Archaeological Investigation and Conservation at San Bartolo, Guatemala

Research Year: 2002
Culture: Maya
Chronology: Pre-Classic
Location: Department of Petén, Guatemala
Site: San Bartolo

Table of Contents

Introduction
Investigation and Conservation at San Bartolo
Conclusion
List of Figures
Sources Cited
Introduction

Research carried out since the mid-1970’s has dramatically altered our ideas about the size and complexity of Preclassic lowland Maya centers. We now know that features such as formal ceremonialism, craft specialization, and urbanism were already well established during Preclassic times. In many instances however, these associations have been hard-won, as Preclassic materials were often deeply buried beneath later constructions (Ringle 1999:183). This was the case with the initial discovery of monumental architecture dating to the Late Preclassic at Uaxactún (Ricketson and Ricketson 1937) as well as with subsequent materials encountered beneath the North Acropolis at Tikal (W. R. Coe 1965). A few sites, namely Cerros (Robertson and Freidel 1986; Scarborough 1991), Cuello (Hammond 1991), Komchen (Andrews V and Ringle 1992), and El Mirador (Dahlin 1984; Matheny and Matheny 1990) were largely free of the overburden restricting insight into early patterns of community organization. Nonetheless, traditional models for the rise of lowland Maya civilization have arisen from decades of archaeological investigation at sites illustrating gradual evolutionary trajectories in which descriptions of Preclassic architecture and artifacts as "simpler", "formative", and "developmental" carried with them clear evolutionary implications (i.e. Smith 1937:3; Coe and Coe 1956:372).

This, coupled with abundant and spectacular Classic period remains, fostered a bias that Maya civilization developed in the lowlands by around A.D. 300, much later than their highland counterparts, suggesting external origins in addition to a slow pace. Thompson suggested:

Such an isolated region as the Petén would hardly have witnessed the beginnings of Maya civilization, which might rather be expected in parts of the Maya area where the stimulus of contact with other cultures should have quickened development–Central Chiapas seems ideal. (Thompson 1954:50)

The work on the North Acropolis at Tikal was perhaps the first to challenge these notions as the farther down they excavated, "the elaborateness and Classic appearance of the discovered structures were no less apparent." In fact things got neither "simpler", nor "cruder", nor more "formative". (Coe and McGinn 1963:26) More recently, investigations in the "Mirador Basin" have revealed abundant Middle and Late Preclassic architectural remains and other manifestations of complex society. In fact some of the largest constructions in Mesoamerica come from this time and region (i.e. Hansen 1998). Settlement surveys at several sites have shown Late Preclassic occupations eclipsing Early and Late Classic densities. In addition, recent research has conveyed a greater appreciation for the sophistication and antiquity of early Maya ritual, deities and art (i.e. Laporte and Fialko 1990, 1995; Hammond, Clarke and Estrada Belli 1992; Hammond 1999, Ringle 1999, Fields 1991; Freidel 1990; Freidel and Schele 1988; Saturno et al. 2001; Saturno et al. n.d.).

Nonetheless, biases persist, and evidence opposing traditional models can often be regarded as simply epiphenomenal. It is hard to consider El Mirador as representative.
Its sheer enormity and rapid rise at once illustrate its exemplary nature and that it is unlike anything else we have found in the lowlands. It is a sample of one, and it is decidedly not average.

Submitted 10/05/2002 by:
William A. Saturno
saturno4@earthlink.net

Investigation and Conservation at San Bartolo

The site of San Bartolo, by comparison appears more commonplace. It has only two or three truly monumental structures giving clear indication of a certain degree of complexity, yet the entire site could easily fit within the Danta Complex at El Mirador. Despite its diminutive nature, San Bartolo in the Late Preclassic still possesses many of the characteristics one would expect to find at a large Classic Period center, specifically, a well differentiated residential hierarchy, clearly defined monumental ceremonial space that includes polychromatic narrative murals and painted hieroglyphic text. The project at San Bartolo is in a unique position to evaluate environmental, demographic, economic, and ritual factors in the development of complex society in the northeastern Petén during the Preclassic, and how changes in those factors may have contributed to the apparent Early Classic political reformulation in the region centered around Xultún and by extension throughout the Maya lowlands at that time.

Until March of 2001, the ruins of San Bartolo were unknown to archaeologists, resulting in a number of structures suffering years of illicit excavation by looters during the last decade or more. More than 200 looters’ trenches and tunnels have thus far been encountered at the site and much of our first two seasons of investigation have focused on salvaging some contextual information from them. The site, located in an uninhabited region of the northeastern part of the Department of Petén, Guatemala, Central America, covers an area of approximately 1 km² and is comprised of more than 100 stone structures organized into two principle architectural groups (Figure 1). The larger of the two groups is associated with the pyramid, Str. #20, named Las Ventanas, "the windows", due to the preserved masonry windows in its final phase superstructure. The group consists of a large number of residential mounds, a "palace" structure, a large central plaza and a small ball court. In addition a causeway leads from the southern end of the central plaza and extends more than 200 meters toward a limestone quarry and an area of seasonal swamps to the south.
The looters’ excavations in the main pyramid of Las Ventanas demonstrate a number of different construction phases. One tunnel near the structure’s summit traverses the building from south to north revealing four phases of Late Preclassic (400 B.C.-A.D. 200) well-preserved masonry and stucco architecture. A second tunnel at the structure’s base contains evidence of eight earlier stages of construction, the earliest of which date to the Middle Preclassic (ca. 800-400 B.C.) and were built with a loosely packed fill of flint nodules. During the 2002 season our team excavated small 50 x 50 x 50 cm probes into each successive phase visible in the looter’s excavations as well as a 2 x 2 m test pit into the structure’s basal platform, uncovering an earlier version of the substructure again dating to the Middle Preclassic. A similar excavation was undertaken in the diminutive ball court located on the eastern boundary of the central plaza, again revealing multiple construction phases ranging in date from the Middle to Late Preclassic.

During the survey and mapping of the site center, several stone monuments were found. Three heavily eroded fragmentary stelae were discovered in the central plaza while a fourth was encountered in the site’s periphery. Stela 3, the best preserved of the four at one point bore what is clearly a hieroglyphic inscription, though at this time it is largely illegible. The ceramic material associated with these monuments although
heavily eroded can be dated to the Late Classic Period (A.D. 600-800) and would appear to signal the return of activity to the site center following a long hiatus. It is important to note that aside from the materials placed over the fallen stelae and the offering in Structure 63 discussed below, all of the material thus far recovered from excavations in the site center have been dated to the Preclassic. One looters’ excavation revealed the presence of a carved boulder monument beneath Structure 63, located to the south of the palace. The monument was buried by a ceramic offering containing hundreds of smashed utilitarian vessels dating to the Late Classic. The ceramic deposit was then covered over by a small (approximately 2 meter) stone mound surmounted in antiquity by a perishable superstructure. This Late Classic activity in the site center in the form of ceramic offerings on existing stone monuments illustrates the enduring importance of the Preclassic center nearly 500 years after monumental construction at the site had ceased.

Figure 2. Partial profile of the looters’ excavations into Structure 1 (Las Pinturas). Pinturas Sub-1, the mural chamber is at center. Looters’ excavations extend more than 40 additional meters.

The second architectural group, *Las Pinturas*, named after the paintings found within it, lies approximately 500 m to the east of Las Ventanas, facing west. The central structure, Str. #1, stands more than 26 meters high and is pierced by four looters’ excavations, two in its face and two in its posterior. The principle looters’ excavation (*Figure 2*) began as an axial trench of the final phase substructure, however after finding the preserved basal terrace they converted to tunneling. The East-West looters’
tunnel continues for more than 40 meters to the west, occasionally branching to both north and south in a vain search for tombs. As our team did in Ventanas, we excavated small 50 x 50 x 50 cm units in each successive construction phase visible within the complex of tunnels. At present, six stages of construction are evident, all of which date through ceramic evidence to the Preclassic. The final building episode began sometime between 100 B.C. and A.D. 100, when the penultimate constructions in the group were filled in to make a stable base for Str. #1.

It is this penultimate phase of construction, Pinturas Sub-1, that contains the polychrome narrative murals for which the site is now known. The murals of San Bartolo are in a remarkable state of preservation given their antiquity and the methods by which they were uncovered. The looters removed the lower half of the northern wall of Pinturas Sub-1 in the process of their tunneling. The paintings are on the upper half of the same wall that now hangs suspended in mid-air by the densely packed fill that surrounds it. Gravity is clearly taking its toll as their surface is cracked and pieces are becoming detached. Conservation and analysis of the exposed mural has been of primary importance to the project to date (Figure 3). To this end, a team of conservators has been involved since the inception of research at the site. To date, the murals have been drawn and photographed and had all biological surface adhesions removed. In addition we have made use of multi-spectral digital photography to fully record the paintings, in both visible and non-visible spectra. The chemical and physical analysis of plasters and pigments is ongoing, as is the recording of microclimatic data from the interior and exterior of the mural room. The fragile borders of the mural have been edged with lime plaster and detached fragments re-adhered to their substrate. We have also constructed a temporary post and lintel support to replace the missing wall, thereby decreasing the danger of a catastrophic collapse.
Figure 3. Conservation activities, at left, removal of surface adhesions, at right, stabilization of borders.

Figure 4. Excavations of Pinturas Sub-1, at left eastern basal terrace and axial step of Sub-1, at right interior of Sub-1 showing scar from destroyed eastern wall.
One of the objectives of the 2002 field season was to determine the overall dimensions of Pinturas Sub-1 and the murals within in order to plan for their future excavation and conservation. To this end, our team excavated a tunnel (Figure 4) along the exterior eastern wall of the structure, revealing the overall length of the basal platform of Pinturas Sub-1 as 11 meters. We discovered that the eastern wall had been destroyed in antiquity, though much of its mural is preserved in the interior fill of the room. Our excavations recovered numerous portions of the mural that we have been able to reconstruct (Figure 5 and Figure 6), including a calendric glyph (Figure 7) that was part of a longer inscription, representing the earliest example of a painted hieroglyphic script in the Maya Lowlands.

Figure 5. Measured watercolor reproduction of bird from fallen Eastern Mural, drawn by Heather Hurst, 2002.
Figure 6. Second bird from fallen Eastern Mural.

Figure 7. Reconstructed calendar glyph from fallen Eastern Mural.
Conclusion

Our 2002 season though relatively short was extremely rewarding and has effectively laid the foundation for the next four years of research and conservation to be carried out at the site and in the region. In future years, the mural will be fully excavated and consolidated, and the early construction phases in both the Pinturas and Ventanas complexes will be explored more fully. Our regional survey will expand to include the important Maya sites of Xultún, Xmacbatún, and La Honradez in the process of covering some 500 square kilometers of rainforest. This survey will be complemented by extensive excavation of residential architecture at San Bartolo and throughout the region, enabling us to accurately piece together the complex and important undulations of development and decline in the northeastern Petén, one of the last truly unexplored regions of the Maya area.

Note: You may visit the San Bartolo.org website by clicking here.

List of Figures

Figure 1. Plan of San Bartolo, illustrating the Ventanas and Pinturas Groups.

Figure 2. Partial profile of the looters’ excavations into Structure 1 (Las Pinturas). Pinturas Sub-1, the mural chamber is at center. Looter’s excavations extend more than 40 additional meters.

Figure 3. Conservation activities, at left, removal of surface adhesions, at right, stabilization of borders.

Figure 4. Excavations of Pinturas Sub-1, at left eastern basal terrace and axial step of Sub-1, at right interior of Sub-1 showing scar from destroyed eastern wall.

Figure 5. Measured watercolor reproduction of bird from fallen Eastern Mural, drawn by Heather Hurst, 2002.

Figure 6. Second bird from fallen Eastern Mural.

Figure 7. Reconstructed calendar glyph from fallen Eastern Mural.
Sources Cited

Andrews, E. Wyllys, V, and William M. Ringle

Coe, William R., and Michael D. Coe

Coe, William R., and John J. McGinn

Dahlin, Bruce H.

Fields, Virginia M.

Freidel, David A.

Freidel, David A., and Linda Schele

Hammond, Norman (ed.)

Hammond, Norman, Amanda Clarke, and Francisco Estrada Belli

Hansen, Richard
Laporte, Juan Pedro, and Vilma Fialko C.  

Ricketson, Oliver G., Jr., and Edith B. Ricketson  

Ringle, William M.  

Robertson, Robin A., and David A. Freidel (eds.)  

Saturno, William A., David S. Stuart, Héctor L. Escobedo, and Ian Graham  
2001 Reconocimiento Arqueológico y Conservación de San Bartolo, Guatemala. Instituto de Antropología e Historia, Guatemala.

Saturno, William A., Karl A. Taube, David S. Stuart, and Héctor L. Escobedo  

Scarborough, Vernon  

Smith, Robert E.  

Thompson, J. Eric  