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Report of the 1996 Field Season of the Early Copán Acropolis Program



Research Year: 1996 Culture: Maya Chronology: Early Classic Location: Copán, Honduras Site: Copán Acropolis

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Introduction

The Early Copán Acropolis Program (ECAP) completed its eighth field season of research between January 15 and May 30, 1996, working under the auspices of the Instituto Hondureño de Antropología e Historia (IHAH). The ECAP research is directed by Robert J. Sharer, assisted by David W. Sedat (Field Director), both of the University of Pennsylvania Museum, and was conducted by a team of researchers that included Loa P. Traxler (MASCA/University of Pennsylvania Museum), Ellen Bell, Marcello Canuto, and Charles Golden (University of Pennsylvania), Christine Carrelli (Rutgers University), and Christopher Powell and Edward Barnhart (University of Texas).

Once again ECAP benefited from a number of highly skilled and dedicated colleagues who joined the research team during the field season. As she has done for the past five seasons, Eleanor Coates rejoined ECAP during January and February to contribute her photographic expertise to the project. In February Pete Petrone (National Geographic Society) joined the investigation for the second time to conduct a remote video and photographic survey of a new tomb discovered by ECAP. During February and March the ECAP research team was augmented by two professional conservators, Lynn Grant (University of Pennsylvania Museum) and Julie Trosper (University of California, Berkeley). In March Dr. Jane Buikstra (University of New Mexico) joined the investigation to conduct a pilot study of the Acropolis burials. And as she has done on many past occasions, Dr. Linda Schele returned to Copán in April to enrich our research with her epigraphic and iconographic expertise.

The ECAP investigation is organized into several components: excavation, computer mapping, tunnel and architectural consolidation, architectural cataloguing, artifact conservation, and artifact analysis; each will be briefly reviewed in this report. The work force for excavation and consolidation ranged up to a maximum of 20 men, along with two field drawers and one conservation trainee. Our research was once again greatly assisted by the IHAH staff working at Copán, especially Professor Oscar Cruz M., and Srs. Juan Ramón Guerra and Fernando López.

The 1996 ECAP fieldwork was supported by funds from the University of Pennsylvania Museum and the Shoemaker Research Fund of the University of Pennsylvania, along with research grants from the National Geographic Society, the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI), the Holt Family Foundation, the Selz Foundation, the Maya Workshop Foundation, the Segy Foundation, and several private donors. Our deep appreciation is extended to all of these foundations and private individuals for making our research possible.

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Excavation

The 1996 season saw the completion of our tunnel excavations designed to document the unprecedented sequence of Early Classic architecture beneath the Copán Acropolis. The 1996 excavations comprised both tunnels and test pits conducted to verify horizontal and vertical architectural connections. The excavations are summarized below for each of the major architectural divisions defined from the Acropolis Corte (Copán River cut), from earliest to latest.

Division VI (ca. A.D. 350-400)

Corresponding to the earliest remains of activity beneath the Acropolis, these levels were further investigated by several excavations. In the tunnels that document the early Court Complex north of the earliest Acropolis, the previously excavated stratipits inside the masonry structures around Court 4B (Loro, Tucán, and Pato buildings) were used to further probe into the deepest levels that contain Division VI constructions, the earliest in this area. These allowed further samples of ceramics and other remains dating from this pre-Acropolis time span.

Division V (ca. A.D. 400-450)

Limited excavations better defined several of the Division V adobe palaces in the Northern Court Complex. To the west further tunneling exposed the southern side of a low adobe structure (Tartan) that defines the boundary between the earliest Ball Court Complex to the north, and the Acropolis to the south. In the course of this work several partially-preserved painted graffiti were found on the plaster floor immediately south of Tartan. These graffiti appear to be representations of Maya deities. Due to the efforts of Charles Golden, advised by Lynn Grant, these were carefully cleaned and recorded by both conventional and infrared film. Because of their uniqueness and importance, these graffiti will be subjected to further study in 1997, along with further work in the major early Acropolis tunnels.

To the south our major E-W axial tunnel was deepened to clarify and record the stratigraphic relationships between the Corte and the core of the first Acropolis Platform (Yune). Other new tunnel excavations defined the extent and limits of the earliest Acropolis platforms and their structures (Hunal, Clavel, Margarita, Wilin, Kar, and Sapo), along with associated features (tombs, burials, and drains). One of these structures, Hunal, was a major focus of work in 1996. Discovered in 1995, Hunal is the earliest-known structure beneath the very center of the Acropolis. Some 4 m. of new tunnel was excavated on the north side of the substructure to verify its unique talud-tablero facade. This work discovered a vestige of a north-facing outset staircase and a well-preserved portion of the talud-tablero facade extending east of the stairs (both originally painted red), verifying Hunal's northward orientation. Hunal is the only Early Classic talud-tablero style structure ever found at Copán.

In 1995 a vaulted masonry tomb chamber measuring ca. 2.5 m long, 1.5 m wide, and 1.7 m high, was discovered beneath the floor of Hunal. Apparently the earliest of a sequence of royal tombs beneath the Acropolis, the position and context of the Hunal tomb suggests it might hold the remains of Yax Kuk Mo, identified in later Copán inscriptions as the dynastic founder who reigned at ca. A.D. 426-437. If this suggestion can be further supported by research in the next two seasons, this would be the first tomb of a Maya dynastic founder ever discovered by archaeology.

Early in 1996 the size and condition of the tomb was recorded by a remote video and photographic survey conducted by Pete Petrone. This survey verified the extent of the single raised stone burial slab that occupies most of the floor area, and the bones of a single individual that are on the surface of this slab, now partially covered with fallen debris. The remote survey also documented the fragile condition of the tomb's walls and vault, and established the best point of entry into the chamber. This entry point, along the western sidewall of the tomb, was reached by a short excavation in early March. Further work succeeded in exposing and recording the exterior wall masonry, and on March 12 David Sedat personally removed several masonry blocks from the west wall of the tomb to secure an entrance to the burial chamber.



Figure 1a: Remains of an adult male, probably the Copán dynastic founder Yax Kuk Mo, on the burial platform inside the Hunal Tomb. Visible are the skull and mandible (displaced by fallen debris), several jade beads and a jade ear spool, covered with red pigment.



Figure 1b: The floor below the burial platform holds an array of Early Classic funerary vessels.

The remote video survey also gave views beneath the east side of the burial slab, revealing that the floor below holds an array of high-quality Early Classic funerary vessels (Figure 1b, shown above). More vessels under west side of the burial slab were first seen from the newly excavated entrance, along with several elaborate jade ornaments on the burial slab (Figure 1a, shown above). A very preliminary assessment of the bones on the burial slab was made on March 15 by Dr. Jane Buikstra, indicating that the buried individual was a robust adult male over 50 years of age at death. The remainder of the 1996 season was devoted to further recording and consolidation of the Hunal tomb. Plans call for this to be finished during the 1997 season, after which the debris will be cleared to expose the full skeleton and its array of jade, pottery, and other offerings.

The other major focus of research in the early Acropolis this season was the continuation of work in the Margarita Tomb. This included further efforts to record, conserve, and remove the fragile organic offerings (matting, textiles, and similar materials) in the upper chamber of this elaborate tomb, conducted by Christopher Powell and Lynn Grant. In the lower burial chamber careful excavation of fallen debris by Powell succeeded in fully exposing the bones and adornments of the single interred individual inside, including several carved jades (Figure 2a and Figure 2b). An initial assessment of the bones was made by Dr. Jane Buikstra. This assessment necessitated the removal of the partially broken skull (fractured by ancient masonry collapse that covered the burial). After study the skull was temporarily secured in an area adjacent to the burial chamber. Once its study is completed plans call for it to be returned to its original position in the tomb.



Figure 2a: In the lower burial chamber of the Margarita Tomb, the bones and adornments of an adult female were cleared during the 1996 season.



Figure 2b: Two of the carved jades from this interment (visible in situ just below the skull in Figure 2a), covered by red pigment.

Buikstra's assessment revealed that the buried individual in the Margarita Tomb was an adult female at least 50 years old (or older) at death (see Figure 2a). This discovery indicates that Copán's most elaborate and venerated tomb was probably that of the most important woman in Copán's history–quite likely the wife of Yax Kuk Mo and honored as his mother by the second king during his reign (and there after as the dynastic matriarch).

The stunning array of jade, shell, and other adornments that covered the buried woman was recorded by photography, video, and scaled drawings. After their full documentation in situ, the removal of these adornments began with the materials around the feet and leg bones (north end of the burial slab), conducted by David Sedat and Ellen Bell. These artifacts were registered into the ECAP computer data base and transported by IHAH personnel to the field laboratory where they were conserved and placed in secure storage pending further recording and study. Once again, this work will carry-over into the 1997 season.



Figure 3a: Project ceramist Ellen Bell cleaning painted stucco objects in Burial 95-1 ("the Tlaloc Warrior"), an apparent dedicatory interment directly west of Margarita.

Work also continued on Burial 95-1 ("the Tlaloc Warrior"), an apparent dedicatory interment located directly west of Margarita. According to plan, the previously conserved adornments of jade and shell, along with the pottery and painted stucco containers that accompanied this burial, were removed by Ellen Bell and Lynn Grant after final documentation in situ (Figure 3a and Figure 3b). A preliminary assessment of the bones

was again made by Dr. Jane Buikstra, showing that the buried individual was a robust adult male approximately 40 years of age at death. As part of this assessment, the fragmentary skull was removed for examination. Both the skull fragments and adornments were registered and transported to the field laboratory by IHAH personnel for further conservation and study.



Figure 3b: View of the newly installed storage cabinets (with vessels from the SubJaguar Tomb) in the just-completed ECAP conservation and storage laboratory in the Centro de Investigaciones de Copán.

Divisions IV & III (ca. A.D. 450-540)

Work in these levels was completed by several brief excavations. In addition to the previously mentioned stratipits in the Northern Court Complex, a small probe was placed beneath a burned area of floor at the northwest corner of the northern room of

Loro building to check for possible earlier construction or activity, but no signs of unusual activity were found.

Division II (ca. A.D. 540-600)

The tunnel west of the SubJaguar Tomb was extended some 3 m. to trace the eastern edge of an extensive floor cut. This proved to be the line of an anciently demolished terrace that defined the western edge of the Division II East Court. In the SubJaguar Tomb itself, Loa Traxler was able to clear, record, and lift the last objects on the tomb floor, concentrating on a cluster of cut shell discs beneath the burial slab and fragments of two now-disintegrated stuccoed gourds along the southern wall. Assistance for the *in situ* conservation of these materials was rendered by Julie Trosper. Once registered these objects were transported to the field laboratory by IHAH personnel for further conservation and study.

Computer Mapping

The effort to map all tunnel excavations continued in 1996, again conducted by Loa Traxler, assisted this season by Charles Golden. This season's Electronic Total Station survey concentrated on newly exposed portions of early Acropolis constructions and early court architecture. In addition, the newly exposed architecture beneath Str. 10L-16 excavated by Ricardo Agurcia F. was also mapped and integrated into the ECAP computer mapping database.

Tunnel Consolidation

The consolidation of the ECAP tunnels concentrated on building a series of masonry arch supports and facing the sides of the main Op 1/6 tunnel (ca. 26 m), according to the original recommendations made in 1995 by C. Rudy Larios. These plans call for all major tunnels to be consolidated for future access by researchers. Testpits and some 400 m of secondary tunnels, along with tunnels in unstable areas will be backfilled. In 1996 an unstable section of the tunnel south of the SubJaguar tomb was backfilled (12 meters) and a new masonry support arch constructed near the tomb entrance. Another 10 m of tunnel and a series of stratipits were backfilled in work that continued after the close of the 1996 season (until July 15), under the supervision of Fernando López.

Architectural Cataloguing

The cataloguing of exposed architecture continued during the 1996 season. Most of this effort, conducted once again by Christine Carrelli, was devoted to Rosalila and

Oropendola structures, exposed in the tunnels beneath Str. 10L-16 (directed by Arqlgo. Ricardo Agurcia F.). Carrelli also completed a preliminary analysis of the energy requirements for the first century of Acropolis construction, based on ECAP excavation data. In addition to these efforts, new drawings of architecture in the ECAP tunnels were checked and recorded prior to entry into the computerized database. The recording of exposed architecture also continued after the close of the 1996 season (until July 15) by two trained drawers, under the supervision of Ellen Bell.

Artifact Conservation

The ECAP research effort also includes both facilities and personnel dedicated to archaeological conservation. As our excavations come to a close we are accelerating the effort to secure long-term storage and conservation of all artifacts recovered from the site. Plans were initiated in 1995 for expanding the ECAP field laboratory space in the Centro de Investigaciones building located adjacent to the ruins of Copán (Figure <u>3b</u>). In 1996 the ECAP facility was completed, comprising a four room complex with enhanced-security totaling nearly 600 square feet of space. The complex includes a Conservation Laboratory (furnished with 8 lockable metal storage cabinets and metal shelving), a Ceramic Storage Room, a Small Finds Storage Area, and an Isolated Storage Area for mercury-contaminated artifacts. This facility is secured by the installation of new metal window grating and a metal entrance door.

In prior years many artifacts excavated by ECAP have been stored in many different areas of the Centro de Investigaciones. With the new ECAP facility in place, a formal request was forwarded to IHAH to move these materials into the new storage area. After approval by IHAH, and coordinated by Ellen Bell, most of these artifacts have been moved into the new ECAP storage facility. Henceforth all artifacts recovered by the ECAP research will be conserved, recorded, catalogued, and placed in permanent and secure storage in this new facility (Figure 3b, Figure 4a & Figure 4b).



Figure 4a: University of Pennsylvania Museum conservator Lynn Grant, working in the new ECAP conservation and storage laboratory.



Figure 4b: Lynn Grant in the process of conserving a shell-backed jade mosaic funerary adornment recovered by ECAP from Burial 92-1.

During the 1996 season ECAP brought two professional conservators to Copán to attend to the critical tasks of preserving a variety of artifacts recovered by ECAP (Figure <u>4a</u> and Figure <u>4b</u>). Lynn Grant from the University of Pennsylvania Museum returned for her second season at Copán, and was joined by Julie Trosper from the University of California (Berkeley). After opening and stocking the new laboratory, these conservators concentrated on a backlog of previously excavated artifacts and worked in the field to conserve and help transport to the laboratory the newly removed offerings from the Margarita tomb and Burial 95-1. Due largely to their efforts, by the end of the 1996 season most of the artifacts from the tombs and caches excavated by ECAP were secured in the steel storage cabinets in our new Conservation Laboratory.

A major new undertaking for ECAP during 1996 was the training of local individuals in archaeological conservation. In consultation with local IHAH officials, several Honduran citizens were identified as qualified candidates for further conservation training under the auspices of ECAP and IHAH. The training of these individuals was designed to meet ECAP's diverse conservation needs in both the field (focused on architectural recording and consolidation) and the laboratory (especially artifact recording and conservation).

In 1996 six local Hondurans (all residents of the town of Copán Ruinas) were trained by ECAP in various aspects of archaeological conservation. One individual was trained in architectural stucco conservation utilizing methods recommended in 1995 by both Lic. Luciano Cedillo A., Head of the Conservation Laboratory of the Mexican Institute of Anthropology and History, and Arq. Carlos Rudy Larios, Copán Project Director of Architectural Consolidation. An especially talented local trainee, Nelson Paredes, was also given training in producing scaled drawings of pottery vessels by Ellen Bell.

These facility development and training efforts enabled ECAP to meet its archaeological conservation goals for the 1996 season. A foundation now exists for the conservation of excavated architecture and artifacts so that both can be preserved for future scholarly study and the appreciation of visitors.

Artifact Analyses

Thanks to the efforts of Eleanor Coates, artifacts from burials and caches turned over to ECAP in 1996 were thoroughly recorded by color and black and white photography. Concurrently Ellen Bell completed the cataloguing of these same objects. In addition to her aforementioned work in the field, Bell also resumed the typological analysis of ceramics and other artifacts from the ECAP excavations. Under her Fulbright fellowship, Bell continued her analyses until the end of August, 1996.

Pilot Study of Acropolis Burials

In 1995 ECAP invited Dr. Jane Buikstra, an internationally known expert in the analysis of archaeological burials, to come to Copán to conduct a pilot study aimed at sampling

the Acropolis burials for DNA detection and analysis. This DNA testing, if successful, could establish whether or not the various individuals found in Acropolis burials were genetically related. With the approval of IHAH through the Copán representative, Arqlgo. Ricardo Agurcia F., in 1996 Dr. Buikstra spent one week at Copán extracting dental samples for the DNA tests from 7 burials and assessing the age, sex, and other characteristics of these individuals (March 11-16). This work was conducted with 4 *in situ* burials (already mentioned), plus the bones of 3 individuals previously transported to the Centro de Investigaciones. The results of Dr. Buikstra's pilot study are summarized in the following table:

BURIAL DESIGNATION	Location	Est. Age	Sex	Est. Stature
37-10 (Motmot)	Centro	25-30 yrs	Female	5'3"-5'5"
92-1	Centro	20-25 yrs	Male	N/A
92-2 (SubJaguar)	Centro	35+ yrs	Male	N/A
93-2 (Margarita)	Op 1/6	50+ yrs	Female	4'10"-5'1"
94-1 (N Guardian)	Op 1/6	30-40 yrs	Male	N/A
95-1 (Tlaloc Warrior)	Op 1/6	40+ yrs	Male	5'4"-5'5"
95-2 (Hunal)	Op 1/6	50+ yrs	Male	5'6"

The dental samples will be analyzed by Drs. Anne Stone and Mark Stoneking at the Pennsylvania State University. The results of the DNA analyses are expected to be available later this year. In the meantime, following discussions between the PIAT Director and Arqlgo. Ricardo Agurcia F., Dr. Buikstra has been invited to organize and lead a comprehensive study of the Copán skeletal population during future field seasons.

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