters of sediment or await discovery in perennially wet environments that pose challenges to researchers. This problem is made worse by Maya-induced sedimentation that occurred in the Preclassic and Classic. In upper northwestern Belize, for example, Maya-period soil deposits are as much as two meters thick; this figure is higher in other parts of the lowlands (Beach et al. n.d.). Alternatively, many Archaic (and Paleoindian) finds occur in sandy ridges separated by slow moving river systems; these ridges represent deflated uplands in spite of the relatively flat terrain that characterize them. In general, the geomorphology of much of the swamp-dominated Coastal Plain is much more complex than is apparent by driving along the Northern Highway, and it is important that preceramic research in such settings be accordingly modeled. In contrast, high relief areas found in upper river valleys such as the Belize and Sibun can often be shaped by high-energy erosion, where early deposits may have been washed away by fluvial action or buried under meters of alluvial or colluvial sediment. Because of the complex and, for much of Belize, relatively unstudied timing and effects of rising water tables, sedimentation, and erosion, systematic (that is, non-serendipitous) research of Archaic-period finds and deposits should include geoarchaeological methods as a central element of research designs.

The centuries between 1500 and 900 B.C. may be the most dynamic of all preceramic periods in Belize prehistory (Figure 8). The earliest reported ceramics are those recovered by Pohl et al. (1996) in northern Belize soils dated to between 1300 and 1500 B.C., though these ceramics are described as rare and non-diagnostic. At Colha, Cuello, and nearby sites, the earliest ceramic-bearing deposits (Bolay and
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Swasey) are consistently dated to around 900 B.C. Emerging information from the Belize River Valley, however, suggests that ceramic-using populations may have been in place as early as ca. 1100 B.C. at Blackman Eddy (Garber et al. 2004) and 1000 B.C. at Cahal Pech and perhaps other sites (Awe 1992; Clark and Cheetham 2002). While these finds, termed Kanocha at Blackman Eddy and Cunil at Cahal Pech, remain to be broadly documented across the valley, these early materials do appear to represent the first established ceramic technologies recorded to date in Belize. Stone architecture accompanies these pottery assemblages, indicating that the adoption of ceramics and permanent settlements occurred at the same time in these sites. Clearly, ceramics do not appear at the same
time across Belize, and ceramic-bearing deposits in some parts of the country appear contemporary with preceramic deposits elsewhere.

Some of the developments seen during this period, at least concerning the rapid spread of swidden maize cultivation, may be in response to the changing environment. Pohl et al. (1996) describe a lowering of water tables around 1500 B.C. that corresponds with the dramatic increase in the appearance of maize pollen. As water tables rose again within a couple of centuries, people responded by modifying and even draining some swamp margins. This demonstrates an effort at maintaining productive and valued habitats, efforts that are sure to have been accompanied by new social arrangements to facilitate and

**Figure 8.** Compiled timeline of Late Archaic events. Chronology after Iceland (1997), sea level curve by Pohl et al. (1996: Figure 6).
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cordinate the labor they required. To understand these processes, archaeologists require a much larger sample of domestic features and sites from the Late Preceramic from both the Coastal Plain and the Belize Valley, where ceramic-using groups first appear in relative profusion. As with earlier facets of the Archaic period, this research should be grounded in geoarchaeological methods to better understand environmental as well as social factors involved in peoples’ decision to adopt ceramic technologies and sedentism as a way of life.

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Preceramic Occupation in Belize
COMMUNITY INTEGRATION AND ADAPTIVE MANAGEMENT AT EL PILAR

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Many developing countries establish parks and protected areas as a means of addressing environmental effects of growing populations and diminishing environmental resource. The surrounding communities can view these areas as opportunities to gain benefits or as obstacles restricting traditional agricultural practices. Effective resource management needs community involvement, the input of experts and the commitment of government officials. These partners, working in collaboration, allow more flexible management and provide opportunity for all partners to engage in decision-making related to the management objectives. The objective of this paper is to demonstrate how the El Pilar Archaeological Reserve for Maya Flora and Fauna promotes the integration of these partners in its unique management plan wherein all interested groups are partners and recognized as important participants in achieving long-term goals.

Introduction

Many developing countries face an ongoing battle with growing populations and diminishing environmental resources. In an effort to address this problem, many of these countries have established parks and protected areas. The communities around these parks either view the change in land status as an opportunity to gain benefits from the tourism it attracts or as an obstacle for reducing their traditional land use practices.

Protected areas management has centered on conservation and preservation of cultural and natural resources enforcing, strict laws against those who do not comply with established regulations. Communities, however, when included in benefits through tourism, sustainable land use, and promotion of their traditional lifestyles are likely to place value on these resources.

Protected areas management needs community involvement they also need the input of experts and government officials. These three partners working in collaboration allow for more flexible management whereby all situations are analyzed as opportunities for all partners to engage in decision making as they occur, and implementation and monitoring objectives are modified to meet collective management goals.

The objective of this paper is to demonstrate how the El Pilar Archaeological Reserve for Maya Flora and Fauna (Figure 1) has managed to integrate all these partners into its unique management plan. The El Pilar Program can be seen as an example management design for protected areas where all interest groups not only have a voice, but also, are recognized as the important participants.

Adaptive Management

Adaptive management of protected areas is designed to maintain flexibility by promoting collaborative reviews to improve resource management strategies (See Holling 1978; 1986; Walters 1986). This is achieved by working within an evolving framework that responds to changing contexts instead of predetermined or established conditions. Characterized as management that monitors policies, actions and conditions as they change and are implemented, results are evaluated and
Community Management at El Pilar

modified depending on how the target cultural and natural resource develop. “Adaptive management is an inductive approach, relying on comparative studies that blend ecological theories with observation and with the design of planned interventions in nature and with the understanding of human response processes” (Gunderson, Holling and Light, 1995:491).

An adaptive management system has two elements: 1) a monitoring system to measure key indicators and current status and 2) a response system that enables modifying key indicators (Hilborn & Sibert 1988:115-116). The design of flexibility involves managing for ecological resilience, addressing crises as opportunities. In adaptive management, each management component is founded on ecological assumptions about hypothetical responses and outcomes. The collective evaluation of each component, after an established period of time, promotes adaptation and the consequent implementation of revised sets of policies and actions among the interest groups.

The adaptive management process for protected areas embraces a cycle of four phases: plan, act, monitor, and evaluate. The planning phase relies on clear objectives and expectations. The action phase requires the field implementation that tests the hypotheses. In monitoring, the expected results are compared with actual responses and outcomes. This permits a cyclic, learning-oriented approach with constant feedback during all stages of management.

The cycle of monitoring and evaluating within protected areas reveals a process of grappling with management problems (Walters 1986:8). It allows participating partners to utilize their knowledge and experiences to facilitate further learning, as they gain understanding of the specifics of the management systems. Conceptually, adaptive management can lead to specifically tailored policy designs that can produce measurable outcomes reflecting conservation goals and priorities.

“Adaptive management will not eliminate conflict, but it will move the debate into a scientific context so that surprises and disappointments can be learned from, as new hypothesis are built.” (Olympic National Park Website, page 1)

The adaptive management process moves away from “traditional” top-down, authority driven protection approaches of officials towards natural and cultural resource management. The strategy involves a
partnership among those who have the ability to influence the implementation as well as those that are affected by the process. The process engages the participants in support and exposes awareness that outcomes are neither clear-cut nor predictable. For the communities, it offers an outlet to incorporate traditional knowledge of the geography, environment, and ecology to promote the management of the protected resources.

Typical approaches to management, such as preservationist or protectionist, focuses on enforcement or policing efforts, the “fencing and fining” style (Honey, 2002:11). These approaches generate resentment on the part of the communities who often feel that there are little or no benefits from either the parks or the visitors it attracts (see Honey 2002). In contrast, adaptive management approach assumes that communities will protect what they value. The adaptive approach calls for a more collaborative relationship with interest groups, particularly within communities. Adaptive management depends on the direct observation by each interest group - officials, experts, and community - to facilitate the overall management process. For all interest groups, the adaptive management option allows for greater comprehension of traditional practices, where land use and history converge into contemporary lifestyles. These lifestyles shape the existing conflict and consensus, directly influencing the resource management outcomes.

Community Integration

For any protected area to thrive there should be the inclusion of local community interest groups in the management and decision-making process. This is the premise of adaptive management. Local communities are implicitly responsible for their surrounding resources, so their integration is critical. This recognition of community responsibility has gained visibility in example management designs for protected areas. The settings include the Adirondacks of upstate New York, Guanacaste National Park, in Costa Rica, Serengeti National Park, Tanzania (Taylor-Ide and Taylor 2002; Honey 2002:220; Janzen 1998). Community integration approaches have varied, yet the outcome can stimulate rural social organizations and their interest in promoting involvement in protected areas. This is especially true when the community sees direct benefits, such as those derived through tourism.

An effective definition of community is defined in the book Just and Lasting Change (Taylor-Ide and Taylor, 2002) as “any group that has something in common and the potential for acting together.” We tend to see communities as a group who live within a geographic region, but there are other community groups - unions, religious organizations, and ethnic alliances. Essentially, a community is any group of people that collectively organize to interact internally as a cohesive social unit. Community involvement starts as a process of self-initiative, promoting group voice. United groups, not one or several factions, can speak for the whole. Cohesive community groups are hard to get off the ground early in the management process, and certain factions may stay outside at first. But, through adaptive management and partnership strategies, larger participation can grow. (Taylor-Ide and Taylor 2002:19-20)

Management and protection programs have been hindered by struggles between community groups and official policy makers, mostly over who controls the resources and who monitors the implementation. “Decision-making authority, including deciding whether a project should go ahead in the first place,
has generally, been denied [to communities]" (Pleumaron 1994:145).

Efforts to include community in the decision making process often centered on small-scale enterprise and community based tourism operations. Despite the result of these programs, traditional lifestyles are perceived by officials to hamper the protection of resources. Moreover, power relationships and tensions between officials and communities have made it difficult to achieve community commitment, resulting in disappointment and discontent (Brannon & Wells 1992:34).

Adaptive Management Partnership

The central focus of adaptive management is collaboration through partnership and communication, unlike authority driven, top-down approaches. This management strategy acknowledges all interest groups, each contributing from their expertise to meet the management goals and objectives. Partnerships are fundamental to integrate community interest groups, providing room for discussions.

Three main interest groups make up the foundation of a solid collaborative partnership: the community, the officials, and the experts. With an active three-way partnership based on mutual respect, a balanced combination of inputs allows flexibility in management (Taylor-Ide and Taylor, 2002:240). Communities are internally focused. Their external relationships are with officials and experts. Nevertheless, officials and experts may wear multiple hats, and can be part of the community as well.

Internal community cooperation frames the context for the identification of needs and interests. Once identified, the needs and interest will reveal strengths and weakness within the community. This will lead to an understanding and achievement of the desired benefits and a means to recognize opportunities for collaboration in the management of protected areas.

The main partner and external collaborator is the official. Officials are most often politicians or administrators who represent government authority. They can also affiliate to interest groups such as businesses, non-governmental organizations, religious agencies, and civic groups. Official authority comes from the outside. They are the link between the communities and the policy makers when it comes to protected areas. These officials are important partners in creating an environment for stimulating consensus. Their influence can extend to decision-making, budget supervision, policy design, administrative regulations, and hiring of professional and local support.

The third partner is the expert. Experts involved in the adaptive management process fill several essential roles that neither community nor officials can bring to the partnership. Their involvement may be voluntary or contracted. Their most important contribution is the infusion of external scientific, social, financial, and administrative knowledge and skill. Familiarity with broad issues, allows experts to set forth comparative technical and disciplinary examples to achieve management goals. Experts bring experience and vision of potentials, opportunities, and circumstances that promote success. This input is fundamental to streamline alternatives and innovations from outside. Experts can also help foster cooperation by linking community groups and government officials around management concerns. At the same time, experts bring a wide network of partners with academic, governmental, and private institutions; large and small businesses; international donor agencies, and professional associations.

Donors are a transient type of expert that plays a significant role for the partnership. Donors offer financial
incentives, essential for the implementation and completion of proposed programs. The financial or technical resources they contribute, however, can encourage dependency instead of development or autonomy. This is why they should not be considered a permanent partner (Taylor-Ide & Taylor, 2002:240).

An effective adaptive partnership among communities, officials, and experts should include collaborative assessment of goals and evaluation of programs. Inclusive, regular meetings among partners provide the roundtable to assess and evaluate activities. Clear meeting agendas, focused on issues, will help to prevent factionalism. They also serve as opportunity for establishing the annual cycle and renewed work plans (Taylor-Ide and Taylor 2002: 295).

Each partner in this collaboration brings their subjective view to the table. Therefore, effort to gather objective data will enable partners and communities in particular, to evaluate their changing circumstances and their integration in the management design (Taylor-Ide and Taylor, 2002:295-296). Officials and experts provide ongoing facilitation and technical assistance to community groups and to shape the comprehensive agenda. Periodic workshops provide the communities with the structure and capacity for adaptation. The stewardship role that the communities develop in this process is essential if conservation goals are to be achieved.

The El Pilar Model

The Maya forest is among the most biodiverse tropical places on earth and at the same time, it is among the most endangered (Mittermeier et al. 2000). This resource is a conservation priority at the regional level. Populations are growing at a fast pace, projecting a doubling in 20 years. This alarming demographic projection combined with exploitive land use calls for alliance between culture and nature to balance the changes.

The Maya forest will not be effectively managed until communities are incorporated in conservation efforts. At El Pilar, the communities have shown that they can play an important role as guardians of the forest. The community group, Amigos de El Pilar (AdEP), clearly sees a role in relationship to the protected area of El Pilar, particularly as beneficiaries from tourism. They recognize government officials as the protected area authority- in Belize, the Institute of Archaeology and in Guatemala, CONAP. The external expertise comes from two main sources. A vital force is the BRASS/El Pilar Program (University of California-Santa Barbara) that carries out the scientific agenda. The non-government organization (NGO) Help for Progress (HfP) based in Belmopan, Belize acts the community development component. These partners have made tremendous advances in relation to the protection of El Pilar (Figure 2).

When AdEP is considered an active partner, they act as advocates, promoting their interests in the context of the greater management objectives. They bring the Maya forest traditions raising their appreciation of the forest as a garden. Historically, members of the community used the El Pilar area for hunting, logging, chicle harvesting and other non-timber extraction, as well as milpa farming.

Asking these communities to see El Pilar in a new light has been a challenge. Rising to the challenge, the BRASS/El Pilar Program has utilized a rich network of individuals and organizations ranging from grassroots community groups and communities leader, to government officials, scientific experts and committed non-governmental organizations (NGO) in Belize and Guatemala. The program’s notable mantra for El Pilar, “Taking the
Figure 2. Consensus building with the Mesa Redonda El Pilar. The core group of the MRII at Rum Point Belize (top) and the MRIII at Remate Guatemala.
A. Ford et al.

Challenge” is particularly relevant for the community development component. This unique archeological and nature reserve on the Belize/Guatemala frontier has compelled the adjacent community to reconsider their connection to the El Pilar area. (Ford, Bunton, et al. 1999: 21)

One of the mayor goals set forth by BRASS/El Pilar since the early 1990’s was to determine practical means of integrating the surrounding communities into the administrative planning process of El Pilar: One resource in two countries. (See www.marc.ucsb.edu) Both Belize and Guatemala, recognizing the multiple values of El Pilar, established and delimited, in 1998, a contiguous protected area around the cultural and natural resources of El Pilar.

A strategy was launched to identify a management design that could be best spearheaded by the community. Funding was sought to start the process by obtaining a basic understanding of the needs of the villages with respect to El Pilar. One of the first major assignments that BRASS/El Pilar undertook was a community assessment project in collaboration with the University of Florida. Two of the main goals were to facilitate local participation in planning, activities for community development, and integration in the management plan for the El Pilar Archaeological Reserve for Maya Flora and Fauna (EPAR). Through this initial project, AdEP as an organization was strengthened and their priorities defined: to develop alternative livelihoods by participating in the development of EPAR.

The UF/El Pilar Community Project (see Veach 1998) unfolded an explicit philosophy of participation promoting empowerment. The project relied on local definition of needs and interest, beginning with an assessment of local groups. Based on the findings, a two-day workshop was held to analyze the potential benefits and challenges of tourism. This investigation and planning process of tourism-related opportunities builds on local traditions such as the forest garden and traditional art that could be locally viable. (Wernecke, Ford, et al. 1998:23)

Amigos de El Pilar has participated in the promotion of the El Pilar Archaeological Reserve as a step towards community integration and adaptive management. The priority to develop community enterprises in tourism and forest gardening are designed to increase the villagers’ economic stake in the reserve. The leadership role villagers are assuming and the self-determination they are gaining in the adaptive management process is the foundation upon which the future success of the El Pilar model depends.

To activate the critical three-way partnership, the Mesa Redonda El Pilar planning process took center stage. Emerging in the process of adaptive management for El Pilar, the Mesa Redonda El Pilar participants came from many distinct fields and professions contributing their time, knowledge, funds and experiences (see Figure 2). A clear accord evolved among the three essential partners: the community group Amigos de El Pilar, the government representatives in Belize and Guatemala, and the experts in community development, science, management, and law.

Published as three successive proceedings (1997, 1998, 2000) the Mesa Redonda El Pilar planning process underscored the governments’ approval of the community’s role in reserve management planning, as well as the role of external experts in the process, including the BRASS/El Pilar Program. Not only was the community partner, AdEP, an effective participant in the Mesa Redonda process, they were critical players with government officials and experts endorsing the drafted management plan for El Pilar in 1998. They
were able to relay the results of the proceedings to the residents of surrounding communities as a unified group. The explicit inclusion of the community in the partnership, the group that has the greatest stakes in the future of the EPAR, enhanced the viability and the credibility of the management planning process. The result of the Mesa Redonda El Pilar process was a comprehensive set of values and guidelines to shape the focus of development at El Pilar.

The innovative management plan for El Pilar recognizes that a critical component for the preservation of cultural and natural resources is the partnership of local communities in management design and implementation. Apart from acknowledging the importance of community support, the Mesa Redonda El Pilar process identified the development of El Pilar as an archaeological reserve that would evolve into a tourism destination. As growth of interest in El Pilar develops and changes, the subsequent Mesa Redonda will help to chart the next adaptations in the management process.

The mayor objectives set forth by the El Pilar management plan are geared towards promoting participation of government and non-governmental organization of Belize and Guatemala in EPAR, creation of a symbol of cooperation between the EPAR and local communities, and the documentation and evaluation of methods of community participation. In order to achieve these objectives, the plan anticipates short-term community participation and collaboration in Belize and Guatemala with the BRASS/El Pilar research and development team, at the same time building communication channels between community and officials of the EPAR. Exchange and mutual respect of the partnership aid in addressing conflicts as they arise (Ford 2002:10).

Medium and long term goals consist of strengthening AdEP membership, participating in conflict management, working on communication between AdEP and officials, documenting education strategies in cultural and natural resources, and the publishing of interpretative material for EPAR such as, El Pilar Community Creek Trail (FCD, 2002), Tzunu’un Forest Garden (Ford & Gerardo 2001), and Trails of El Pilar (Ford & Wernecke 2002). While these goals still remain challenges, all are being addressed (Ford 1998:12).

With this plan, the governments of Belize and Guatemala, Amigos de El Pilar, BRASS/El Pilar, and other key management personnel should be able to anticipate and respond to problems and opportunities rather than react to crisis. The action plan for El Pilar is founded on the necessity of community integration (Horton, 1995). This plan establishes guidelines to facilitate management control and community support of El Pilar Archaeological Reserve for Maya Flora and Fauna (Horton 1995: 6-7).

A critical expert in the partnership is Help for Progress, (HfP). Working in collaboration with several NGO’s in Guatemala, they focus on education, economic development, and organizational capacity building. Educational efforts are directed toward incorporating community knowledge regarding Maya heritage, The Maya Forest ecological conservation, and presentation of archaeological sites.

One example of this collaboration is the mayor educational capacity building program. Organized by HfP in collaboration with BRASS/EP it focused on cultural resources in the form of a series of four mobile workshops. The goal of these mobile study tours was to increase AdEP members’ knowledge of development options for archeological reserves. AdEP members made trips to nearby ancient Maya sites such as Caracol, Xunantunich, Cahal Pech, and
Tikal. The lessons learned were then brought into a review workshop at El Pilar. AdEP members also gained vital new knowledge of the context of the Maya archaeology that allowed a working relationship to develop between AdEP and the other partners, including BRASS/El Pilar crew, non-government organizations, Melchor community members, and government officials, all who were involved in these events. The exposure provided by educational workshops encouraged community members to see the potentials for direct involvement in economic development at El Pilar (Ford et al. 1999:22).

Another mayor vehicle for community cooperation has been joint activities of the Fiesta El Pilar promoted by HfP and Guatemalan counterparts (Figure 3). Initiated as an annual event, cultural dance, indigenous foods, and local music was organized by Amigos de El Pilar. Attendance began small and rose to over 2,000. This event has great potential for the future community partnership event.

The growth and evolution of this dynamic relationship lies at the heart of the El Pilar philosophy, resilient and with the potential to educate communities, reform local-level resource management, and inform conservation designs for the Maya Forest (BRASS/EP 2002a). The success of the planning process has revealed new opportunities in tourism for rural communities and enhanced regional relations (BRASS/EP 2002b).

The community integration component of El Pilar is unique. Unlike the archaeological, ecological, and management components, the community involvement in the partnership exposes deep commitment, one of the most challenging and exciting aspects of this groundbreaking work.

Assessing the Situation at El Pilar

Community development at El Pilar has local, national, regional, and international implications. In many ways, El Pilar is leading the way by incorporating community involvement from the beginning. Moreover, it has become increasingly clear that reserve sustainability is impossible without local community support and commitment. Appropriate development will allow the community to define its own goals, take ownership of success and failures, and include all interested groups. By embracing struggle and learning from differences, El Pilar has the potential to become a model for community development that stresses process and adaptation to build longevity (Ford 1999:23).
Community Management at El Pilar

Asking any community to embrace a project as unique and grand as El Pilar is bound to encounter difficulty. It is important, however, to acknowledge that struggle is inherent in community development, and that change and new understanding are impossible without debate. The success of local outreach at El Pilar can best be seen in the evolution of the community organization, Amigos de El Pilar (Figure 4). With groups based in both Belize and Guatemala, the Amigos de El Pilar have worked together with the El Pilar Program to build a participatory relationship between the community and the reserve that is mutually beneficial (Ford 1999:22).

Embracing all of the facets and enhancing the strengths of the three-way partnership is the emerging El Pilar Forest Garden Network. The forest garden concept was designed to awaken interest of cultural preservation and natural history that could be reincorporated into community daily life (Ford, Wernecke et al. 1996). The forest gardeners, like those in the surrounding areas of El Pilar, play an important role in the practice of this traditional form of farming and have been the key players in educating the younger generation and preserving past and present lifestyles. The interdisciplinary work at El Pilar continues to break new ground by making community development a project priority.

Figure 4. Growth of the Amigos de El Pilar cultural center. From the upper left: the 1995 galeria, the 1998 Be Pukte, the 2000 interior, & the 2003 cultural center and cafe.
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