Introduction

Between 1974 and 1986 archaeological investigations were undertaken at the Maya site of Lamanai, located on northwestern shore of the New River Lagoon in northern Belize (Figure 1). Excavations at the site were carried out by David Pendergast of the Royal Ontario Museum. The site of Lamanai has a long, uninterrupted stratified sequence of occupation spanning the Middle Preclassic (900-300 B.C.) period through the Historic (17th Century) period (Pendergast 1981a). A total of 718 structures were mapped at Lamanai, of which 37 were excavated. Primary deposits dating to the Middle Preclassic
(900-300 B.C.) and Late Preclassic (300 B.C. - A.D. 250) periods were exposed in
eleven of these sampled structures, about 25% of the total surveyed.

Among the artifacts recovered during the 1974-86 excavations were a significant
number of whole and complete ceramic vessels dating to both the Middle and Late
Preclassic periods. The Preclassic ceramic assemblage offers an interesting opportunity
for analysis. To date, the assemblage consists of five Middle Preclassic and 132 Late
Preclassic vessels recovered from such primary contexts as burials, caches, middens,
hearths, sherd features, and rock features in pyramidal structures (Structures N10-9,
N10-27, N10-43, P8-9, P9-2), residences (Structures N10-2, P8-11, P8-14, P8-27, P8-
103, YDL II-7), and a subterranean feature (Chultún P8-2) (Powis, 1999; 2000).
Approximately 35% of the Late Preclassic ceramic assemblage comes from a large
Protoclassic (50 B.C. - A.D. 250) chultún (P8-2) discovered at the north end of the site
(Pendergast, 1981b; 1981c). Much of the Preclassic settlement at Lamanai is dispersed
within a two kilometer strip along the lagoon. To date, it appears that the earliest
settlements were located in the north (harbor area), with a shift southward in later times
as changes in the lagoon environment may have made the northern area less attractive
for habitation.

Since the ceramic assemblage had already been excavated and is stored in the on-site
open-air museum at Lamanai, my dissertation research consisted entirely of laboratory
analyses. In the summers of 1998 and 1999, prior to my work funded by FAMSI,
reconstruction and conservation of the Preclassic vessels was undertaken with the
permission of Elizabeth Graham, director of the Lamanai Archaeological Project (LAP).
Because of the daily exposure to pests (e.g. bats, spiders, insects) and the weather,
immediate action was required before the entire Preclassic ceramic assemblage was
permanently damaged. In June, 2000 my research at Lamanai focused on the
typological and contextual analyses of the Preclassic assemblage as well as the
complete documentation of each vessel through artifact illustration and still and digital
photography. Both goals were achieved during this four week research period.

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Figure 1: Map of Lamanai showing concentration of structures running along the lagoon edge (after Pendergast 1981a: Figure 3).
Ceramic Research

The ceramic analysis began with the types enumerated using the type:variety-mode system of classification commonly used in the Maya lowlands (Gifford, 1976; Sabloff and Smith, 1969; Smith et al., 1960; Willey et al., 1967). This approach, combined with an attribute or modal analysis, provided a better understanding of the chronology, intra-site and inter-site distribution of these ceramics, and a knowledge of vessel function and site use. More than 30 attributes were examined on each Preclassic vessel, including shape or form, slip color, decoration design and technique, surface treatment, paste and temper type, and metrics (height, rim diameter, wall thickness, volume).

Analysis of the Late Preclassic ceramic assemblage has produced a number of preliminary results. For example, there are a number of specialized and unspecialized forms which were used by the inhabitants of Lamanai for a variety of purposes, including cooking, food preparation, serving, dry and liquid storage, and transport. Eight general vessel forms are present in the Preclassic assemblage. There are 66 open bowls and dishes, 20 jars, 18 open plates, 11 crudely-fashioned bowls, nine restricted-rim bowls, three deep basins and buckets, three vertical-walled bowls, and three vases. Of the forms present, open bowls, dishes, and plates are the most common, making up 63% of the entire assemblage. Jars are also common, forming 18%, and are represented by both spouted and unspouted forms.

More than two-thirds of the assemblage were highly polished serving vessels and slipped red, black, cream, or a combination of two of these colors. The Sierra Red Group is the dominant ceramic group at the site making up 65% of the total assemblage during Late Preclassic times. All other ceramic groups, including Aguacate, Coconut Walk, Flor, Matamore, Polvero, and Specials consist of less than 10% each (see Graham, 1994; Lopez, 1996; Kosakowsky, 1987; and Valdez, 1987; for ceramic type descriptions). Pottery vessels were generally decorated with pre-slip incisions, grooves, and punctates. The assemblage exhibited a number of modelled vessels in the zoomorphic shapes of birds (Figure 2) and crocodiles (Figure 3). The crocodile effigy vessel is important because it represents the first evidence of crocodile imagery at the site, supporting the reading Lama’anayin (“submerged crocodile”) as the ancient name of this community (Pendergast, 1981a:32).
Figure 2: Lechugal Grooved-Incised effigy bird bowl found in Late Preclassic midden in Structure P8-11. Drawing by Ruth Dickau.

Figure 3: Unnamed buff-orange effigy crocodile bowl found in Late Preclassic Burial 6 in Structure P8-9. Drawing by Ruth Dickau.
Although red slipped pottery was prevalent at Lamanai there are also a number of black and cream slipped pottery examples that represent the Late Preclassic period at the site (Figure 4, Figure 5 and Figure 6). During the Protoclassic period, red slipped pottery continued to predominate the assemblage (Figure 7), but this homogeneity in slip color was slowing being replaced by pottery that exhibited trickle painted designs known as Usulután decoration (Figure 8 and Figure 9). Like other Maya sites of this period, Lamanai also adopted new pottery elements such as mammiform feet and ring bases (Figure 9 and Figure 10). Other kinds of decoration applied to the vessels included concentric horizontal streaky marks painted on the surfaces of Society Hall Red bowls and dishes as well as red crosses painted on the base of Sierra Red plates. According to McAnany et al. (1999:139-140), these cross motifs could represent an early example of the quadripartite motif or kan cross.

Ceramic Illustration and Photographic Record

Artifact illustration and still and digital photography of the individual vessels constituted the main goal of my research funded by FAMSI. Although some of the Preclassic vessels had already been drawn by Louise Belanger in the 1970’s and 1980’s nearly half of the assemblage had never been illustrated for archival purposes. In the summer of 2000 Ruth Dickau of Temple University illustrated more than 70 vessels during a two week stay at Lamanai. During this same period a complete still and digital photographic record was produced for each vessel. Multiple images were created and then downloaded into the Lamanai Archaeological Project computer database. This new and advanced form of recording, along with the complete set of drawings, will provide a unique opportunity to document this large Preclassic ceramic assemblage for both researchers and the general public through the LAP and FAMSI Web pages. A permanent record now exists of the broad range of pottery forms and styles dating to the Middle Preclassic, Late Preclassic, and Protoclassic periods at Lamanai. The illustration of each of these vessels was important because their exposure to the elements was causing, in some cases, rapid deterioration of the decorated surfaces. For example, the Usulután decoration found on many of the Protoclassic vessels was eroding and/or flaking off of the vessels. This collection of drawings is especially significant given the fact that no formal analysis of the Preclassic ceramic assemblage has been undertaken until this time. Furthermore, Lamanai was an important site not only because of its long history of occupation, but because it was one of the largest and more populated sites in northern Belize during Late Preclassic times and as such its stylistic modes would have presumably had more impact on outlying regions than would those of a smaller site (cf. Chase, 1994).
Figure 4: Polvero Black cylindrical vase with lid found in Late Preclassic Cache 6 in Structure N10-43. Drawing by Louise Belanger.
Figure 5: Lechugal Grooved-Incised jar with four vertical loop handles found in Late Preclassic Cache 1 in Structure P8-9. Drawing by Ruth Dickau.
Figure 6: Flor Cream round-sided bowl found in Late Preclassic Burial 6 in Structure P8-9. Drawing by Louise Belanger.

Figure 7: Rio Bravo Red bowl with basal flange and ring base found in Terminal Preclassic core in Structure P8-27. Drawing by Ruth Dickau.
Figure 8: Unnamed redware dish with Usulután-style design and tripod mammiform feet found in Protoclassic Chultún P8-2. Drawing by Ruth Dickau.

Figure 9: Unnamed redware bowl with Usulután-style design and tripod mammiform feet found in Protoclassic Chultún P8-2. Drawing by Louise Belanger.
Concluding Remarks

With funding from FAMSI during the summer of 2000 I was able to achieve my two main goals of analyzing the Preclassic ceramic material from Lamanai. The information gathered will not only help me to complete my dissertation in a timely manner but also allow other individuals to go online and view Maya ceramics that would otherwise be inaccessible. The corpus of drawings along with the still and digital images of each vessel provides a complete catalogue of the Preclassic ceramic assemblage at
Lamanai. In addition to providing scholars with a comparative database on Preclassic Maya ceramics these images also provide the general public with an opportunity to learn about Preclassic Maya culture via the Web.

Acknowledgements

The analysis of the Preclassic ceramic assemblage would not have been possible without the permission of Elizabeth Graham, Principal Investigator of the Lamanai Archaeological Project. I am indebted to her for allowing me to use this collection for my dissertation research. I am also deeply grateful for the FAMSI support that enabled me to finish my research in a timely manner. Projects such as this one are rarely funded so I am very pleased that FAMSI was interested in documenting this important ceramic collection from Lamanai. I also want to thank David Pendergast for helping me understand the Preclassic occupation at Lamanai. My research would not have been successful in the summer of 2000 without the talent, skill, and professionalism of Ruth Dickau. Her artistic contributions, as well as those by Louise Belanger who preceeded her, are invaluable to my dissertation research. Other individuals who helped me out with my ceramic research through their insightful comments and knowledge of Lamanai’s prehistory include: Claude Belanger, Laura Howard, Linda Howie-Langs, Nasario Ku, Richard Meadows, Karen Pierce, Dorie Reents-Budet, Mark Shelby, Scott Simmons, Norbert Stanchly, and Darcy Wiewall. The permission to use the Lamanai site map and ceramic line drawings was given by Elizabeth Graham and David Pendergast. Food was provided by Xochil Ku Butterfly Education Centre and Maya Cultural Museum, located in Indian Church. Lodging during the 2000 field season was provided by Mark and Monique Howells, of the Lamanai Outpost Lodge.

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**Figure 10**: Unnamed Red rimmed cream ware bridge-spouted jar with ring base found in Protoclassic Chultún P8-2. Drawing by Louise Belanger.

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