

FAMSI © 2000: Kam Manahan

After the Fall: Examining the nature of the Classic Maya collapse of Copán, Honduras



Research Year: 1999

Culture: Maya

Chronology: Late Classic to Post Classic

Location: Copán, Honduras

Site: Copán Valley

Table of Contents

[Introduction](#)

[Objectives](#)

[Preliminary Results](#)

[Laboratory](#)

[Fieldwork](#)

[Conclusions](#)

[Sources Cited](#)

Introduction

The Classic Maya collapse at Copán, Honduras continues to generate controversy. Although most scholars generally concede agreement as to the factors that precipitated dynastic collapse in the Ninth Century A.D., the severity and timing of these sociopolitical processes continue to be debated. In this light the Copán Postclassic Archaeological Project (CPAP) was initiated in 1995 to address these questions in a novel manner, by reconstructing demographic trends from the Early Postclassic period (A.D. 1000-1200) backwards in time to the time of dynastic collapse. Thus by studying

the ultimate occupants of the site, it is hoped that this research will not only better define a contentious period in the history of the site, but also offer insight into the nature of the Late Classic collapse.

Previous fieldwork conducted by the author has yielded a well defined Postclassic phase filling the period from A.D. 1000 to 1200 which is substantially larger and more robust than what one would expect if the phase merely represented a residual surviving non-elite population which survived the Late Classic collapse. Research conducted between 1995 and 1999 identified a very small yet discrete Early Postclassic village within 200 meters of the site center in an area of dense settlement to the south of the Main Group. These new data differ significantly from established Late Classic patterns of settlement, architecture, lithic procurement and production, ceramic production, and long-distance trade, suggesting that the Early Postclassic period may represent a disruption of the local chronology.

Objectives

The 1999 CPAP season addressed several problems concerning our growing understanding of the sociopolitical landscape in the Copán Valley during the Early Postclassic Period (A.D. 1000-A.D. 1200). The Early Postclassic information offer a particularly rich body of data from which to draw interpretation not only about the extant of Early Postclassic peoples but also about the severity of the Late Classic dynastic collapse in Copán, an issue which continues to raise controversy.

In particular, three principal goals were held for the 1999 season: (1) To examine the question of continuity versus disjunction between the Late Classic Coner and the Early Postclassic Ejar ceramic phases; (2) To continue the study of the Ejar phase settlement located near Ballcourt B; and (3) To expand the scope of research to the Copán Valley as a whole in order to test for the existence of similar Early Postclassic Ejar phase structures or settlements outside of the confines of the site center. These goals were addressed through fieldwork which encompassed mapping, horizontal excavations, test excavations, laboratory analysis, and radiometric assays, each of which is discussed below.

Preliminary Results

The 7 week field season was almost equally divided between field work and laboratory analysis. The first part of the field season was consumed analyzing previously excavated ceramic material, while the final week was devoted to analyzing new materials. All excavated materials, save the 6 carbon samples submitted for radiometric dating, are housed at the Centro Regional de Investigacion Arqueologica laboratory in Copán, Honduras.

Laboratory

Problematic to the definition of a discrete Early Postclassic Ejar ceramic phase has been both the lack of a properly defined utilitarian Ejar complex as well as the presence of clearly Coner ceramic material in lots that also contain Ejar material. Thus my time in the laboratory focused upon these two problems and the possible significance of their respective occurrences.

In this regard I proposed to answer the following two questions:

(1) Does the presence of Coner sherds present in seemingly Ejar phase constructions signify a transitional phase or are they present as a result of the documented presence of recycled building materials coupled with poorly preserved floors that do not offer truly sealed contexts? To answer this question, I examined a sample of lots from Structures 11L-77, 11L-141, and 11L-122 from specific contexts: midden, fill, floor, and collapse debris. If the presence of Coner sherds represents a transition into the Ejar phase, the Coner material should contain markers and frequencies diagnostic of the latest Coner 2 sub-phase. However, I was able to determine that the types and frequencies of Coner sherds that are present in these contexts are not from the latest Late Coner 2 times, but rather represent an amalgam of Coner, most similar to Late Coner 1 or earlier based upon the high frequency of cream-paste polychromes. Thus it seems more likely at this point to conclude that the presence of Coner sherds with Ejar sherds does not represent temporal continuity and some sort of transitional phase between the two types but rather that the existence of Coner with Ejar is a direct result of reusing building materials from earlier Coner phase constructions in the Ejar phase. Therefore this line of evidence suggests that there is discontinuity between the two phases.

(2) Is there a complete Ejar assemblage present in the current sample, or could some of the Coner types still have been in use in the Ejar phase? To address these questions, I examined the entire Ejar assemblage from Structures 11L-77 and 11L-141, which had previously been separated from the Coner material, as well as looked at material from the midden on the southeast side of Structure 11L-122 (primarily 2x2m excavation unit S2E14 Levels 1-7). From this assemblage Dr. Cassandra Bill and I spent countless hours attempting to classify all of the previously unclassified Ejar ceramic materials. We came to the conclusion after much deliberation that due to the highly variable nature of production in Ejar times, it is impossible, at least for now, to make all of the pottery fit within a Type-Variety classificatory system at this stage. It seems quite probable that socio-economic dissolution in the wake of the dynastic collapse was sufficiently devastating to have wreaked havoc with the local economy. Thus rather than the more standardized mode of production seen in Coner times, the Ejar pottery shows extreme variation, suggesting a more household-based mode of production. The increased variation makes it difficult, if not impossible, to categorize all of the Ejar material within a Type-Variety system. However, we were able to classify 4 types of utilitarian pottery from the Ejar assemblage that hang together well from structure to structure. Beyond these four types, summarized below, the Ejar assemblage also includes imported fine wares such as Tohil Plumbate, Las Vegas Polychrome, and Fine Orange. Additionally, at least 4 other types, which are distinctive, but for the moment are represented only by

fragmentary single vessels, are known. Future excavations should reveal a larger sample that will allow for the classification of this material. Other sherds that are definitively not Coner but show too much variation to be joined into a single Type-Variety category are for the moment classified as Ejar indeterminate. It is hoped that in the future other investigations will reveal better samples of Ejar pottery that will allow classification of new types that currently reside in the Ejar indeterminate category. This option, while not ideal, presented the best compromise between classifying the pottery and acknowledging that there exists an unprecedented range of variation within the assemblage. As well, this decision retains the integrity of the four utilitarian types that are clearly classifiable.

The four current Ejar utilitarian types are currently defined as follows:



Kan Burnished

FORM: Horizontal tube handles on shoulder

Vertical strap handles on body/shoulder

Comes in two forms: jars, and bowls. Jars have generally tall, open necks varying from roughly C-shaped to almost vertical (i.e. cantero form). The rims are direct but frequently taper to a very thin, pinched, or outcurled lip that is rounded or pointed at the end. Rim diameters vary between 20 to 23 cms. The bodies are generally globular in

form. Bowls are sub-hemispherical, with direct rims tapering to pointed or outcurled lips in some cases.

SURFACE: Color: 10YR:7/3; 10YR:6/3; 10YR:6/2; 10YR:6/4; 10YR:5/4; 10YR:5/3

The interior and exterior surfaces of both bowls and jars are unevenly burnished. On the interior of jar necks burnishing extends from the rim to the neck break, while in other examples the burnishing continues below the base of the neck and onto the interior of the body. The exterior surface, and in some cases interior surfaces of jars appear to have been brushed or raked with a parallel-toothed implement creating rather deep, broad striations on the vessel surface. However, unlike the Late Classic Coner pottery type Casaca, with few exceptions these striations appear to have been burnished over and partially obliterated. The burnishing marks on the exterior appear to be part of a secondary surface finishing treatment. Therefore the striation marks seem to have been part of the formation process rather than solely for decoration. Unlike the earlier Late Classic Casaca type, where the striations formed the finished surface, the striations on these may have been part of the formation process. Bowls are essentially the same process. The interior surfaces are similarly burnished and the texture is similarly uneven like that with jars. However the exteriors are more crudely finished. The surfaces are more uneven and lumpy with uneven burnishing. It also contains inclusions penetrating the surface as well. Several body sherds and one rim from the present sample display a red slip on the exterior. Thus the surfaces of both bowls and jars are uneven and lumpy with uneven burnishing and often have inclusions protruding from the surface.

PASTE: Color: 10YR:6/3; 10YR:5/4; 10YR:6/4; 10YR:5/6

Particle sizes: mostly 3 and 4, some 5, occasional 6

(3=fine=1/8-1/4mm; 4=medium=1/4-1/2mm; 5=coarse=1/2-1mm; 6=very coarse=1-2mm)

Density:10-20%

The paste of Kan Burnished is very hard and compact but brittle with an irregular angular fracture. Inclusion density is lower than that of the Puchica Leaf-Imprinted, but the inclusions are much more poorly sorted.

Sí Papa Censer

Surface Color: 5YR:5/6; 5YR:6/6; 7.5YR:6/4; 7.5YR:6/4; 7.5YR:5/4; 5YR:5/6; 5YR:5/6; 7.5YR:5/6; 7.5YR:5/4; 7.5YR:5/3; 5YR:5/6; 5YR:5/6.

Large vertical-sided cylindrical vessels (i.e. urns) with flat bases. Rims are direct with squared or slightly rounded lips and vessel walls are well-formed and of regular thickness. Vessel surfaces are even but are not well-sealed and are gritty to the touch. The surface is brushed on the interior and exterior, although the exterior often has deeper brush strokes with striations descending vertically from the rim. Applied elements most commonly include an impressed fillet along the exterior of the rim and

along the exterior of the break between the vessel and hollow stand in the possible composite form illustrated from Los Naranjos (Baudez and Becquelin, 1973: Figure 129, #5). Fillets are finger impressed and spaced accordingly. They are well integrated into the vessel wall and do not tend to separate. Other elements include fillet appliques with reed punctations and 30 cm diameter circles. The paste (5YR 5/6) has a high particle density with good to fair sorting. Overall paste texture is not exceedingly coarse, although there is a relatively high density of inclusions.

Puchica Leaf-Impressed

Surface Color: 10YR:5/2; 7.5YR:5/3; 10YR:6/3; 7.5YR:6/4; 7.5YR:6/4; 10YR:6/3; 10YR:6/3; 10YR:7/3

Paste Color: 7.5YR:6/4; 7.5YR:5/6; 7.5YR:5/6; 10YR:5/3; 7.5YR:5/6; 7.5YR:5/4; 7.5YR:5/6; 10YR:5/6; 7.5YR:5/4; 10YR:5/4; 10YR:5/4

Vessels are flat comales with rims typically tapered to rounded or interior sharpened lips. The lips are occasionally pinched and folded on the exterior. Some vessels have rims that are thickened on the exterior with an interior sharpened lip. Vessel interiors are completely pebble burnished. Burnishing strokes are visible on well-preserved examples but are not pronounced. The condition of the exterior surfaces suggests a mode of *comal* production whereby wet clay was pressed against a prepared surface covered with leaves. The resultant product has an extremely irregular surface with deep undulations. As well, the exterior retains impressions of veins from the leaves on which the *comales* were prepared, hence their name. The paste is typically hard and very compact although some examples are more friable, and the fracture is angular and irregular. Pastes are very poorly sorted and have a high density of angular inclusions. Most examples have extremely large inclusions (1-2mm). Overall, the paste texture is very coarse and brittle.

Emilia Red

Vessels are hemispherical or sub-hemispherical bowls with direct rims typically tapering to a rounded or slightly pointed lip. The vessels are slipped red on the interior and exterior surfaces. The interior surfaces are polished and very smooth and slip coverage is complete and even. The exterior surfaces are unevenly smoothed and lightly burnished or polished, although they retain a somewhat irregular surface. Slip coverage is incomplete, or perhaps just more eroded.

Where exposed paste surface color is: 7.5YR 5/3, 7.5 YR 5/4, occasionally 7.5YR 6/4, for paste variant 1 (below), and 5YR 5/6, 5YR 6/4, 5YR 6/6 for paste variant 2. The slip is relatively thick, and well preserved surfaces have a moderately glossy appearance. The paste contains two variants. The typical paste is fine-textured and relatively compact with a moderate (5%, occasionally 10%) density of well-sorted ("good") fine (1/8-1/4 mm) to very fine (1/16-1/8 mm) angular quartz sand inclusions with some crushed tuff. Occasional medium (1/4-1/2 mm) particles. Paste sections have a thick, sharp-edged gray core with very thin paste margins on the interior and exterior. Paste

margins are buff in color (10YR:5/4; or 10YR:6/4; occasionally 7.5YR:5/6). The possible variant paste (2) is very similar in texture and composition to the typical paste (variant 1), but is fired red-brown in color (5YR: 5/6 to 5YR: 5/8). The paste cores vary from clear to having diffuse light gray central cores, to having dark gray sharp-edged cores with thin paste margins. Overall the bowls are well made and evenly fired.

Finally, 6 samples were selected to be submitted for radiocarbon dating to Beta Analytic. These samples originate from Structures 11L-141 and 11L-137. Two of the carbon samples from Structure 11L-141 were pieces of carbonized wattle from the building's superstructure, while the samples from 11L-137 are all human bone recovered from Burial 58/3/1. The results of the radiocarbon assays are summarized in Table 1.

Table 1 Uncalibrated Radiocarbon Dates from Ejar Structures			
Structure	Lab #	¹⁴ C Age B.P.	Material Dated
11L-137	Beta 139612	920±40	bone
11L-137	Beta 139613	780±40	bone
11L-137	Beta 139614	1070±40	bone
11L-141	Beta 139615	1030±40	wood charcoal
11L-141	Beta 139616	1100±40	wood charcoal
11L-141	Beta 139617	980±40	seeds

Fieldwork

Another aim of the 1999 season was to continue excavation and testing of Ejar phase structures. Operations 58/1-3 have focused upon broad horizontal exposures of the Ejar phase structures located to the south of Ballcourt B in the *Bosque* residential area. In this regard, Op 58/4 sought to expand the database of excavated structures by partially excavating Structure 11L-138. The second goal of the excavation phase was to attempt to determine the extent of Ejar occupation. Ejar phase structures have currently been found only within the urban ward south of the Acropolis. Thus a program of test pitting and surface reconnaissance was initiated to examine the Copán Valley outside of the immediate center of the site to determine the size of the Early Postclassic occupation at Copán. These two separate yet complementary approaches are detailed below.

The first goal was the testing of the possibility that Structure 11L-138, an Ejar phase building in the center of the small Ejar village in the southern extreme of the *Bosque*

area, represents a lineage shrine dedicated by the ultimate inhabitants of the Copán Valley. To this measure the structure was partially excavated with the help of members of the Harvard field school.

The building, measuring approximately 6 by 6 meters, contained its entrance to the west. The structure was entered by climbing a pair of risers, formed of recycled cut stones, including one vault stone. As seen with all other Ejar phase buildings, Structure 11L-138 also included pieces of reused Classic Period sculpture within the construction. Excavations recovered a piece of the niche motif originally from Structure 10L-41 as well as a block of elaborately carved feathers originating on the façade of Structure 10L-18, identified as the final ruler of Copán's funerary monument. While a sufficient sample of archaeological material has been collected, preliminary analysis of the excavated materials failed to identify any material that would be inconsistent with a primarily residential function to the structure. However this conclusion must remain tentative until a more thorough analysis of the material may be conducted.

Another accomplishment of the 1999 field season included producing an updated map of the southern *Bosque* area of the site. Discrepancies between the established map of Copán (Fash and Lane, 1983) and mapping conducted by the author in 1998 in regards to the precise location of several clusters of settlement necessitated that I re-survey a large portion of the *Bosque* area using a TopCon Total Station in order to rectify existing errors in the map. The mapping was conducted with the gracious help of William Macfarlane (SUNY-Buffalo). This map work also allowed me to tie my map in with the grid system established by the University of Pennsylvania ECAP project for the East Court, which is quickly becoming the standardized grid system for the site. As well, this new map will reflect the changes wrought on the banks of the Copán River by Hurricane Mitch in 1998. The finalized version of the map is still under construction as the combination of diverse bodies of digital data has had the unforeseen effect of greatly complicating the mapping process. Nevertheless, the new map will combine the new data and excavation maps of the Ejar structures with the corrected portion of the valley map.

Finally, CPAP undertook an ambitious program of test pitting in order to determine the extent of the Ejar occupation in the Copán Valley outside of the Main Group and surrounding urban *Bosque* area. Using the extant maps of the valley, a sample of 100 structures of comparable settlement pattern, size, and proportion were selected for investigation. Of the structures selected for testing, 34 structures were either too damaged, destroyed, or I was otherwise unable to locate them. An equally high number of structures were not tested because they were clearly from the Late Classic period, due to a combination of size, settlement pattern, or for ceramic material visible on the surface. Beginning in the westernmost secondary settlement called Ostuman and reaching as far east as Salamar, also known as the North Group, to date the testing program excavated 35 structures, all of which have been clearly not from the Early Postclassic period. Three possible Ejar phase structures have been located, however all three are within the confines of the *Bosque* area. Two structures, Structure 11L-142 and Structure 11L-143, seem quite certainly to be Early Postclassic buildings, and are located within 25 meters of a previously excavated Ejar phase building, Structure 11L-

141. The third building, Structure 10L-69, contained a single sherd of Puchica Leaf-Impressed. Thus the building merits further investigation before this tentative identification may be confirmed.

Conclusions

Operation 58/4 succeeded in expanding our understanding of the Ejar phase at Copán from independent yet complementary bodies of data, yet questions remain unanswered about this illusive end to the history of pre-Columbian Copán. The ceramic data suggest that significant differences exist between the Ejar and Coner assemblages, raising the possibility that the presence of Coner ceramics in Ejar lots stems from contamination due to the recycling of building materials in the Early Postclassic phase. It appears that the Coner ceramics that are present do not contain temporal trends in the evolution of the assemblage that one would expect. Rather, the data show more similarities to the earlier part of Coner, which one would expect if the material was used first in the fill of Coner phase structures. Secondly, the ceramic material demonstrates that the Ejar assemblage contains a complete array of storage, cooking, serving, and ritual-use vessels, demonstrating that the Ejar material appears to represent a fully functional assemblage containing both utilitarian and elite vessels. Therefore the ceramic data confirm that the Ejar phase represents a separate, discrete occupation at the site that seems to share little continuity with the preceding Coner phase. This finding suggests that dynastic collapse may have triggered a relatively rapid depopulation that left the valley virtually devoid of inhabitants within a century following the end of the Copán dynasty.

Excavation data from this season support this tentative conclusion as well. The Ejar population seems to be concentrated solely within the area to the south of the Main Group and near the river. While it seems probable that other contemporaneous sites must exist, if not within this pocket of the valley, then in one of the others, unfortunately this hypothetical existence must remain unconfirmed for now. The presence of imported trade wares in significant quantities suggests that the Ejar inhabitants were actively engaged in the greater Mesoamerican-wide long distance trade network that typifies this time period. Thus data from both excavation and laboratory analysis concur in their suggestion that the Ejar phase appears to represent a discrete occupation that postdates even the latest Late Classic Coner material. Yet until these findings may be incorporated with other sources of data, the nature of the collapse of Copán will continue to generate debate. The data from this season, however, strongly suggest that the dynastic collapse of Copán was more sudden, abrupt, and ultimately more devastating to the larger populace than has been recently proposed.

Sources Cited

Baudez, C. F. and P. Becquelin

1973 *Archéologie de Los Naranjos, Honduras*. Etudes Mésoaméricaines 2. Mission Archéologique et Ethnologique Française au Mexique, México.

Fash, W. L., and K. Z. Long

1983 Mapas. In *Introducción a la arqueología de Copán, Honduras*, edited by C. Baudez. vol. 3. Secretaría de Estado en el Despacho de Cultura y Turismo, Tegucigalpa, D.C.