THE Art and Archaeology of the Moche

An Ancient Andean Society of the Peruvian North Coast

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Depictions of armed combat and of the capture and sacrifice of prisoners are well-known in Moche iconography. Since 1995, the iconographic record has been joined by archaeological evidence of the sacrificial practices themselves. The most dramatic discoveries have been made at Huaca de la Luna in the Moche Valley, in two small courtyards (Plazas 3a and 3c) located adjacent to Platform I. Excavations conducted in these plazas between 1995 and 2001 have recovered evidence of sacrificial rituals spanning multiple centuries. Although these deposits share many common features, they also demonstrate a number of important differences.

Place and Context
Plazas 3a and 3c are not the only areas where remains of sacrificial victims have been found at the Pyramids of Moche, but no other excavations have produced such a concentration of skeletal remains. Sacrificed retainers have been found associated with some tombs in the Urban Zone, and three skeletons found lying face down at the base of the west facade of the Huaca de la Luna appear to be sacrifices (Delabarde n.d.). No direct skeletal evidence of violent death was found in any of these cases; however, the context and body positions of these remains suggest that they were offerings. Two modified human skulls found in a niche in Sector 8 of the Urban Zone also appear to have come from sacrificial victims (Verano et al. 1999), and it is likely that other modified human bones remain to be found at the site.

Plazas 3a and 3c are exceptional in that they appear to represent locations specifically dedicated to human sacrificial activities—and on a relatively large scale. From the available archaeological evidence, it cannot be determined whether these plazas were the actual locations where victims were killed, or whether they served primarily as repositories for the remains of victims sacrificed in some other location. The latter seems likely for Plaza 3c, as will be argued below; Plaza 3a, with its natural rock outcrop as a central focus, seems a more likely candidate for a primary sacrificial site.

Commonalities
Plazas 3a and 3c, and the archaeological materials found within them, show many similarities. These include the general location of the sacrificial areas, the demographic profile of the victims, manner of sacrifice, and objects found associated with the skeletal remains. Other similarities include the presence of associated tombs,
as well as ceremonial architecture or geological features of apparent ritual significance.

**Location of Deposits**

Plazas 3a and 3c are located southeast of the principal construction of the Huaca de la Luna, Platform I (Figure 11.1). They form part of a series of courtyards, small enclosures, and corridors that lie between Platform I and the west flank of Cerro Blanco (Tufinio n.d.; Uceda and Tufinio 2003). A small adobe platform (Platform II) forms the eastern wall of Plaza 3a and bisects a natural rock outcrop that constitutes the ceremonial focus of the plaza (Bourget and Millaire 2000). Plaza 3c has no associated rock outcrop or platform, but the plaza walls enclose a room (Recinto I) decorated on the exterior with polychrome friezes (Figure 11.2). At the entrance is a small raised platform and an altar. The eastern half of Plaza 3c is separated from the western half by a wall and contains a smaller enclosure, Recinto II (Figure 11.3). The remains of sacrificial victims and fragments of ceramic prisoner vessels were found exclusively in this eastern part, which seems to have functioned as a repository for these materials (Tufinio n.d.). Plazas 3a and 3c were linked to Platform I by narrow corridors that provided only limited access and would not have been visible either from the north courtyard (Plaza 1) of the Huaca or from the urban sector. Their limited access and visibility suggest that the plazas were not designed for public traffic or for large audiences. Nevertheless, anyone passing downwind (to the north/northeast) of these areas during periods of active deposition of bodies would have been struck by the odor of decomposition, and would have gained a visceral impression of the activities that went on in these courtyards even if they could not directly observe them. The archaeological evidence suggests that the bodies of most or all of the sacrificial victims in Plaza 3a, and some in Plaza 3c, were left to decompose on the surface rather than being promptly buried.

Other than isolated puncture marks on a few of the thousands of bones recovered from Plazas 3a and 3c (Verano 2001a; Hamilton 2005), there is no evidence of carnivore damage, indicating that mammalian scavengers such as dogs or foxes did not have access to the remains. Yet numerous pupa cases found in association with skeletons in both Plazas 3a and 3c indicate that

**Figure 11.1.** Map of Huaca de la Luna, showing the location of Plazas 3a and 3c. Courtesy of the Huaca de la Luna Archaeological Project.

**Figure 11.2.** External view of the north side and doorway of Recinto I, Plaza 3c, showing friezes depicting felines on top of human figures. Photograph by author.
flies visited and laid eggs on the decomposing bodies (Bourget 2001b; Verano n.d.). It is possible that vultures fed upon them as well. Black vultures are commonly shown in Moche art in association with scenes of punishment and human sacrifice (Donnan 1978; Rea 1986), and some of the disarticulation and scattering of skeletal elements seen in Plaza 3a would be consistent with vulture scavenging. Steve Bourget, however, has identified a number of cases in Plaza 3a where bodies and skeletal elements appear to have been intentionally manipulated by humans as part of the sacrificial rituals (Bourget 1998). The final disposition of human skeletal remains in Plaza 3a probably reflects a complex interaction of human and nonhuman actors, as well as natural taphonomic processes as the bodies decomposed. As will be described later in this chapter, the human remains in Plaza 3c appear to present a different scenario since most of them show evidence of having been defleshed prior to their deposition in the plaza.

Demographic Profile and Life History of the Victims

Both the demographic profile and evidence of skeletal trauma seen in the sacrificial victims in Plazas 3a and 3c support the hypothesis that these were captives taken in armed conflict. All appear to be healthy males between the ages of approximately fifteen to forty years, and many show old injuries—including healed fractures of the ribs, skull, and mandible, and several cases of “parry” fractures (fractures incurred while blocking a blow) of the forearms—suggesting a prior history of interpersonal conflict. In addition, some individuals in both Plazas 3a and 3c show fractures of the arm, ribs, or shoulder blade that were in the early stages of healing at the time of death (Verano 1998, 2001a). These healing injuries appear to mark wounds received in combat or following capture. They are consistent with Moche depictions of armed combat, where the primary objective seems to have been to disable and capture rather
than kill one’s opponent (Alva and Donnan 1993; Donnan 1997:52). These healing fractures are also important in indicating that some time (at least several weeks, perhaps more) elapsed between the moment of capture and death (Verano 2001b).

Manner of Sacrifice

Moche artistic depictions of prisoner sacrifice show victims having their throats slit and their blood collected for presentation to an elaborately dressed figure (Alva and Donnan 1993). Skeletal evidence from Plazas 3a and 3c is consistent with the art: the most common perimortem injury (occurring around the time of death [Sauer 1998]) seen in these skeletons is cut marks across the bodies and transverse processes of the cervical vertebrae (Figure 11.4). The location of the cut marks (limited in most cases to the anterior surfaces of the vertebrae) indicates that the objective was to slit the throat, not decapitate the victim. Although many isolated skulls and headless trunks have been found in Plazas 3a and 3c, only a small number of unequivocal cases of decapitation can be confirmed on the basis of cut mark location and patterning. One example (P3c-H33) is a skull found with three articulated cervical vertebrae and a pair of feet. These were buried together in a small pit beneath the floor of Plaza 3c (Figure 11.5). The cervical vertebrae exhibit two distinct forms of cut marks: fine cuts horizontally across the body of the third cervical vertebra, typical of throat slitting, and a set of deeper, angled cuts and fracturing of the spinous and transverse
processes of C3 that occurred with forced separation of the third and fourth cervical vertebrae during decapitation (Figures 11.6, 11.7). Another example is a partial skeleton (P3c-H36) that shows deep cut marks on the posterior surface of the second cervical vertebra’s odontoid process (Figure 11.8). These marks apparently were made when the neck was cut repeatedly from behind to remove the head.

Recently, a detailed study by Laurel Hamilton of cut marks on the entire Plaza 3a skeletal sample (including all isolated bones as well as complete and partial skeletons) has identified ten additional cases of vertebrae with cut marks suggesting decapitation (Hamilton 2005). But in skeletal remains lacking cut marks indicating intentional decapitation, other mechanisms must be considered to explain the isolated skulls and clusters of skulls that were found in Plazas 3a and 3c. Skulls may have been moved intentionally following decomposition of the body (Bourget 1998), dislodged by vultures, or separated from the neck vertebrae during decomposition. Skulls have a natural tendency to disarticulate from the neck and roll, as has been observed frequently in modern forensic cases (Ubelaker and Scammell 1992).

The Moche are known to have decapitated victims in some circumstances, as is documented by the discovery of eighteen severed heads at Dos Cabezas in the Jequetepeque Valley (Cordy-Collins 2001), and of two modified human skulls from the urban sector at Moche (Verano et al. 1999). Trophy heads are also shown in Moche art, as are supernaturals holding tumi knives and severed heads (Cordy-Collins 2001). Why some Moche sacrificial victims were decapitated and others not is unknown, but the osteological evidence from Plazas 3a and 3c indicates that both slitting of the throat and decapitation of captives occurred at Huaca de la Luna.

**Skull Fractures**

Skull fractures are also seen in the Plaza 3a and 3c victims, although in a relatively small number of cases. Eight individuals from Plaza 3a and one from Plaza 3c have skull fractures that occurred at or around the time of death. Some of these are massive and presumably were caused by blows with a large club or rock (Figure 11.9). Steve Bourget hypothesizes that some of them may have been produced with a wooden club of a distinctive form that appears in Moche scenes of sea lion and deer hunts.
(Bourget 2001a). In fact, he found such a club in a tomb in Platform II. Its surface had a dark stain that reacted strongly with human antiserum, suggesting that the club was covered with dried human blood (Bourget and Newman 1998).

Two other skull fractures in Plaza 3a were produced with a different type of weapon, as can be seen from impact scars along the broken margins (Figures 11.10, 11.11). The scars are small, and their shapes indicate that an object with multiple protuberances struck the skull. The object was likely a star-headed mace: a short, single-handed weapon carried by some Moche warriors (Donnan 1978: figs. 110, 111; Donnan and McClelland 1999: figs. 4.19, 4.25). These clubs have copper or stone heads with multiple protuberances that are circular or quadrangular in cross-section. One of the fractured skulls from Plaza 3a (Figure 11.10) shows small rectangular impact scars; the other (Figure 11.11) shows semicircular fractures produced by a mace head with rounded points.1

Only one case of perimortem skull fracture was found in Plaza 3c. An isolated skull vault (H41) has multiple radiating fractures from an oval-shaped impact in the forehead area. Like the majority of the Plaza 3a cases, the fractures appear to have resulted from a blow from a large club.

It is unclear why some victims in Plazas 3a and 3c were struck with clubs. In Moche art, warriors some-

**Figure 11.9.** Cranium with massive blunt force trauma, Plaza 3a, Skull XI. Photograph by author.

**Figure 11.10.** Skull fragment with rectangular impact scar (lower margin), Plaza 3a. Photograph by author.

**Figure 11.11.** Partial cranium with semicircular impact fractures, Plaza 3c. Photograph by author.

times are shown hitting captives in the nose to induce a nosebleed, but I am not aware of any scenes where captives are clubbed to death. Moreover, five of the seven individuals with skull fractures whose cervical vertebrae could be examined also show cut marks, indicating that their throats were slit in the standard fashion. Thus, it appears that clubbing was not an alternative method of execution in these cases, but perhaps an embellishment...
reserved for a select few. In support of this, Bourget noted that three of the individuals with skull fractures lay in close proximity to one another in Sediment 2 (Bourget 1998).

An unusual case of multiple skull fractures was found in a single individual (HG99-5) in Plaza 3c. It is distinct from the fractures described above because it represents intentional postmortem modification. This skull, which was found still articulated to a nearly complete skeleton, was missing the entire upper portion of the braincase (Figure 11.12). Small fractures around the broken margins mark where the upper portion was broken away by a series of percussion blows. Presumably, the skull was fractured to gain access to the brain.

**Penetrating Wounds**

Two individuals, one in Plaza 3a and one in Plaza 3c, have penetrating wounds produced by a sharply pointed weapon. An isolated sternum found in Plaza 3a has a single wound with an entrance on the anterior surface, and an exit with radiating fractures on the posterior surface (Figure 11.13). The wound is very similar to those found in a Late Intermediate period mass burial of sacrificed individuals at Pacatnamú (Figure 11.14; Verano 1986). A skeleton in Plaza 3c (HG99-3), excavated by Moises Tufinio during the 1999 field season (Tufinio n.d.), shows punched-in lesions on multiple bones of the lower neck and thoracic cage (right fourth rib, vertebrae C7, T1, T4, and T9), also similar to those seen in the Pacatnamú skeletons (Figure 11.15). Two pointed bone fragments were found in lower levels of the Plaza 3c sacrificial area. Each is a long bone shaft fragment with one end that terminates in a sharp point. One of them is slightly over 7 cm long, and the pointed end shows obvious polishing (Figure 11.16). The second is about 5 cm long and also terminates in a point, although it does not show polishing. These fragments are similar in size and shape to bone points found in the Pacatnamú mass burial and may represent the tips of atlatl darts. In Moche iconography, atlatls are the weapon of choice in deer hunting but are rarely shown being used against human targets in combat scenes (Bourget 2001a; Donnan 1997; Verano 2001b). Atlatl darts (often with barbed points), however, are frequently depicted as a component
of weapons bundles and as isolated elements in combat scenes (Donnan and McClelland 1999), suggesting that they were used in some combat situations. It is possible that the Plaza 3a sternum represents a nonlethal combat wound (depending on how far the point penetrated beyond the sternum), but the multiple wounds deep within the thoracic cavity of HG99-3 would undoubtedly have been fatal. Consistent with this, HG99-3 shows no cut marks on his cervical vertebrae.

**Associated Artifacts**

The most common artifacts associated with the sacrificial victims in Plazas 3a and 3c were fragments of ceramic vessels. Other cultural materials—including textile fragments; small, perforated, gilded copper plates of the type sewn on elaborate garments; and food remains—also were found. Included in the ceramic assemblages from Plazas 3a and 3c are numerous examples of prisoner figures. In the case of Plaza 3a, these are large, unfired clay effigy figures in the form of seated nude males with ropes around their necks (Bourget 2001a, 2001b). In Plaza 3c, we found fragments of smaller, fired vessels in the form of seated prisoners with ropes around their necks and hands bound behind the back (Figure 11.17). All vessels from Plaza 3c were fragmentary, but two were complete enough to allow reconstruction of their original form (Figures 11.18, 11.19). The prisoner vessel

![Figure 11.13. Penetrating wound on an isolated sternum from Plaza 3a. Entrance is on the ventral side, exit on the dorsal side. Photograph by author.](image1)

![Figure 11.14. Sternum from Pacatnamú mass burial with a penetrating wound similar in form to that seen in Figure 11.13. Photograph by author.](image2)

![Figure 11.15. Seventh cervical vertebra with a penetrating wound on the anterior surface of the vertebral body, Plaza 3c, HG99-3. Photograph by author.](image3)

![Figure 11.16. Bone fragment with a polished end, possibly a dart (atlatl) tip, from Plaza 3c. Scale is 5 cm. Photograph by author.](image4)
fragments from Plaza 3c are similar in size and decoration to complete examples found as funerary offerings in a number of tombs at the site of Moche, including three vessels found in Tomb 2 of Platform II (Bourget 2001b). Given their direct association with the skeletal remains of sacrificial victims, the unfired and fired vessels found in Plazas 3a and 3c clearly played some role in the sacrificial rituals, and their intentional breakage seems to have been an integral part of the process. In Plaza 3a, the effigy figures appear to have been placed with the victims and broken in situ (Bourget 2001b). In contrast, in Plaza 3c the distribution of vessel fragments indicates that they were broken prior to being deposited. All vessels are incomplete, and in several cases we found matching fragments of a single vessel scattered widely across the plaza.

Also found in Plaza 3c was one complete example and sixteen fragments of undecorated ceramic discs. The discs are circular, with a diameter of approximately 9 cm. José Armas, who analyzed the ceramics from Plaza 3c, believes these discs may have been used to carry the blood-filled goblets in prisoner sacrifices. In support of this hypothesis, he notes that the Priestess in the sacrifice ceremony carries a goblet in one hand and a disc-shaped object in the other (Armas n.d.).
Association with Tombs
Moche tombs were found in indirect association with both Plazas 3a and 3c. In the case of Plaza 3a, these were chamber tombs placed in Platform II during or shortly after its construction. Although disturbed by early looting, they still preserved an abundance of ceramic and other funerary offerings (Bourget 1998, 2001b; Bourget and Millaire 2000). In the case of Plaza 3c, several tombs were found under the plaza floor in close proximity to the sacrificial victims. Two of these were simple interments, but one was a larger tomb (Tomb 2) whose chamber had been created by removing a rectangular block of adobes from the plaza construction fill (Figure 11.20). The principal occupant of the tomb was an adult male, accompanied by a bundle containing the remains of three infants. Fifteen ceramic vessels were found in wall niches and on the tomb floor (Verano and Tuñiño n.d.).

The close proximity of tombs and sacrificial victims in Plazas 3a and 3c might at first appear incongruous. Based on his analysis of the funerary goods associated with the Platform II tombs, Bourget concluded that their occupants may have been directly involved with the sacrifice of victims in Plaza 3a (Bourget 1998; Bourget and Millaire 2000). A similar argument can be made for the principal burial in Tomb 2 in Plaza 3c. While no clubs or weapons other than a fragment of a chisel-like knife were found in the tomb, ceramic offerings included representations of a warrior, two captives (one associated with a detail of a deer hunting scene), and a portrait head vessel (Figures 11.21-11.24). The portrait

**Figure 11.20.** View of Plaza 3c excavation, showing an exploratory trench through the plaza floor and the location of Tomb 2 (A). Photograph by author.

**Figure 11.21.** Stirrup spout vessel with modeled warrior and war club in clay slip from Tomb 2. Photograph by author.
vessel depicts an individual without a headdress or ear ornaments, which may indicate that it portrays a captive (Donnan 2004:113–139). The ceramics in Tomb 2 and those associated with the sacrificial victims in Plaza 3c are both Moche Phase III in style, indicating that the tomb and sacrificial deposit are roughly contemporary (Armas n.d.).

Diversity

As discussed above, the sacrificial sites of Plazas 3a and 3c share many similarities. Yet there are some differences between the two that are important for understanding the activities that went on at these two locations. These differences include the dates of construction and use of the two plazas, the distinctive way in which bodies in Plaza 3c were manipulated postmortem, and the possible motivations for sacrificial rituals.

**FIGURE 11.22.** Stirrup spout vessel from Tomb 2 depicting a seated prisoner, identifiable by the rope around his neck and exposed genitalia. Photograph by author.

**FIGURE 11.23.** Canchero with handle from Tomb 2 that terminates in a modeled human head with a rope around the neck. On the inferior surface of the chamber is a deer pierced by darts. Photograph by author.

**FIGURE 11.24.** Portrait head vessel from Tomb 2. Photograph by author.
Chronology
The first distinction is chronological: there is now good evidence that Plazas 3a and 3c were not in use at the same time, but date to different construction phases of Huaca de la Luna. Excavations during the 1999 field season revealed that Plaza 3c was buried by windblown sand and sealed with adobes prior to the construction of Plaza 3a (Tufinio n.d.). Attempts to radiocarbon date the skeletal remains from Plaza 3a were unsuccessful due to poor collagen preservation. But construction of Plaza 3a corresponds to one of the latest phases at the Huaca de la Luna (Edificio A), and an algorrobo log sample from the roof of a Platform II tomb yielded a calibrated date (2 sigmas) of AD 425–690 (Uceda et al. n.d.).

Four radiocarbon dates were obtained from materials in Plaza 3c: two from materials above the plaza floor and two from below it. Three utilized samples of rope recovered from around the ankles and wrists of skeletons or isolated limbs; the fourth was done from a sample of fly and beetle remains collected from within the skull of H33. Because of the small size of the samples, all were analyzed by accelerator mass spectrometry (AMS). Since skeletal remains were found in two stratigraphically distinct contexts—above and below the floor of Plaza 3c—we expected some differences in dates. Laboratory results confirmed these expectations.

The first above-floor sample, collected from Skeleton E5, produced a conventional radiocarbon age of 1560 +/- 40 BP (Beta-146464), with a 2 sigma calibrated result (95 percent probability) of Cal AD 410–600, and an intercept of the radiocarbon age with the calibration curve of Cal AD 530. Rope from around an isolated foot (H2), produced a conventional radiocarbon age of 1570 +/- 40 BP (Beta-146465), with a 2 sigma calibrated result (95 percent probability) of Cal AD 460–480 and Cal AD 520–650, and an intercept of the radiocarbon age with the calibration curve at Cal AD 580.

The two radiocarbon determinations made from materials below the floor of Plaza 3c yielded substantially earlier dates. A rope fragment from Skeleton E16 produced a conventional radiocarbon age of 1880 +/- 40 BP (Beta-158974), with a 2 sigma calibrated result (95 percent probability) of Cal AD 50–230, and an intercept of the radiocarbon age with the calibration curve at Cal AD 120. The insect sample collected from the skull of H33 produced a conventional radiocarbon age of 1810 +/- 40 BP (Beta-158975), with a 2 sigma calibrated result (95 percent probability) of Cal AD 110–330, and an intercept of the radiocarbon age with the calibration curve of Cal AD 230.

The four radiocarbon dates from Plaza 3c are consistent with its stratigraphy and construction sequence, and the above-floor dates correspond well with the established building chronology of Huaca de la Luna. The dates for the sub-floor sacrificial remains, however, are surprisingly early, representing some of the earliest radiocarbon dates to be reported from the site of Moche (Uceda et al. n.d.). If the two sub-floor dates are not anomalous, they indicate that remains of sacrificial victims were deposited in Plaza 3c over many centuries, beginning with some of the earliest construction phases of the Huaca de la Luna.

Stratigraphic Context
The construction sequence of Plaza 3a and deposition of bodies appear to be quite distinct from that of Plaza 3c. From his excavation data, Bourget concludes that Plaza 3a and Platform II were constructed rapidly during one of the final construction phases of the Huaca de la Luna, and that Platform II may have been built specifically as a response to an impending El Niño event. A series of sacrifices were then made both during and following episodes of heavy rainfall, as evidenced by skeletons found in alternating layers of hardened mud and windblown sand.
The stratigraphic data and radiocarbon dates for Plaza 3c, in contrast, appear to document a slow, accretional deposit of victims over multiple centuries. The sub-floor remains were incorporated in the sand and adobe fill that was used to raise the level of the plaza during its construction (Figure 11.25). The above-floor remains, in contrast, were covered with adobe fragments or simply left to be buried by accumulating windblown sand (Figure 11.26). Evidence of occasional rainfall was found in the form of thin layers of hardened silt alternating with windblown sand, and water streaks on the painted surface of the east wall of the plaza. No evidence of torrential rains, however, was found in Plaza 3c, nor was any correlation found between episodes of light rainfall and the deposition of sacrificial victims.

**Postmortem Treatment of Sacrificial Victims**

Although complete, articulated skeletons were found in both Plazas 3a and 3c, partial skeletons—as well as isolated limbs, hands, feet, and scattered bones—were more common. Upon seeing the degree of disarticulation in the Plaza 3a skeletal material, our initial hypothesis was that the victims were intentionally disarticulated as part of the sacrificial ritual. But extensive examination of the Plaza 3a sample has revealed only a handful of bones with cut marks consistent with dismemberment or defleshing (Bracamonte 1998; Hamilton 2005). If fresh bodies had been dismembered with a sharp tool, we would expect to see numerous cut marks, particularly around the joint surfaces. Such marks are absent in all but a few bones in Plaza 3a. Manipulation and dismemberment of decomposing bodies may have occurred, however, and this could explain the high degree of disarticulation in Plaza 3a, as well as the apparent grouping of mandibles, skulls, and limbs seen there (Bourget 1997, 1998, 2001b).

In contrast, the human remains in Plaza 3c show abundant evidence of complex postmortem treatment and manipulation. Laboratory examination revealed cut marks on nearly all skeletons and partial remains.

**Figure 11.26.** Sacrificial victim (E8) above the floor of Plaza 3c, buried in a deposit of windblown sand and scattered adobes. Photograph by author.
in Plaza 3c. Interestingly, the cuts are most common in areas of muscle attachment rather than on or around the joint surfaces of bones (Figures 11.27, 11.28), suggesting that the objective was to deflesh rather than disarticulate the victims. This is supported by the fact that many skeletons were found largely articulated, despite having cut marks on all major bones. While the specific motive for the defleshing is unknown, the victims’ bodies in Plaza 3c were not systematically dismembered, as is typical in butchering of large food animals such as deer and camelids. Furthermore, there is no evidence of burning or fracturing of bones to extract marrow. Apparently the Moche were not cannibalizing the bodies of their victims, but seem to have been more interested in the skeletons themselves—using them, or parts of them, for display or some other ritual purpose. An example is E6, a partial set of remains found in sand above the floor of Plaza 3c, covered by adobe fragments (Figure 11.29). It consists of the crossed bones of the upper and lower limbs, with all elements (including the shoulder blades) still articulated, suggesting that the bones were still held together by soft tissue at the time they were buried. All of the bones show cut marks on their external surfaces, including the small bones of the hands and feet (Figure 11.30). These marks indicate that the skin and muscles were cut from them, apparently leaving only ligaments to hold the bones together. The extensive and time-consuming defleshing of these bones, while carefully maintaining their articulations, suggests intentional preparation for some purpose rather than simple butchery and consumption. Unfortunately, no evidence remains of what was done with the flesh removed from E6 and other skeletons in Plaza 3c. We thus cannot exclude the possibility that the flesh...
of captives, as well as their blood, was consumed in Moche sacrificial rituals.

Also found in Plaza 3c were remains of rope around the wrists and ankles of isolated limbs and around the necks of defleshed skeletons. These ropes suggest that articulated arms and legs, and in some cases whole skeletons, may have been suspended and displayed in some location at the Huaca de la Luna. Depictions of amputated limbs with ropes tied around them are known from Moche art, although in all cases they are fleshed, not skeletal limbs (Donnan 1978; Donnan and McClelland 1999; Hill 2000; Hocquenghem 1987). Animated skeletons engaged in various activities are also known in Moche art, but I am not aware of any depictions of suspended skeletons.

The extensive postmortem processing of the Plaza 3c remains, along with evidence that they represent a gradual accretional deposit over an extended period of time, suggests that the small rectangular area was dedicated to the final deposition of sacrificial victims following extensive postmortem preparation and ritual use.

**Figure 11.28.** Location of cut marks on Skeleton E4, Plaza 3c. Darkened areas indicate missing bones. Drawings by author.

**Figure 11.29.** Skeleton E6, Plaza 3c, above-floor deposit. Photograph by author.

**Figure 11.30.** Location of cut marks on Skeleton E6. Darkened areas indicate missing bones. Drawings by author.
In contrast, Plaza 3a appears to be a primary sacrificial site, where bodies were cast (or placed) around the rocky outcrop following their death. Plazas 3a and 3c thus may have functioned in very different ways, despite the fact that both served as places where the remains of sacrificial victims were deposited.

**Motivation for Sacrificial Practices**

The specific motivation behind the sacrifice of captives by the Moche remains a subject of significant interest among Moche specialists. Steve Bourget concludes that prisoner sacrifices in Plaza 3a were performed in times of crisis associated with torrential El Niño rains, since some of the sacrificial victims appear to have been killed during periods of heavy rainfall (Bourget 1997, 1998; Bourget and Millaire 2000). In Plaza 3c, we also found evidence of occasional rainfall that deposited thin layers of silt over the plaza; however, none of the skeletons were directly associated with these layers. Therefore, we could not find evidence to support a direct relationship between El Niño rains and human sacrifice in Plaza 3c. Given the three temporally distinct deposits of sacrificial victims at the Huaca de la Luna (Plaza 3c sub-floor; Plaza 3c above-floor; Plaza 3a), it is now evident that sacrifices were made over a period of centuries. Sacrifice of captives was clearly a long-standing cultural tradition that played an important role in ritual activities at the Huaca de la Luna, and not exclusively a response to episodic environmental crises such as the El Niño phenomenon. While sacrifices in Plaza 3a may have been made for different reasons than those in Plaza 3c (Uceda and Tufinio 2003), the type of victims chosen and the way in which they were killed are very similar.

As I have argued elsewhere, the sacrifice of captives, whether from ritual combat among the Moche or from more secular battles with non-Moche polities, likely functioned to affirm the religious and political power of major centers like the Pyramids at Moche, the El Brujo complex, San José de Moro, Sipán, and others (Verano 2001b). To what degree Moche combat was ritual or secular continues to be a subject of debate among Moche scholars (Alva and Donnan 1993; Castillo 2000; Donnan 1997; Topic and Topic 1997). Unfortunately, most of this debate centers on interpretations of Moche iconography. In my opinion, Moche iconography alone cannot tell us whether combat was ritual or secular since Moche art is highly formalized and must be interpreted with caution (Verano 2001b). Some new attempts to identify the genetic characteristics and population affiliation of the Plaza 3a and 3c victims using mitochondrial DNA (Shinoda et al. 2002; Shimada et al. 2005; Shimada et al., this volume) and dental morphological traits (Sutter and Cortez 2005) may shed new light on the issue. Unfortunately, the results of these preliminary studies are not in agreement. While Shimada finds the Plaza 3a sample internally homogeneous and similar to a comparative sample of mtDNA from burials at the Huaca de la Luna, Sutter and Cortez find them quite distinctive, supporting the hypothesis that they were captives brought from another location. Attempts to extract and amplify mtDNA from Plaza 3c skeletons have been unsuccessful, but analysis of dental morphological traits is in progress.

Regardless of the debate over the nature of Moche combat and the identity of its participants, it is now clear that the capture and sacrifice of prisoners was a significant and deeply rooted focus of ritual activities at the Huaca de la Luna. It remains to be seen whether the sacrifice of captives played an equally important role in ritual activities at other Moche ceremonial complexes such as El Brujo, San José de Moro, or Sipán. Further excavation at these sites will be needed to answer this question.

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Notes
1. Steve Bourget found a circular stone mace head at the foot of the stone outcrop in Plaza 3a, but in a disturbed context (Bourget 1997:57)

2. This wound was identified by Laurel Hamilton in her inventory of the Plaza 3a skeletal remains, conducted as part of her dissertation research (Hamilton 2005).

3. Food remains found in Plaza 3c included nonhuman bone (probably camelid), marine and terrestrial gastropod shells, and carbonized maize cobs. These items were scattered through the plaza fill along with over 1,300 nondiagnostic ceramic sherds. It is unclear whether these food remains and ceramic fragments were associated with sacrificial activities or were simply occupational refuse included in construction fill (see note 4 below).

4. Fragments of Gallinazo style ceramics were also found in the sub-floor strata of Plaza 3c (Armas n.d.).

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