HUMAN SACRIFICE AT EL BRUJO, NORTHERN PERU

Report on 2005 Summer Field Research supported by the National Geographic Society’s Committee for Research and Exploration (Grant #7844-05) and the Roger Thayer Stone Center for Latin American Studies (Faculty Summer Research Grant)

John W. Verano
Department of Anthropology
Tulane University

January, 2006
Background to the Research Project

Recent breakthroughs in iconographic analysis and archaeological research have demonstrated that the Moche of ancient Peru sacrificed prisoners at their major ceremonial centers in rituals directed by priests impersonating Moche deities. Until 1995 the evidence was indirect—derived from new interpretations of Moche art based on the contents of elite tombs at the Moche sites of Sipán and San José de Moro (Alva 2001; Alva and Donnan 1993; Donnan and Castillo 1994). In 1995, the first physical evidence of prisoner sacrifice was found at the Pyramid of the Moon in the Moche river valley by Canadian archaeologist Steve Bourget, who discovered a sacrificial site (Plaza 3A) that would eventually produce the skeletal remains of more than 70 victims (Bourget 1998, 2001a, 2001b). During the summers of 1995 and 1996, I conducted an osteological study of these remains to determine the age at death, sex, and physical characteristics of the victims, as well as to identify injuries and possible cause of death. The results of my analysis confirmed that the victims were probably captured in combat, and that the manner in which they were sacrificed was consistent with what is shown in Moche art (Verano 1998, 2001b, 2001c).

In the summers of 2000 and 2001, with funding from the National Geographic’s Committee on Research and the Stone Center for Latin American Studies at Tulane, I conducted excavations of another courtyard at the Pyramid of the Moon, Plaza 3C, which would eventually produce the remains of more than 40 additional sacrificial victims (Verano 2001a, 2001c, n.d.; Verano and Tufinio n.d.). Radiocarbon dating of these remains indicated that they were significantly older than the Plaza 3A victims, and thus documented a centuries-long tradition of prisoner sacrifice at the Pyramid of the Moon.

One of the major questions that remains to be answered, however, is if sacrificial victims await discovery at other major Moche ceremonial centers along the north coast of Peru, such as Sipán in the Lambayeque Valley, and El Brujo, in the Chicama Valley. Sipán and El Brujo show abundant iconographic evidence—both in the grave goods buried with elites at both sites, and in the form of large polychrome murals that decorate the north façade of Huaca Cao at El Brujo—of the importance of prisoner sacrifice to Moche religion and political power. Based on my work at the Pyramid of the Moon, I have hypothesized that captives were sacrificed at El Brujo as well (Verano 2001b, 2001c), although until recently the archaeological evidence was limited to a few skeletons and partial remains in isolated contexts on and around Huaca Cao.

During the 2004 field season of the Proyecto Arqueológico Complejo El Brujo (PACEB), test pits excavated at the northeast corner and along the east side of Huaca Cao exposed the skeletal remains of two sacrificial victims, one of which was imbedded in stratum containing a dense concentration of isolated bones. The objective of our 2005 field project was to conduct area excavations with the goal of better defining these contexts as well as to search for more sacrificial victims. Our second objective was to open several test pits near the southwest corner of Huaca Cao, where previous excavations had found human skeletal remains also believed to be possible sacrificial victims. Finally, I was invited by the directors of the PACEB project to assist in the excavation of a group of high status Moche tombs discovered in a ceremonial plaza on the northwestern portion of Huaca Cao in 2004. Two of these tombs contained retainer sacrifices placed with the principal burials. Archaeological preservation in these tombs was exceptional, suggesting that we might be able to identify how the retainers were sacrificed, as well as provide information on their age, sex, and physical characteristics.
The 2005 Field Season

After acquiring a field vehicle and checking in with contacts at the National Museum of Anthropology and the National Institute of Culture in Lima, I drove north to our field site with my Peruvian physical anthropology lab director, Mellisa Lund. We arrived at El Brujo on July 4th. We were subsequently joined by project member and recent Tulane Ph.D., Catherine Gaither, who assisted with laboratory analysis. Our first task was to assist in the recording and removal of human remains (including two sacrificed retainers) from a group of elite tombs that had been discovered by the El Brujo Archaeological Project in 2004 and 2005 (Figures 1 and 2). Our field examination of these remains allowed us to document how the retainers were killed (strangulation with plant fiber ropes that were still in place around their necks).

We also were able to collect samples of these ropes for radiocarbon dating (submitted to Beta Analytic upon my return from Peru) and samples of bone and teeth for dietary and DNA analysis. The remains of the principal burials in the three tombs will be conducted once their funeral bundles are documented and unwrapped by the El Brujo Project textile specialists.
For our 2005 season excavation, we hired two Peruvian archaeologists (Lic. Arqla Alicia Romero and Lic. Arqlo Moises Rivero) to supervise excavations, field recording, and artifact inventory, as well as five field workers from the local town of Magdalena de Cao. We purchased some field equipment and began excavations on July 7th. Our excavations were located in two distinct areas: (1) The eastern flank of the coastal promontory that formed the eastern margin of “Huaca Cao” (the major platform mound that has been the focus of excavations by the El Brujo Project since 1991), and (2) the southwest corner and western flank of Huaca Cao. The first area was chosen because of the discovery in 2004 of two sacrificial victims found associated with a series of ceremonial patios and platforms just to the east of Huaca Cao. The second area was placed in an area where previous test pits had revealed human skeletal remains thought to be possible sacrifices.

I. The Eastern Sector (Area 1)

Here we laid out a 10x10 meter unit surrounding a test pit that had been excavated last year by El Brujo Project archaeologists. At the base of the test pit, the splayed skeleton of an apparent sacrificial victim had been found associated with the eastern face of a small adobe platform. El Brujo Project archaeologists carefully covered the skeleton in 2004, leaving it in situ until we could enlarge the excavation area in 2005 and better define its context. Before we began our excavation, our unit was tied into the El Brujo Project’s coordinate system by Ing. Carlos Araujo, the El Brujo Project cartographer and graphic artist. Carlos also laid out additional data markers to allow for expansion of our excavations.

We began excavating the 10 x 10 unit down to the level where the skeleton was found in 2004, following natural and cultural strata. We used the profiles of a nearby trench that had been dug last year as a guide to our own excavations, although some strata and the adobe wall in our unit did not continue into the adjacent trench. The uppermost stratum was composed of a compact layer of melted adobe and debris that had washed down during heavy rainfall, probably after abandonment of the site by the Moche. Below this were alternating strata of sandy soil and layers of small cobblestones with abundant potsherds and bone—both human and non-human (primarily camelid bone). The camelid bones show fracturing and cut marks indicating butchery, while the human bones do not (Figure 3). The human bones were isolated finds, and appear to represent material from burials disturbed during construction or remodeling of the adobe platform.

Figure 3a. Examples of isolated human bones found in fill  Figure 3b. Faunal bones with fractures indicative of butchering (arrows)
On July 19th we reached the level of the skeleton (which we designated Entierro 1, or E1). Although it had been partially exposed last year, we were able to continue defining portions of it that had not been excavated, including bones of the pelvis, legs, and feet. Exposing these made it clear that a fully-fleshed and articulated body, and not a secondary or disturbed burial, had been deposited here. The left arm had been traumatically removed, and it showed a spiral fracture and cut marks consistent with intentional dismemberment (Figure 4). The left clavicle and scapula are missing, and apparently were removed with the left arm, although we were unable to find them.

![Figure 4: Skeleton and detail of left arm of sacrificial victim, Eastern Sector](image1)

Multiple ribs show ancient fractures consistent with perimortem (around the time of death) trauma to the thoracic area (Figure 5). Two of the hand phalanges also show ragged fractures that appear to be perimortem. The skull and cervical vertebrae were poorly preserved, precluding observations on trauma, but the posterior half of the skull was sufficiently complete to permit an assessment of sex (male), and to indicate that the skull was not artificially deformed (as is common, but not always found in Moche skulls). Although the pelvis was fragmentary, other skeletal elements were sufficiently complete to suggest an age at death of approximately 25-35 years.

![Figure 5: Perimortem fractures (arrows) of ribs and fingers of sacrificial victim](image2)
The position of the body (splayed on its back with its left arm fractured off and separated from the rest of the body) is inconsistent with any known north coast burial pattern, and suggests that this individual was indeed a sacrifice, perhaps placed outside the wall of a small platform as a form of dedicatory offering. It rested on a layer of clean sand that appears to have been deposited intentionally as a surface on which to place the sacrifice. In order to test the hypothesis that this was a dedicatory sacrifice associated with architecture, we decided to open an additional 5 x 5 unit to the south, to define the extent of the adobe wall, and to search for additional evidence of sacrificial victims.

Our 5 x 5 meter southern extension revealed similar stratigraphy to the 10 x 10 northern unit. Abundant ceramics and bone (both human and non-human) were found in multiple layers of cobblestones and sandy to clayey soil. Unfortunately, the only possible evidence of a sacrificial victim was the articulated left arm and hand of an adult, found in isolation in a lens of sand and silt, approximately 30 cm east of the platform wall (Figure 6).

Figure 6. Articulated arm and hand. Arrow indicates damage to head of humerus.

The hand is complete except for the bones of the thumb. Some minor breakage that may have occurred during forced disarticulation was seen on the head of the humerus, but no cut marks or other clear signs of intentional dismemberment were seen on the bone surfaces. Nevertheless, the isolated arm is clearly distinct from disassociated human and non-human bones found in the rest of the unit, suggesting that it was intentionally removed and placed there (along with the articulated skeleton in the northern excavation unit), perhaps as an offering associated with the construction of the adobe platform. No other evidence of sacrificial victims was found in the southern extension.

Our final research objective involved defining the size and form of the adobe platform. We opened an additional several small units in an attempt to define the corners of the platform, but encountered looters’ pits that had caused extensive damage to the walls, making it difficult to define its corners, and indicating that the contents of the platform had been looted. We thus terminated and back-filled our excavation units and constructed a protective wall to conserve exposed architecture.

Southwest Corner of Huaca Cao

Excavations in the southwest corner of Huaca Cao (Sector Sur-Oeste) did not reveal evidence of human sacrifice. Instead, skeletal remains recovered from our excavation units 1
and 2 were burials of three individuals that had been placed at a shallow depth along the west face of the platform.

Figure 7. Three burials from the southwest corner of Huaca Cao

Burial 1, a male, 16-18 years of age, dates to the Moche occupation; Burials 2 and 3 are infants dating to the later Lambayeque or Chimú occupation of the site, as judged by the textiles and grave goods found with them. We removed these burials and did a full laboratory analysis on them. Due to a lack of evidence that this was a sacrificial area, we terminated excavation and backfilled these units.

Laboratory Analysis

In our field laboratory we cleaned, inventoried, photographed, measured, and analyzed all skeletal remains and artifacts encountered in our excavations. A substantial amount of material was recovered, including thousands of ceramic sherds and animal and human bones. All items were counted, described, registered, and bagged for permanent storage in the El Brujo project collections. The ceramics found in the Eastern Sector excavations were all early Moche/Gallinazo in style, and consist of primarily domestic ware, but also include fragments of stirrup spout bottles and other fineware [photos]. Unlike the Pyramid of the Moon sacrificial areas in the Moche valley, however, no recognizable fragments of prisoner vessels were found.
In the laboratory we also were able to study the skeletal remains of a young adult male sacrificial victim excavated by Catherine Gaither during the 2004 field season beneath a wall of a ceremonial patio (Patio C) located on the east side of the principal plaza of Huaca Cao. The skeleton, although largely complete, was missing its lower right leg, and its position was highly unusual: splayed face down, with its left leg extending into an adobe wall. The wall had clearly been built over the body, incorporating the left leg within it.

Laboratory examination revealed cut marks on the external surfaces of multiple ribs, many of which also showed fresh (perimortem) fractures. The skull has massive fractures on its right side, suggesting blunt force trauma as the cause of death. The position of the skeleton, and its association with architecture, shows similarities to the splayed skeleton we excavated in the Eastern Sector. This apparent pattern will be discussed further below.
Interpretation

During the 2005 field season we excavated the remains of four sacrificial victims and analyzed the skeleton of another that had been recovered during the previous field season. Two clear and distinctive patterns emerge from our excavations and field laboratory analysis. The two retainers sacrificed and buried in elite tombs in Huaca Cao were carefully wrapped and placed either at the feet or alongside the funeral bundle of the principal burial in the tomb; each with a single ceramic vessel. Both were adolescents (13-17 years of age), and both were strangled with a plant fiber rope. Their careful burial with grave goods indicates that they were treated with respect and care. Presumably they were placed in the tombs to serve as companions or retainers in the afterlife; a practice seen in elite Moche tombs at Sipán (Alva and Donnan 1993; Donnan 1995) and San José de Moro (Donnan and Castillo 1992, 1994), and still practiced by the native elite during Inca times, according to Spanish chroniclers (Verano 1995). In the case of other Moche retainer sacrifices, cause of death could not be determined, but the exceptional preservation found in the ceremonial patio at El Brujo allows us to document how they were killed.

The other three sacrifices at El Brujo are quite distinctive. The victims were not associated with tombs, but were found alongside or under walls of courtyards or platforms, in non-standard burial positions, and showed evidence of dismemberment, cut marks, and multiple fractures indicating a violent death. No grave goods or other artifacts were found with these remains. The two complete skeletons were young adult males; the isolated left arm was also of an adult, but of uncertain sex. These three sacrifices show similarities to Moche prisoner sacrifices we have documented at the Pyramid of the Moon, in their context (non-mortuary), body position (atypical of Moche burials), and in their evidence of skeletal trauma and dismemberment (Verano 1998, 2001b, 2001c). Unlike the case of Plazas 3A and 3C at the Pyramid of the Moon, we have not found a concentration of sacrificial victims at El Brujo. However, sacrifices and modified skulls from sacrificial victims also have been found at the Pyramid of the Moon, in isolated contexts distinct from the main concentrations in Plazas 3A and 3C. Our sacrifices from El Brujo are similar. It remains unclear whether a large concentration of sacrificed prisoners awaits discovery at El Brujo. The striking similarity between the architectural plan and decoration of the north façades of both pyramids suggest that a sacrificial area lies somewhere adjacent to Huaca Cao. However, differences in the local topography and geological features of the two sites (the Pyramid of the Moon was built on the slopes of a large hill, Cerro Blanco, while Huaca Cao was constructed on an elevated plateau overlooking the ocean), suggest that we should not expect courtyards, platforms, and other secondary architecture to be laid out in identical fashion at the two sites.

Overall, human sacrifice at El Brujo conforms to two distinct patterns I have previously identified at other Prehispanic Peruvian sites: (1) carefully-arranged burials of children or adolescents accompanied by elaborate grave goods as offerings to temples or retainers in high status tombs, and (2) male captives buried in non-mortuary contexts (in plazas, in architectural fill) without grave goods or considerate treatment of the body. Evidence of violent death is commonly found in the latter, but not in the former. The manner in which sacrifices were killed and the treatment of their remains indicates that these two forms of ritual killing were performed for different reasons, and had very different significance for those who practiced them. While the specific social context and ritual meaning of each of these sacrifices cannot be determined by the archaeological evidence alone, it is important to carefully document them if we are to continue to make progress in understanding the ancient Moche.
References Cited

Alva, W.

Alva, W. and C. B. Donnan

Bourget, S.


Donnan, C. B.

Donnan, C. B. and L. J. Castillo


Verano, J. W.


Verano, J. W. and M. Tufinio