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Report of the 1998 and 1999 Investigations on the Archaeology and Iconography of the Polychrome Stucco Façade of Structure N10-28, Lamanai, Belize



Research Year: 1999

Culture: Maya

Chronology: Late Classic and Terminal Classic

Location: Belize

Site: Lamanai

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Abstract

This research project centers on a collection of ca. 2000 polychrome fragments of modeled stucco that was once upper zone decoration of Structure N10-28 at Lamanai, Belize. This collection consists of a variety of motifs and decorative elements, including a central figure (an ahau), subsidiary elites, and supernatural figures associated with royal power. Small-scale excavations were undertaken along the western and southwestern faces of the structure to recover more stucco fragments and to clarify some architectural data. During this field season, it was planned to fully analyze the complete collection. However, a variety of factors, namely expansion of excavations, did not allow me to complete this objective. Therefore, the discussion in this report should be considered preliminary, pending completion in an estimated two more full field seasons. Concomitant to this project was the need to safely store and conserve the collection in a secure environment, which has now been largely addressed. This report presents the findings of the 1999 archaeological excavations on Structure N10-28, and presents a summary discussion of iconographical elements found in the collection. This is one of the few collections of Terminal Classic Mayan sculpture, presenting a unique opportunity to study Maya iconography at a time of stability for Lamanai, while the rest of the Lowlands was in a period of decline.

Resumen

Este proyecto de investigación está centrado en una colección de ca. 2000 fragmentos policromos de estucos modelados que en algún momento decoraron la zona de la parte superior de la Estructura N10-28 de Lamanai, Belice. Esta colección consta de una variedad de motivos y elementos decorativos, entre los que se cuenta una figura central (un ahau), élites secundarias, y figuras sobrenaturales asociadas con el poderío real. Para recuperar más fragmentos de estuco y para clarificar algunos datos arquitectónicos, se llevaron a cabo excavaciones en menor escala a lo largo de las caras oeste y sudoeste de la estructura. Durante esta temporada de campo, estaba previsto analizar la colección en su totalidad. Sin embargo, diversos factores, concretamente la expansión de las excavaciones, no me permitieron cumplir con este objetivo. Por lo tanto, la discusión en este informe deberá ser considerada como preliminar, y su finalización quedará en suspenso hasta que se completen lo que estimamos serán dos temporadas enteras más de trabajo de campo. Paralela a este proyecto, estaba la necesidad de guardar a buen recaudo y conservar la colección en un entorno seguro, temas a los que se les ha prestado suma atención. Este informe presenta los hallazgos de las excavaciones que se realizaron en 1999 en la Estructura N10-28, y presenta una discusión resumida de los elementos iconográficos encontrados en la colección. Esta es una de las pocas colecciones escultóricas del Maya Clásico Terminal, lo cual presenta una oportunidad única para estudiar la iconografía maya de una época de estabilidad en Lamanai, en un momento en que el resto de las tierras bajas pasaba por un período de decadencia.

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Figure 1. Excavations in progress on Structure N10-28, looking northeast.

Section 1: Introduction

During the 1981 and 1982 field seasons of the Royal Ontario Museum's Lamanai Archaeological Project, a large collection of polychrome fragments of modeled stucco from the upper zone of Structure N10-28 was recovered in a strata of building demolition material. In July of 1998 I conducted an exploratory study of the collection to determine the feasibility of pursuing more intensive archaeological investigations and iconographic analysis. A grant proposal was submitted to the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI) in September of 1998 and approved in December 1998. This grant was to fund a preliminary analysis of the collection as well as minor excavations on Structure N10-28, which is summarized in this report.

Structure N10-28 is located in Plaza N10-3 ([Figure 1:1](#) and [Figure 1:2](#)), an assemblage of elite residential and administrative buildings that date to the Late and Terminal Classic. As the Maya are well known for making numerous architectural modifications to pre-existing buildings, the structure and its façade were partially chopped to make way for later construction during the Terminal Classic. The remains of the façade were strewn about the structure and subsequently buried. The fragments of stucco range in

size from less than 2 cm² to a large head of a supernatural measuring some 36 cm long. Numerous anthropomorphic forms and profiles are present, many of which are larger than life size, glyph-like elements, borders, headdress fragments, saurian imagery, supernaturals, and a number of other iconographic motifs and decorative forms. Color is present on virtually all pieces, and includes red, light blue, dark blue, yellow, black, white, green, and orange. Many of these fragments contain specular hematite within the paint. An iconographic and stylistic analysis, when complete, will hopefully provide a significant contribution to Late and Terminal Classic Maya art.

The Site of Lamanai

The site of Lamanai is situated in north central Belize ([Figure 1:3](#)) in Orange Walk District, and adjoins the modern village of Indian Church, aptly named after the nearby church ruins. It is situated on the western shore of the New River Lagoon, which is approximately thirty kilometers long and some two kilometers wide. The New River, or *Dzuluinicob*, empties into Chetumal Bay, close to the ruins of Cerros. The area on the eastern side of the lagoon is composed of large expanses of low scrub, some of which are seasonally or permanently inundated. The area around Lamanai is relatively high in comparison, and the region beyond is characterized by gently rolling limestone hills ([Figure 1:4](#)).

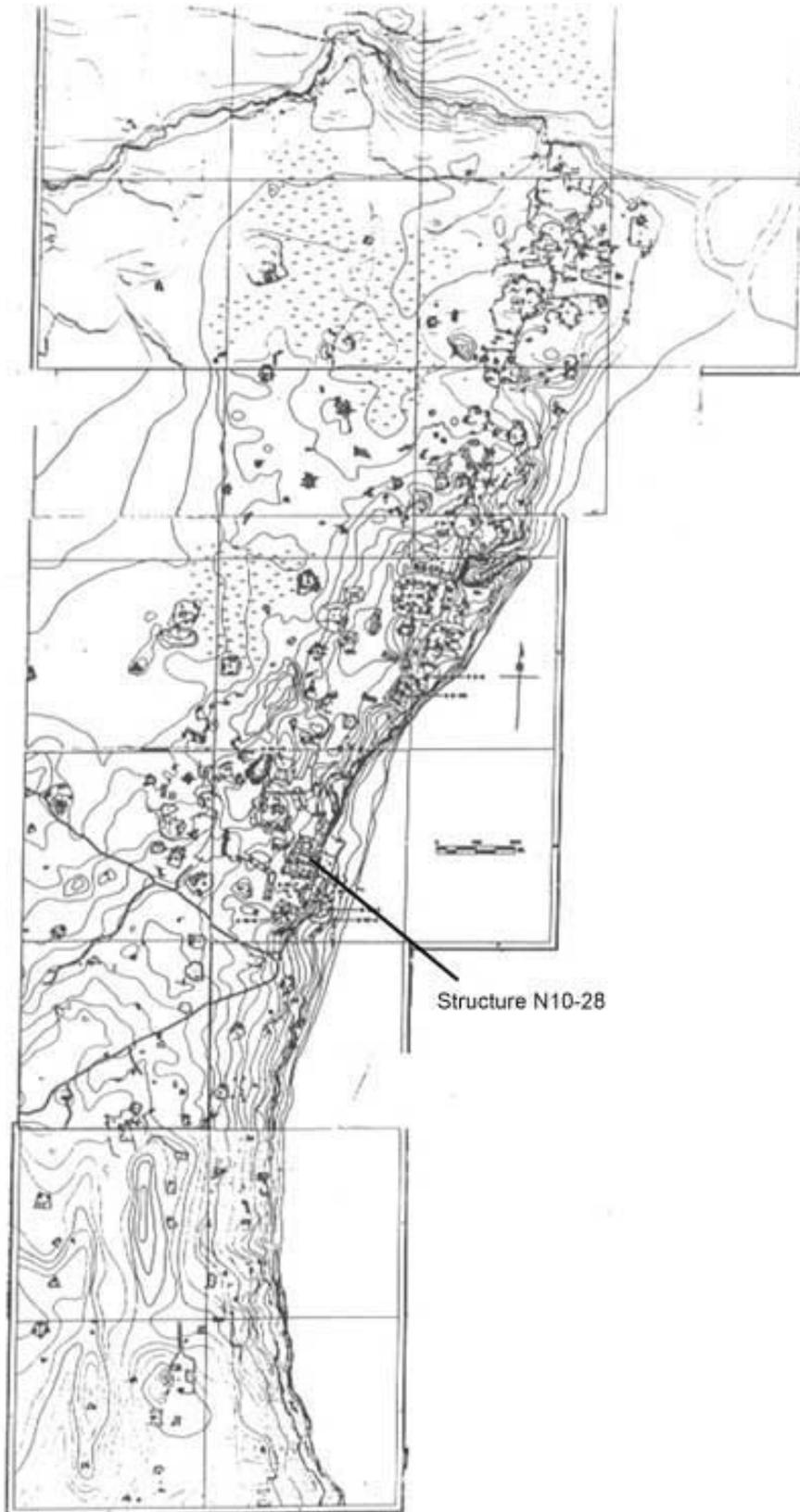


Figure 1:1. Site Map of Lamanai (after Pendergast 1985:92).

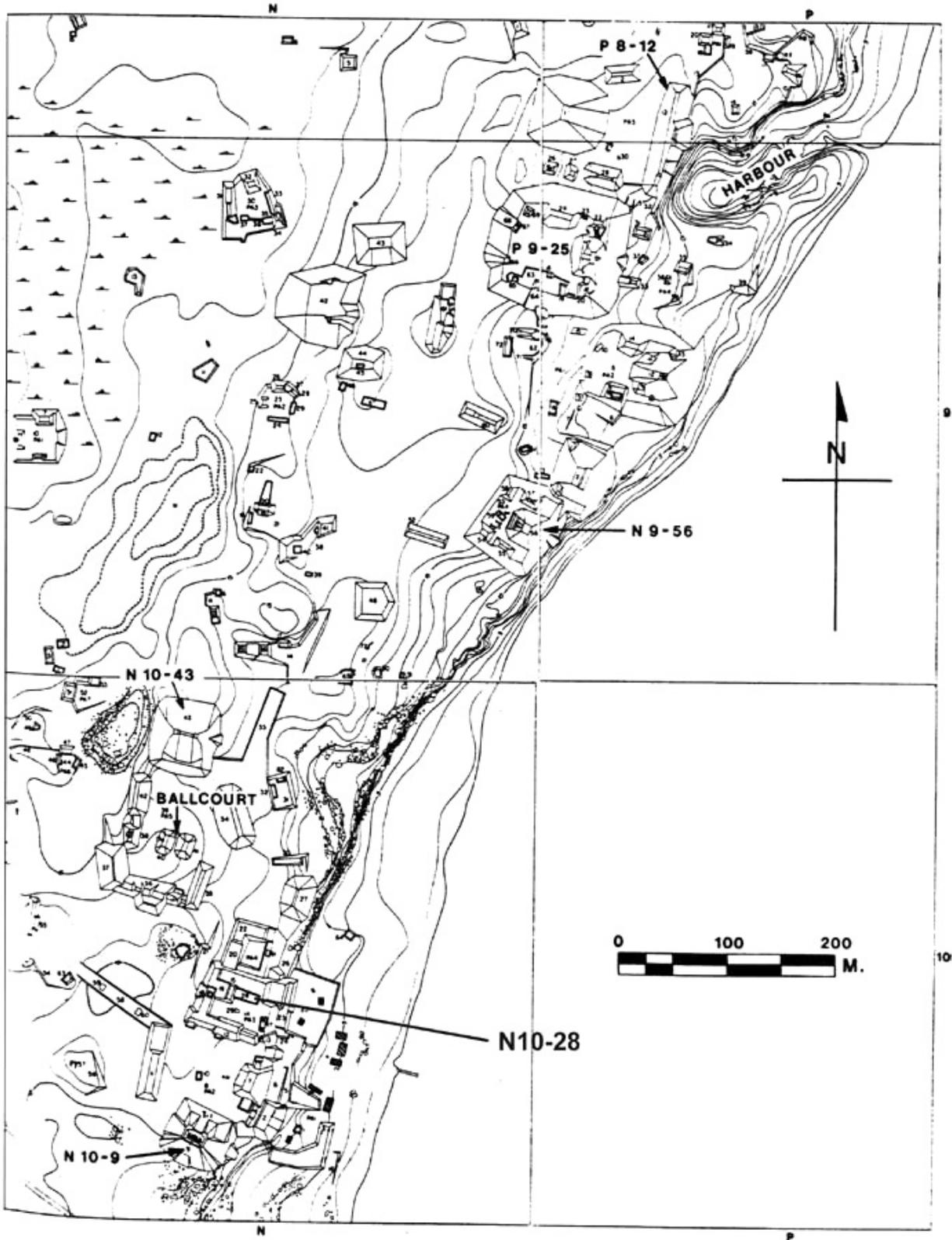


Figure 1:2. Map of the central area of Lamanai, showing location of Structure N10-28 (after Pendergast 1981:33).

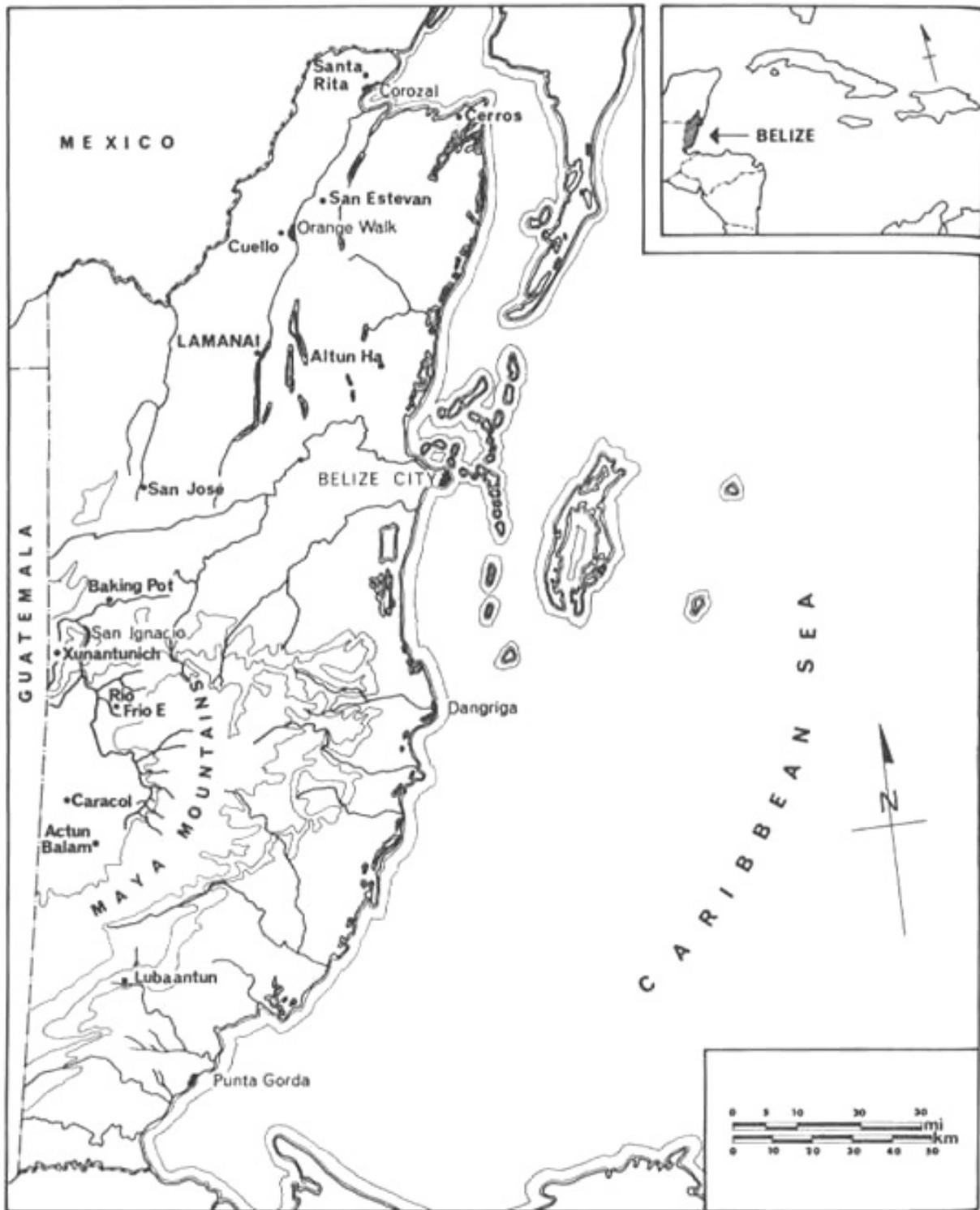


Figure 1:3. Map of Belize, showing location of Lamanai (after Pendergast 1981:30).

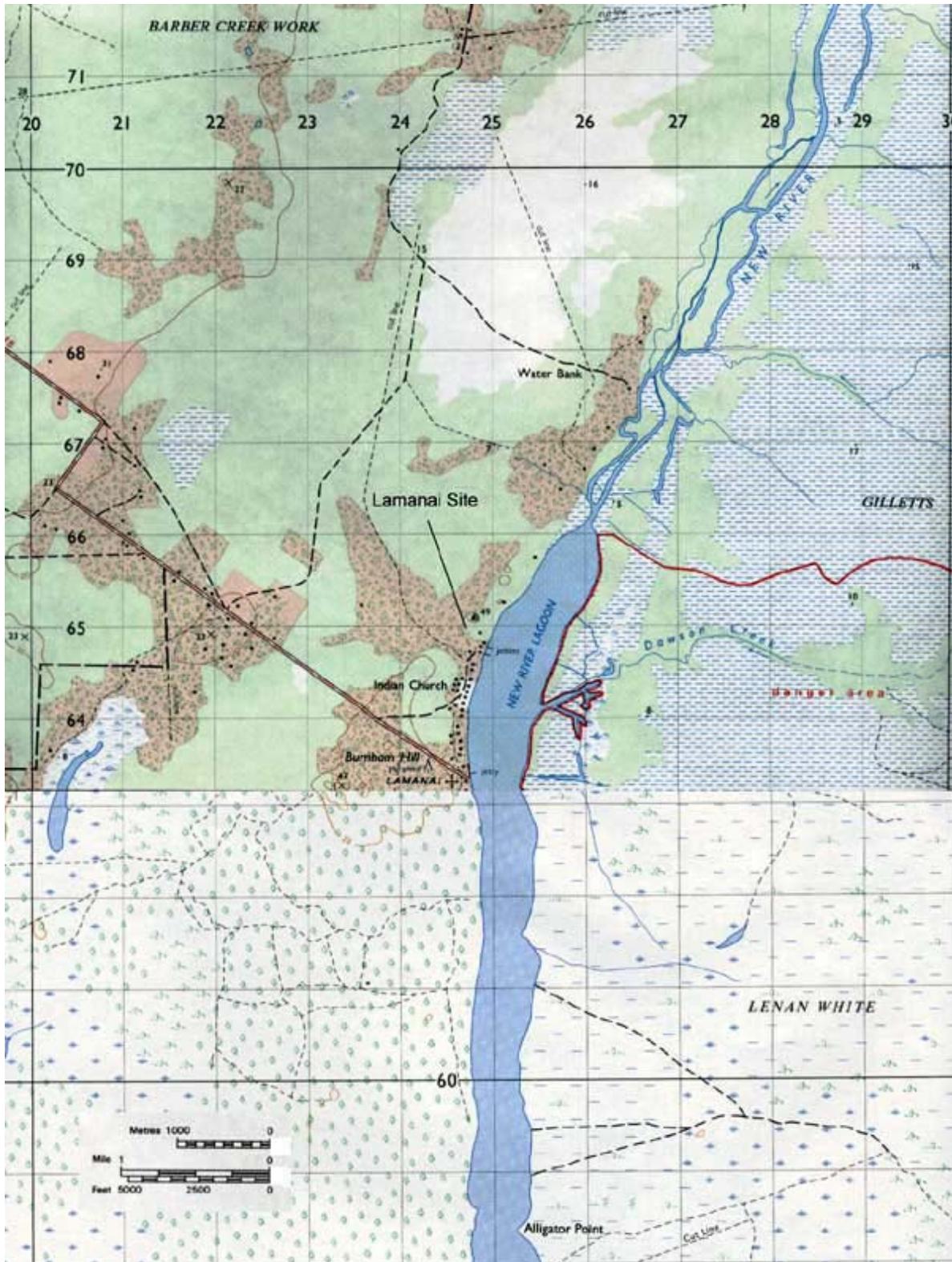


Figure 1:4. Two government topographic quadrangles showing the general area around Lamanai (Sheets #10 (1994) and #15 (1975), Ministry of Overseas Development and Ministry of Defence, United Kingdom).

The site core forms the centerpiece of the Lamanai Archaeological Reserve, and is administered by the Belize Department of Archaeology. This 950 acre park also serves as a natural reserve, being one of the few large tracts of land in the area not under cultivation. As a result, the Reserve is home to numerous species of flora and fauna, and includes a variety of tropical birds and several troops of howler monkeys. Marine life includes crocodiles, some of which are known to be as long as thirteen feet, which inhabit the lagoon and swampy river areas.

The ancient city center of Lamanai covers some 4.5 square kilometers and contains 718 structures. The settlement pattern is non-standard, and is unlike any encountered at other Maya sites. Rather than a centralized ceremonial grouping(s), Lamanai is spread along the lagoon shore in a continuous north to south strip (Pendergast 1981:32). The unusual site plan has clusters of temporal development, with Formative Period structures generally located in the northern sector of the site, and as one proceeds southward the structures become progressively later in time, the culmination of which is the Spanish Church located in the extreme southern sector.

Lamanai presents a unique opportunity to study Maya cultural evolution because of the extensive time depth. Data indicates an unbroken occupation span from 2000 B.C. through the 17th century A.D. Lamanai is also unique in that it is one of the few sites in which we have the precolumbian name, *Lama'an/ayin* which translates as "submerged crocodile," and is further verified by saurian imagery found throughout the site and from a variety of different contexts (Pendergast 1981:32, 38).

One of the most significant structures in the northern sector of Lamanai is Structure N9-56 ([Figure 1:5](#)). This 17 m tall structure borders the lagoon, and dates to the Formative and Early Classic. Two tombs were discovered here, one on the primary axis of the structure and the other within the supporting platform that supports N9-56 and its flanking structures. The most notable aspect of this structure is its architectural sculpture. At the rear of the primary structure was discovered a large polychrome mask and panel reminiscent of those found at Cerros. On the front of the secondary structure are large masks as well, modeled in gray stucco, that flank the main stair. These masks probably represent an early ruler, and crocodile imagery is present on the headdress (Pendergast 1981:36-40).

Other notable structures in the Formative sector include P8-12, a long platform with no superstructure that is 97 m long on its top. It was most likely port and storage facilities, as it is located next to the ancient harbor area (Pendergast 1981:40). A significant architectural assemblage is P9-25, also located close to the harbor. It is a massive acropolis that measures 90 m by 110 m along its top, and is 18 m tall. On its summit are several buildings that are 9 to 10 m tall (Pendergast 1981:34). In the extreme northern part of the site is an unusually large, three-chambered chultun, which yielded numerous intact and fragmented Formative vessels (Pendergast 1981b:62). Farther to the north are extensive areas of raised fields.



Figure 1:5. Structure N9-56, with mask in the lower right hand side of the structure (Photograph by Garry Rowell).

Moving south towards the center of the site is Structure N10-43 ([Figure 1:6](#)), the tallest building at Lamanai at 33 m. The primary structure dates to the Late Formative, and had a tripartite stair flanked by large masks, with a triadic arrangement of false temples at its summit. During the Late Classic N10-43 was modified, which involved merging the front stairs into a single stair, clearing off the summit, and the addition of a range structure that spanned one of the front terraces. Three caches help to date the structural stratigraphy, the earliest dating to the second century B.C. (Pendergast 1981:40-42).

Within the plaza that fronts Structure N10-43 is the lone ballcourt. It is rather late and dates to the ninth century A.D. It is very small, open-ended, and exhibits some unusual construction elements. In the center of the playing field is a large round marker. Below this stone was a cache that contained a lidded vessel, inside of which were two miniature vessels, small jades, and shell objects resting in a pool of 9.7cc of Mercury. Surrounding this plaza are a number of structures and large stones with unusually large carved glyphs.



Figure 1:6. Structure N10-43, the highest structure at Lamanai. Note mask remnants in lower right hand corner.

Farther to the south is Structure N10-27, a large, rather squat pyramidal building that dates to the Middle Classic. On the lower steps of this structure, lying face down, was discovered Stela 9, which represents Lord Smoking Shell of Lamanai, and follows Middle Classic canons of art (Budet 1988:31). A short distance away to the south is the N10-3 plaza area, also known as "Ottawa." It is a large courtyard surrounded by a number of range structures. Immediately to the south of this area is a large open plaza and Structure N10-9.

Structure N10-9 ([Figure 1:7](#)) was built in the Early Classic and stands 19 m tall. Its earliest form had a landing on a lower terrace that supported a temple. In the Late Classic period a new stair, stairside outsets, and a larger temple were constructed. A cache associated with this modification contained a jade mosaic mask. The front portion of this structure was maintained into the Middle Postclassic. In the 12th century A.D. it was again modified with the addition of new stairside outsets, suggesting a continuum of ritual and forms from the Classic into the Postclassic. The structure was completely abandoned in the 15th century, and a number of censers and Lamanai "chalices" were smashed and scattered over the steps (Pendergast 1981:34-35, 43-44).



Figure 1:7. Structure N10-9, photograph taken from the N10-3 Plaza area.

The Postclassic center of Lamanai is situated on the shore of the lagoon and to the east of the N10-9 plaza. Several structures in this area exhibit affinities with northern Yucatán, both in architecture and ceramics. These small structures contained numerous burials in Postclassic style, as well as gold and copper pieces (Pendergast 1981:44-49).

Evidence of continued occupation comes from the two seventeenth century Spanish churches ([Figure 1:8](#)), located about a kilometer south of the Postclassic center of Lamanai. The apse of the church was of masonry while the nave was built of perishable material. The church was burned in 1641 during a Maya rebellion. A Postclassic mound to the south of the church was modified and used as a cemetery for the Christian Maya. What was left of the prehispanic structure atop this mound is very similar architecturally to Late Postclassic structures of the east coast of Quintana Roo, México.

By the early 18th century the population had declined and the site center was virtually abandoned, although the Maya still continued to occupy the area. In the 19th century the British built a sugar mill, cisterns, and other structures associated with the endeavor, only to be abandoned within thirty years.



Figure 1:8. The second Spanish Church at Lamanai.

The Lamanai Archaeological Project

Previous Work

Until 1974, research at Lamanai was sporadic at most, with brief visits by Thomas Gann, J.E.S. Thompson, William Bullard, and Thomas Lee. Previous to this century, the last accounts of the site were by the Spanish Fathers Fuensalida and Orbita (Franciscan), shortly after the rebellious Maya in 1641 burned the church (Pendergast 1981).

In 1974 the Royal Ontario Museum (ROM) began an archaeological project at Lamanai under the direction of Dr. David Pendergast, also of the ROM. The site was chosen for intensive study for several reasons. The first was the presence of a sixteenth century Spanish church, which indicated historical occupation (Pendergast 1981:29). The second was the presence of extensive monumental architecture, indicating an important and sizable community during the Classic. Thus, it was hoped that excavations would provide information addressing the great span of time that was apparent at Lamanai (Pendergast 1981:31).

Excavations continued until 1986, with a number of areas within the site having been intensively excavated and major structures stabilized and consolidated. In 1979, Dr.

Elizabeth Graham, then the Archaeological Commissioner of Belize, joined the project and remained until its termination. The entire site was mapped from 1974 to 1976 under the direction of Dr. H. Stanley Loten of Carleton University, who also served as the project architect. In 1988, a four year program of restoration and development by the Belize government began.

In 1996, minor excavations began at a site named Lamanai South, an elite residential area about three kilometers south of the main site. These excavations were directed by Dr. Herman Smith in conjunction with field schools operated by the Lamanai Field Research Centre (LFRC), located at the Lamanai Outpost Lodge, Indian Church. Excavations continued at Lamanai South in 1997, and Smith was replaced by Dr. Elizabeth Graham of the ROM as Principal Investigator. Beginning in 1998, excavations conducted by field schools and researchers have focused again on the main center at Lamanai and the site of the Spanish church. I joined the project in 1997 as a field school student and have remained with the project since. In 1998, following excavations on Structure N10-27 and N12-12, I began work on the stucco collection from Structure N10-28.

The 1998 Field Season

As time was limited to two weeks to look at the collection, the primary focus was to pull out what could be located in the bodega, to quickly sort the pieces by motif, and to take general notes and sketches of the more elaborate pieces. Basically, it was an exploratory survey of the collection, which would provide the information needed to decide whether or not to pursue further analysis.

The bodega at Lamanai (see [Appendix 1](#)) is a relatively small concrete structure with a metal roof and few windows that houses many of the artifacts recovered during the ROM's Lamanai Archaeological Project. As in many other little used structures in the tropics, numerous bats call the bodega home. After the collapse of the original bodega in 1991, the Department of Archaeology constructed a new building and moved the collections to this location. Many of the stucco pieces were piled in two large metal washbasins filled beyond their rims, in a large heavy mahogany box on one of the shelves, and two five-gallon buckets. Several pieces were also found scattered on the shelves. Many of the pieces had to be brushed of dust, dirt, scorpion exoskeletons, and bat guano.

All of the pieces that could be located at that time in the bodega were taken to the adjacent and largely empty DOA structure and spread out on the floor and the three steel frame beds for ease of sorting ([Figure 1:9](#) and [Figure 1:10](#)). Approximately fifteen of the better pieces were in the museum located some several dozen meters away from the Department of Archaeology buildings. These pieces were removed for processing as well. Field illustrations and measurements were done on approximately twenty of the better pieces in the collection, and both color and black-and-white photographs were taken of a number of the fragments.



Figure 1:9. Initial sorting of the stucco collection in 1998.



Figure 1:10. Initial sorting of the stucco collection in 1998.

In all, approximately six hundred pieces were processed, the majority of which were returned to the bodega unnumbered and/or unclassified. Some of these were non-descript fragments of stucco whereas others had finished surfaces but were too small and ambiguous to be classified in any fashion. Bulk weights were taken on a rudimentary scale, and approximate weight of what could be located was 483 lbs.

The collection was divided into general categories, such as borders, anthropomorphic forms, headdress patterns, flat painted surfaces, earflares, and the ubiquitous miscellaneous category. Division by general form and/or pattern was the primary objective, rather than iconographic meaning. Several matches were found and were glued back together. Some other pieces were noted to be similar to others, but no breaks could be matched. It was also noted that at least fifteen pieces were associated with each other and represented a figure with an outstretched arm.

A temporary cataloging system was implemented for use in referencing field notes, and many of the pieces were numbered by their lot number and a unique artifact number. A total of 176 pieces were numbered. The lot number for the stucco pieces recovered in 1981 and 1982 is LA 1103. All of the pieces were returned to the bodega in new plastic washtubs covered with plastic. Some of the pieces were bagged up for extra protection. The last day in the field was spent installing approximately thirty-eight of the best and most representative pieces in the museum on newly cleared shelves.

Research Design and Objectives

This project provides an example of how research designs are constantly modified with each progressive field season. The two weeks of work in 1998 was exploratory, in order to determine the viability of pursuing the project further. It was then decided the project would be worthwhile to pursue, and plans were made to fully analyze and record the collection during the following field season in 1999. At that time, I was operating under the assumption that the pieces retrieved from the bodega represented virtually all that had been recovered in the field.

A research proposal was submitted to FAMSI for funding to cover a field season of research. The objectives of this research project comprised three areas: (1) to process, conserve, store, and report the collection, (2) to analyze the iconography of the collection, and (3) to conduct small-scale excavations at and around Structure N10-28 to clarify some architectural data.

Excavations at Structure N10-28 would consist of two operations: (1) A trench, approximately four meters long and located at the northeastern corner of the structure, to determine if the north and east sides contained façade sculpture, and (2) removal of at least a meter of plaza core to recover more sculptural pieces. The first ten days of the season, projected to last six weeks, would consist of the excavations at Structure N10-

28, described above, with approximately five full workdays devoted to each trench. The following four and a half weeks were to be devoted to the full analysis of the collection.

However, conditions in the field and logistical problems greatly modified the plans for the 1999 season. The original plan of giving each piece a unique artifact number quickly became an awkward and unwieldy problem. In addition, at least eight flour sacks full of stucco were located in the bodega by a colleague. Many nice pieces were found in these bags, and greatly increased the size of the collection to well over a thousand fragments. In addition, several lot numbers of non-stucco artifacts from the 1981 excavations were also located.

Excavations as originally outlined were carried out, with the exception of locating the northeast corner of the structure, which was postponed due to logistical problems. In addition, an architectural field school directed by Drs. Elizabeth Graham and David Pendergast were moved from Structure N10-27 over to N10-28 and N10-15, as these structures provided a better laboratory for addressing specific architectural questions. Concurrently, Claude Belanger, who worked at Lamanai during the original ROM project and who was assisting with the field school, began operations that eventually removed approximately 100 tons of core from the plaza, exposing large quantities of stucco and other artifacts. This unexpected, but highly appreciated, extension of the project, as well as my original excavations, have recovered another thousand fragments as well as a large volume of ceramics and other artifacts.

With these changes and extensions to the original plans, the scope of the project has increased. It will take at least two more field seasons to fully analyze and record the stucco fragments, as well as to analyze the ceramics and other artifacts. In addition, I have every reason to believe there are more pieces of the façade on the east side of the structure, and at some point excavations in this area would be beneficial not just for more sculptural pieces but for architectural data as well.

In addition to the iconography, it has been posited that this structure may have been the Popol Na of Lamanai, based on a number of reasons which will be more fully discussed. In retrospect, the events of this past field season have been enlightening and optimistic, enabling me to work out my methodology and determine the scope of work for the upcoming field seasons. The first full season of fieldwork on the stucco façade of Structure N10-28 at Lamanai is the subject of this report, various aspects of which are detailed in the following sections.

Theoretical Constructs

A brief discussion should be made on the theoretical underpinnings that generally shape and guide a project such as this one. Two major art historical theorists are utilized, Erwin Panofsky and George Kubler. The ideas of others are drawn upon as well. Generally there are two schools of thought in the approach to the study of prehistoric art: the configurational school of Kubler with the ethnological school of Willey

and most Mesoamerican archaeologists, though the earliest approaches to iconography were put forth by Panofsky. The configurational school believes that interpretation should be confined to iconographic clusters within a period so as to avoid disjunction of meaning and form. The ethnological school assumes that forms and symbolic meanings are the same if the culture itself is unchanged. Kubler, using Panofsky's Principle of Disjunction argues that disjunction of form and meaning is more common than continuity.

One of the primary theorists of Art History, Erwin Panofsky, defined three levels of meaning involved in an iconographic approach. His three levels of meaning are: (1) primary or natural subject matter, (2) secondary or conventional, and (3) intrinsic meaning or context. The first level is subdivided between factual and expressional, such as representations of objects, the relation between the objects and events, and the expressive qualities of the object. This level is that of pure forms and contain primary (or natural) meaning. These pure forms are called artistic motifs, which constitutes a pre-iconographical description.

On the second level, artistic motifs and combinations thereof are connected with themes or concepts. Images are motifs with a secondary or conventional meaning. This is the level of iconographic analysis, where the subject matter of themes and concepts are the focus of iconography proper. However, a correct identification of motifs is necessary for a correct iconographical analysis (Panofsky 1972:6).

The third level is concerned with the intrinsic meaning of an image. This is arrived at by studying the "underlying principle which reveal the basic attitude of a nation, a period, a class, a religion or philosophical persuasion-unconsciously qualified by one personality and condensed into one work" (Panofsky 1972:7).

By principle, a correct pre-iconographic description is based on our practical experience, or "reading what we see". But this does not necessarily mean it is correct (Panofsky 1972:9). Iconographical analysis, though, requires familiarity with themes and concepts. He also cautions that a knowledge of themes and concepts does not also necessarily mean a correct iconographical analysis. Intrinsic knowledge, rather than familiarity, is required for the interpretation of symbolical values and the intrinsic meaning or content, or what Panofsky terms "synthetic intuition" (Panofsky 1972:14-15). By comparison of all other works and decoration of the period we can arrive at intrinsic meaning.

George Kubler, on the other hand, advocates Panofsky's Principle of Disjunction. The concept of disjunction negates most ethnological analogies because of its emphasis on discontinuity, and provides an explanation for the complex mechanics of culture change (Kubler 1975:762). Kubler's main argument is against the simplistic view by archaeologists that Mesoamerica was a large cultural system that experienced no major changes in its symbolic system from the Formative through the Conquest (Kubler 1975:762). He was especially critical of Gordon Willey who emphasized the anthropological view of cultural unity and the art historian's cultural pluralism. However, Kubler asserts there are three incorrect assumptions of anthropology: art does not

reflect life, it does not necessarily indicate nature, and art cannot be explained by texts and informants (Kubler 1975:766).

Kubler's approach to Maya art is that of contextual study. If these themes consist of motifs recognized as object and events, then the motifs of this grouping should convey the information from the then undeciphered text framing the image. To Kubler the picture has more information than the glyphs do. Motifs by themselves can compose a meaningful theme, but not all motifs are meaningful because some are just ornamentation (Kubler 1969:5). Kubler also believes that within a long cultural duration, early and late versions of a theme are distinct (Kubler 1969:7). Frequent thematic representation over a long period of time indicates fixity of meaning; but when there are different symbolic systems continuity is unlikely (Kubler 1969:8). This is Panofsky's disjunction.

Kubler emphasizes several main points. The structure and meaning of a form is necessary before its development can be studied, and meaning and relationships are more easily understood from late examples than earlier ones (Kubler 1969:47). Kubler states that the "two axioms of iconographic method are (1) that a visible form often repeated may acquire different meanings with the passage of time, and (2) that an enduring meaning may be conveyed by different visual forms." Disjunction is a mode of renovation whereby a succeeding culture inherits new meanings for old forms or new forms for old meanings (Kubler 1970:143).

Form and meaning can be understood by studying style and tradition and the relationships within a style. This is what the configurational method does. However, analogy and comparison is what brings about full meaning. Terence Grieder (1975:853), though aware of disjunction, believes that archaeology and history can determine disjunctive events in the past. Grieder's approach is that only through "a full catalogue of images, with the archaeological record, including ceramics, with an awareness of evidence of disjunction, and with historical and ethnographic records to provide one end of the traditions of content, we can attain reasonably good descriptions of the more recent prehistoric cultures, and at least increase the evidential base for speculation about the remote ones" (Grieder 1975:853-854).

Gordon Willey (1973), in discussing his views on Mesoamerican iconography, states that art has two types of meaning: general and specific. When a researcher determines general meaning, that level is aesthetic or superficial. Specific meaning can be interpreted several ways, and in the understanding of how art functioned within a specific cultural context. Most Pre-Columbian art researchers have a basic methodological assumption, and that understanding must begin with the ethnohistoric accounts and then proceed back in time. This is based on three assumptions. The assumptions are Mesoamerica: (a) is a unified cultural tradition, (b) has a unified ideological system, and (c) has an integrity of belief and communication within these systems (Willey 1973:297-298). Kubler, on the other hand, searches for meaning in general analogy with reference to other cultures rather than specific Mesoamerican cultures (Willey 1973:298).

Processual archaeologists have recognized the dangers of disjunction between the ethnographic present and the archaeological past, preferring general comparative analogy and avoiding specific historical arguments (i.e. Binford). It seems that if the focus of archaeology is ecological, technical, and economic information, then art is unimportant. However, art and architecture are some of the most important pieces of information left behind by past cultures.

Esther Pasztory (1973) has developed the synthetic approach, which is a very good reconciliation between the disparate approaches of art history and archaeology. This method involves both disciplines and ideally should produce the best results. Her synthetic approach involves four steps: (a) analysis of motifs, (b) comparison of motifs with motifs in other Mesoamerican cultures, (c) the use of Aztec and Spanish texts, and, (d) modern ethnography. This approach goes beyond elementary contextual analysis (Pasztory 1973:150). However, I believe that the first two are the most important, and the farther removed from the present the culture is, then three and four become less important. In essence, I would rank the steps here in level of importance.

Many art researchers now have condensed these approaches, which they employ on many different levels, especially with how image is read (see Berlo 1983; Miller 1989). Basically, the new scholars using both traditions "use a rigorous analytical approach that combines the best of traditional anthropological use of discrete texts with the traditional art historical commitment to the primacy of the art object" (Berlo 1983:6).

This report should be considered the first in a series concerning this research project, as it appears it will last for several more field seasons. In my own approach I tend to draw upon all of the scholars mentioned above, and consider my own theoretical inclinations to be "middle of the road" between these extremes.

Especially in regards to Pasztory's synthetic approach, this report should be considered only preliminary at best. It primarily deals with the first step in an iconographic analysis: the identification of motifs, forms, and patterns within the corpus. However, it also touches upon the second step as well with some very general comparisons of the motifs and forms from other sites.

Section 2: Archaeological Excavations at Structure N10-28

The N10-3 Plaza Group

Structure N10-28 is located in the N10-3 plaza group, a highly complex assemblage of elite and residential structures. The structures that are visible now largely date to the Terminal Classic ([Figure 2:1](#), [Figure 2:2](#), [Figure 2:3](#), and [Figure 2:4](#)), and represent later versions of an assemblage that dates at least as far back as the Middle Classic (Pendergast 1986:231).

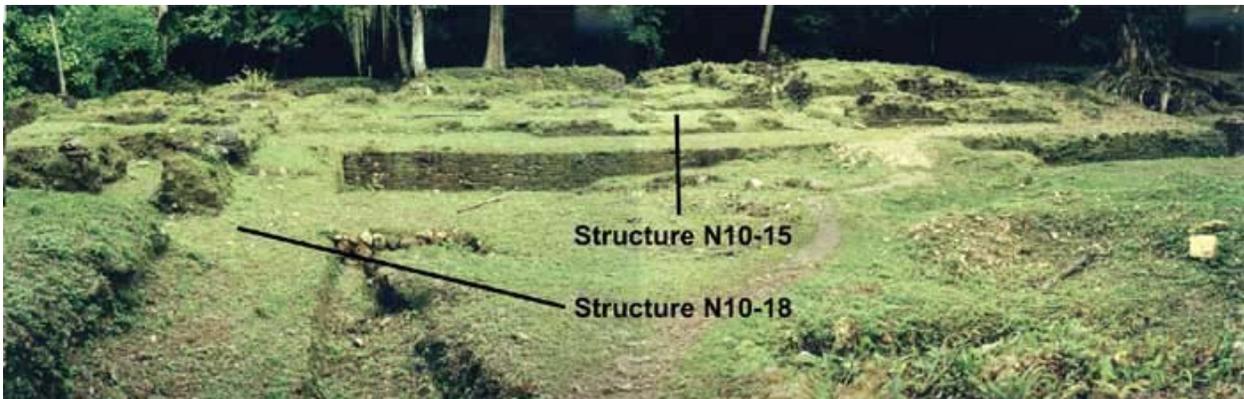


Figure 2:1. Panoramic view of Structures N10-18 (on the left) and N10-15 (center). Structure N10-28 is on the far right.



Figure 2:2. Structure N10-18, behind which is the large face of the N10-3 Plaza complex. The western portion of Structure N10-15 is on the right hand side.



Figure 2:3. Panoramic view of the N10-3 Plaza complex, looking north-northeast.

By the late ninth century, the group consisted of a series [at least six] of structures arranged around two contiguous courtyards. While the three eastern structures of this period are typical of the Lamanai Classic...the masonry is largely or wholly reused from earlier structures. The western portion...resembled its eastern counterpart in that it

consisted of three structures, but with the significant difference that the three sat atop a common platform that bordered the court on three sides. While masonry characteristics are essentially those of the Classic, the enclosure of a courtyard with a single multipart platform is a marker of the late Terminal Classic and the Postclassic on parts of the Yucatán (Pendergast 1986:231-232). Two...appear to have rested directly on the surface of a large underlying platform, while the remainder were raised on two-terrace platforms (Pendergast 1985:93).

The use of vertically set facing stones in stair risers, the tripartite platform, which seems to prefigure those of the Yucatán, and the use of a columned entryway, is an innovative step on the part of the city's builders (Pendergast 1986:232). In the Early Postclassic this assemblage of structures would undergo a radical transformation in the middle to late tenth century.

As the initial step in the modification, the builders razed the upper portions of all structures but one, and capped the remains with part of the material used to fill both courtyards to a depth of approximately 2.5 meters so as to create a single large platform top. The partly razed rear faces of the northern structures were abutted by a huge platform, with a volume of roughly 3,000 cubic meters, while the west side of the tripartite platform was cased with an extensive new face, and additions were made to platform units peripheral to the principal group... The transformation of the courtyard group was clearly an effort of such magnitude as to have engaged the energies of a very large work force over a very considerable period. Data from a variety of offerings in the core of the courtyard fill indicate that the better part of a century may have been taken up in this effort. During the period, the lone remaining building of the earlier complex, a masonry-walled building with wooden roof (Structure N10-15), was also undergoing numerous internal and external modifications, while at the east and west ends of the new large main platform the builders erected residential structures that differed radically from each other and from their predecessors. The northern extensions of the complex were probably built shortly after the courtyard filling, perhaps in more than one stage, while ceramic evidence from core of the western addition shows that it was almost certainly the last element in the modification, built in the twelfth century or later. The gigantic size of the effort, coupled with the fact that earlier construction must have brought about depletion of core-material sources, means that the rebuilding of the group must reflect the presence of an elite still fully capable of marshaling the populace for a massive undertaking that probably spanned, in all, at least a century and a half. That this was the work of a vigorous, vital community with its goals clearly in view is surely beyond question (Pendergast 1986:232-233).

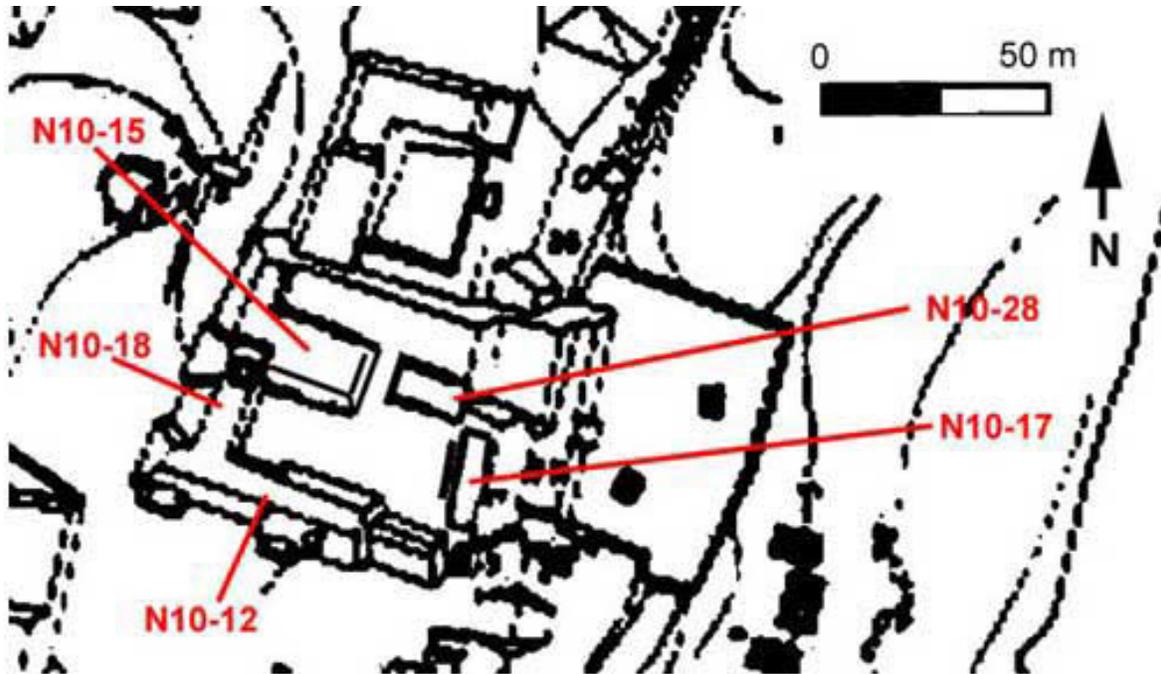


Figure 2:4. Map of the N10-3 Plaza group (modified from Pendergast 1981:33).

Structure N10-28

Structure N10-28 ([Figure 2:6](#) and [Figure 2:7](#)) is the smallest structure in the N10-3 group and occupies the northeast corner of the complex. It was probably the last major addition to this group and was constructed about A.D. 925-950. "Plan and exterior surface features suggest that the structure did not serve as a dwelling, but rather may have functioned as a semipublic element in the group, perhaps with a combination of secular and ceremonial use" (Pendergast 1985:93).

During the original ROM Lamanai Project, Plaza N10-3 was under excavation during the 1981 and 1982 field seasons. Work primarily concentrated on the removal of core in an attempt to expose the faces of some of the structures that surrounded the original plaza. Structure N10-28 was discovered during work on N10-17, late in the 1981 field season, thus being out of number sequence with the rest of the structures. Only the west and south (front) faces of N10-28 were uncovered, and only part of its front platform. Large quantities of stucco were recovered from the demolition level along these sides and from atop the platform.

This structure experienced at least one major modification, which involved the front terrace and not the primary structure itself, although there were a number of minor modifications to the interior rooms. The structure is composed of two rows of rooms that were roofed by two long vaults. As of July of 1999, nine rooms have been excavated.



Figure 2:6. Photograph of Structure N10-28 taken before the 1999 excavations.

The N10-28 substructure closely approximates the superstructure on its west and east sides, projecting only along the front, or south, side. This terrace appears to have experienced two phases of construction. The earlier terrace was located around the central doorway, and was then modified by extending the terrace to the west and east ends of the building.

The substructure, as seen on the west and east sides, are characterized by a series of small setbacks and angles. Much of the original plaster, painted red, still adheres to the substructure face and plaza floor in some areas. These distinct setbacks are not continued on to the front terrace modification, the masonry of the latter being different and not as uniform. Though two phases of terrace construction undoubtedly exist, a joint where they meet could not be determined.

The masonry of the front stair of N10-28 is generally large, rather uniform, and formed of vertically set stones. However, the top step is composed of small stones lain horizontally. This stair, which was modified once, is flanked by stairside outsets. An axial trench excavated by Pendergast in 1981, which did not recover any caches, did reveal that N10-28 is primary to the uppermost of two plaza floors (Pendergast, personal communication).



Figure 2:7. View of Structure N10-28, looking east, with Structure N10-17 in the background. The core that fills the courtyard can be seen on the right.

Field Operations and Artifacts

In the following sections each field operation is described and associated artifacts are listed. Excavations carried out in 1999 on Structure N10-28 were assigned a general operations number to identify architectural investigations within the Lamanai Archaeological Project system. This number, OP99-6, encompasses excavations carried out in July of 1999 by the author.

A datum was established on the west wall of Structure N10-28 near the structure's southwest corner. It is a nail one course down and one stone back from the corner (10.5 cm down from top of wall and 19.5 cm north from southwest corner along west wall). All vertical measurements were taken from this datum.

In addition, a grid system was established throughout the N10-3 group to redraw the plan of Structure N10-28 as well as map the entire group for field school exercises. To insure continuity in the mapping next year, three benchmarks were established and formed with aluminum pipe and poured concrete.

A photography platform was established approximately 10 to 12 meters up in a massive strangler fig that is growing in the northwestern area of Structure N10-28. This was done by nailing cut limbs to the trunk of the tree, trimming appropriate limbs that blocked particular views, and once inside the safety of the limb canopy, a number of sweeping views of the excavations were possible.

In addition, the project seemed to involve more engineering than archaeology at times, with the need for people to move around the structure easily as well as transporting equipment and rock. The need to construct ladders, ramps, and lifting mechanisms from jungle timber provided an important lesson in logistical planning and the ability to work with limited resources.

Field Operation 1

Location: Continuation of the removal of plaza core from the area between Structures N10-15 and N10-28 to the front corners of their respective terraces.

Objectives: There were a number of reasons for excavating in this area. The first was to remove enough plaza core at the top to gain at least a meter of surface of the demolition level that is atop the plaza floor. Within this demolition level it was hoped to recover more stucco fragments, datable ceramics, and obtain stratigraphic information. In many Maya structures, the corners of facades are generally more elaborate and heavier. It is this assumption that further guided reasons for excavations here. Finally, this operation would uncover the terrace corners of these two structures, providing additional architectural data.

Stratigraphy: Two primary levels recognized, Level A represents the core layer that fills the plaza. This level consists primarily of stone with little soil. Depth ranges from three to four meters. Level B corresponds to the demolition level that is atop the plaza floor. This level is characterized by a light yellowish color and the soil is relatively crumbly and sandy. Much of the color and texture is from pulverized building core, stucco, and mortar. Level B is rich in artifacts, primarily stucco and ceramics, and is approximately fifty centimeters thick.

Approximate Dimensions: Approximately 1 by 1.2 meters (at base).

Lot Numbers: 1284, 1285. *Figures:* [2:8](#), [2:9](#), [2:10](#), [2:16](#), [2:19](#), [2:20](#), [2:21a](#), [2:22a](#)



Figure 2:8. Area of Operation 1 before excavation. Portions of the N10-28 terrace can be seen in the lower left, and the N10-15 terrace is on the lower right.

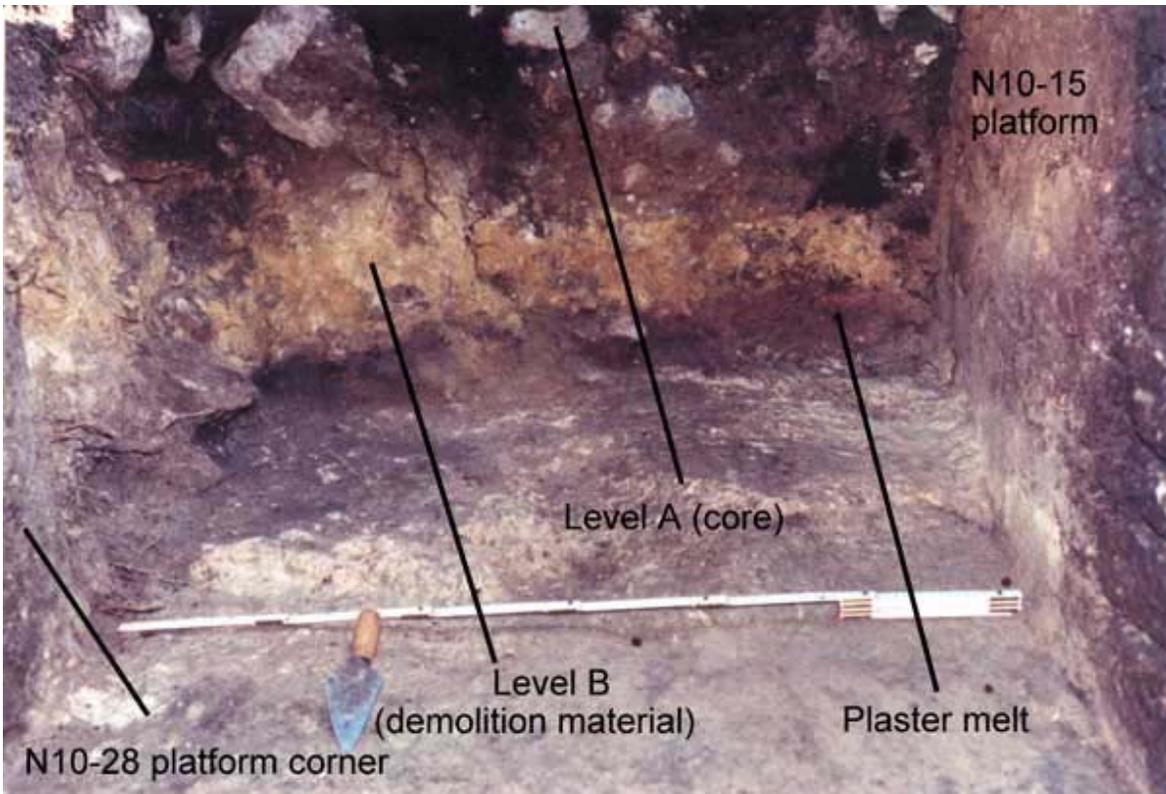


Figure 2:9. Operation 1 stratigraphy.

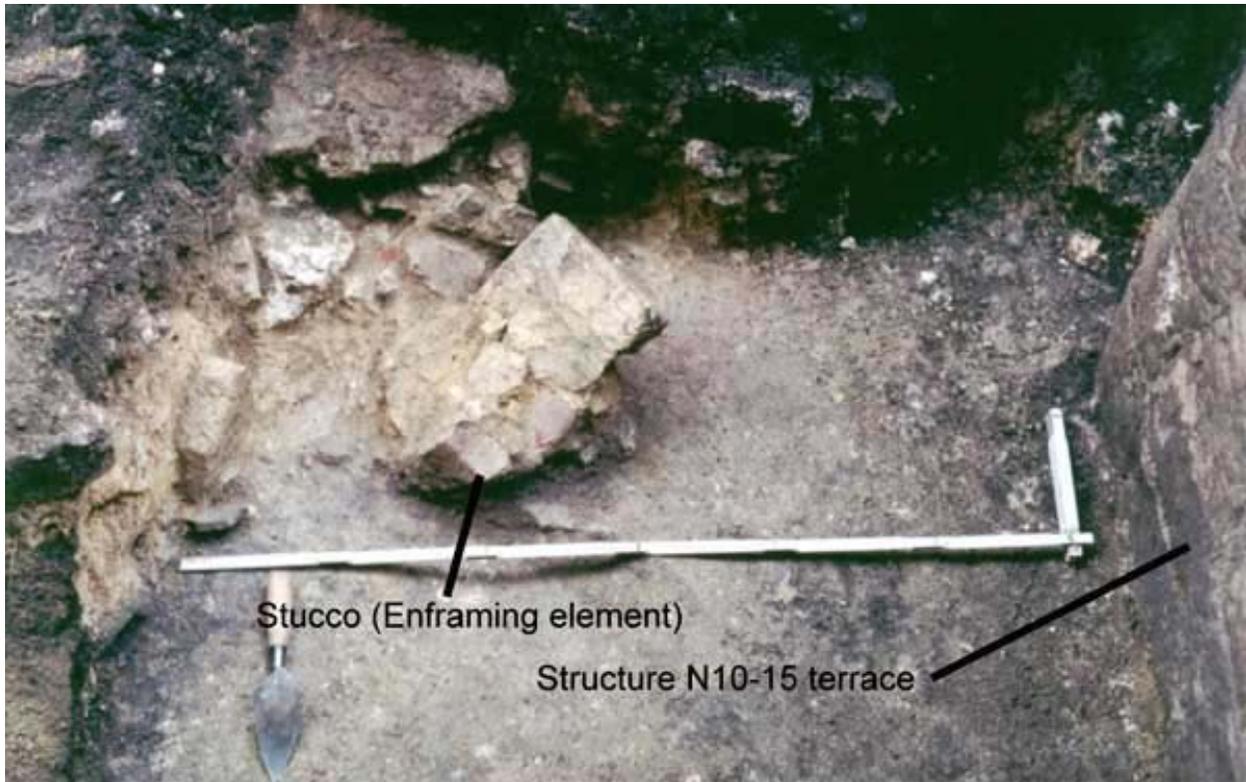
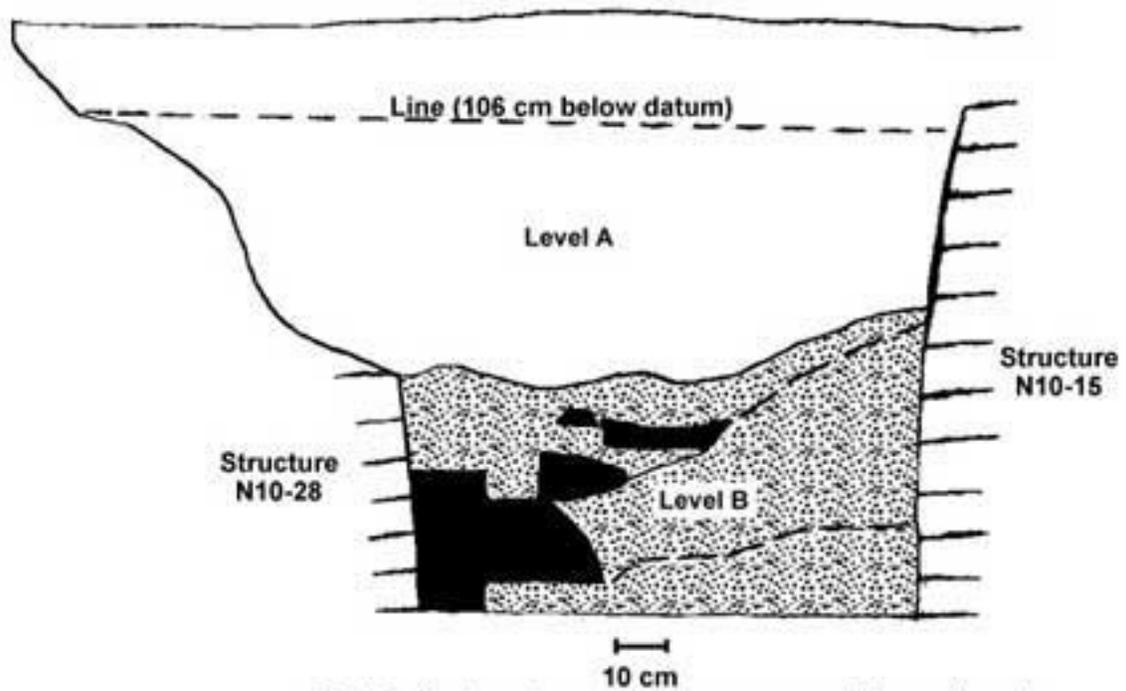


Figure 2:10. Recovery of stucco and ceramics in Operation 1.



Black indicates stones and stucco exposed in profile cut

Figure 2:16. South profile of Operation 1.

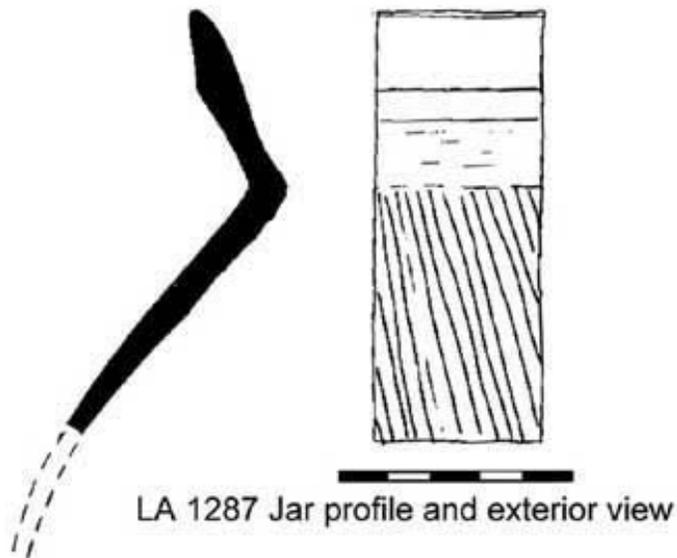
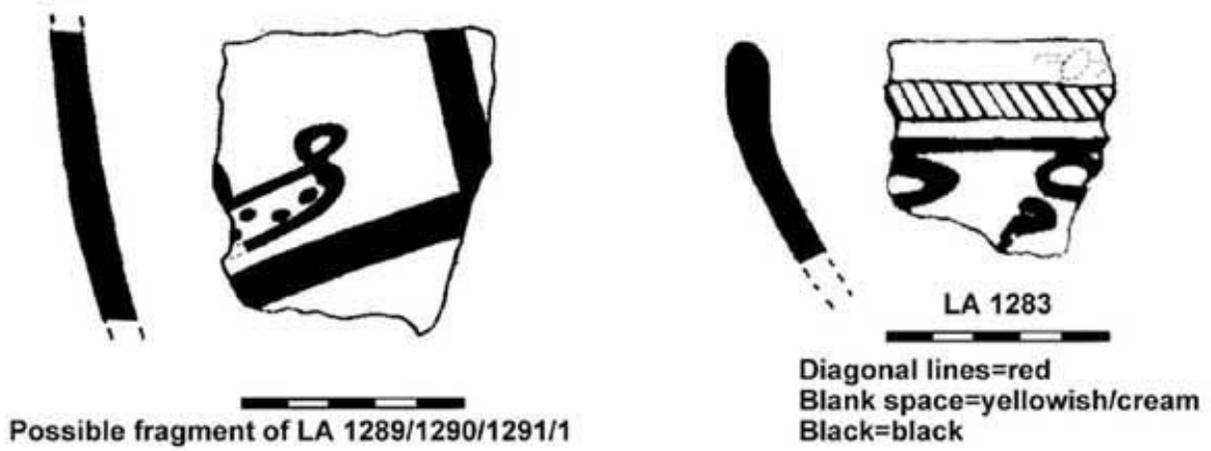


Figure 2:19. Ceramic profiles and photographs.

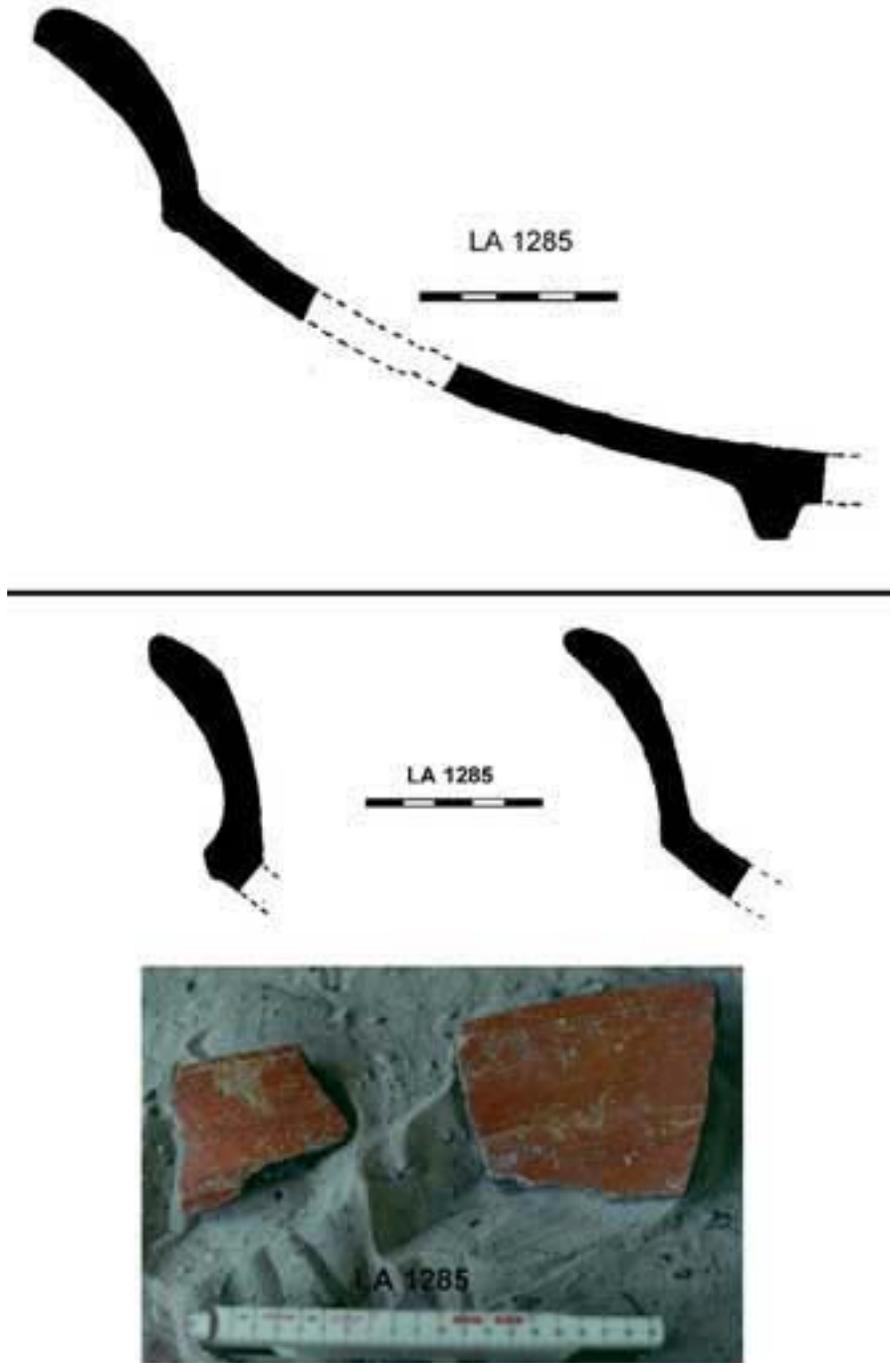


Figure 2:20. Ceramic profiles and photographs.



(a)



(b)

Figure 2:21. (a) Photo elevation of the corner of N10-15, from Operation 1. (b) Photo elevation of core face from Operation 4.



(a)



(b)

Figure 2:22. (a) Southwest corner of N10-28. (b) photo mosaic elevation of west N10-28 terrace.

Lot Number 1284

Description: Plaza core, corresponds to Level A.

Artifacts:

Description	Count	Weight (grams)
Chert	3	88.7
Obsidian	4	2.8
Rim Sherds	9	154.8
Body Sherds	94	1387.0
Basal Sherds	3	169.2
Decorated Sherds	2	16.0
Stucco	3	n/a

Thickness of Deposit: Approximately 3 to 4 meters.

Temporal Assignment: end of Terminal Classic, Early Postclassic.

Comments: Few artifacts in this level, most have filtered down through the stones from surface during excavation or natural processes.

Lot Number 1285

Description: Demolition level, corresponds to Level B.

Artifacts:

Description	Count	Weight (grams)
Chert	6	43.0
Obsidian	1	0.6
Rim Sherds	57	2290.1
Body Sherds	345	4431.0
Basal Sherds	4	255.8

Shell	1	0.9
Stucco	418	n/a

Thickness of Deposit: Approximately 50 cm.

Temporal Assignment: Terminal Classic

Comments: Two floor levels, one 2 cm higher than the other, were noted. A number of stucco pieces recovered in this level, including two large stone armatures. At least three clusters of ceramics were noted, one of which is a type known as Daylight Orange. Red tinted plaster melt was also noted close to the base of the two terraces, and measured approximately 2 to 4 cm thick.

Field Operation 2

Location: Continuation of core removal from the rear of the area between Structure N10-15 and N10-28 proceeding north.

Objectives: To remove enough core to gain approximately a meter of the demolition level on the plaza floor. Primary objectives were to locate more stucco pieces, datable ceramics, and attempt to follow the remainder of the chopped west terrace face of N10-28 to its corner.

Stratigraphy: Two primary levels recognized, Level A represents the core layer that fills the plaza. This level consists primarily of stone with some soil. Depth is approximately two and a half to three meters. Level B corresponds to the demolition level that is atop the plaza floor. This level is characterized by a light yellowish color and the soil is relatively crumbly and sandy. Much of the color and texture is from pulverized building core, stucco, and mortar. Level B is rich in artifacts, primarily stucco and ceramics, although Level A contained more stucco fragments than its equivalent level in Operation 1. Level B is approximately 1 to 1.5 meters thick.

Approximate Dimensions: Approximately 1 by 1.75 meters.

Lot Numbers: 1286, 1287. *Figure:* [2:11](#)

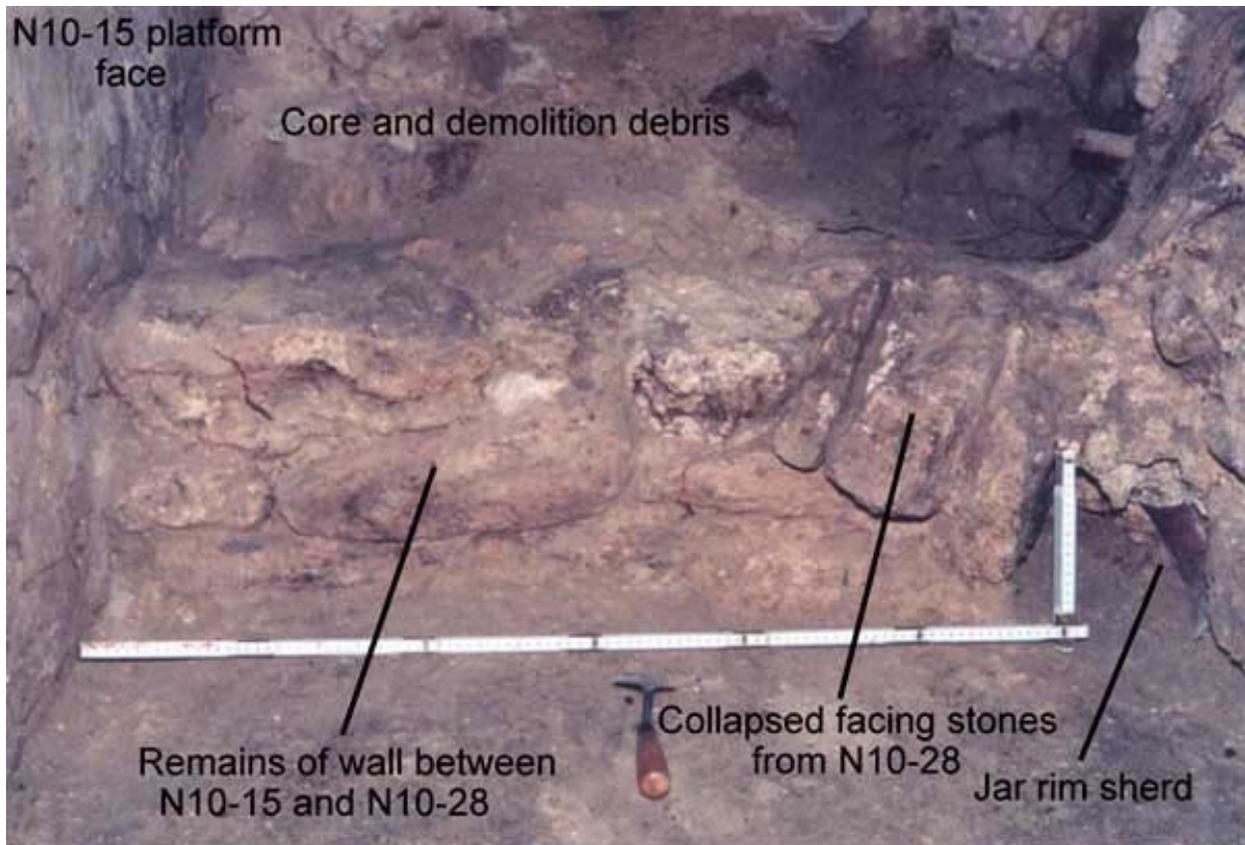


Figure 2:11. Operation 2, showing wall base and collapsed facing stones.

Comments: This operation was terminated prematurely due to logistical problems. Work on this operation will be completed in the 2000 field season.

Lot Number **1286**

Description: This lot corresponds to Level A, upper core.

Artifacts:

Description	Count	Weight (grams)
Rim Sherds	15	662.0
Body Sherds	97	3308.0
Decorated Sherds	(bichrome) 1	21.0
Stucco	1	42.0

Thickness of Deposit: 1 to 1.75 meters.

Temporal Assignment: End of Terminal Classic, Early Postclassic.

Comments: The core in this area is more tightly packed with soil. This operation involved the removal of a late addition to N10-15, all that remained of which were a few facing stones, which were recorded and photographed prior to removal.

Lot Number 1287

Description: This is the demolition level that is atop the plaza floor, corresponds to Level B.

Artifacts:

Description	Count	Weight (grams)
Obsidian	1	0.8
Rim Sherds	5	356.0
Body Sherds	42	861.0
Decorated Sherds	(bichrome) 1	14.0
Stucco	282	n/a

Thickness of Deposit: 1 to 1.5 meters.

Temporal Assignment: Terminal Classic

Small Finds: LA 1287/1

Description: Broken bivalve shell perforated close to hinge.

L: 2.3 *W:* 2.0 *Thickness:* 0.01 *Height:* 0.06 *Perf:* 0.04

Comments: A number of stucco fragments were recovered from this level, many of which were recovered atop the terrace of N10-15. As the façade was demolished many of the pieces, in addition to the floor between the two structures, fell on to the top of the N10-15 terrace. At the bottom of the operation, just on the plaza floor, was found the base of a wall, much like the wall that blocks access between the two structures a couple of meters to the south. Interestingly, this base abuts approximately three to four facing stones that had fallen from the N10-28 west face. Beneath these facing stones was recovered a jar fragment.

Field Operation 3

Location: Approximately two to three meters north of Field Operation 2.

Objectives: At the northernmost point of the ROM Project trench, approximately 4 to 5 small facing stones were exposed. This operation was an exploration to determine what structural remains these facing stones were a part of.

Stratigraphy: No definable stratigraphy. One meter of midden atop core and against terrace face.

Approximate Dimensions: See plan 2.

Lot Numbers: 1281. *Figures:* 2:12, 2:13

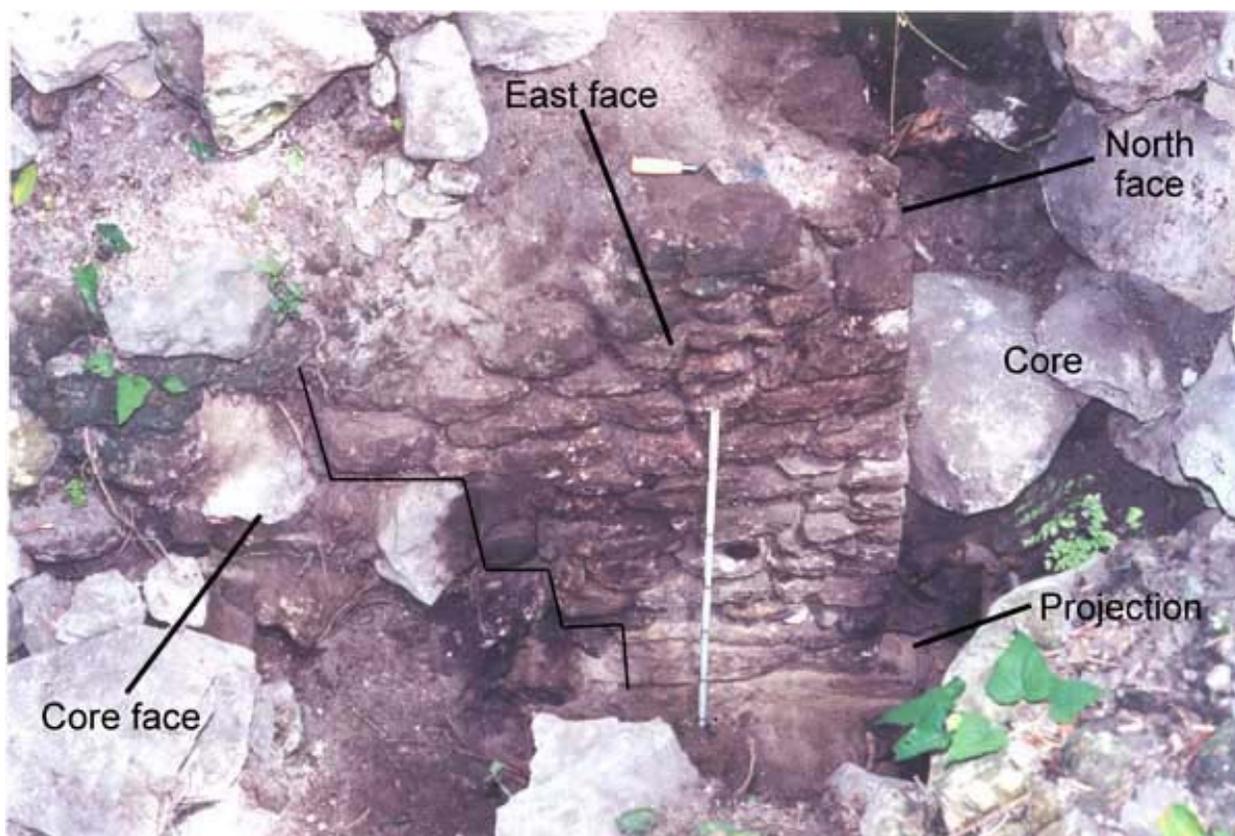


Figure 2:12. Operation 3, showing east face of N10-3 Plaza complex.

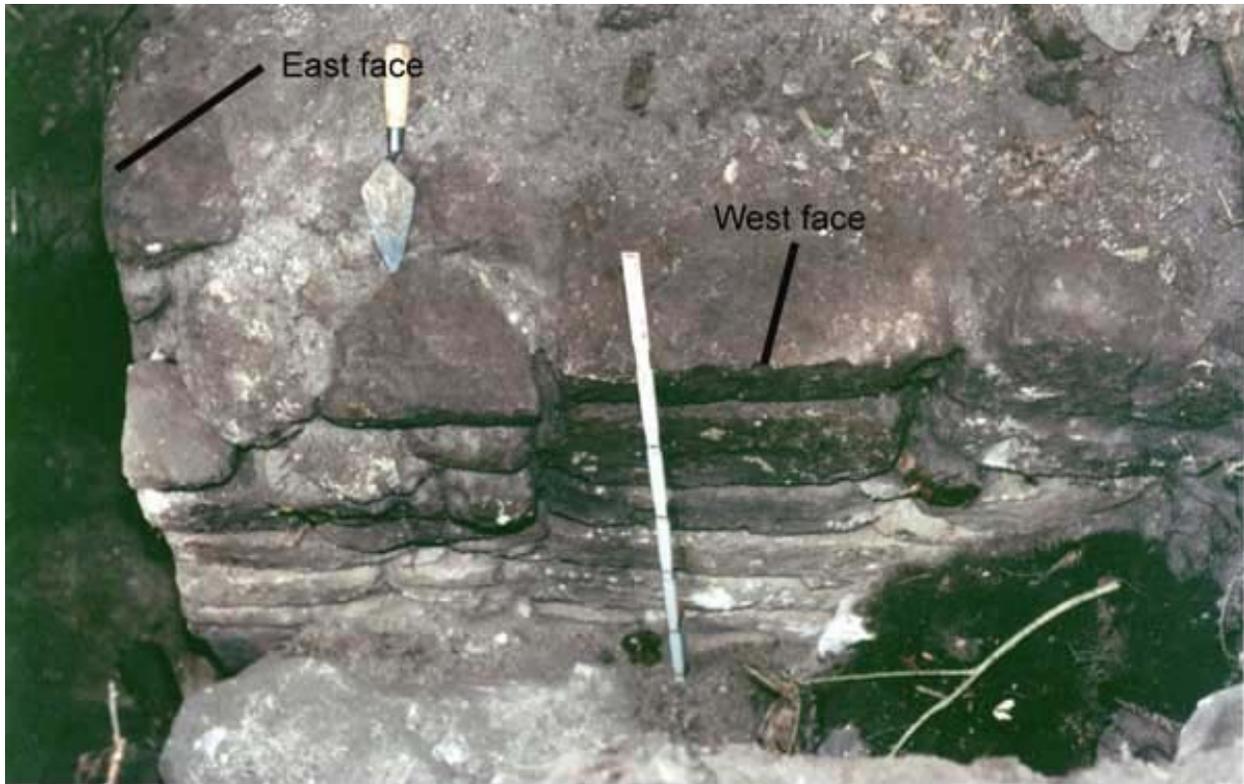


Figure 2:13. Operation 3, showing the north face of the N10-3 Plaza complex.

Comments: This operation uncovered a secondary face of the entire N10-3 Plaza complex. Excavations exposed an east face, the corner, and part of the north face. The east face terminates at a core face, and this represents where the terrace turned eastward behind N10-28. The face was excavated down approximately 1.5 meters until a setback was discovered on the north side. This operation was terminated due to the unstable core and because it was unrelated to N10-28.

Lot Number **1281**

Description: Midden material over and against terrace face.

Artifacts:

Description	Count	Weight (grams)
Chert	14	112.4
Obsidian	2	1.2
Shell	3	7.5
Bone	4	23.4

Rim Sherds	45	1832.2
Body Sherds	337	2971.4
Basal Sherds	3	308.5
Decorated Sherds	11	114.5
Misc.	1	24.2

Thickness of Deposit: Approximately 2 meters.

Assessment: Midden 2-moderately disturbed.

Temporal Assignment: Early Postclassic.

Comments: There was a tremendous volume of artifacts from this small area. Artifacts include obsidian blade fragments, large ceramic sherds, a drum fragment, and faunal material.

Field Operation 4

Location: The western end of the south side (front) of N10-28, from Operation 1 to core face.

Objectives: To remove core to fully expose the platform of N10-28 and recover, in a systematic fashion, more stucco pieces.

Stratigraphy: Two primary levels recognized, Level A represents the core layer that fills the plaza. This level consists primarily of stone with little soil. Depth is approximately three to four meters. Level B corresponds to the demolition level that is atop the plaza floor. This level is characterized by a light yellowish color and the soil is relatively crumbly and sandy. Much of the color and texture is from pulverized building core, stucco, and mortar. Level B is rich in artifacts, primarily stucco and ceramics, and is approximately five to thirty-five centimeters thick.

Approximate Dimensions: 2.3 m by 5.4 m.

Lot Numbers: 1284, 1289, 1290, 1291, 1292, 1293. *Figures:* [2:14](#), [2:15](#), [2:17](#), [2:21b](#), [2:22b](#), [2:23](#), [2:24](#), [2:25](#), [2:26](#), [2:27](#)



Figure 2:14. Operation 4 during excavations. Most of the overlying core has been removed atop the demolition level.



Figure 2:15. View of Operation 4, with excavation of the demolition level (under tarp) and field school work underway within N10-28 and N10-15. Workmen in the background are removing core from the front of N10-15.

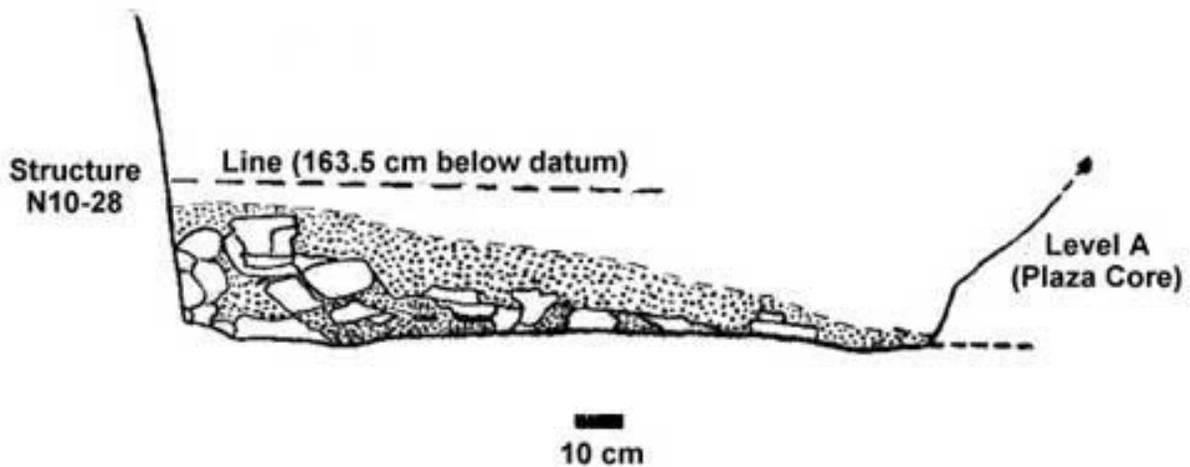


Figure 2:17. East profile of Operation 4-b, used here as a representative example. Final drawing by Thomas M. Shelby based on field drawing and notes by Heidi Ritscher and Karen Pierce

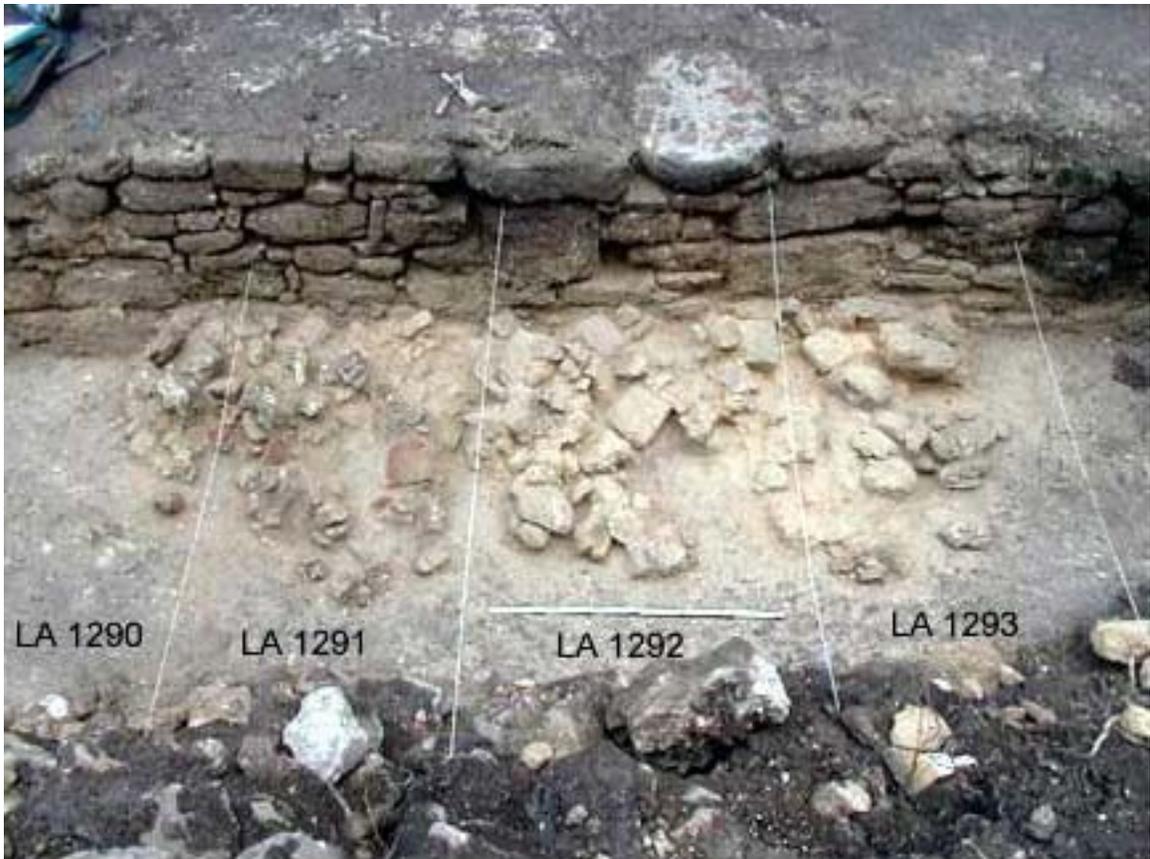


Figure 2:23. Photograph of stucco and ceramics exposed in situ in Operation 4.



Figure 2:24. Plan view of stucco in Operation 4-b (LA 1290).



Figure 2:25. Plan view of stucco in Operation 4-c (LA 1291). Note polychrome vessel fragments.



Figure 2:26. Plan view of stucco in Operation 4-d (LA 1292).



Figure 2:27. Plan view of stucco in Operation 4-e (LA 1293).

Comments: In this operation, dozens of tons of rock had to be removed, which included the recording and removal of a core face. After the debris layer was achieved, it was sectioned into one-meter increments from the southwest platform corner. In all, there were five one-meter sections, numbered Operation 4-a, 4-b, and so on. Operation 4-a was excavated out completely at once. It was noted that stucco and debris tapered down to the floor approximately a little over a meter out from the platform face. It was then decided to come down on the debris layer carefully exposing the stucco fragments, ceramics, and facing stones *in situ*. The result was a three and a half-meter long *in situ* debris layer.

Lot Number **1284**

Description: See under Field Operation 1.

Lot Numbers **1289 to 1293**

Description: Corresponds to Level B of Operation 1.

Thickness of Deposit: 5 to 35 cm.

Temporal Assignment: Terminal Classic.

Comments: These lot numbers, all from one operation, result from the sectioning into one meter increments the demolition level, from Operation 1 to the core face that was located just west of the front stair. Numerous stucco fragments and ceramics were recovered from this area. A fragmented polychrome vessel was found in Lot 1291, although fragments were found in adjacent lots.

Artifacts:

LA 1289

Description	Count	Weight (grams)
Chert	1	10.0
Rim Sherds	12	337.0
Body Sherds	117	2028.0
Stucco	227	n/a

LA 1290

Description	Count	Weight (grams)
Chert	7	177.0
Obsidian	1	0.8
Rim Sherds	19	904.0
Body Sherds	96	1426.0
Stucco	101	n/a

LA 1291

Description	Count	Weight (grams)
Chert	2	2.9
Obsidian	1	0.8
Rim Sherds	6	249.0
Body Sherds	50	1234.0
Basal Sherds	1	11.0

Stucco	270	n/a
--------	-----	-----

Ceramic Vessel LA 1289/1290/1291/1: large bowl, fragmented, polychrome, rounded base.

Height: 8.4 cm *Thickness:* Rim 1.2 cm, Body 0.8 cm *Rim Diameter:*

Comments: Fragments of this vessel were recovered from three lot numbers, in this case a three meter wide area, indicating a forceful smashing. Other vessel clusters were located (Operation 1), all generally in association with sparse to moderate amounts of charcoal. This may represent termination rituals during the demolition of the structure. ([Figure 2:18](#))

LA 1292

Description	Count	Weight (grams)
Rim Sherds	3	93.0
Body Sherds	12	107.0
Stucco	330	n/a

LA 1293

Description	Count	Weight (grams)
Chert	1	2.0
Rim Sherds	4	181.0
Body Sherds	25	300.0
Stucco	339	n/a

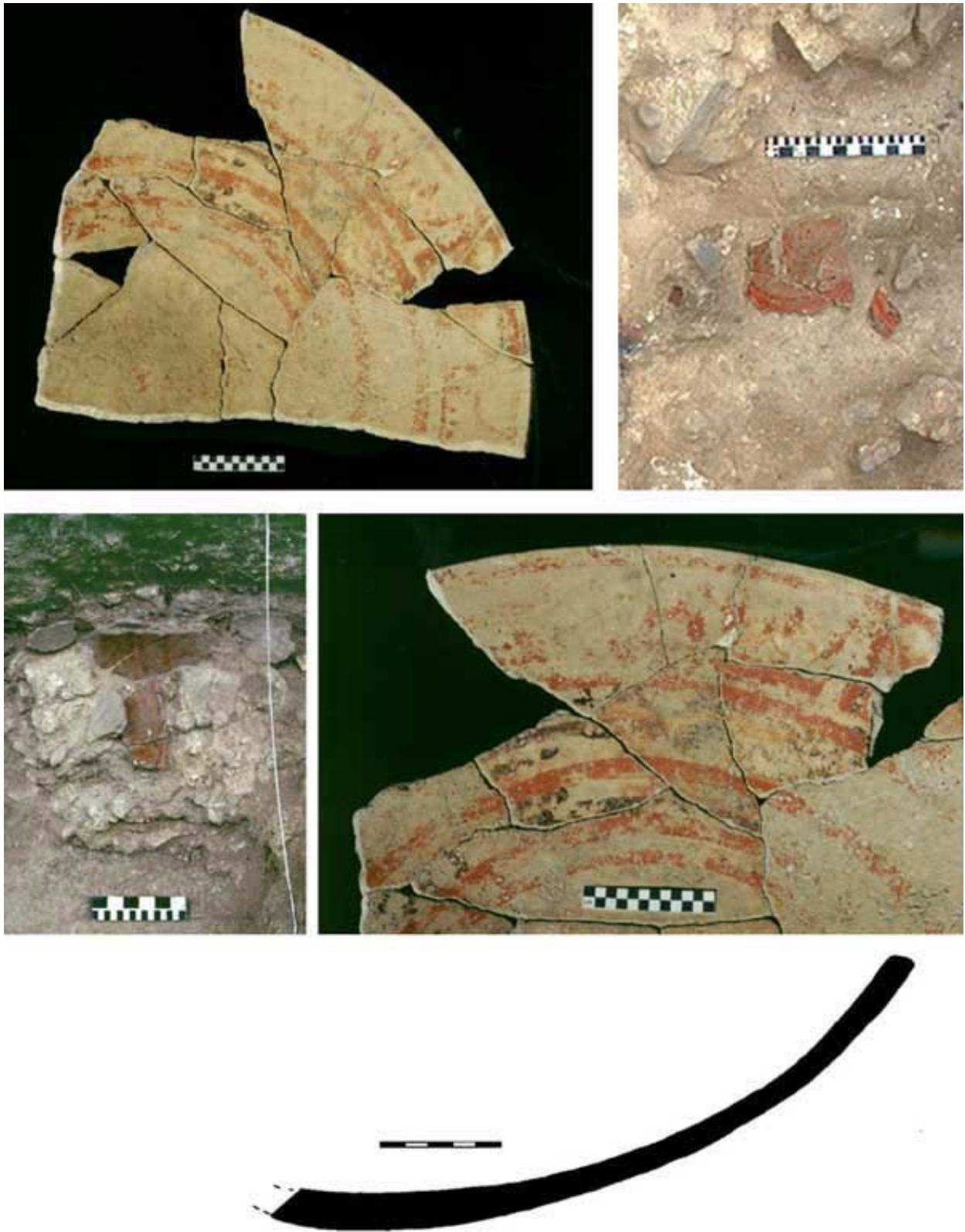


Figure 2:18. Photographs and profile of vessel LA 1289/1290/1291/1 during excavation and after analysis.

Other Lot Numbers from July 1999 Excavations

Lot Number 1282

Description: This cleaning operation involved the removal of approximately ten centimeters of accumulated material from the plaza floor between N10-15 and N10-28, and between Operation 1 and the wall that spans the space between these two structures.

Artifacts:

Description	Count	Weight (grams)
Chert	3	43.8
Rim Sherds	5	137.5
Body Sherds	35	358.6
Decorated Sherds	1	2.3
Stucco	7	143.8

Lot Number 1283

Description: This cleaning operation involved the removal of approximately ten centimeters of accumulated material from the plaza floor between N10-15 and N10-28, and between the wall that spans these structures to Operation 2.

Artifacts:

Description	Count	Weight (grams)
Body Sherds	19	332.7
Decorated	(3 polychrome) 11	764.2

Removal of the N10-3 Plaza Core

A brief mention should be made here about the plaza core. The estimated 21,000 tons of core that fills this plaza makes removal a daunting task (logistically and financially).

Areas of core removal have primarily been around the front of the north end of Structure N10-18, the front of the west side of N10-15, the east side of the front of N10-28, between the latter two structures, and the entire front of N10-17. As discussed in Operation 4, the remaining front core was removed from N10-28 to allow the recovery operation of more stucco pieces, as well as to fully expose the front platform.

After this work was completed, work began on the removal of core from the front of N10-15, from its primary axis eastward to meet up with work on N10-28, and subsequently exposed a portion of the N10-15 stair (Figure 2:28). This work involved the removal of a larger volume of core, as N10-15 is larger than N10-28. In this area the core was slightly deeper as well, increasing the tonnage of rock to be removed.



Figure 2:28. Excavation of the stair of Structure N10-15 during core removal.

Based on work from the original ROM Lamanai Project and the work done this past year, a number of observations can be made concerning the plaza core. It is quite probable that the entire plaza was filled in with task units, as core faces were located in various areas (Pendergast, personal communication). Two of these core faces were located in front of and within N10-28. Core faces are distinguished from loose core in that the stones have been carefully dry-laid, forming a vertical or near-vertical face (Loten and Pendergast 1984:7). Caches were also found throughout the core, usually in

association with a core face or task unit (Pendergast, personal communication). Burials were also found just below the latest upper plaza level, and were generally associated with the Postclassic platforms that were constructed atop the filled complex. An example of this is the burial found in the core atop N10-28 which contained Postclassic vessels. In addition, during the removal of core from the front of N10-15, an area of artifacts in rich black soil was encountered, and probably represented a Postclassic dwelling. Objects recovered include net sinkers, obsidian blades, stone tools, and several unique pieces of pottery.

The core itself is dry lain, with little dirt between the stones. The surface of the core, representing the general level of the new plaza floor, is characterized by approximately a half meter of very dark soil. In some areas, such as in Operation 3, the soil can be considered midden.

In the future it is hoped the complete removal of the core from the plaza can be achieved, providing a striking new perspective on the N10-3 group, enhancing the area for the increasing number of tourists who visit the site, and providing information on the construction history of the N10-3 Plaza core.

Field School Investigations

For the second consecutive year, Drs. Elizabeth Graham and David Pendergast conducted a specialized field school on architectural excavation techniques, which this year was at Structure N10-28. Field school work consisted of a number of field operations on N10-28, although work was conducted on some rooms in N10-15.

The two primary operations of interest in regards to the stucco analysis were in the central rooms and along the southeast corner. The central room was cleared, revealing a large doorjamb that had been partially blocked. The room behind this was cleaned as well, and excavations began to cut into the core left from the 1981 excavations. It was towards the back of this cut and second room when it was realized N10-28 had been heavily chopped along its rear wall. Interestingly enough, fragments of stucco were recovered from the fill inside these rooms.

At the rear of this axial clearing, a pit was taken down into the demolition material and platform core of N10-28. Artifacts recovered include ceramics and stucco fragments. These stucco fragments are in all likelihood from the rear of the structure, and indicates that there was probably a sculptural façade on the rear as well. One of the ceramic sherds recovered was a basal fragment with a stucco finish that was painted a light blue.

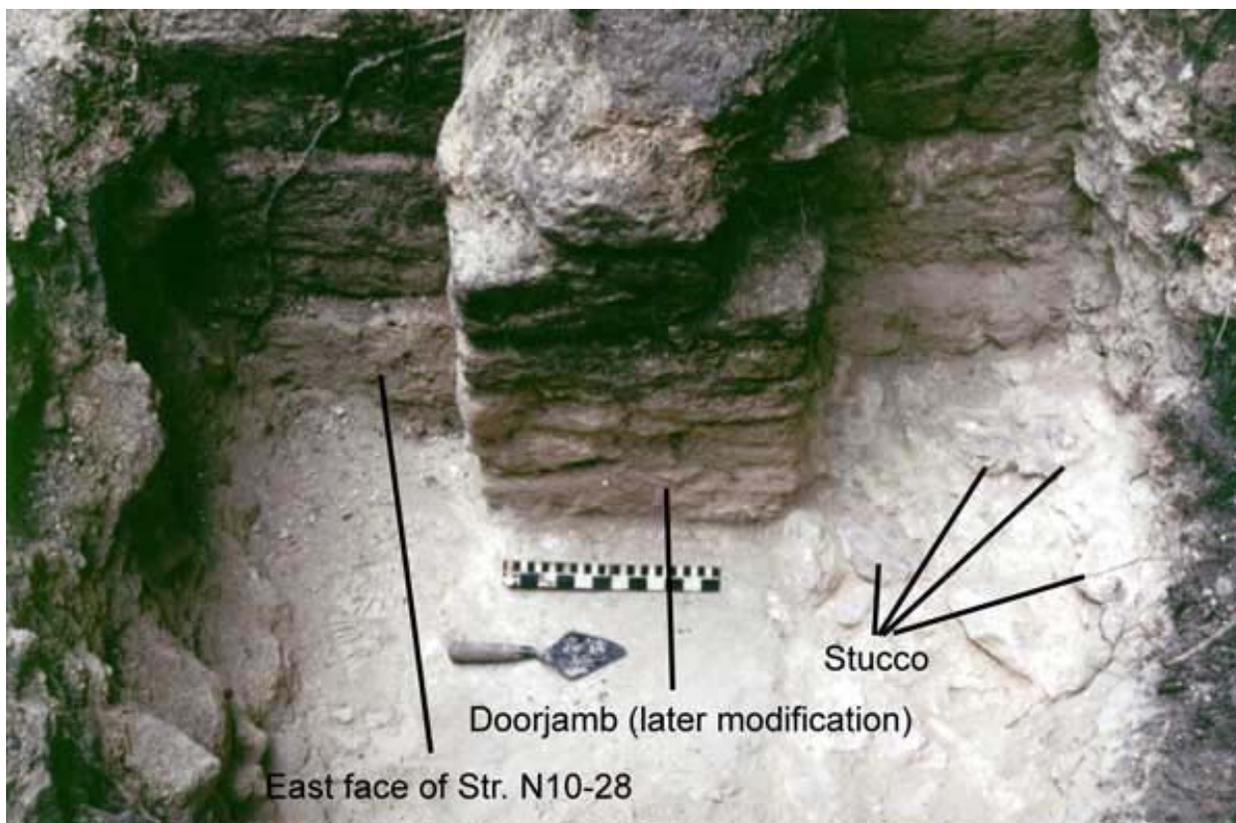


Figure 2:29. Southeast corner of Structure N10-28, showing east face, door jamb, and stucco fragments.

On the east face, excavations uncovered the previously undefined southeast corner of the structure. This small trench revealed a complex sequence of construction activity, including a floor between N10-28's platform and the plaza floor (Figure 2:29). A doorjamb had also been built against the east terrace face. This terrace face had the exact setbacks and angle of the west face, and much of the original plaster and red paint are still preserved. On top of this intermediate floor was found a number of stucco pieces, as well as ceramics and lithics, a labret, and a ceramic cluster representing at least two vessels. Stucco from the field school has not yet been analyzed.

In summary, N10-28 has seen extensive archaeological excavations, both in 1981 and 1982 during the ROM project, and in 1999 from my excavations as well as those of the field school. These excavations have revealed a great deal of information concerning architectural data, the date of demolition, the N10-3 Plaza modifications, and a large collection of modeled stucco fragments which constitute a significant assemblage of ninth and tenth century Maya art. Pendergast (1986:231) states that Structure N10-28 was present in the eastern N10-3 plaza configuration by the late ninth century, though an exact construction date is still lacking. The demolition of Structure N10-28 in the Terminal Classic is corroborated by ceramic forms characteristic of this period (Graham and Pendergast, personal communication), recovered from Operations 1 and 4.

Section 3: A Preliminary Analysis of the Stucco Façade of Structure N10-28

Currently, there are approximately two thousand pieces of polychrome stucco sculpture from Structure N10-28, ranging in size from very small fragments, less than 2 cm, to rather large and elaborate sculptural pieces. By far the largest concentration comes from the original ROM excavations, designated LA 1103. Unfortunately, it is not known which pieces came from the west side or the front of the structure. Although originally separated and stored by provenience, most of the pieces were accidentally mixed in 1991 when the bodega collapsed and during the subsequent cleanup and transfer to a new bodega by the Department of Archaeology. However, sorting by west or south façade can begin by reading Pendergast (1985:93-94) who states:

"Portions of the front panel of the upper zone stucco was recovered in 1981 from beneath core for later construction that concealed the partly demolished structure; these indicated that the decoration had included larger than life-size human and/or deity figures, set amidst panels of latticework and curvilinear motifs. In 1982 we encountered most of the panel from the building's west side, dumped between the structure platform and the building immediately to the west. Conditions of recovery permitted reconstruction of significant portions of the panel, including a large center cartouche that contains a seated human figure."

Because I did not have provenience for all of the stucco pieces, I wanted to carry out some small-scale excavations to clarify some questions. It was hoped that some of these newly excavated pieces would match those of LA 1103. Notwithstanding the lack of provenience, the fragments can still be analyzed for their stylistic and iconographic significance.

Technical Aspects

Stucco is sculptured while it is still wet, and is used solely for decorative purposes. It is very similar to plaster, which is a flat, external coat used on walls and floors that contain little or no fine aggregate (<6mm) (Brown 1990:186-187). Figures that were more three-dimensional and decoration were sculpted on stone armatures and tenons, whereas low relief was sculpted against the flat façade background. At Palenque, it has been demonstrated that the artist sketched the design with a black line prior to application (Coe and Kerr 1998:135).

Stucco, depending on the volume, may contain coarse aggregate at times (>6mm). The cementing base for stuccos and plasters is usually lime, although sascab can be used when lime production was limited by mixing it with water. Sascab is a fine powdery aggregate that is chemically similar to lime (Brown 1990:185); It is essentially decomposed limestone and does not need to be fired. A number of studies have been conducted by Brown (1989, 1990) and Littman (1957, 1958a, 1958b, 1959, 1960, 1962, 1966, 1967), primarily on stucco samples from Comalcalco.

A number of inexpensive tests have been proposed by Brown (1990) to test plasters and stuccos. These include testing unit weight and absorption, compressive strength and Mohs Hardness tests, measuring lime content, and studying carbonation. One study at Kohunlich, México, took samples from several buildings and paved plaza areas of different construction dates. Lime tonnage was estimated for the different areas, reflecting labor that was needed to produce the plaster. Estimates can also be made from lime content of the amount of firewood required to burn the lime for a given structural area (Brown 1989:15). Differences in quality, aggregate size, and hardness were noted from different architectural features, such as stairs, and the paved plaza, with the latter being harder and of a better quality, though it is unclear if this may be related to function (Brown 1990:190; see also Hansen 1998 for microscopic studies of stucco between periods). It is hoped that some estimates can be generated from the wall plaster and stucco of Structure N10-28 concerning labor and resources needed for their production.

Procedures and Methodology

As very few studies of stucco sculptural facades have been conducted, much less published, the framework of how to approach the processing and analysis of this collection has essentially been a work in progress. During the initial sort in 1998, all unidentifiable fragments, or those without any distinct patterning, were packed up. The larger pieces were sorted by a rough system based on like patterns, without any reference to Maya iconography. A number of general categories were devised, such as large circular disc, small circular disc, flat painted surfaces, bead, anthropomorphic, curled designs, rounded borders, straight borders, and uniques. At that time, without knowledge of the existence of more bags of stucco, it was planned to record, photograph, and analyze each piece. Each piece of stucco was to be given a unique artifact number for referencing notes. However, events of the 1999 field season greatly altered this original plan of approach.

With the changes to the 1999 field season, as discussed earlier, the project took on a much larger aspect, in both scale and time length. As several more field seasons await, a method for processing and analysis needed to be devised, one that would be consistent from beginning to end.

Numbering each artifact with a unique number has been abandoned due to logistics. At any rate, pieces within each lot number unique enough to have a number can be easily remembered and/or referenced. All pieces that are not unidentifiable fragments will be numbered with their lot number only for tracking in any reconstruction attempt.

Unidentifiable fragments will be separated by color, counted, weighed, and then spread out on a table in an attempt to measure an approximate finished surface area. Fragments will also be differentiated by being classified as either flat, rounded/curved, or excurvate or incurvate. These and other categories will allow for tabulation by lot numbers for comparative issues as well as a number of statistical applications.

All unique small fragments will be kept separate in small plastic bags. The bulk of the unidentifiable fragments will be bagged in large flour sacks for permanent storage, as plastic buckets do not hold up well in tropical climates. Enframing elements, or borders, can be differentiated, and this will allow for them to be studied for context and possible placement. In addition, rather than extensive photographs, cross-sections showing their form would be more beneficial.

The larger pieces with more sculptural detail will be fully recorded, from scale illustrations to photographs. These pieces will then be studied for motifs within Maya iconography. For those pieces that have substantial decorated surface or merit, a database is under development for management of the data. To reduce the costs of photographic film, a digital camera will be employed to record all of the pieces, linked to the database as a thumbnail, and stored on two electronic mediums, CD and large storage disks. Only preliminary photographs will be taken on 35mm film throughout the duration of the project.

After recording the more significant pieces, sorting will begin by grouping each piece with a similar one, and category names will be based largely on elements of Maya iconography, insofar as identification is viable. Essentially, it is a large-scale jigsaw puzzle, attempting to determine the relationships between motifs, what pieces may go together, and the overall narrative program. Given the fragmentary nature of the collection, in addition to the provenience problems, this has been and will be a great challenge.

Lot Numbers

Following is a brief categorization of work to date on the stucco collection. Fragments within each lot number are broken down by generalized categories. As this was a preliminary sort, counts and totals by categories may change as the sorting becomes more refined in the upcoming field seasons. Weights were not taken because of the lack of appropriate equipment for measuring the weight of large objects as well as bulk weights. This problem will be remedied in the next field season.

LA 1103

Category	Count
Borders	269
Fragments	418
Misc.	95
Total:	782

Comments: Exact counts of this lot are still undetermined due to several factors, primarily being the size and increasing number of more bags of stucco being found in the bodega.

LA 1285

Category	Count
Adornos	2
Anthropomorphic	2
Beads	15
Borders	91
Earflare (small)	2
Fragments	290
Misc.	6
Painted (flat and/or unique)	9
Stone armature	1
Total:	418

Comments: This lot has a number of interesting pieces. One large piece that represents a leg was found, with only a few bits of stucco still adhering to the armature. A nose from a figure was also found. Two unique fragments, though having little artistic merit, are unique for their technical aspects. One large excurvate piece of stucco is still attached to a medium sized facing stone and a large section of mortar. The other piece is a small fragment with the finger grooves of the sculptor still visible. Other pieces include a knot, several uniquely painted fragments, and two series of borders, one painted yellow and the other having several colors and perforated disks attached to it.

LA 1287

Category	Count
Beads	13
Borders	79
Decorative	3
Decorative areas	8
Earflare	2 frags. of 1
Fragments	177
Total:	282

Comments: Many of the pieces recovered in this lot are generally rather small, with few medium size fragments. Two fragments of a single large earflare were recovered, as well as at least eight pieces that are related to each other. These are blue and yellowish in color and have incised patterns. Three of these fit together.

LA 1289

Category	Count
Adornos	4
Anthropomorphic	1
Beads	4
Borders	27
Earflare (large)	1
Earflare (small)	1
Feather(s)	2
Fragments	140
Misc.	12
Uniquely painted area	35
Total:	227

Comments: A variety of decorative pieces comprise this lot. At least thirty-five of them are from the same image grouping. These fragments form a circular design that terminates with a face in profile. These pieces are painted yellow with a thin black stripe painted along its center. Within this decorated area are beads, buttons, and feather representations.

LA 1290

Category	Count
Adorno w/ stone armature	1
Adornos	3
Borders	36
Decorative	5
Fragments	50
Misc.	2
Unique pieces	4
Total:	101

Comments: This lot number contained the lowest amount of stucco pieces of all the lots. Two of the small unique pieces appear to have eyes incised on them.

LA 1291

Category	Count
Adornos	7
Beads	4
Borders	42
Earflare (large)	6
Earflare (small)	2

Fragments	163
Misc.	16
Yellow band design	30
Total:	270

Comments: A number of fragments are painted yellow and are likely associated with those in the previous lots. Note: A small bag of LA 1292 was accidentally mixed with this lot, and consisted largely of small fragments and 5 to 7 yellow painted pieces.

LA 1292

Category	Count
Adornos	1
Borders	53
Borders with beads	4
Buttons	2
Earflare (large)	2
Earflare (small)	4
Feathers	4
Fragments	223
Misc.	16
Unique painted pieces	5
Yellow painted pieces	16
Total:	330

Comments: This lot has a number of interesting pieces. At least sixteen pieces are painted yellow, some having a thin black stripe within it. Another piece is painted a unique red maroon color. One of the large earflares is painted white on a red background.

LA 1293

Category	Count
Adornos	5
Anthropomorphic	3
Beads	8
Borders	61
Buttons	2
Decorative	24
Earflare (large)	3
Earflare (small)	1
Feathers	2
Fragments	225
Fragments w/ stone armatures	4
Unique pieces	1
Total:	339

Comments: This lot contains a variety of designs. A number of fragments have unusual incised designs. There are three hands, all of which appear to be outstretched or raised. One unique piece has a number of beads in a curvilinear design.

Basic Forms and Motifs

The following is a very preliminary discussion of the various motifs and patterns identified so far in the collection of stucco fragments from Structure N10-28. Individual motifs and forms are described, as well as clusters of motifs and forms that may represent a pictorial grouping or pieces that were closely associated in the scheme of the façade.

Adornos: ([Figures 3:2 through 3:5](#)) This class of decorative form includes flattened circular objects with a small circular perforation (<5 mm) in its center. Adornos average around 3 to 4 cm in diameter. Their function is presumed to be decorative only, although

this is a preliminary statement as most have been found broken off from the larger composition of which they were a part.

Many adornos are located adjacent to one another, forming rows. Paint color is generally either red or blue, with specular hematite. One example, painted blue ([Figure 3:2](#)), has an attachment on either side that may suggest a draping. Based on their context at other sites in the lowlands, it appears that adornos served a wide range of decorative purposes in composing larger compositions and images, such as headdresses.

Anthropomorphic: ([Figures 3:6 through 3:10](#)) This category includes fragments of the human form that are not a part of the central or subsidiary figure categories. These items include two legs, three noses, a foot, four hands, and an arm. The two legs, as well as the other one that belongs to the central figure, are larger than lifesize and gives an indication of the scale of some of the figures.

One of the legs from LA 1103 was a stone armature covered with a thin layer of stucco, much of which has broken off ([Figure 3:7](#)). A large oblong medallion remains on the lower half of the leg. This medallion has a centerpiece whose form echoes its outer shape, and has shallow incised lines that radiate out from this centerpiece. This leg decoration is characteristic of warriors (Budet, personal communication).

The second leg was recovered in LA 1285. It, too, was a stone armature. Unfortunately, most of the stucco has fallen off, leaving only enough to determine that the color was red. A large nose was also recovered in LA 1285 ([Figure 3:8](#)). This nose is slightly larger than lifesize and is very naturalistic. Another nose, attached to an upper lip, and a third one, come from LA 1103 ([Figure 3:10](#)).

A foot was identified in LA 1103 ([Figure 3:9](#)). It is rather stylized and projects to the left of the presumed leg location, following the finished surface of the façade. The background area is relatively smooth, with no decoration other than red paint. The foot curves downward and has been broken lengthwise, leaving only four toes.

The arm ([Figure 3:6](#)) shows part of the upper arm, the elbow, and part of the lower arm. The arm is somewhat stylized, and the scale of the piece seems awkward. The arm is bent, presumably inward to the body, as if holding or offering something. Two beads, painted blue, are located at the inside bend of the elbow. One hand was recovered from LA 1293 and was painted a bluish green color, as far as could be determined as the surface was rather deteriorated.

Anthropomorphic Panel: ([Figure 3:11](#)) At least seventeen fragments were identified that compose one pictorial grouping. This scene depicts a male figure, painted red, set against a flat light green background. This background has a number of intersecting curvilinear shallow grooves. Only the lower portion of the figure's face remains, broken at the eye. His teeth are somewhat out of scale, and are painted white, and just above the nose is a bead like object, also painted white. The face appears to be looking upward. The figure's arm is extended and upturned, as if in an offering.

Beads: ([Figures 3:12 through 3:19](#)) This category describes small circular objects, of which there are two types. The first are small and almost fully rounded. Presumably they were decorative as most have broken away from the original composition. The second type have shallow relief but still retain a rounded, or excurvate surface. The latter type can be found on wristlets, and, most importantly, composing the central figure's jadeite bead pectoral. This type varies in size, ranging from 2 to 4 cm in diameter, and the beads generally are not perfectly circular. Color is either red or blue, with specular hematite.

Body Adornment: ([Figure 3:20 through Figure 3:22](#)) At least seven fragments were identified as items of body adornment: three wristlets and four fragments of leg/knee decoration. The three wristlets have a broad flat surface with the sides angling off sharply, ending with a single row of jadeite beads ([Figure 3:20](#)).

Three of the four leg/knee adornments are shown in [Figure 3:21](#) and [Figure 3:22](#), and have similar designs. They are similar in size and shape to the legs identified in the collection, and presumably may have come from the knee area. One fragment has large rectangular panels, above which are smaller panels, all with shallow grooves separating them. The other fragment has four large rectangular panels. Both pieces are painted a blue or turquoise, though layers of red paint were noted on both and may represent an earlier paint coat. A third example also has the rectangular panels, under which are beads. This decoration is painted blue, and a small portion of the leg, painted red, is also evident on this fragment ([Figure 3:22](#)). The fourth example is in poor condition, but the form is similar enough to allow for identification.

Buttons: This category covers fragments that are circular but are very flat and have little relief in relation to the projected overall composition. They are painted red with specular hematite and have no other decoration, unlike adornos. Their function is undetermined, though some were presumably decorative elements within the overall sculptural program. They range in size from 3 to 6 cm in diameter.

Captive Figures: ([Figures 3:23 and 3:24](#)) At least two captive figures have been identified. Both are from LA 1103 and include two heads and two hands. One of the heads has not yet been recorded. Figure 3:24 shows a face in profile, with an elongated forehead that marks Maya nobility, looking upward. He is wearing a helmet with a chin strap. The chin strap, mouth, and nose is marked by high relief, and the eyes are marked by incising. One of the hands ([Figure 3:23](#)) is characterized by high relief, with the fingers being rather thin. This hand is rather small overall in relation to the rest of the facade figures. The other hand has deep incising that delineates the thumb and the two fingers that seem to be clenched or clasped together. All three of these examples are red with specular hematite.

Cartouches: ([Figures 3:25 and 3:26](#)) This is a provisional category for the classification of three pieces, all of which are from LA 1103. The first example is shown in Figure 3:25, and is painted red with specular hematite. It projects out from the decorated surface on one side, terminating in a flattened surface that is square in shape but with rounded corners. There is a centerpiece that reflects the outer shape, within which is a

third design element formed by a shallow hole. On one side of the fragment remains the impression of beads that have broken away.

The second example ([Figure 3:26](#)) is larger in size and has a flattened surface in the shape of a square with rounded corners. The centerpiece reflects the exterior style by a shallow groove. Within this centerpiece is a single large bead. The entire piece is attached to the end of a large stone armature. Though primarily red in color, traces of yellow and blue were found on the piece. A second piece identical to this one was also found in the collection, being only slightly smaller and in poorer condition.

Central Figure: ([Figures 3:27 through 3:31](#)) A number of pieces, based on size, color, and similarities, have been tentatively grouped together to represent the central figure. Presumably this figure was originally located over the central door, based on similar examples from other sites. The figure was larger than lifesize, and until estimates can be made concerning the original size of the façade, it remains to be seen whether the central figure was standing or seated.

At present we have two large fragments of his head, a hand, a leg, and numerous pieces of a multistrand jadeite pectoral. His leg ([Figure 3:27](#)) consists of a stone armature clad in a thin finish of stucco. It is highly adorned with circular objects, projecting from which are jadeite beads. The leg itself is red, with the decorations being blue. His hand ([Figure 3:29](#)) is delineated by deep incising around the fingers, which appear to be slightly upturned and resting against part of his pectoral, which is painted a brilliant Maya blue. In addition, there are several more pieces of this jadeite bead pectoral, though these examples do not have any color due to poor preservation ([Figure 3:30](#) and [Figure 3:31](#)).

The head of the figure is seen in profile, with jadeite beads streaming down his hair ([Figure 3:28](#)). The facial features are of high relief and very naturalistic. He has a nose typical of Maya elite. Interestingly, the face was broken into two pieces at the eye, which has been almost destroyed. During the destruction of monuments, and by extension to sculptural facades, the face of a figure would be smashed at the eye in a ritual "killing" of the monument. This type of ocular defacement, usually to the left eye, is known from a number of sites and from a broad temporal range (Budet 1988:25, 31; Freidel and Schele 1988:64).

Decorative Elements: ([Figure 3:32 through Figure 3:51](#)) There is a large number of unique pieces that could not be assigned to any of the categories listed here. Presumably many of these pieces were purely decorative, although others no doubt have deeper meanings which have not been determined at this time. Some examples have scroll like attributes, and are comparable to many motifs found in Maya imagery. However, analysis has not focused on these motifs as of yet. Several pieces recovered in LA 1289 appear to be a yellow circular band. A thin black line has been painted down the middle of this curvilinear band, and appears to terminate at a human profile head that is painted a number of different colors ([Figures 3:98 and 3:99](#)).

Enframing Elements: ([Figure 3:52 through Figure 3:62](#)) This broad category encompasses a number of pieces. Assignment to this category, as with all others, is temporary pending further stylistic and iconographic analysis. Generally speaking these examples are believed to have framed an image or a group of images. They can be angular or rounded, and some are decorated. Although red predominates, there is a range of colors within this category.

Further work is planned to subdivide this category by size, color, shape, etc., and from this we can gain some information on size estimates. Unless they are adorned or uniquely painted, as many of them are, only cross sections will be taken. Three of the larger fragments, [Figures 3:56, 57, and 59](#), appear to have been part of larger curvilinear enframing elements. All three of these pieces are attached to large stone armatures, and based on finished surface must have projected from the façade at least 10 to 12 cm. Two have a single row of adornos, painted blue.

Feathers: ([Figures 3:63 and 3:64](#)) The use of feathers in headdresses is known from a variety of media throughout the Maya area. Many of the feathers identified in the stucco collection are presumably from the central figure based on their large size. Two of the feathers identified have more curvature and naturalism, whereas the others are more stylized, with moderate to shallow grooves that delineate the parallel feathers and the ruffles within them. When the end of a feather is represented it tapers to either a sharp or rounded point.

A number of other pieces (not shown) may represent headdress feathers, or they could be part of a decorative background design, although this division is highly subjective. Measurement and stylistic comparison need to be carried out further on this group to refine and solidly justify a fragment's placement in this category. Color is primarily red, though some pieces are painted yellow. Three fragments, painted yellow, that may represent headdress feathers on a smaller scale, and thus presumably for a smaller figure, were found in LA 1293.

Glyphic Forms: ([Figures 3:65 and 3:66](#)) Although there are no true glyphs identified in the collection, two pieces have "glyphic" qualities and are classified here. Both examples are from LA 1103. The first example ([Figure 3:65](#)) is an imperfect circle divided into two rings by a shallow groove. Within this inner piece is a small incised hook, and although probably decorative, resembles T706 or T578 (Thompson 1962) and resembles a hook cartouche and scroll (T19) (Coggins 1983:65). Outside of the piece are a single bead and a raised triangular form that joins the inner circle.

The second example has the closest resemblance to a glyph from the entire collection ([Figure 3:66](#)). It is painted a brilliant Maya blue, though red is present, and consists of a flattened surface with the outline of a square with rounded corners. An incised line within echoes the outline shape, forming two rings, resembling T715 (Thompson 1962). Underneath this main element is a bar, at one end of which is a circular design.

Herpetomorphic/Sauria/Serpentine: ([Figures 3:67 through 3:70](#)) This category includes pieces with serpent and/or saurian imagery, which is a pervasive and recurring

theme in Maya art. A number of pieces from different lot numbers have been included in this category. The first example ([Figure 3:67](#)) is a fragment of a head that shows an incised linear shaped eye. It is painted blue with traces of red and comes from LA 1103. Two sides of the eye are shown, and the pupil is rather rectangular in shape. Above the eye the piece angles off sharply, and is of raised relief. Based on comparative shapes from around the lowlands, this may be the eye of a serpent.

During the last field season (1999) a number of fragments of various sizes were found on the plaza floor near the front stair of N10-28. These fragments were painted with a fine black line on a yellow background. The repeating pattern and shape is reminiscent of scales. A particularly large piece was recovered that had a semicircular shape and a large round depression within it ([Figure 3:68](#)). The sides of this piece were painted in the same fashion, indicating it projected and was of high relief. This piece may represent the supra-orbital plate of a saurian. Interestingly, a small piece recovered from one of the interior rooms (LA 1319) depicts a reptilian limb, and is painted with the same repeating pattern outlined in black on a yellow background ([Figure 3:69](#)). At this time, we are operating under the assumption this was a saurian, and this latter piece probably depicts a front leg.

Another fragment, recovered from the front plaza as well, is painted yellow and has a twisting row of round objects, suggesting a twisting tail ([Figure 3:70](#)). Some black lines are painted on this surface, but the preservation of the piece is not very good.

Knots: ([Figure 3:71](#), and [Figure 3:72](#)) At least five pieces in the collection were identified as knots. Four of these are from LA 1103, and the other is from LA 1285. All five were painted blue.

Mouth Curls: ([Figures 3:73 through 3:77](#)) This is a subcategory of herpetomorph, and includes pieces that have curled shapes that may represent the open mouths of saurians and/or serpents. At least five were identified. Two of them are stone armatures, with only their shape suggesting what they may have represented. One of these armatures, similar to another one that retains its stucco finish, curls downward and terminates midway through the upturn.

Another stone armature has an upper and lower extension from a broad centerpiece, and is reminiscent of the open jaws of a serpent from which a figure would emerge ([Figure 3:73](#) far right). Another mouth curl is more naturalistically sculpted, with a more rounded surface and having two elongated sections. Yet another mouth curl identified is made up of several pieces, and is painted (from outer to inner) blue, red, and yellow ([Figures 3:75 through 3:77](#)). Within the blue band is another band of a more brilliant Maya blue, with all colors having specular hematite.

Perforated Discs: ([Figure 3:78 through Figure 3:84](#)) This motif is generally recognized as an earflare, though in some contexts they serve a purely decorative purpose. They approximate in size and shape earflares from other materials, such as jadeite (see Budet 1994:348, entry #74; Schele and Miller 1986:90, Plate 12-14; see also Coe and Kerr 1998:116). These perforated discs come in two sizes: large (average 6-7 cm in

diameter) and small (3.5 to 4.5 cm in diameter). Thickness ranges from 1 to 2.5 cm, with the larger one being thicker. Within these pieces is a large center hole that averages 1.5 to 2 cm on the larger pieces, and 1 to 1.5 cm on the smaller examples. The center perforation can be up to 2.5 cm deep, and seem to have been formed by the insertion of the sculptor's finger, as they generally have an elongated shape. Many of these perforated discs are painted red with specular hematite, although other colors are known. Two of these large perforated discs, one from LA 1292 and the other from LA 1293, are painted red but the overall front surface is painted white ([Figure 3:83](#)).

There is one exceptionally large earflare within the collection ([Figure 3:79](#)). It is circular with a central projection. On two sides, one that would form a right angle, are raised linear designs that may suggest some kind of headdress apparatus. This earflare is 10 cm in diameter, with the entire fragment being 16.5 by 17 cm. It is painted red with specular hematite. This earflare was eventually matched to the large head of K'inich Ajaw. In addition, one of the smaller earflares was matched to the head of one of the subsidiary figures.

Subsidiary Figures: ([Figures 3:85 through 3:88](#)) Five subsidiary and/or lesser elites were identified in the collection. These figures are represented only by their heads, as few other body parts were identified that would match the scale of these figures. One figure's head ([Figure 3:86](#)) is sculpted on its forward half and joins the façade around the ears. The face is rounded and rather stylized. Light incised lines delineate the eyes, and the mouth and nose were fully sculpted. On his head he wears a headdress with a trefoil motif. The color of the face is blue with specular hematite. The head is mounted on the end of a stone armature.

The second head ([Figure 3:85](#)) is similar to the first but has shallower relief. Atop his head is a long, wide bar. To the right of the figure is a flat undecorated background, suggesting the head may have been part of a panel. The head is sculpted only on its forward area, joining the background just before the ears. No color remains due to poor preservation.

The third example ([Figure 3:87](#)) is a projecting, one-dimensional head. The details that outline the face are formed by shallow incised lines. A headband is evident and made up of small rectangular panels, and a small earflare was later found in the collection that was originally a part of this figure. The earflare is small, thin, and round, with a small projection on its lower side and extending towards the chin area.

The fourth figure is the fragment of a face ([Figure 3:88](#)). Only the nose, mouth, and chin remains. The mouth was executed in low relief, and a small earflare with a small portion of its background was found in the collection. It joins with this face fragment on its lower left side. Only a face with shallow relief represents the fifth figure, with facial features sculpted with light furrows. These last three faces were painted red with specular hematite.

Supernaturals: ([Figure 3:89 through Figure 3:95](#)) At least seven examples of supernatural figures were identified in the collection, all of which come from LA 1103

with the exception of one (LA 1291). The primary component of supernaturals that aided in their identification as such was the circular, bulbous, and vacuous eyes. Three of these are in such fragmentary condition that their identity could not be determined. These three examples are shown in Figures 3:89, 90, and 91.

The largest piece of sculpture from the entire collection belongs to the large head of K'inich Ajaw, the Sun God ([Figure 3:93](#) and [Figure 3:94](#)). This piece measures 36.5 by 20 cm. It is a very elaborate piece of sculpture. The figure appears to have the upper portion of a chin strap. The eye is large, circular, and has a rounded surface. The head is sculpted only on its right side, with the left side being relatively flat and undecorated save for some faint incised lines. The large earflare mentioned earlier joins on this undecorated side, indicating it was once a corner piece. In all likelihood it once adorned the southwest corner of Structure N10-28. K'inich Ajaw, a manifestation of Itzamna, has several identifying characteristics, such as cross-eyes, aquiline nose, filed incisors, a beard, and sometimes a short, "flaming" hairstyle from when the sun is at its zenith. At night in the Underworld, the sun is portrayed as an old man and identified with the Jaguar (Coggins 1985:52).

A smaller head has a projecting hook nose with upper and lower protrusions, deep rounded eyes, and a toothless mouth ([Figure 3:92](#)). There is an incised design on his forehead, and the cheeks are relatively rounded. The surface of this figure has not been preserved very well, but appears to have been painted red. This image may represent God K, or K'awil. K'awil is generally portrayed as having a serpent foot, an axe in his forehead, and a branching nose. In many images he takes the form of the Manikin Scepter, and the grasping of K'awil in Classic Maya portraiture is a very common theme (Freidel, Schele, and Parker 1993:201-202). Other identifying features are a serpentine eye (Classic), and the emergence of either corn leaves, flames, or an axe from the mirror glyph in his forehead. Landa and the codices (Garza 1998:241-242) have also identified him with Bolon Dzacab from written sources and references. K'awil is generally associated with lineage and descent (Coe 1993:178).

A large fragment of a supernatural head was recovered this past field season. Like the K'inich Ajaw figure, it is sculpted primarily on one side and has high relief ([Figure 3:95](#)). The lower portion of the head is missing, but on the nose is a hook like object. The forehead is smooth with no decoration, and two large rounded objects are positioned at the ear. The hook feature on the nose is reminiscent of a bat.

Trefoil Motif: ([Figure 3:96](#)) There are two examples of a tripartite headdress, composed of three rectangular panels that taper on one side, and on the other terminates at a point. The first example is associated with one of the lesser elites. The second example is much larger than the first, but having the same pattern. These two examples represent a non-anthropomorphic trefoil variation of the Jester God or the 'hunal.'

The presence of two sizes of this trefoil motif, and thus two sizes of important figures, brings up two possibilities. The first scenario is that the trefoil motifs belong to royal ancestors, a visual representation of past members of the royal lineage. An alternate scenario is that the trefoil motif belongs to members of the lesser elites of the royal

court. During the Late and Terminal Classic the Jester God becomes detached from its Formative and Early Classic association with the rank of ahau, or divine king, and a symbol of royal authority. These and other symbols of the highest ranks became more accessible to the lower ranks, thus diluting the sanctity of the existence of central power (Freidel 1990:77-78).

Witz Monster: ([Figure 3:97](#)) Four fragments that defied classification for a long time have now been classified as the witz monster, a common recurring element in Maya imagery. These witz masks are found throughout the Lowlands on sculptural façades, identifying a structure as a "sacred mountain", and the place of entry into Xibalba, or the Underworld (Sharer 1994:205). One of the fragments shows the lower part of the eye and a portion of the projecting nose. Based on the size of the fragments this was a large image, and may have composed part of the image of the central figure. These fragments are painted red with specular hematite.

General Observations on Context, Style, and Comparative Façades

The stucco façade of Structure N10-28 as excavated can provide only limited insight into its original appearance and dimensions. However, comparisons from other sites can assist in this process. In addition, several observations can be made from the excavations of the stucco pieces. The first is that the number of fragments recovered in proportion to architectural area is relatively small. Taking into account the damage and destruction of the stucco pieces from the demolition and fall of the façade from the structure, the volume is still disproportional between size of the pictorial field on the façade and actual recovered pieces. It may be that a number of the fragments were taken away for reasons unknown. At any rate, it is evident that a moderate percentage of the pieces have been removed or completely destroyed.

In all likelihood, the façade had a rather low profile, with vertical projections rising at intervals between the corner and center of the structure. The latter two projections, because of their importance and placement, probably rose to a much greater height over the rest of the façade. A comparative façade that most likely approximates the appearance of the one at N10-28 is located at Seibal, to the west in Guatemala.

This façade is located on Structure A-3 ([Figure 3:1](#)), a small radial pyramidal structure. The upper zone was decorated with polychrome stucco sculpture, with the tallest vertical projection rising over the doorways. The central projection enframed a major figure, usually an ahau. The corners, though not as tall as the central projection, matched those that rose midway between the corner and central doorway (Willey 1982).

Structure N10-28 at Lamanai is a range structure with one central doorway rather than a radial pyramid. In all likelihood, the façade over the central doorway had a large vertical projection, based on the relative proportions of the hypothesized upper zone and the size and shape of the central figure identified among the fragments. A corner and interval vertical projection is purely hypothetical, but is a strong possibility based on

Maya principles of architectural symmetry. In support of this, the volume of stucco recovered in Operations 1 and 4 reflect this idea, with a large volume of fragments from the corner area, fluctuations as one proceeds eastward, and then an increase at the end of the excavation, closest to the doorway. This is merely an observation of the volume for the excavated sections at the front of the platform.

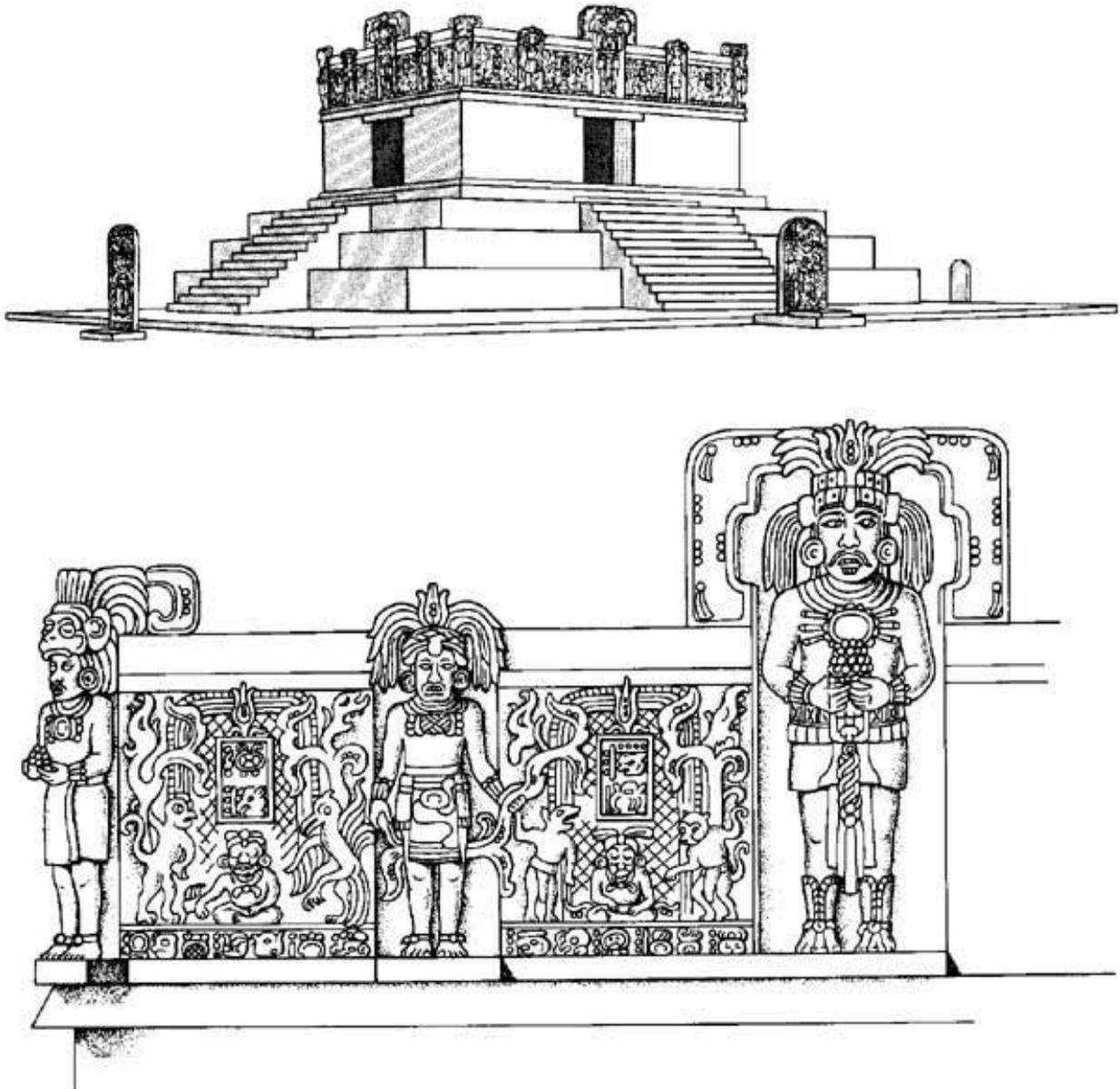


Figure 3:1. Reconstruction drawing of Seibal Structure A-3 and façade detail (from Smith 1982:16).

There is a wide range of paint color within the collection. By far the most common color is red. Blue is also found on a moderate number of the pieces. Two tones of blue were identified. The most common is a light color while the other is an intensely brilliant Maya blue. Some of these blues are found in the same composition, usually with the Maya blue within the lighter color. The third most common occurring color is a deep yellow, and this color seems largely confined to fragments related to saurian imagery.

Less common are two shades of green, one being a dark, dull green and the other seems to be a turquoise or green/blue combination. Orange and white are more scarce. Black paint is almost always used to delineate shape against a different color background for contrast, though green has also been used for this purpose in a few examples. All of the pigments have been mixed with specular hematite, a material of special significance.

There seems to be at least two distinct layers to the façade. The first layer is only represented by a few small fragments. Almost all of these fragments are a dark maroon red, though there is some orange present, and they do not have the specular hematite. In a few of the larger pieces of stucco the early layer was evident by examining the stucco matrix along the side of the fragment.

In regards to style, based on comparable images from other sites in the lowlands, the façade appears to follow Late Classic canons of art (Budet, personal communication). The stucco façade of Structure A-3 at Seibal, mentioned earlier, is closest stylistically to the Lamanai façade. Many of the decorative forms and motifs are identical, and the treatment of the figures and supernaturals are similar, though without the black painted details as seen in some of the examples from Seibal (Willey 1982).

In addition to the Seibal façade, the Lamanai façade recalls some of the form and style of a stucco façade from Structure E-7, 1st, at Altun Ha (Pendergast 1985:94). These two examples from Seibal and Altun Ha both date to the Terminal Classic. Pendergast (1986:231) believes the appearance of facades with strong iconographic content in nontemple settings may in all three instances represent a restatement of religious values at a more personalized level, perhaps as part of retrenchment in the face of the upheavals that afflicted many Central and Southern Lowlands sites. The façade at Lamanai may indicate the emergence of semipublic, residence-related religious practice at the outset of the Terminal Classic; at Lamanai, in contrast to the two other sites, such practices may have been an element in the successful staving off of Classic collapse.

Another façade with motifs and decoration similarities, though temporally and spatially different, is Structure 1-sub at Dzibilchaltún, as well as fragments from other structures within this site (Coggins 1983). Within Belize, similarities are also noted in stucco façade fragments from Structures A8 and C4 at San Jose (Thompson 1939), and from Structure A-11 at Xunantunich (MacKie 1985).

In regards to dating, while generally following Late Classic canons of art, this façade has been dated archaeologically to the Terminal Classic (Pendergast 1985:94). We do know for certain that the destruction of the façade occurred during this time because a

Terminal Classic polychrome vessel (LA 1289/1290/1291/1) was recovered this past year mixed with the demolition debris. We are reasonably sure of the date of events that surround Structure N10-28 with one critical exception: the date of initial construction.

In regards to the hypothesis that Structure N10-28 may have been the Popol Na, or council house, of Lamanai, we are lacking the requisite mat motif that identifies a structure as such, such as Structure 10L-22 at Copán and the House of the Governor at Uxmal (Sharer 1994:329, 632). However, several factors may support the idea that this structure may have been the seat of power at Lamanai: (1) that the N10-3 plaza is the only recognized elite residential/administrative area at Lamanai, (2) that Structure N10-28 is the only structure within this group to have an elaborate upper zone decoration of the nature and scale of this one, and (3) with the narrative content relating to power and royal authority.

In sum, there is a wide range of motifs and decorative forms found within the corpus. Although this was only a preliminary discussion, it is evident that the N10-28 façade was a very complex work of sculptural and painted art. Many of these forms are very elaborate, complemented by the delicate painting and fineness of line noted on many of the fragments.

Catalog of Stucco Fragments (as of January 2000)

Figures 3:2 through 3:11

Figure 3:2 - This is an example of an adorno, though in this case it composes a more elaborate decorative piece that suggests a draping. This was probably a part of an enframing element that highlighted a figure or composition.



Figure 3:3 - The example on the left is a perforated disc, and in this case it most likely served a decorative role. The example on the right is an adorno.



Figure 3:4 - The example in the lower right represents a wristlet form, though its size suggests it may have been decorative. The other four pieces are examples of adornos.

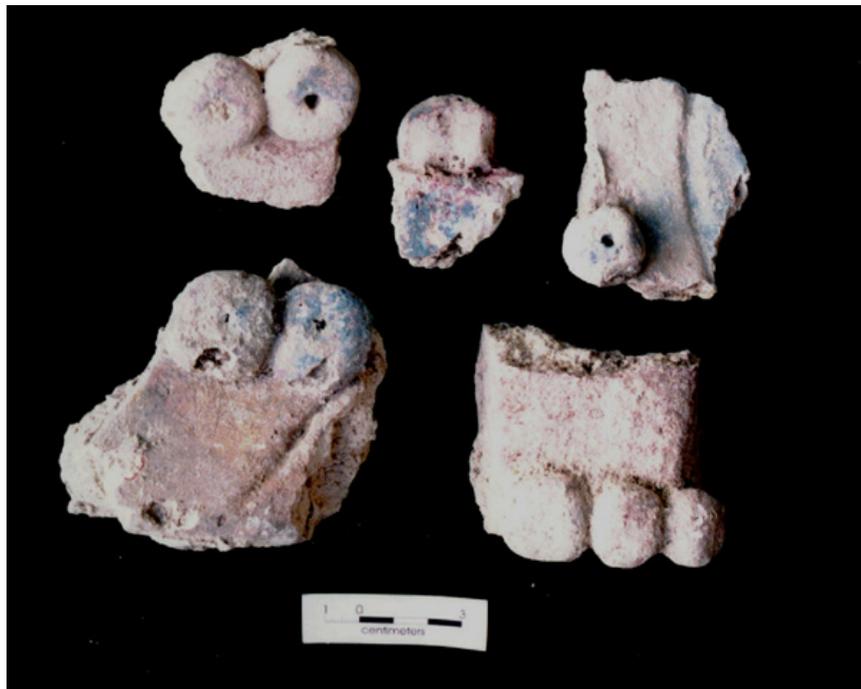


Figure 3:5 - An adorno with an elongated attachment having an incised center line.



Figure 3:6 - This piece seems to represent an arm, bent at the elbow. However, an alternate suggestion was that the bend at the lower right represents a knee. Note the scale is rather awkward.



Figure 3:7 - This is a larger than life size representation of a leg, probably of a warrior based on the decoration.



Figure 3:8 - This is a larger than life size nose recovered in LA 1285.



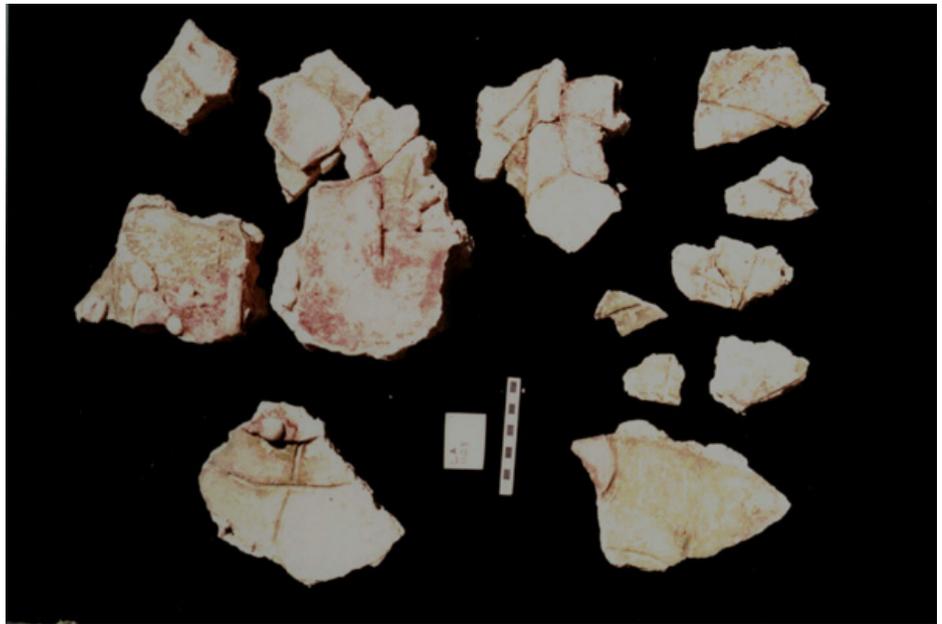
Figure 3:9 - This is a top view of the one foot identified in the collection.



Figure 3:10 - Fragments of faces.



Figure 3:11 - These fragments represent a pictorial image of a seated figure, painted red, set against a green background.



Figures 3:12 through 3:21

Figure 3:12 - This may have been an enframing element of raised relief, and having a line of beads along the forward surface.



Figure 3:13 - Profile of Figure 3:12.

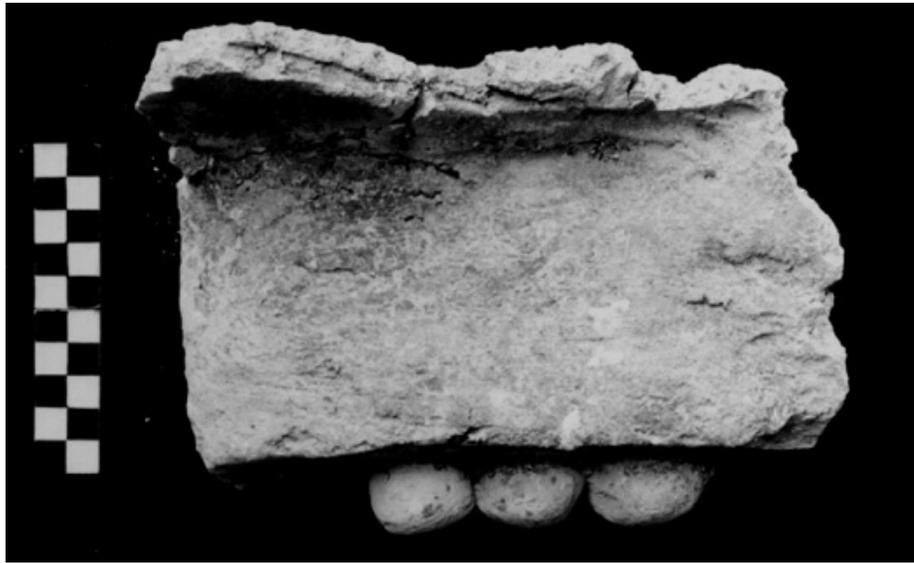


Figure 3:14 - Examples of beads with attachments.



Figure 3:15 - A decorative element, perhaps enframing, characterized by a single line of beads and delicately painted details.



Figure 3:16 - A double row of beads, all painted blue.



Figure 3:17 - An enframing element with beads and attachments.



Figure 3:18 - A bead with an attachment on a curvilinear band. The paint on this piece, from LA 1103, matches the band shown in Figure 3:98 from LA 1289.

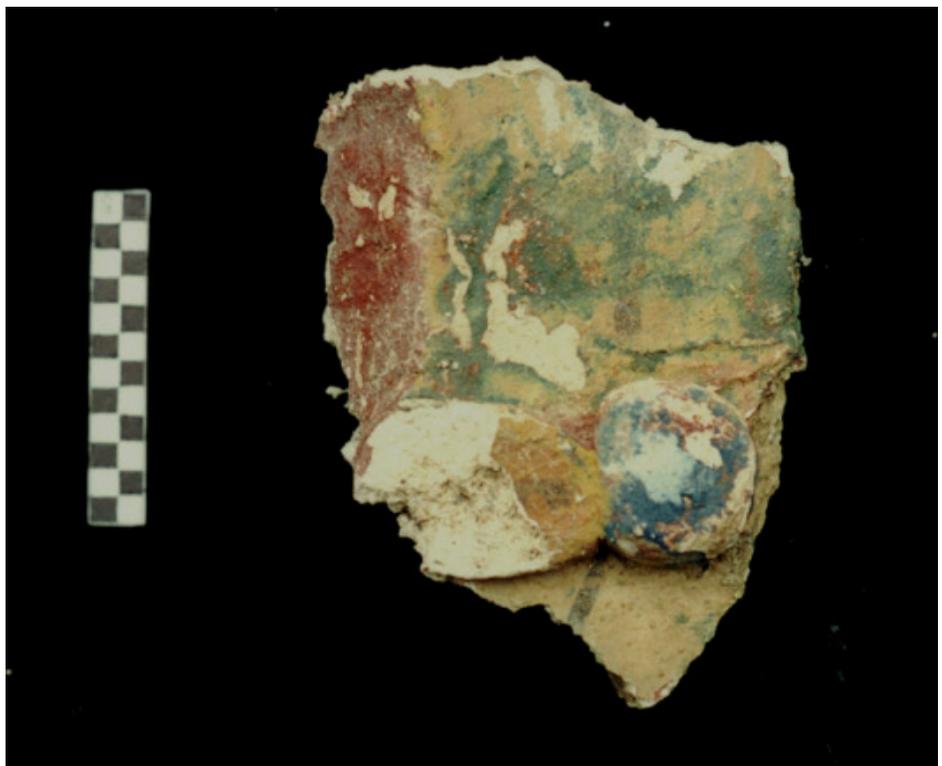


Figure 3:19 - A miscellaneous decorative design.



Figure 3:20 - These two examples represent wristlets, or decorative elements that once adorned the wrists of an unknown figure.



Figure 3:21 - These two examples represent knee adornment, based on morphology and a comparable example with a portion of the leg still attached. They are painted blue.



Figures 3:22 through 3:31

Figure 3:22 - This is an example of a leg/knee adornment. It is composed of vertically set rectangles underneath which are beads. The leg attached to it is painted red. This piece is comparable in size to the two legs.



Figure 3:23 - This piece represents the hand of a captive, based on its size in relation to other figures in the collection, and its form, suggesting an outstretched hand with fingers clasped.

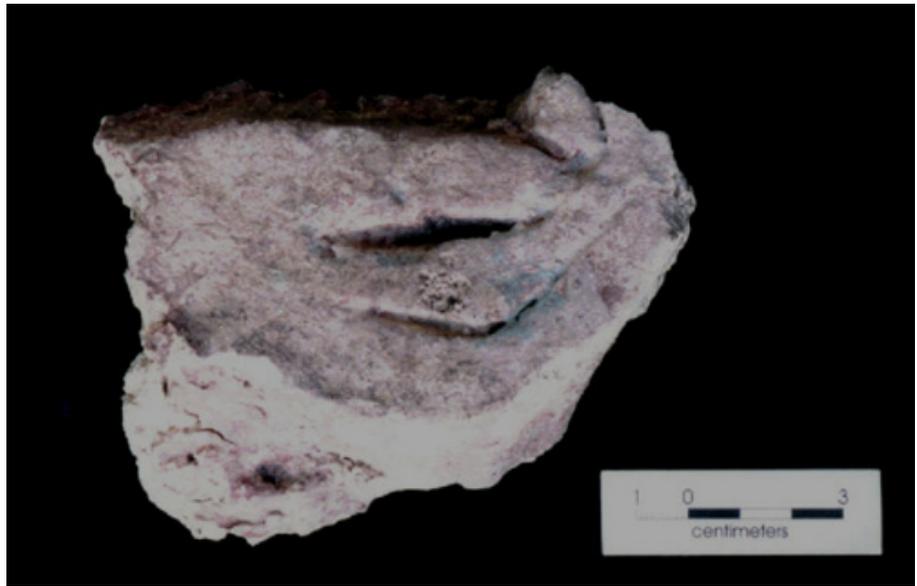


Figure 3:24 - This figure has been identified as a captive, based on his overall size and form with other figures in the collection.



Figure 3:25 - A small cartouche-like example that once had beads to one side.



Figure 3:26 - There are two examples of this form, though the other one is smaller.



Figure 3:27 - This is a larger than life size representation of a leg, and probably belonged to the central figure based on its elaborate decoration.



Figure 3:28 - This image is believed to be the central figure, or the ahau of Lamanai. In all likelihood he was positioned above the central door. Note the hair and jadeite beads.



Figure 3:29 - This piece represents the hand of the central figure, resting against a large jadeite bead pectoral. This identification is based on the size of the hand in relation to other figures in the collection, and several more pieces with forms that match the size of the beads.



Figure 3:30 - This piece is also believed to be a part of the central figure's jadeite bead pectoral.



Figure 3:31 - This is believed to be a fragment of the central figure's jadeite bead pectoral, based on comparative morphology.



Figures 3:32 through 3:41

Figure 3:32 - This example has not been identified at this point.



Figure 3:33 - A miscellaneous decorative piece with a large bead. There is a red stripe painted along a cream/tan background.



Figure 3:34 -
Undetermined.



Figure 3:35 - These pieces were recovered in LA 1287. The centerpiece is two fragments that have been fitted together. The fragment on the right joins the centerpiece, but this relationship is not shown in the photograph.



Figure 3:36 - This is a profile of a miscellaneous decorative piece that projected from the façade.



Figure 3:37 - Miscellaneous pieces.



Figure 3:38 - A miscellaneous decorative fragment forming a scroll shape. The blue area is painted with a second darker blue.

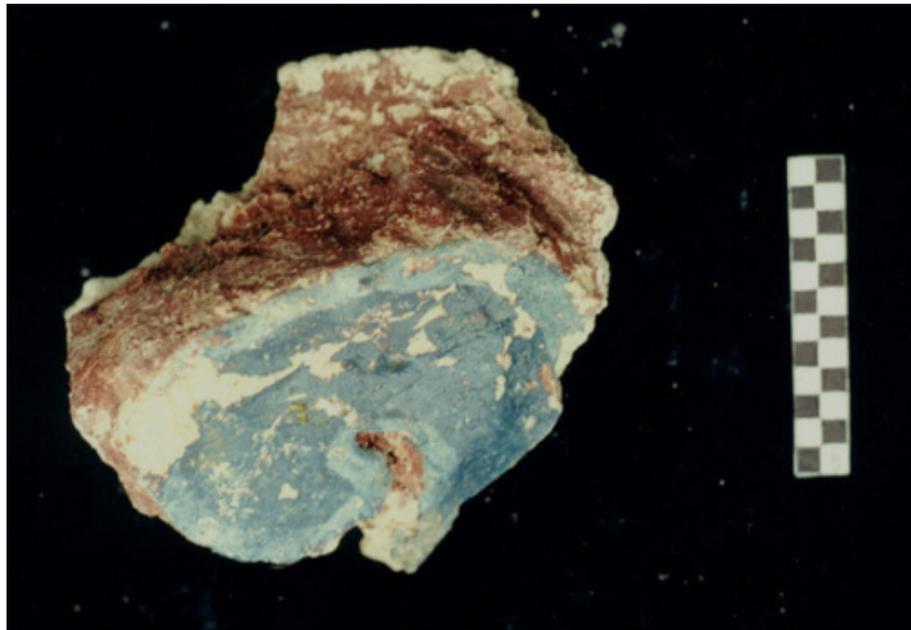


Figure 3:39 - A miscellaneous decorative piece with a large center bead.

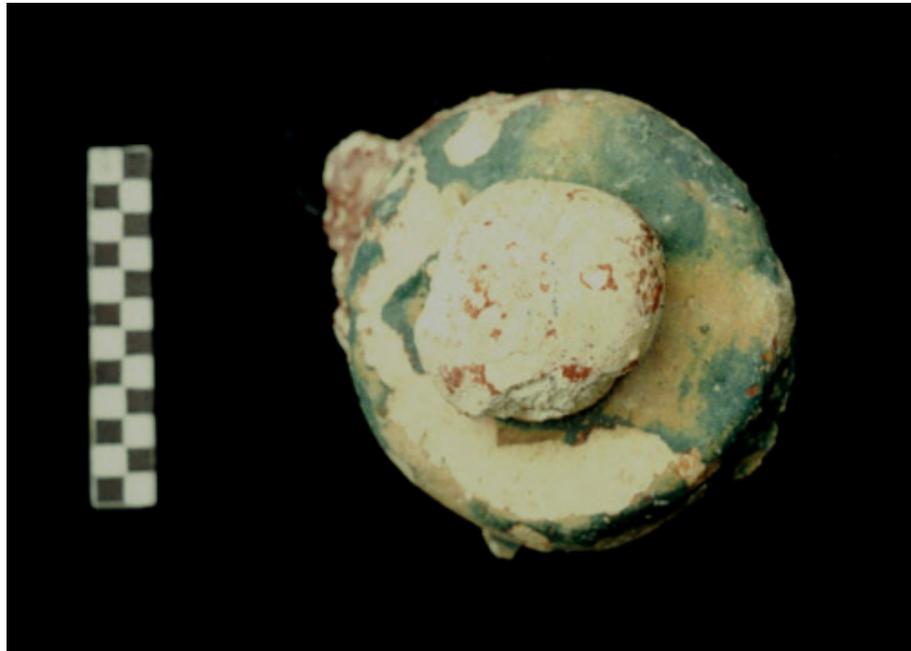


Figure 3:40 - This decorative piece has a perforated disc attached to it, though whether it was attached to a figure as an earflare is unknown.



Figure 3:41 - Miscellaneous decorative designs.



Figures 3:42 through 3:51

Figure 3:42 - An animal form recovered in LA 1290.

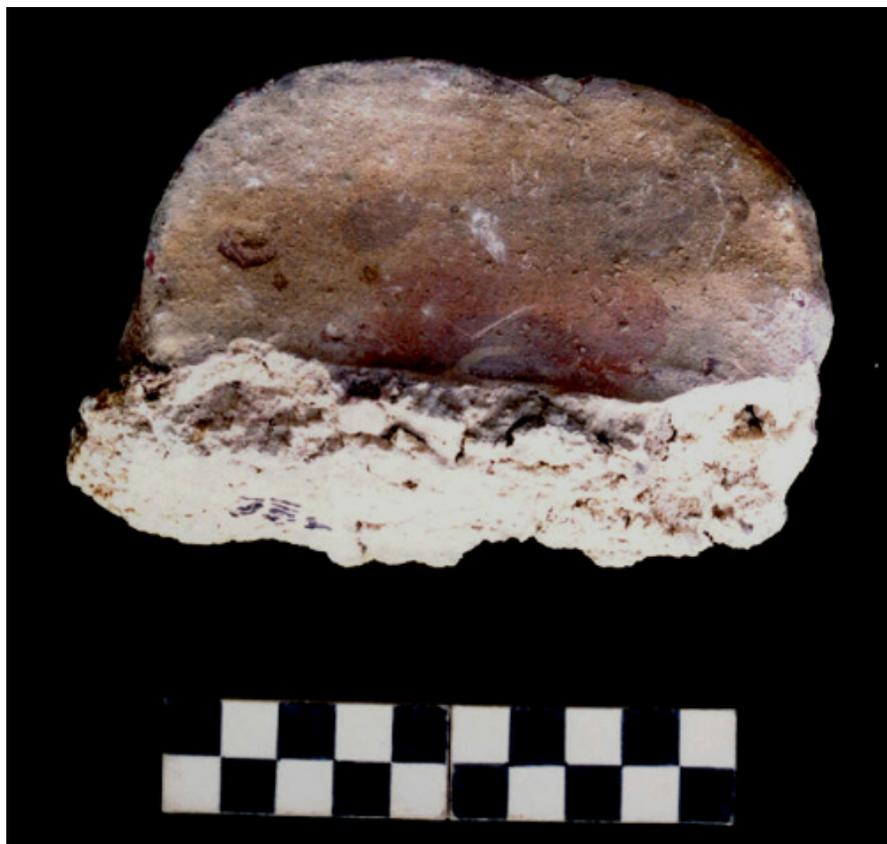


Figure 3:43 - This is an elaborate decorative piece recovered in LA 1285, and is a raised rectangular with rounded end design, painted red and green, and having three small perforated discs on its surface.



Figure 3:44 -
Miscellaneous
decorative piece.



Figure 3:45 - Misc.
decorative piece.



Figure 3:46 - Misc.
decorative piece.

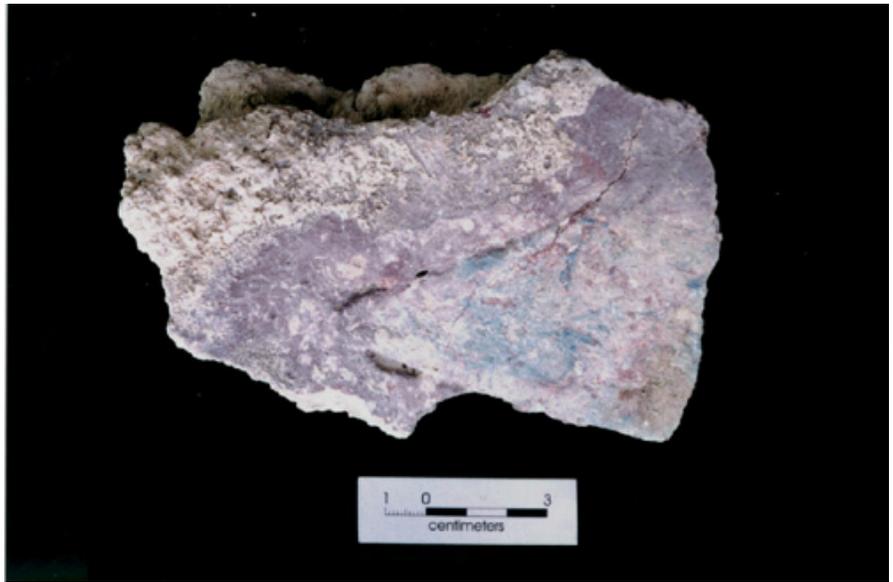


Figure 3:47 - Misc.
decorative pieces. The
fragment in the lower
left hand corner is a
feather.



Figure 3:48 -
Decorative.



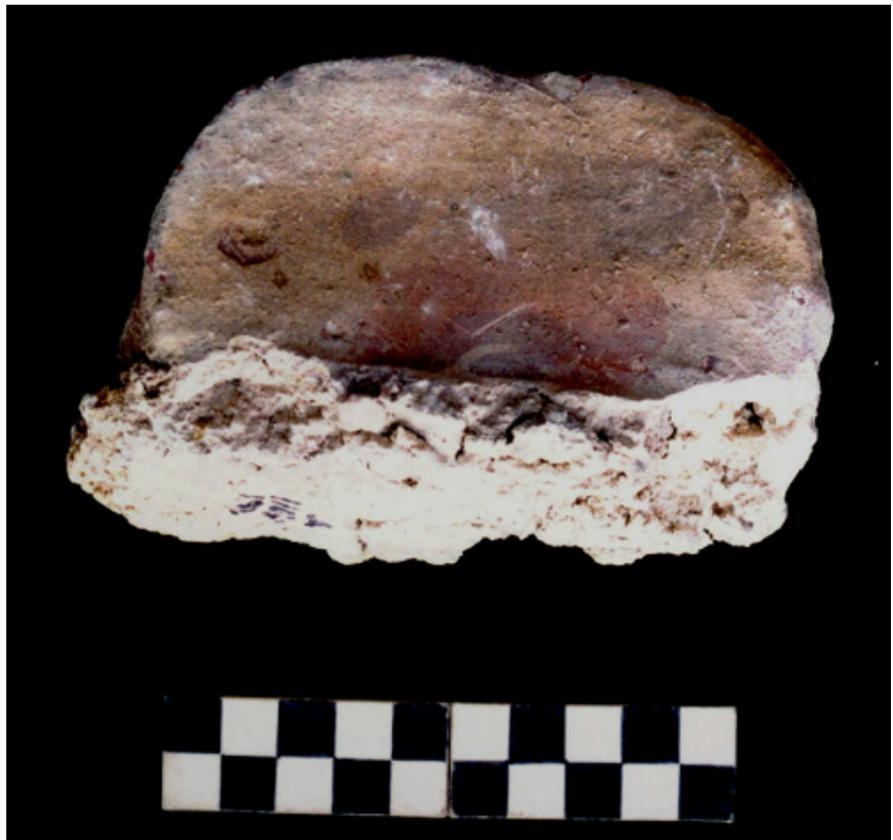
Figure 3:49 - Stone
armature with adorns
and panel. This piece
may have functioned
as part of the upper
zone molding.



Figure 3:50 - Possible fragment of upper zone molding.



Figure 3:51 - Unknown decorative. This piece projects and has at least four colors in a striped pattern. On the other side are groove marks of the sculptor's fingers.



Figures 3:52 through 3:61

Figure 3:52 - A circular enframing element.



Figure 3:53 - Fragments of enframing elements.



Figure 3:54 - This is an enframing element (top) underneath which are beads attached to an elongated form. This decorative arrangement is rather common in the façade collection. These beads are set within parallel rows delineated by incised lines of moderate depth.



Figure 3:55 - Examples of enframing elements.

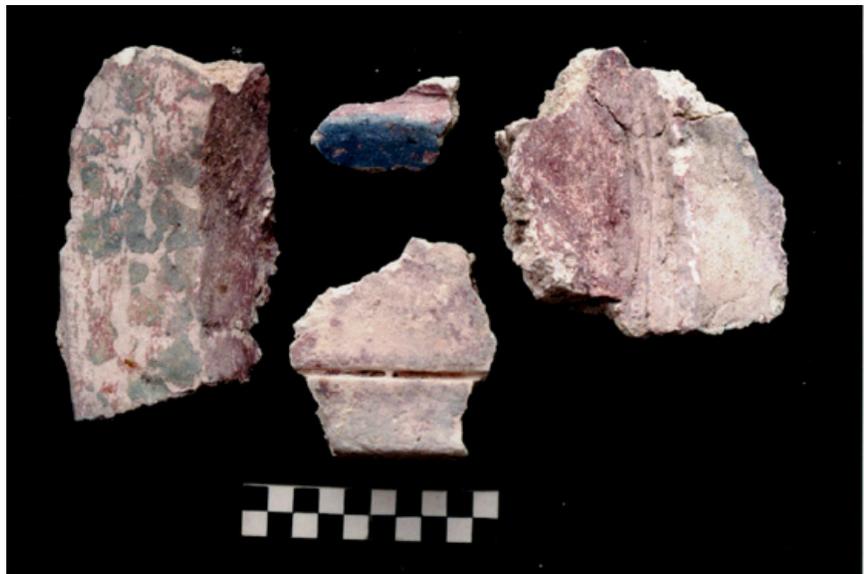


Figure 3:56 - This piece is a large decorative/enframing element that probably once framed a figure. It is of raised relief and is attached to a stone armature. The paint details on the piece are interesting and well preserved.



Figure 3:57 - This piece is virtually similar, though somewhat thinner, to Figure 3:59, and once was a part of the same pictorial composition.



Figure 3:58 - A blue enframing element.

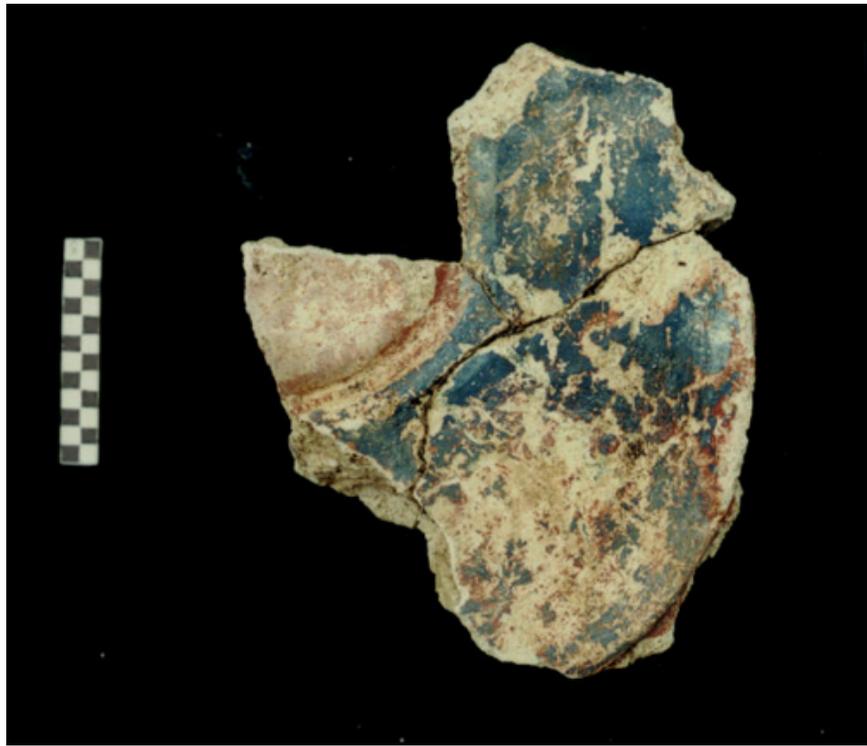


Figure 3:59 - This is a large decorative/enframing element that probably once framed a figure or image. It matches Figure 3:57.



Figure 3:60 - An enframing element with a single row of large beads. This may be associated with Figure 3:54.

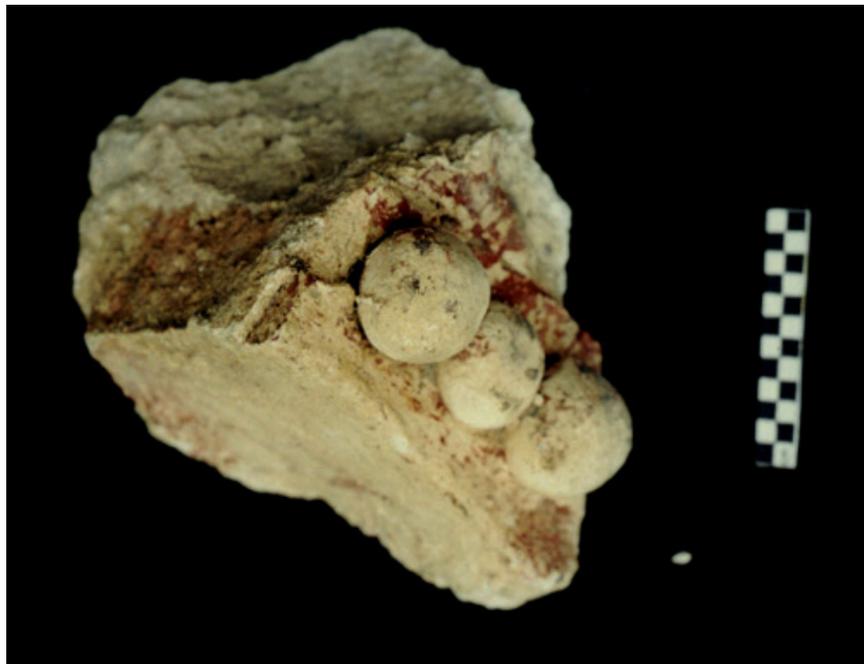


Figure 3:61 - A probable enframing element. Note the paint detail. These two fragments are from LA 1285.



Figures 3:62 through 3:71

Figure 3:62 - This is an elaborate enframing element from LA 1285. Colors include red, yellow, black, and green.

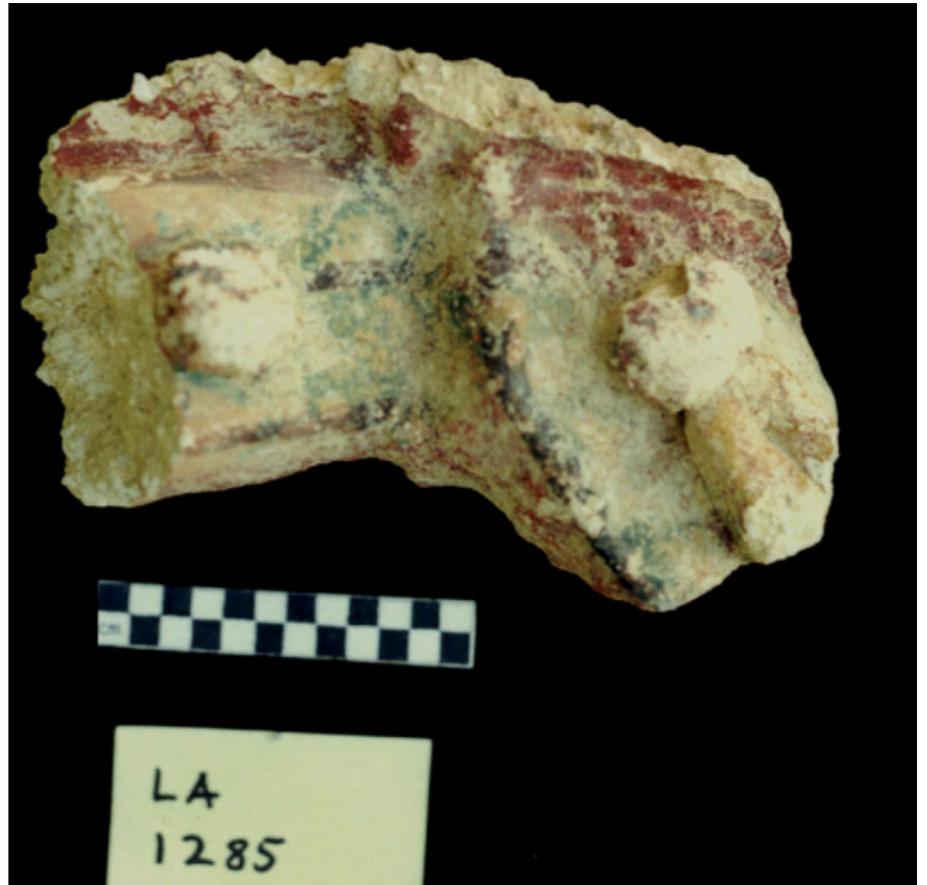


Figure 3:63 - These six pieces are examples of feathers, most of which probably formed headdresses.



Figure 3:64 - This piece from LA 1293, though not yet analyzed, may represent headdress feathers.



Figure 3:65 - This piece resembles a hook cartouche. Its relationship with other fragments has not been determined yet.



Figure 3:66 - This example is glyphic by its form. Whether it is a glyph cannot be determined at this time.



Figure 3:67 - This piece may represent the eye of a saurian. The main surface is delineated by deeply incised lines to signify the eye.



Figure 3:68 - This piece, recovered in LA 1293, may represent the supra-orbital plate of a saurian. It is painted yellow, with black lines delineating what may be scales.



Figure 3:69 - This piece was recovered by the field school in LA 1319. It may represent a limb of a saurian, and is painted in the same way as Figures 3:68 and 3:70. The detail on this small piece is quite exceptional, and gives an indication of the elaborateness of the façade in general. It is evident from this piece that emphasis was not just on sculpture, but on fine detail throughout the entire program.



Figure 3:70 - This piece, recovered in LA 1292, represents a curvilinear design of beads. The entire piece is painted yellow with black lines. Because of the paint style, it is no doubt associated with Figure 3:68 and Figure 3:69. In addition to these pieces, there are at least forty more fragments with the same paint style.

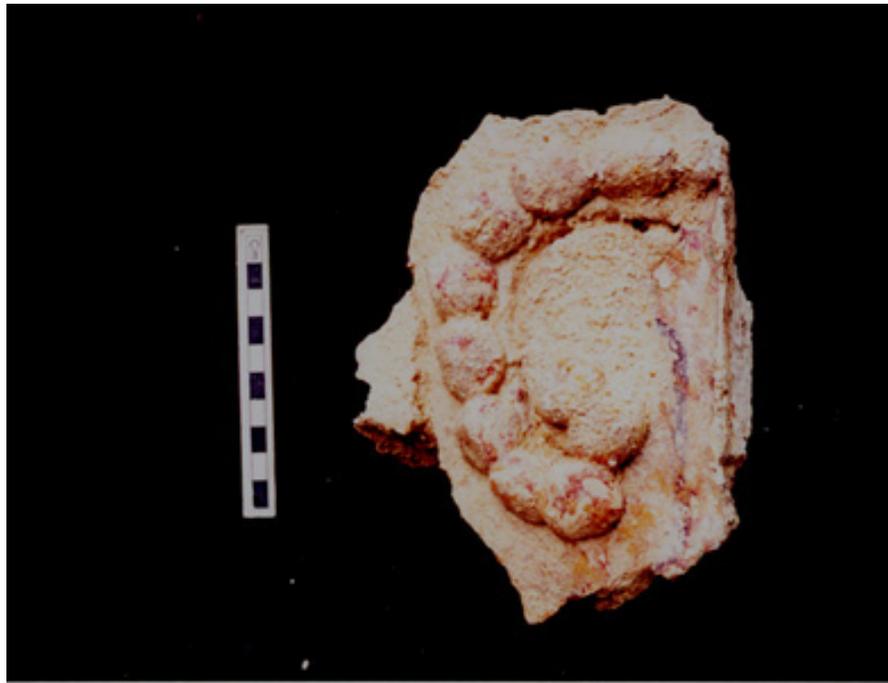


Figure 3:71 - An example of a knot.



Figures 3:72 through 3:81

Figure 3:72 -
These examples
represent knots.



Figure 3:73 - The
two examples on
the left represent
mouth curls. The
example on the
right is a stone
armature.



Figure 3:74 - This fragment may represent a mouth curl, and is painted in at least three colors.

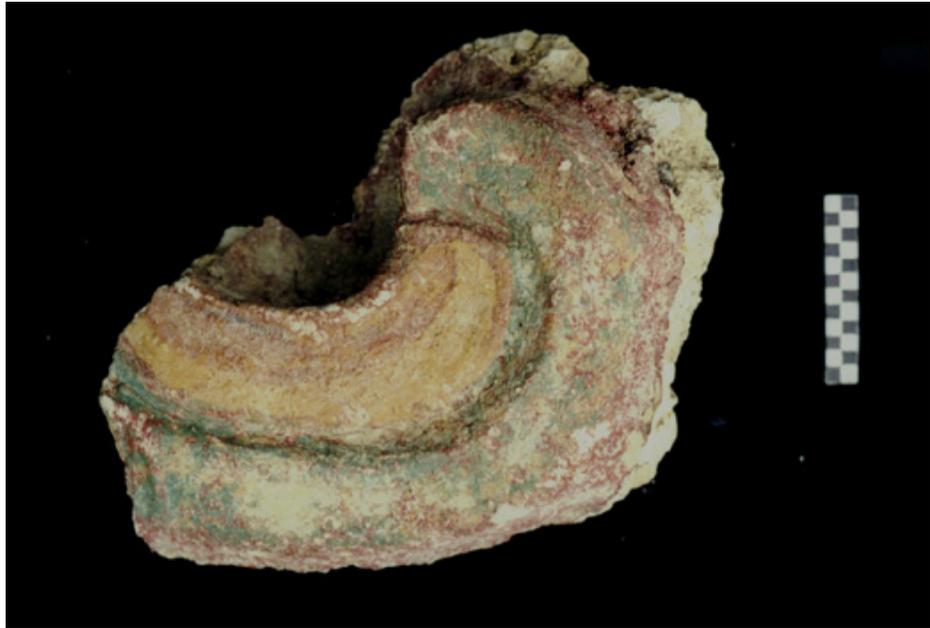


Figure 3:75 - This may be a possible mouth curl, and forms a pictorial grouping with Figures 3:76 and 3:77. It is painted in three colors, and the blue stripe has a darker shade of blue within it.

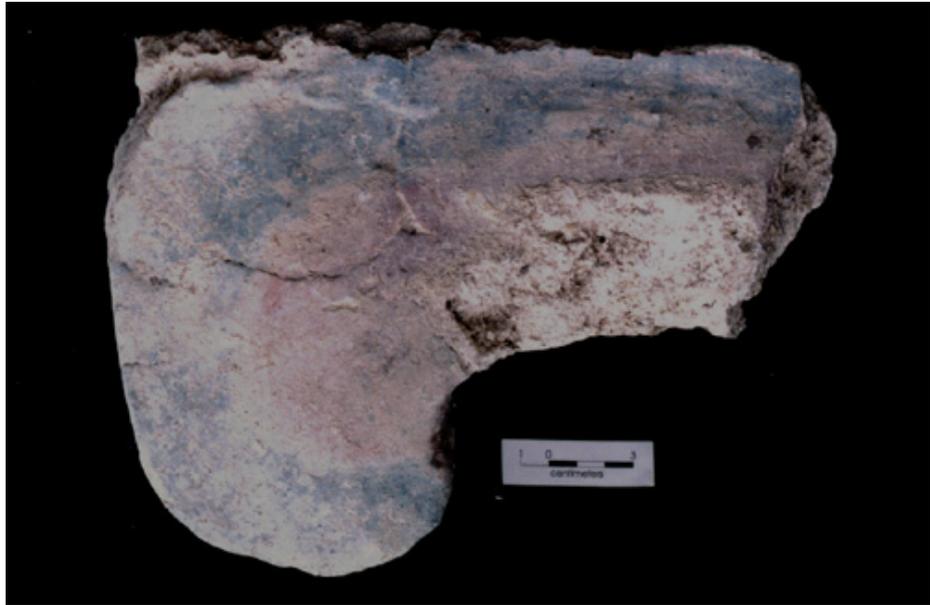


Figure 3:76 -
Associated with
Figures 3:75 and
3:77.



Figure 3:77 -
Associated with
Figures 3:75 and
3:76.

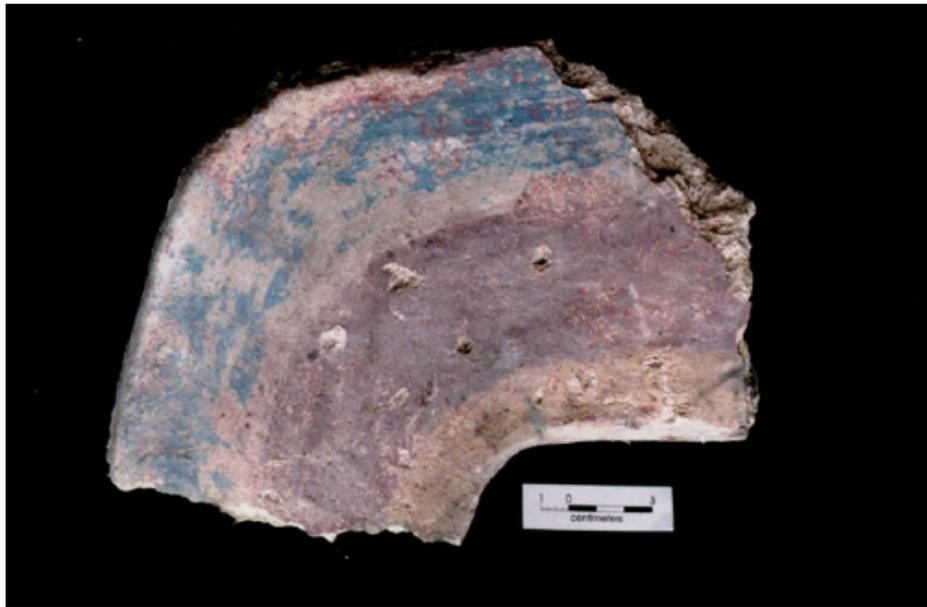


Figure 3:78 -
These two
examples
represent large
perforated discs,
or earflares.



Figure 3:79 - This
is the largest
earflare identified
in the collection,
and rather than a
hole has a
centerpiece. This
earflare was
matched to the
large head of
K'inich Ajaw,
Figure 3:93.



Figure 3:80 - An assortment of fragments from LA 1103. These include large and small earflares (lower seven pieces), adornos, and one scroll design.

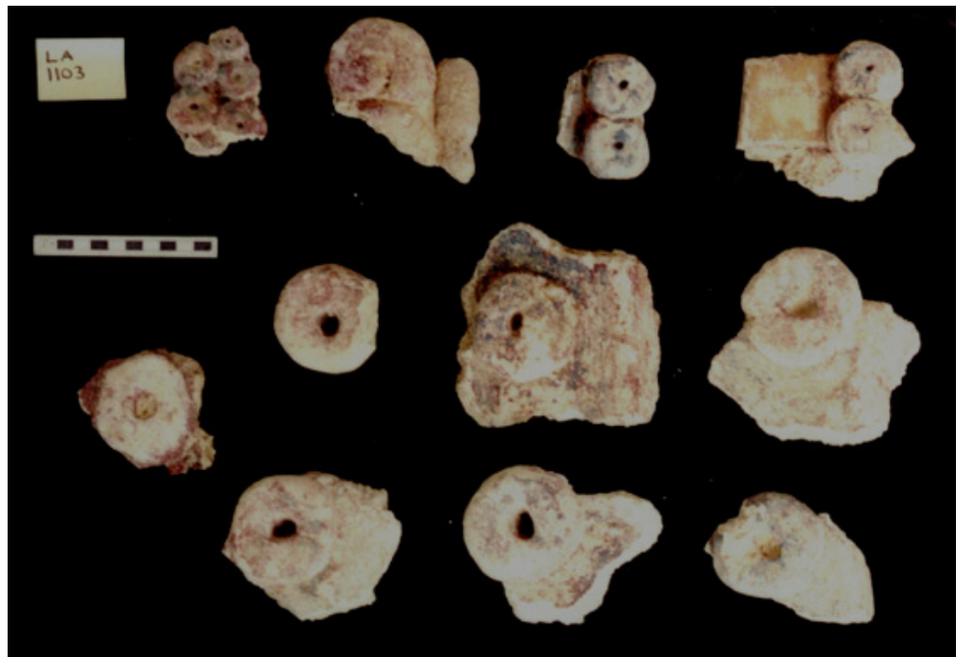


Figure 3:81 - A small perforated disc. Note the painted details on the background.



Figures 3:82 through 3:91

Figure 3:82 - This piece, from LA 1292, represents a painted earflare on a multicolor background. The face associated with this earflare could not be located.



Figure 3:83 - These two perforated discs are from LA 1293. The large example on the right is red, but its front surface is painted white.



Figure 3:84 - An earflare that was fitted back to the subsidiary elite in Figure 3:87.

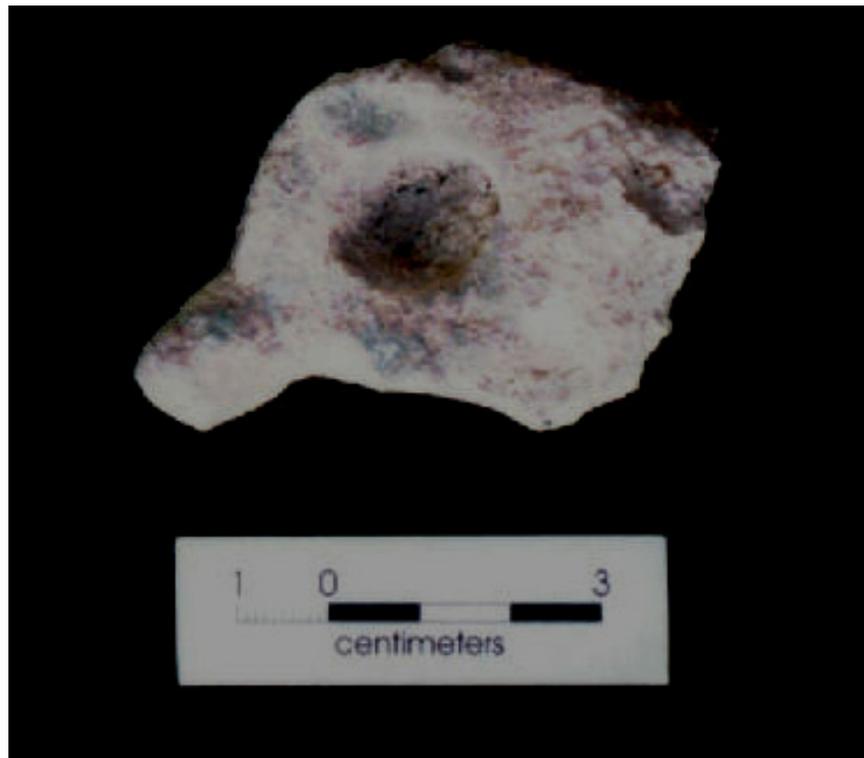


Figure 3:85 - The face of a figure, perhaps representing a lesser elite.



Figure 3:86 - This head, attached to a stone armature, may represent a lesser member of the elite royal court. On his head he wears a trefoil crown, similar but smaller to the example shown in Figure 3:96.



Figure 3:87 - One of the subsidiary elite figures. An earflare was found in the collection and fitted back to this figure.

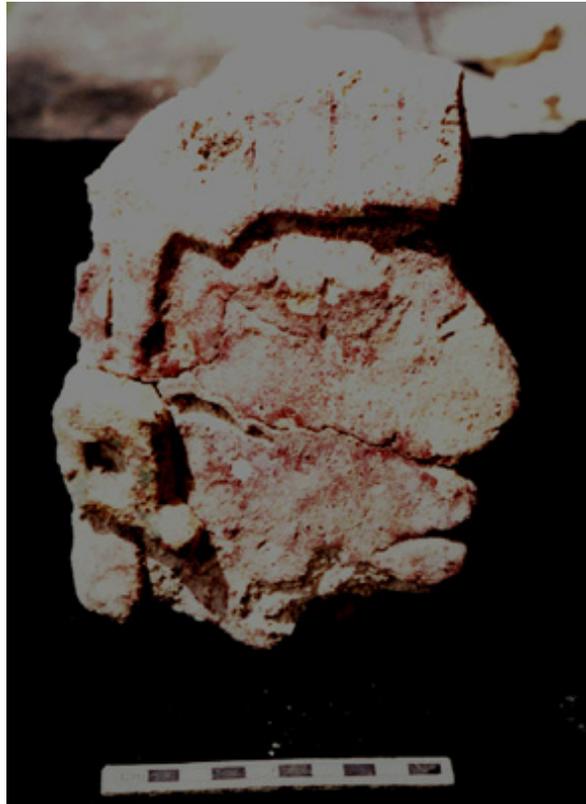


Figure 3:88 - These are two fragments that were joined this past Summer. One fragment is the lower portion of a face, and the other fragment is a small earflare.

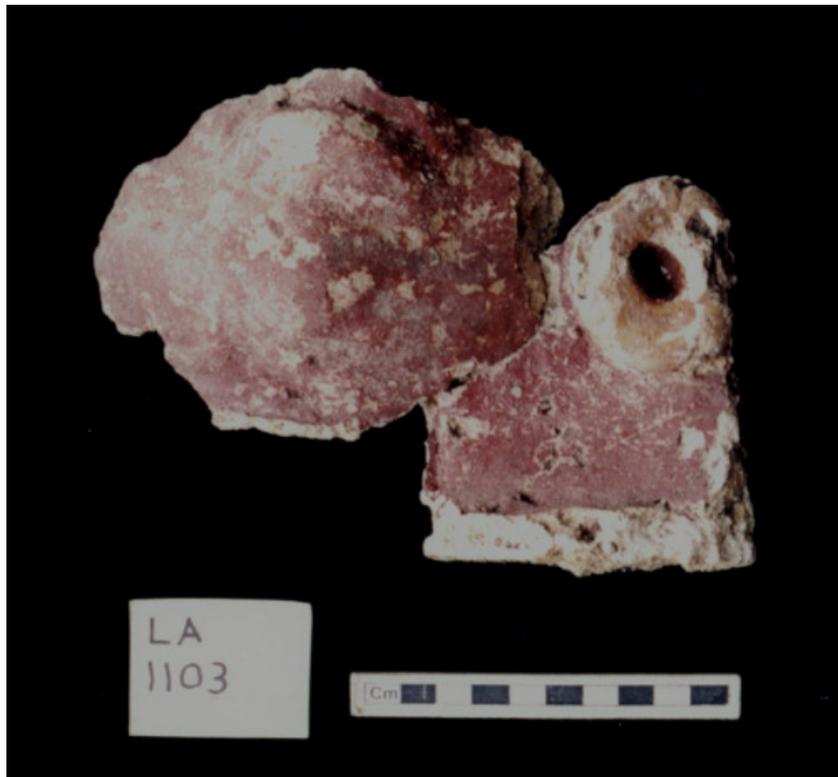


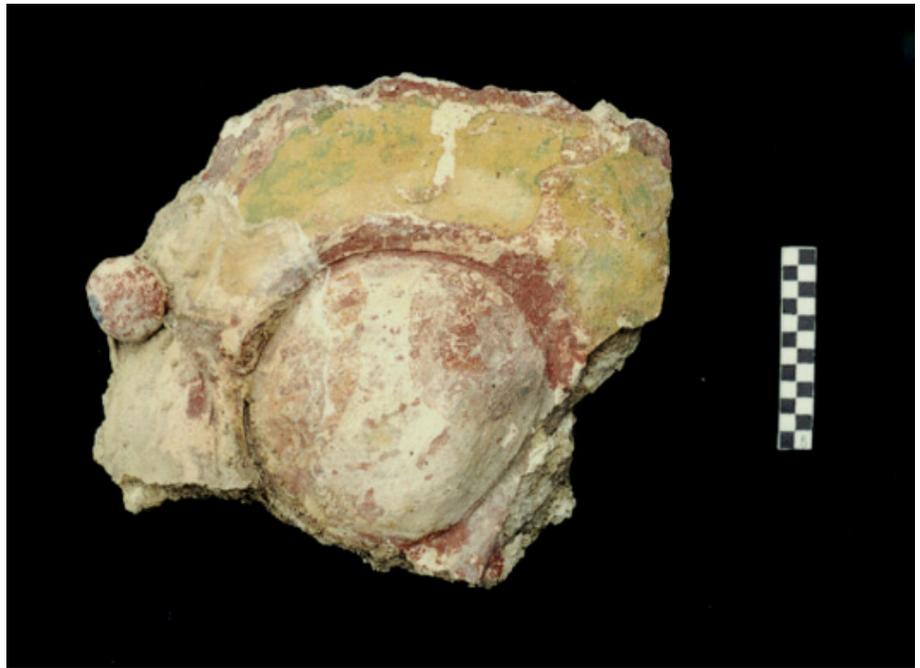
Figure 3:89 - This is a fragment of a supernatural, the identity of which cannot be determined.



Figure 3:90 - This is a fragment of a supernatural figure, the identification of which is undetermined due to the fragmentary nature of the piece.



Figure 3:91 - The eye of a supernatural figure.



Figures 3:92 through 3:99

Figure 3:92 - A supernatural head, probably God K. Note the projecting nose with protrusions. There is an incised design on his forehead, only part of which can be discerned due to poor preservation.



Figure 3:93 - A supernatural head representing K'inich Ajaw. This is the largest piece of sculpture in the collection.



Figure 3:94 - This is a profile view of the head of K'inich Ajaw, Figure 3:93.



Figure 3:95 - A large supernatural figure from LA 1291. The head is sculpted on one side, with little or no relief on the other. It has a projecting hook on its nose.



Figure 3:96 - An example of the trefoil motif. This piece is much larger in size than the one shown in Figure 3:86.



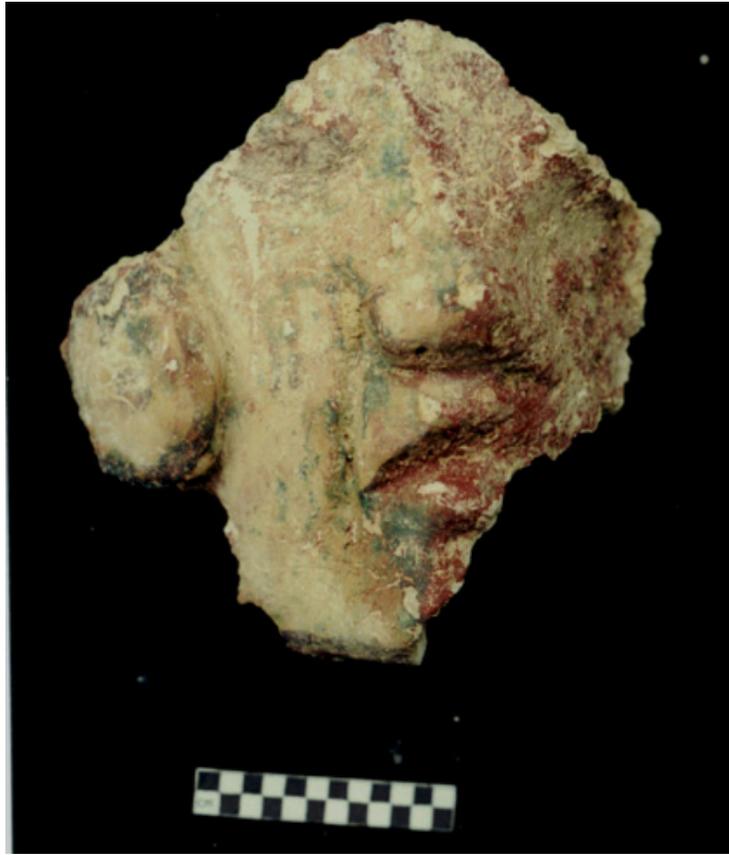
Figure 3:97 - These fragments are believed to represent the witz monster. There are four pieces total, but the diagnostic example is the one on the right. This piece may represent the lower portion of the eye, and the protrusion on the right hand side of this fragment may be the nose.



Figure 3:98 - These fragments, recovered in LA 1289, are mostly painted yellow and represents a curvilinear band with a black stripe that terminates at a human head. Several other pieces associated with this band, have not been intensively analyzed or compared for joining.



Figure 3:99 - Detail of the face from Figure 3:98. The face was raised from the façade surface, and details, such as the earflare, were painted for highlight.



Section 4: Concluding Remarks

Summary of Excavations

Limited excavations on Structure N10-28 consisted of four field operations. Operation 1 was the removal of the front core between the N10-28 and N10-15 platforms, starting where Dr. David Pendergast left off and extending about a meter and a half to two meters to the south. Reasons for extending the core removal in this area were to: (1) see the stratigraphy as it changed from large core to the demolition/collapse debris level located on the plaza floor, where the stucco is located, (2) to recover datable ceramics from within this sealed context, (3) to recover more unique and stylistically important pieces of sculpture, as façade corners tend to be quite elaborate, and, (4) to expose the platform corners of N10-28 and N10-15 for architectural data.

Artifacts recovered included several clusters of vessel fragments, which have been dated to the Terminal Classic (Graham and Pendergast, personal communication). Other finds include several obsidian blades, one shell (freshwater clam), and a small

number of lithic material. Stucco pieces recovered, as was hoped, were high in both volume and quality. In all, over 400 pieces were recovered from this area. Two levels were named, Level A being equivalent to the large mass of core (3-4 meters), and Level B, which ranged from 10 to 35 cm. Large stones composed Level A, with little dirt filling the spaces, and was capped by a relatively thin layer of soil. Level B was strikingly different, being yellowish in color, and being composed of facing stones, stucco, structural core, mortar, ceramics, and pulverized building material. Artifact density was extremely dense, in contrast to the low volume of artifacts from Level A.

Operation 2 was the continuation of the 1981 trench between N10-28 and N10-15 to the north. Although a large volume of ceramics were recovered, no clusters were encountered *in situ*, although one vessel is represented by a large number of sherds. Other finds include an obsidian blade, a large jar fragment found beneath rows of fallen facing stones, and a perforated shell. Architectural features encountered include the back platform corner of N10-15 and the base of a wall between N10-28 and N10-15, similar to the more complete wall at the southern end of the space between the two buildings. An estimated 230 pieces of stucco were also recovered, much of it being small fragments. The debris layer, at an estimated 1.5 meters, was much thicker in this area. Excavations here were terminated prematurely due to several factors, and will be completed in the next field season.

Field Operation 3 began as the probing of four small facing stones exposed at the surface about two meters north of Operation 2. The result was the clearing of a secondary face of the N10-3 Plaza complex. The face was cleared down a meter and a half into midden, an inset corner was exposed, and the north face was followed for about a meter. The volume of artifacts recovered from this operation was high. Soil atop and among the core was very dark. Numerous ceramic sherds, including many large rim sherds, obsidian blade fragments, a drum fragment, lithics, and faunal material were recovered. A preliminary appraisal of the ceramics indicate they belong to the Buk Phase, or Early Postclassic. Artifact density in this operation was extremely high in comparison to other field operations.

Field Operation 4 was the complete removal of core from the area immediately adjacent and overlapping the N10-28 platform. The area excavated was approximately 5.5 meters by 1.5 meters on the plaza floor. The stratigraphy observed was identical to that described in Operation 1. After the overlying core was removed, which included the recording and removal of a core face, the debris layer was sectioned into one meter increments from the corner. In all, there were five one meter sections, numbered Operation 4-a, 4-b, and so on. Operation 4-a was excavated out completely at once. It was then decided to come down on the debris layer carefully exposing the stucco fragments, ceramics, and facing stones *in situ*. The result was a three and a half meter long *in situ* debris layer. One of the significant finds was a Terminal Classic polychrome vessel, the fragments of which were found in three of the one meter sections, perhaps indicating a termination ritual. Stucco fragments number in the hundreds. Pieces recovered include the head of a supernatural with bat features, and a large fragment painted yellow with scales that may represent the supra-orbital plate of a saurian. After recording, each one meter interval was taken out one by one.

Laboratory analysis this season consisted of the preliminary sorting of many of the stucco pieces recovered in 1981 as well as the new excavations. All other materials recovered were sorted, counted, weighed, bagged, and are in storage at the on-site bodega, awaiting further analysis.

Iconographic Summary

The narrative program of the stucco façade of Structure N10-28 represents a ruler (an ahau) surrounded by subsidiary figures, representing lesser elites of Lamanai society, as well as captives. The main figure is a male, and is represented by a profile head, upper arm, a lower leg, and a jadeite bead pectoral. Due to the size and rich adornment of this figure, he may have been the ahau of Lamanai, and in all likelihood was located over the central doorway.

Other iconographic elements of sacred royal power are represented by a large head of Kinich Ahau, the sun god, and an image of God K. The identity of other supernatural heads have not yet been determined. In sum, the façade seems to convey a program on the charter of power and Maya kingship.

The pictorial groupings include a wide range of motifs and forms. Many of these are decorative, such as adornos, beads, buttons, and other forms that have not yet been classified. A number of anthropomorphic forms have been identified, including arms, feet, legs, as well as elements of elaborate elite costume. At least five lesser figures of the royal court have been identified, as well as two captive figures. A number of pieces, when grouped, depict a seated male figure set against a green background decorated with grooved curvilinear patterns.

A large number of enframing elements exist in the collection, with a range of color, sizes, and shapes. These pieces are thought to have framed individual images as well as delineating the entire façade. Feathers from headdresses and costume have also been noted, as well as two glyphic forms. Five knots have been identified, the best preserved being a bright blue. Two examples of a trefoil motif in the collection represent a non-anthropomorphic version of the Jester God. Four fragments of a witz monster were noted, which identify a structure as a sacred mountain and the entrance to the Underworld.

A large number of perforated discs were identified in the collection, representing earflares. One of these belonged to the figure of K'inich Ahau. The nature of the breakage indicate that this figure was once located on the corner of the façade. Images of saurians were noted in the collection, with much of these pieces being recovered in the 1999 field season. Some of the fragments may include a supra-orbital plate and a limb. Other pieces may represent an eye and a tail.

Future Research

There are a number of research possibilities that can be explored through this research project. Immediate plans for the collection include the complete sorting of the collection by iconographic motif. Specially built shelving will house the sorted pieces in the bodega annex at the site. All of the unidentifiable fragments will be processed as described in [Section 3](#). Analysis will also be conducted in and among lot numbers in regards to ceramics as well. Future plans include taking paint and stucco samples for chemical analysis.

Plans also include a more comprehensive iconographic and stylistic analysis of the stucco collection as well as a more thorough comparison with facades from other sites in the Maya lowlands. When the new, larger, on-site museum at Lamanai becomes a reality, then hopefully more pieces can be put on display.

After the lots from Structure N10-28 are analyzed, including those from 1981 and 1982, funding will be sought to cover excavations along the eastern side of N10-28 to recover all fragments of the east façade. The recovery of the fragments of the east façade will provide the most promising endeavor in the reconstruction of a section of the façade.

As few stucco facades have been studied, this collection from Lamanai can provide important information on Late Classic Maya art. The significance of this study is that little is known about Mayan sculpture modeled in plaster, as compared with other art mediums, and especially of the Late and Terminal Classic Periods. The Lamanai collection represents a corpus of iconographic material from these periods, presenting a unique opportunity for a contribution to the study of Maya representative art, architectural settings, and iconography, in addition to providing a clearer understanding of the ancient Maya of Belize.

Acknowledgements

Archaeological research projects such as this one are never the work of the one individual, but rather, the net result of many contributors. First and foremost I would like to thank Dr. Elizabeth Graham, Principal Investigator, for permission to carry out the excavations and analysis, permission to use the plan on page 25, comments, suggestions, helpful information, and for encouraging me to return after my first visit to Lamanai in 1997. I would also like to thank Dr. David Pendergast for his encouragement, contributions, information, access to field notes, and wit, which kept many of us sane in the field.

I am very much indebted to Claude Belanger for his many contributions to this project. He has been continually teaching me the virtues and pitfalls of architectural recording, and his ingenuity for solving logistical problems as well as his enthusiasm kept me going through some rather stressful times. He is one of the best individuals to work with in the field. It has been a pleasure to work with these three individuals, and I look forward to working with them for several more years.

Another person to whom I owe a great deal is Dr. Dorie Reents-Budet. She was at Lamanai for two weeks this past Summer and it was a great pleasure to work with her. Her comments, suggestions, observations, help, enthusiasm, and, above all, encouragement, have meant a great deal. Thanks also go to Karen Pierce for her help, occasional use of her new digital camera, and friendship.

I also owe a great deal to Mark and Monique Howells of the Lamanai Outpost Lodge and Field Research Centre for their logistical support and coordination with local workmen. Thanks also go to Laura Howard, Norbert Stanchly, Terry Powis, Richard Meadows, Scott Simons, Nazario Ku, and Lisa LeCount for their help and suggestions. Many thanks also go to Melissa Knight for assisting in the stucco excavations in Operation 4, and Heidi Ritscher for database information and her excavation assistance. Last, but not least, I would like to acknowledge my workmen, Federico Vasquez and Brian Ramirez, the workers from the lodge, Rolando and Estuardo, and the workmen who removed the plaza core this Summer: Israel, Felix, Ricardo, Victor, Victorino, and Miguel.

A grant for this work was awarded by the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI) to fund a preliminary analysis of the collection as well as minor excavations on Structure N10-28.

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Appendix 1: General Improvement to the Bodega of Lamanai

During the 1999 field season at Lamanai, described in this report, a larger than anticipated volume of cultural material was recovered. Most of this material consisted of stucco fragments. This was due primarily to the modifications to the original research design, discussed in Section 1. This expansion of the excavations prompted the need for adequate storage for the sculptural fragments. Ideally, these fragments should be stored loose on shelving, rather than in flour sacks where the pieces are more easily damaged from movement, etc. However, these shelves should be stored in a secure environment.

The bodega at Lamanai is a two room concrete structure. The smaller side room has been previously used to store old equipment from the ROM's excavations. The larger room is where artifacts from the ROM excavations are stored. This room has shelving along all available wall space with the exception of one, as well as a shelving unit down the center of the room. Approval had been granted to clear the smaller room and utilize the preexisting shelves that were along one wall. This task was done and the more elaborate stucco pieces were stored on these shelves. A contingency grant request was submitted to FAMSI via fax from the site to cover the construction of more shelving and soffit screening the bodega to keep out bats. Bat guano is highly acidic and would damage the surface of the stucco, so the elimination of bats from the bodega was of great concern.

In December of 1999 I returned to Lamanai to implement these contingency measures, only to find that the small room was being utilized again for equipment storage for the DOA. The DOA has recently received IDB money to develop sites for tourism. As a result of facilities improvement, they needed the storeroom for equipment. After meeting in Belmopan with DOA officials, an alternate location was chosen along the remaining

empty wall in the larger room. Workmen were hired to begin the bodega work. As a result of this new shelf location, the large bodega room needed to be cleaned and rearranged. The shelves constructed are rather deep, and should provide enough storage space for the stucco collection. However, the shelves are now located in the larger room, which has more traffic and activity, and thus is not as secure as the small storeroom would be. In response to this new situation, large storage bins and archival packing material will be used during the upcoming field season to store the more fragile fragments.

The lumber was obtained in Indian Creek, one of numerous Mennonite settlements in the area. Hardware supplies were obtained in Blue Creek, Shipyard, and Orange Walk. The type of lumber used was mahogany, insuring longevity and eliminating the threat of termites. The screen used in bat-proofing was a flexible, fine screen. The lead worker employed is one of the best carpenters in the village, and did an excellent job. The holes between the wood trim and the roofing material was sealed by an expanding latex foam sealant that was brought from the United States and was applied by myself.

Due to a variety of factors I could not extend my stay to supervise the bat-proofing. I made arrangements with the two workmen, advanced funds to cover any needed supplies, and left money for wages in the care of fellow archaeologists at the Lamanai Field Research Centre. This task has been completed and the bodega is now, hopefully, free of bats. General improvements were also performed one afternoon by trimming a number of overhanging limbs and spreading gravel around the bodega entrance.



Figure A1:1. Shelving units in the bodega along the north wall and in the room center, before (left) and after (right).



Figure A1:2. Shelving to the left of the bodega door, before (left) and after (right).



Figure A1:3. Shelving to the right of the bodega door, before (left) and after (right).

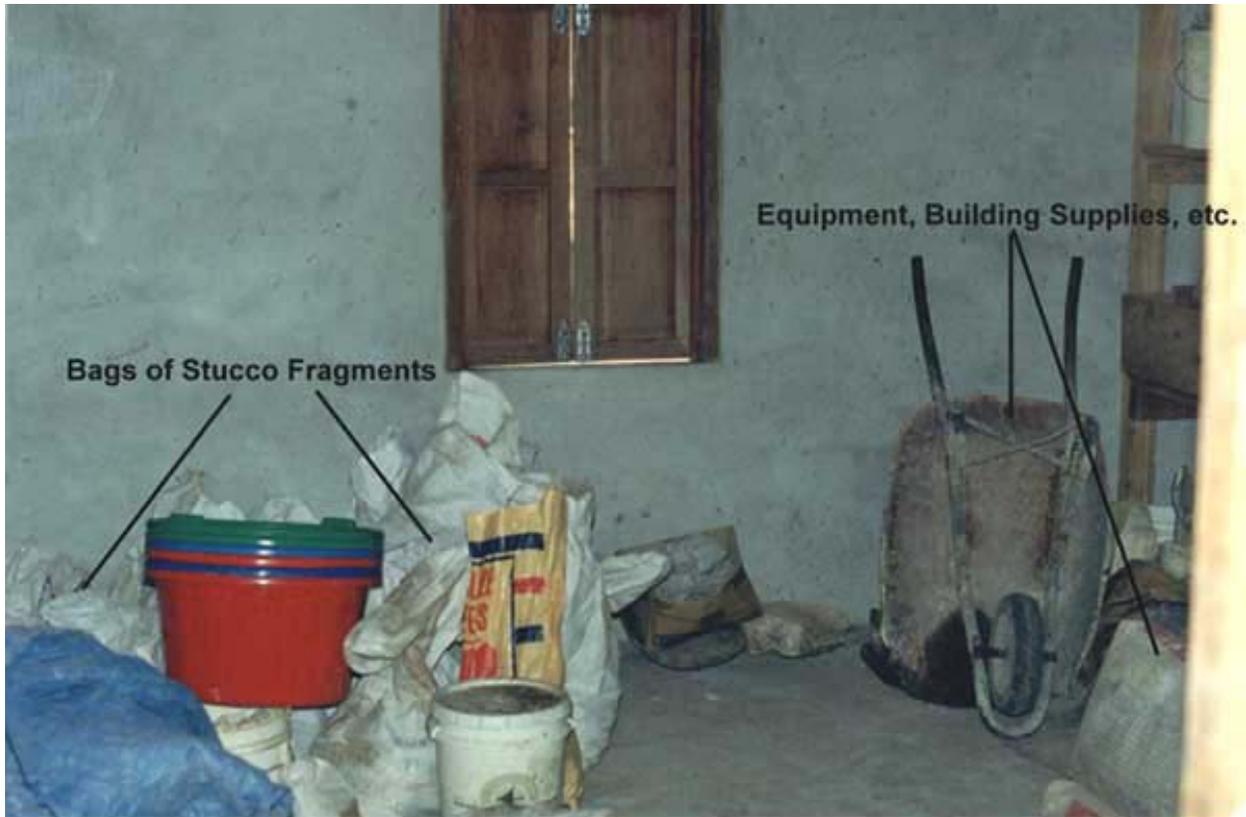


Figure A1:4. The empty wall in the bodega that the new shelving will be built against.



Figure A1:5. The new shelving immediately after completion.



Figure A1:6. The new shelves after placement of the stucco fragments, detail.



Figure A1:7. The new shelving after placement of stucco fragments. Almost all of the loose pieces have been slipped into a plastic sleeve for protection. Some of the flour sacks contain stucco that is yet to be analyzed, while others contain non-descript fragments. After the 2000 season most of these pieces will be packed in large plastic bins.



Figure A1:8. Israel at work on the new shelving.



Figure A1:9. The grantee applying expanding foam sealant to the holes created by the metal roof.



Figure A1:10. Bodega soffit before screening.



Figure A1:11. Bodega soffit after screening.



Figure A1:12. Federico and Israel installing screening.



Figure A1:13. Federico and Israel installing screening beside bodega entrance.

Appendix 2: Lot Numbers from Structure N10-28

ROM Excavations 1981-1982

- LA 567 Burial N10-28/1.
- LA 575 Core filling rooms of N10-28.
- LA 576 Surface of core atop N10-28 (small find).
- LA 598 Core of N10-28, atop SHAMROCK floor.
- LA 602 WIND bench core, N10-28.
- LA 603 Core of N10-28, stair trench, atop PEPP floor.
- LA 604 Small charcoal sample, core of N10-28, above PEPP floor.
- LA 676 Bottom (midden) stratum below demolition material between east end of DOLL/MAYS (N10-15) and west end of N10-28.
- LA 1103 Upper zone stucco decoration from N10-28 (TULIP).

Field School 1999

- LA 1304 Debris clearing atop bench, Room F.
- LA 1305 Debris clearing, Room A.
- LA 1306 Clearing around doorjamb, east terrace face.
- LA 1308 Debris clearing atop bench, Room G. (NW)
- LA 1309 Debris clearing atop bench, Room C. (SE)
- LA 1311 Debris clearing, east terrace face.
- LA 1312 Core north of face in southeast room, north of LA 1309.
- LA 1313 Room C, core of bench #2.
- LA 1315 Core north of face, south of doorjamb, Room C.
- LA 1316 Bench core, Room F.
- LA 1317 Clearing south of front face at floor level.
- LA 1319 Soil atop north wall, Room A.
- LA 1320 Marl above floor in Stephen's room, beneath LA 1308.
- LA 1324 Fill of Room E.
- LA 1325 Removal of north doorjamb, Room C.
- LA 1335 Core of platform below west end large stones.
- LA 1336 Possible cache - upper core LA 1335 beneath large stones.
- LA 1337 Possible cache - in core of LA 1325 adjacent to step.
- LA 1338 Ceramic cluster in LA 1311.

Core Removal 1999

- LA 1307 Core south of N10-15.
- LA 1318 Stratum below LA 1307, directly on plaza floor.

N10-28 FAMSIS Project

- LA 1281 Midden atop and against secondary Ottawa face behind TULIP and FIFTEEN.
- LA 1282 Trench cleanup between TULIP and FIFTEEN, forward of wall.
- LA 1283 Trench cleanup between TULIP and FIFTEEN, rear of wall.
- LA 1284 Upper core (BOULDERS) fronting TULIP.
- LA 1285 Demolition level under core, continuation of trench between TULIP and FIFTEEN.
- LA 1286 Upper core at rear of trench between TULIP and FIFTEEN.
- LA 1287 Demolition level at rear of trench between TULIP and FIFTEEN.

- LA 1288 Surface collection, spoil trench, Postclassic platform behind TULIP.
- LA 1289 Demolition level under core, fronting TULIP terrace. (Op. 4-a).
- LA 1290 Demolition level under core, fronting TULIP terrace. (Op. 4-b).
- LA 1291 Demolition level under core, fronting TULIP terrace. (Op. 4-c).
- LA 1292 Demolition level under core, fronting TULIP terrace. (Op. 4-d).
- LA 1293 Demolition level under core, fronting TULIP terrace. (Op. 4-e).