EMBATTLED BODIES, EMBATTLED PLACES

War in Pre-Columbian Mesoamerica and the Andes
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War in Pre-Columbian Mesoamerica and the Andes

ANDREW K. SCHERER AND JOHN W. VERANO
Editors

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Embattled bodies, embattled places: war in pre-Columbian Mesoamerica and the Andes / Andrew K. Scherer and John W. Verano, Editors.

Library of Congress Cataloging-in-Publication Data

Embattled bodies, embattled places: war in pre-Columbian Mesoamerica and the Andes / Andrew K. Scherer and John W. Verano, Editors.

pages cm. — (Dumbarton Oaks pre-Columbian symposia and colloquia)
Includes bibliographical references and index.
1. Indians of Mexico—Warfare—History—To 1500. 2. Indians of Central America—Warfare—History—To 1500. 3. Indians of South America—Andes Region—Warfare—History—To 1500. 4. Indians of Mexico—Antiquities. 5. Indians of Central America—Antiquities. 6. Indians of South America—Andes Region—Antiquities. I. Scherer, Andrew K. II. Verano, John W.

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Printed in the United States of America

General editor: Mary E. Pye and Colin McEwan
Art director: Kathleen Sparkes
Design and composition: Melissa Tandysh
Managing editor: Sara Taylor


www.doaks.org/publications
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Until 1995, the sacrifice of captives by the Moche was known only from depictions in Moche art. With the exception of indirect evidence (such as weapons found in tombs), armed combat and the taking of captives—also common themes in Moche iconography—were largely invisible in the archaeological record. This invisibility was in contrast to offerings of human lives in funerary contexts (retainer burials accompanying high-status individuals), which had been documented archaeologically as early as 1946 in the Virú Valley in the Tomb of the Warrior Priest (Strong and Evans 1952) and subsequently at various North Coast sites (Alva and Donnan 1993; Donnan and Castillo 1994; Millaire 2002).

While the archaeological evidence of captive sacrifice by the Moche is now unequivocal (Bourget 2001; Verano 2008), debate continues over the context in which captives were taken (warfare or ritual combat), the source of captives (locals or outsiders), and larger issues such as the ritual and political significance of prisoner capture and sacrifice in Moche society. New approaches, including mitochondrial DNA comparisons between victims and local population samples, other biodistance estimates based on dental morphology, and stable isotope analyses of bone and teeth, have been used in an attempt to identify the source of captives. The analysis of skeletal trauma, both healed fractures and injuries associated with the time of death, has been used to explore the life history of victims and to reconstruct the events leading to their capture and sacrifice. Finally, careful documentation of the archaeological context of these discoveries and the postmortem treatment of victims’ bodies provides additional insight into how Moche captives may have been perceived by their captors. This chapter will examine the issues of Moche warfare and the sacrifice of captives and critically review the models that have been developed to explain them.
Warfare in Andean South America

Identifying warfare in the archaeological record is a challenging task, and Andean South America is no exception to the rule (Arkush and Allen 2006; Arkush and Stanish 2005; Nielsen and Walker 2009). While fortified sites and piles of sling stones may survive for millennia, battlefields and war dead are more ephemeral. Even where there is rich ethnohistoric documentation of warfare and conquest, such as in the case of the Inca (Ogburn, this volume; Rostworowski de Diez Canseco 1999; Rowe 1946), little archaeological evidence of the battles described by native and Spanish sources has been found (Andrushko and Torres 2011; Murphy et al. 2010). And for time periods extending back beyond the range of ethnohistory, we must rely on archaeological evidence alone. Along with fortified sites, weapons buried in tombs and evidence of trauma in skeletal remains may indicate periods of increased warfare, but these must be evaluated carefully (Härke 1997; Martin and Frayer 1997). The Moche of northern coastal Peru represent the complexities involved in using archaeological and iconographic evidence to reconstruct such behavior. While the Moche left an extremely rich and detailed iconographic record of combat and militarism, direct evidence of warfare has been largely elusive. The archaeological evidence is now growing, however, although it is variably expressed across time and space.

Warfare and Moche Iconography

The highly representational art style of the Moche has long provided scholars with rich and abundant visual material for study. Moche art clearly celebrates militarism; it is unique among pre-Hispanic Andean art styles for its frequent and detailed representations of warriors, combat, and the capture and killing of opponents (Figure 11.1; Alva and Donnan 1993; Castillo Butters, this volume; Donnan 1997; Quilter 2008). In a survey of Moche iconography, Christopher Donnan (2010:60) estimates that more than 60 percent of Moche art depicts warriors, combat, captive sacrifice, and associated symbols such as weapon bundles and decapitator deities. This emphasis on warriors, weapons, and captives no doubt inspired Rafael Larco Hoyle (1945) to conceptualize the Moche as a quintessentially militaristic society (Castillo Butters, this volume).

While the great majority of depictions of warriors and combat are known from portable art (ceramics, metalwork, carved wood and bone), recent excavations at the Pyramids of Moche and El Brujo have uncovered depictions of combat, the parading of prisoners, and the decapitation of victims on a monumental scale (Franco et al. 1994; Uceda 2010). These larger-than-life displays on the facades of major platform mounds and on the walls of temples effectively proclaim the ritual, political, and military power of these ceremonial centers.
(Figures 11.2 and 11.3). Their location (facing plazas that could hold large crowds) and high visibility make it clear they were meant for public consumption, as opposed to portable art, which probably had a limited audience.

The rich artistic record left by the Moche has not, however, led to a consensus on the nature of Moche society and the frequency of and motives for warfare. Some scholars interpret scenes of Moche combat as not portraying warfare at all, but instead a form of ritual combat between elite members of Moche society (Alva and Donnan 1993; Castillo Butters and Holmquist 2000; Hocquenghem 1987, 2008). Evidence for this view is drawn from the depiction of elaborately dressed opponents who appear to fight one-on-one, wielding only close-range weapons. Their dress, ornamentation, and weapons are in nearly all cases Moche in style,
suggesting that these are depictions of Moche warriors fighting other Moche warriors. The question remains whether these are competing warriors from different Moche polities or from a single site and whether the competition is strictly “ritual” or whether it represents real conflict over resources or territory. Opinions also differ over whether non-Moche warriors can be identified in some combat scenes. George Lau (2004) has published an excellent review of this issue and concludes that weapons and elements of dress worn by warriors in some of these scenes are Recuay in style, suggesting that they depict battles between the Moche and Recuay (see Lau, this volume).

The ritual nature of Moche combat has also been argued on the basis of the apparent goal of combat: the taking of captives rather than the killing of enemies (Castillo Butters, this volume; Donnan 1997). Scholars frequently note that the objective appears to have been to wound one’s opponent or simply knock off his helmet, rather than kill him (Figure 11.4). While this representation may indicate a preference to capture rather than kill, it also may simply be a visual metaphor for a military victory over an enemy or competing polity. The grasping of a political foe (or even a patron deity) by the hair is a common signifier of military conquest in many cultures, Old World and New (Davis 1996; Scherer and Verano, this volume; Figure 11.5).

Some scholars have proposed that highland Andean ritual battles—known by various names, including tinku, tinkuy, juego de pucara, and ch’iaraje (Orlove 1994; Urton 1993)—might serve as models for interpreting Moche combat (Hocquenghem 1987, 2008; Topic and Topic 1997, 2009). However, extending interpretations based on highland traditions across such a significant amount of time and space to the Moche (or to any other pre-Hispanic coastal group) is problematic on many levels. But more importantly, the archaeological evidence we have of Moche captive sacrifice is not consistent with that of ritual battles such as tinku. In ethnographically documented Andean ritual battles, minor injuries are common, and occasional deaths occur from beatings or sling-stone wounds to the head. Captives may also be taken, but in most cases they are held only briefly. Importantly, individuals who die in ritual battles are returned to their communities for proper burial.

The fate of Moche captives was very different. Warriors were stripped of their weapons, clothing, and adornments and were physically abused, publicly displayed, and then executed. Perhaps

![Figure 11.4](image_url)

Moche combat scene showing one warrior striking another and knocking off his helmet, while another grabs his opponent by the hair. (Drawing by Donna McClelland.)
figure 11.5
Detail from the sacrificial stone of Motecuhzoma I, illustrating the conquest of Tenayuca by the Aztec ruler: Motecuhzoma I, shown as the Aztec war god Huitzilopochtli, grasps the god of Tenayuca by the hair; while this scene is metaphorical, it documents a historic military conquest. (Drawing by Emily Umbarger.)

figure 11.6
Severed head and feet of a Moche sacrificial victim found in Plaza 3C of the Pyramid of the Moon; cut marks on the cervical vertebrae and ankle bones (tali) indicate that the head and feet were amputated from a fleshed body. (Photograph by John W. Verano.)
most importantly, they were denied proper burial. Bodies of victims were typically left exposed to be fed upon by flies, beetles, and probably vultures. Some were decapitated and buried with other severed body parts (Figure 11.6); others were dismembered or defleshed. The vaults of some skulls were broken open or cut away to create trophy vessels. The disrespectful treatment of bodies and the collection of body parts as trophies are commonly associated with warfare and the killing of enemy captives in many societies (Andrushko et al. 2010; Chacon and Dye 2007; Otterbein 2000) but are not consistent with ethnohistoric and modern accounts of Andean ritual battles (for a more detailed critique of tinku as a model for Andean warfare, see Arkush and Stanish 2005).

Interpreting Moche Combat

A number of scholars have cautioned against overly literal interpretations of Moche combat as depicted on ceramic vessels (Bourget 2001; Lau 2004; Shimada 2010; Verano 2001). Jeffrey Quilter (2002, 2008) has presented the most detailed arguments that Moche depictions of combat are highly formalized and selective and that these scenes cannot be assumed to represent accurately and completely Moche armed conflict. Quilter notes that in Moche art (as is the case in many societies ancient and modern), elite actors are privileged in combat scenes, although this privileging does not necessarily imply that common foot soldiers did not exist. But it does make sense, of course, since the finely made ceramic
vessels with depictions of combat were produced for and consumed by the Moche elite.

Like other scholars, Quilter notes that close-in, hand-to-hand combat is also privileged in Moche combat scenes. The Moche possessed medium- and long-range weapons, but these are rarely shown being used in combat. Spear-throwers and darts were standard weapons carried by Moche warriors, and they are displayed prominently in Moche weapon bundles, which often stand alone as symbols of armed combat (Donnan 2010; Donnan and McClelland 1999). Spear-throwers and darts are also shown as part of the booty collected from defeated opponents, yet these weapons are only rarely depicted being used in combat. Interestingly, spear-throwers and darts do figure prominently in Moche deer-hunting scenes, which Donnan (1997) has shown to have strong parallels to human combat and the taking of prisoners. Slings and sling stones—also medium- to long-range weapons—are rarely seen either; when shown they are usually isolated, seemingly discarded elements rather than weapons actively being used. Thus, although the Moche possessed and carried lethal mid- and long-range weapons to battle, and they stored piles of sling stones at their defensive sites (Castillo Butters, this volume), their artists rarely depicted these weapons being used; the focus is instead on highly formalized scenes of hand-to-hand combat between paired opponents (Figure 11.7). Of course, spear-throwers and slings would not be particularly useful for close-in fighting, which may be the simplest explanation for their absence.

Quilter notes that the iconic Moche weapon shown in combat scenes—the large two-handed Moche war club—was equipped not only with a head for striking blows, but also with a pointed end (possibly tipped with metal) that would make it an effective stabbing weapon. While no combat scenes show an actual stabbing of an opponent with the pointed end of a club, Quilter describes several examples where the club appears to be held in a “ready” position to deliver such a strike (see Figure 11.1).

Some have questioned the practical effectiveness of the small shields carried by Moche warriors (Bourget 2005:77). I would argue that their small size makes sense for combatants fighting with large clubs that required two hands to wield. The shields carried by Inca soldiers were of similar size (Rowe 1946:275), but to my knowledge no one has suggested that these were symbolic items that were of no practical use in battle.

Archaeological Evidence of Combat and Prisoner Sacrifice

As I have argued elsewhere (Verano 2001), interpreting Moche warfare based solely on iconography is problematic, since we must decipher the motivations and graphic conventions of Moche artists. Archaeological finds of sacrificed captives and the osteological analysis of their remains provide independent evidence that can be used to test hypotheses developed from iconographic study. This evidence adds to our knowledge of the demographic profiles and life histories of those sacrificed, the manner in which they were killed, and the treatment and final disposition of their remains. Their cultural affiliation (local Moche/nonlocal Moche/non-Moche) is an important issue as well and is currently an active focus of research.

To date, the most impressive discoveries of sacrificed captives come from Plazas 3A and 3C of the Pyramid of the Moon (Bourget 1997, 1998, 2001; Verano 2001, 2008). Isolated skeletons with traumatic injuries and severed heads, hands, and feet have been found at other major Moche sites such as El Brujo, Dos Cabezas, and Sipán (Cordy-Collins 2001; Verano 1997), but these are rare finds. We do not know whether these finds are an accurate indication of the infrequent practice of captive sacrifice at these centers or simply a reflection of the limited excavations that have been done at some sites.

At the Moche site, remains of sacrificial victims have been found in the urban sector and near the Uhl Platform (Chauchat and Gutiérrez 2008; Delabarde 2006; Verano et al. 1999). These include articulated skeletons, amputated hands and feet, and modified skulls. However, the largest concentrations of the remains of sacrificed captives come
Map of the Pyramid of the Moon, its associated plazas, and Platform III (the New Temple); sacrificial victims have been found in Plazas 3a and 3c and along the base of the western side of Platform I, as well as along the north, south, and west sides of Platform III. (Map courtesy of the Huaca de la Luna Archaeological Project.)
from Plazas 3A and 3C, located east of Platform I of the Pyramid of the Moon (Figure 11.8).

The sacrificed captives at the Pyramid of the Moon are a highly selected group. Their demographic profile is restricted to adolescent and young adult males (Verano 2001, 2008), and they show evidence of a particularly active and hazardous lifestyle. A recent study by Sara Phillips (2009) confirms that the healed fracture frequency in this group is significantly higher than in cemetery samples from other Moche sites (Castillo Butters, this volume; Verano 1997:198–200) and that the locations and types of fractures (skull, ribs, forearms, hands) are consistent with injuries sustained

*figure 11.9*
Healing rib fracture in an individual from Plaza 3A. (Photograph by John W. Verano.)

*figure 11.10*
Parry fracture of the left ulna of a sacrificial victim from Plaza 3C, showing a bony callus in the process of formation at the time of death. (Photograph by John W. Verano.)
in violent encounters. These were young men with prior combat experience.

Importantly, at the time of death some victims had fractures in the early stages of healing—apparently wounds suffered in combat or following capture. They include fractures of the forearm, shoulder blades, ribs, nose, and bones of the hand (Figure 11.9). The three forearm fractures found in Plazas 3A and 3C are transverse fractures of the distal third of the left ulna, classic examples of what are known clinically as “parry” fractures (Figure 11.10; Judd 2008). Parry fractures typically result when the arm is raised in an attempt to block a blow. Scapula, rib, hand, and nasal bone fractures also commonly result from physical violence (Walker 1997). While we do not know how long victims lived after suffering these fractures, modern clinical data on fracture repair—the degree of healing present—indicate a minimum of several weeks (Ortner 2003; Sauer 1998). Thus, it is clear that at least for some victims, death did not promptly follow defeat in combat. Wounded captives may have been brought to the Pyramids of Moche from distant locations, as is implied by Moche depictions of captives being forced to march across deserts and over hills (Makowski et al. 2011:241). Extended ceremonies associated with the presentation and display of captives also may have delayed their deaths.

Identity of Victims

Key to understanding sacrificial practices at the Pyramid of the Moon is the identity of the victims. Were they captives taken in battles distant from the Pyramids of Moche and brought back for sacrificial rituals? Or were they members of the local Moche ruling class who fought one another in one-on-one duels? A study of Moche portrait vessels by Christopher Donnan (2004) has shown that some portraits appear to depict the same individual at different ages, marking distinct moments in their life history: as a youth, as a high-status individual wearing elaborate headdresses, and finally as a captive stripped of emblems of rank and presumably awaiting sacrifice (Donnan 2004). Unfortunately, the identity of these individuals and the significance of these portraits are unknown.

Ceramic vessels in the form of bound prisoners are common at the Pyramids of Moche. Broken fragments of them were recovered in direct association with sacrificial victims in Plazas 3A and 3C, and dozens of whole vessels have been found as funerary offerings in tombs at the site. Most of these appear to be generic depictions of captives rather than portraits of specific individuals (Figure 11.11), although according to Donnan (2004:137), the fifty-two unfired prisoner vessels excavated by Steve Bourget in Plaza 3A all show differences in details such as face paint, suggesting that they represent distinct individuals. The question remains: do these vessels represent members of the local elite, or are they enemy captives?

Recent attempts to identify the genetic characteristics and population affiliation of the Plaza 3A and 3C victims using mitochondrial DNA (Shimada et al. 2005; Shimada et al. 2008) and dental morphological traits (Sutter and Cortez 2005) represent innovative approaches, although the results of these studies are not in agreement. Izumi Shimada and colleagues found the Plaza 3A sample internally homogeneous and similar to mtDNA sequences in a small comparative sample of burials at the Pyramid of the Moon, which suggested to them that the sacrificial victims may have been drawn from the local population. In contrast, Richard Sutter and Rosi Cortez’s study found that the Plaza 3A sacrificial victims showed dental morphological trait frequencies that were distinct from a sample of Moche burials from the site, supporting their hypothesis that they were captives brought from another location. Attempts to extract and amplify mtDNA from Plaza 3C skeletons have been unsuccessful, but more recent analyses of dental morphological trait frequencies of both the Plaza 3A and Plaza 3C sacrificial victims have found statistically significant differences between them, samples from the Pyramids of Moche, and comparative samples from other Moche sites (for a detailed description of methods and statistical analyses, see Sutter and Verano 2007).

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The differing results that have emerged from the mtDNA and dental morphology studies might be due to small sample sizes and the challenges of using mtDNA to reconstruct genetic relationships. Mitochondrial DNA only reflects maternal inheritance and has been shown in some studies to correlate poorly with genetic distances derived from nuclear DNA (Williams et al. 2002) and other biodistance measures (Shimada et al. 2008). Dental morphological traits, which reflect both paternal and maternal inheritance, may serve as a better measure of biological relationships. Dental morphology data now have been collected from a number of sites in the Moche Valley as well as other North Coast valleys, providing a larger comparative framework for examining issues of biodistance and population relationships (Sutter 2009; Sutter and Verano 2007). Additional avenues for investigating the origins of the Pyramid of the Moon victims are currently being explored. Preliminary results of a new study by Marla Toyne and colleagues (2010), in which they analyzed the oxygen isotopic composition of bones and teeth, demonstrate differences between tooth and bone values and suggest nonlocal origins for at least some of the Plaza 3A sacrificial victims. Additional skeletal samples are needed to clarify these issues. However, one could argue that the way the Moche treated their captives—both before and after their deaths—provides additional insight into the identities of the victims.
Treatment and Execution of Captives

In Moche art, the humiliation of captives is an important part of what Donnan (2010) has termed the “warrior narrative.” Captives are shown stripped of their weapons, clothing, and adornments, with ropes around their necks, being led away by a captor who prominently displays his captive’s arms and finery hanging from his war club (Figure 11.12). Some scenes show captives being struck on the face and made to bleed. That captives were physically abused and tortured is supported by the osteological evidence, which includes fractured noses, cuts on some skulls indicating slashing of the scalp and flaying of the face (although this may be postmortem defleshing), as well as cut marks on fingers and toes (Verano 2001; Verano et al. 2008).

Although some victims show fractures from blows to the head, the standard means of dispatching captives was by slashing their throats. This treatment is consistent with Moche iconography, where captives are shown having their throats slit and their blood collected. Multiple cuts to the anterior neck are ubiquitous in the sample. Of particular interest is the number of cuts seen in the neck vertebrae of these victims. Only rarely has an individual been found with a single cut mark. Typically, numerous cuts are present on multiple cervical vertebrae (Figure 11.13), indicating repeated slashing of the throat. While the objective appears to have been to produce massive bleeding, multiple deep cuts to the neck would not be necessary to achieve this goal. Repeated slashing suggests a performative, rather than strictly practical, approach to throat slitting. If Moche prisoner sacrifice was conducted before an audience, which seems likely, the repeated slashing would have had dramatic visual impact.

The Postmortem Fate of Sacrificial Victims

In my opinion, one of the keys to interpreting the context and meaning of Moche captive sacrifice is the way in which bodies of the victims were treated. In no case do we have evidence that the sacrificed captives at Moche were given proper burial. Moche funerary practices are well known, and from the most humble graves to the most elaborate chamber tombs, they follow consistent rules regarding body position, orientation, and types of grave offerings (Donnan 1995; Millaire 2002). In Plaza 3A, the bodies of sacrificial victims were intentionally not buried, and the only items that could be considered offerings were broken prisoner vessels. Evidence of sun bleaching on many bones and the presence

figure 11.12
Nude captives with ropes around their necks being led off by their captors. (Drawing by Donna McClelland.)
be ruled out because very few joint surfaces show cut marks. Were bodies manipulated during the decomposition process? This practice now seems likely based on recent research. A taphonomic study of the Plaza 3A skeletal assemblage by Heather Backo (2011) has revealed a systematic pattern of missing elements not explainable by animal scavenging or natural processes such as water transport during heavy rainfall. Element counts reveal that skulls, femurs, and the terminal bones of the fingers and toes are greatly underrepresented in comparison with other bones. Cut marks are rare, however, suggesting that most bones were removed only after the bodies were partially or fully decomposed, with the exception of fingers and toes, where cut marks on remaining hand and foot bones indicate deliberate removal. Thus, we have clear evidence of the manipulation of the remains and the collection of specific body parts, perhaps as trophies.

Defleshed human skulls modified to become vessels (Figures 11.14 and 11.15) have been found in two room complexes in the urban sector of the Moche site (Seoane et al. 2009; Verano et al. 1999). Another was found in recent excavations at the Uhle Platform (Chauchat and Gutiérrez 2008). Severed hands and feet have been found in Plazas 3A and 3C and along the western side of the Pyramid of the Moon near the Uhle Platform. These skulls, hands, and feet presumably were collected from sacrificed captives, and cut marks indicate that they were taken from fleshed bodies.

Excavations in Plaza 3C revealed evidence of more extensive postmortem manipulation of bodies—including defleshing, dismemberment, and the careful arrangement of skeletal remains (Figure 11.16). The defleshing, as indicated by cut marks on muscle attachment areas of limb bones, ribs, vertebrae, the pelvis, and even hand and foot bones, was systematic (Hamilton 2005). While cannibalism cannot be ruled out, the detailed defleshing of parts of the body with little consumable flesh, such as the hands and feet, and a lack of bone fracturing or burning, as well as the fact that joint articulations were carefully maintained, suggests some other objective than removal of flesh for consumption. The purpose appears to have been to systematically

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**Figure 11.13**
Anterior view of the second through the sixth cervical vertebrae of a Moche sacrifice victim from Platform III: at least thirteen distinct cuts can be seen on the anterior surfaces of the vertebral bodies and on the transverse processes. (Photograph by John W. Verano.)

of large numbers of fly puparia indicate that bodies were left on the surface of the plaza to decompose (Bourget 2001). The number of partially disarticulated skeletons and isolated elements might indicate vulture scavenging as well. We have no evidence that bodies were placed in any consistent orientation, although Bourget (2001) noted examples of paired elements and body positions suggesting that there may have been some manipulation of skeletal elements as well as intact bodies. The intentional dismemberment of bodies with cutting tools can
deflesh skeletons for suspension and display, leaving the bones articulated by ligaments. Suspension is suggested by the presence of rope fragments around wrists, ankles, and the necks of some of the defleshed skeletons (see Figure 11.16b). The ligaments that hold bones together at the joints, if left intact, would allow a defleshed skeleton to remain articulated. Over time, however, the ligaments would dry and become brittle, causing articulated limbs and individual bones to fall away. Perhaps this was the point at which a skeleton was “retired from duty.” Such a scenario may explain some of the unusual partial skeletons that we found in Plaza 3C (Figure 11.17). Indeed, Plaza 3C appears to have been
figure 11.16
(a) Partial skeleton (E7) found in windblown sand above the floor of Plaza 3C: many skeletal elements are missing, and the bones of the lower legs and left foot were inserted into the thoracic cavity before burial. (b) Skeleton E7 after removal of the skull: remains of rope can be seen encircling the neck area; presumably, this rope was used to suspend the skeleton. (Photographs by John W. Verano.)
figure 11.17
Skeleton E19 from below the floor of Plaza 3C: although some portions of the skeleton are in proper articulation, the upper limbs are out of position, all of the ribs are fractured off at the neck, and the vertebral column is separated at the upper thoracic level; this defleshed skeleton came apart or was partially disassembled, then folded and buried in a small pit. (Photograph by John W. Verano.)

figure 11.18
Skeletal remains in architectural fill under the floor of Plaza 3C. (Photograph by John W. Verano.)
a final repository for these prepared skeletons, which were either buried in architectural fill during construction of the plaza or left lying on the surface of a small courtyard there (Figure 11.18).

The ways in which defleshed human skeletons were used is unknown, but perhaps they were displayed as part of the festivities associated with the presentation and sacrifice of captives. Some Moche depictions of human skeletons dancing or playing musical instruments may illustrate defleshed sacrificial victims rather than simply scenes of the afterlife (Figure 11.19; Benson 1975), although I am not aware of any examples showing skeletons suspended by ropes.

Platform III

Additional sacrificial victims come from recent excavations of Platform III, or the “New Temple” at Moche, the location of the well-known mural called the Revolt of the Objects (Quilter 1990). Platform III is located on the western flank of Cerro Blanco, northeast of the Pyramid of the Moon (Figure 11.20). Although it had been sporadically explored since the late nineteenth century, the first intensive excavations of the platform were conducted between 2008 and 2010 under the direction of archaeologist Moisés Tufánio of the Huacas de Moche Project (Uceda 2010; Uceda et al. 2011). Platform III is a late construction at Moche, dating to between AD 800 and 900, and is now understood to postdate the abandonment of the Pyramid of the Moon as a functioning temple. Importantly, recent excavations have uncovered more evidence of human sacrifice associated with a temple richly decorated with friezes depicting familiar Moche themes of warriors, weapons, and captives. While the sample of human remains from Platform III is relatively small, it shows the characteristic signatures of Moche prisoner sacrifice, including the demographic profile of the victims (adolescent and young adult males), the way in which they were killed (slitting of the throat), and the complex ways in which their remains were manipulated postmortem, including by defleshing, selective disarticulation, and the removal and modification of crania.

Skeletal remains excavated in the 2008 and 2009 field seasons comprise the remains of approximately ten individuals. The sample consists of four partial skeletons, three skulls with articulated cervical vertebrae, two partial skulls, two isolated
Figure 11.20
Platform III during excavation in 2009. (Photograph by John W. Verano.)

Figure 11.21
Skullcap from Platform III that was broken away from the rest of the skull by repeated percussion; cut marks on the parietal and frontal bones indicate that it was prepared from a flayed head. (Photograph by John W. Verano.)
skull fragments, five amputated hands and feet, and various clusters of bones and isolated elements. The remains were found along the external walls of the western and southern sides of Platform III, in deposits of windblown sand.

Backo (2009) analyzed the skeletal material excavated in the 2008 season; I studied the material from the 2009 excavations (Verano and Backo n.d.). Our analyses revealed patterns of cut marks and complex postmortem manipulation of bodies similar to those seen in Plazas 3A and 3C of the Pyramid of the Moon. These patterns include cut marks on cervical vertebrae consistent with both the slitting of the throat and decapitation, as well as cuts on crania and postcranial bones indicating defleshing and dismemberment. The incomplete nature of the remains as well as evidence of the intentional manipulation of the arms (switching of the left and right arms) of one individual are also similar to what was seen in some victims in Plazas 3A and 3C. Three crania were defleshed, and the superior portions of the cranial vault were intentionally broken away (Figure 11.21), similar to an example excavated by Moisés Tufinio in Plaza 3C in 1999. These discoveries at the New Temple are important in demonstrating that the sacrifice of prisoners continued into the final phase of Moche occupation.

Explaining Captive Sacrifice

Why the Moche took captives and sacrificed them at the Pyramids of Moche remains a subject of debate among specialists. Bourget (2001) has argued that sacrifices in Plaza 3A were performed in times of crisis associated with torrential El Niño rains, since the remains of some victims were embedded in dried mud. In excavations of Plaza 3C, we found evidence of occasional rainfall that deposited thin layers of silt over the plaza and caused some minor damage to plastered walls but no evidence of torrential rains (Verano 2008). At Platform III, all of the skeletal material was found in deposits of windblown sand. Thus, the archaeological evidence thus does not support a direct relationship between El Niño rains and human sacrifices in Plaza 3C and Platform III. It is possible that Plaza 3A represents a special case of a response to environmental crisis and political instability. Overall, however, the evidence suggests that the sacrifice of captives was not a periodic response to catastrophe, but was in fact a long tradition integral to ritual practices at the Pyramid of the Moon. Some of the earliest radiocarbon dates for the Moche site come from sacrifices in Plaza 3C (Uceda et al. 2008; Verano 2008), and sacrifices continued after the abandonment of the Pyramid of the Moon and the construction of the New Temple. Over a span of at least six hundred years, the type of victims chosen, the way in which they were sacrificed, and the treatment of their remains changed little.

Discussion: Continuing Battles

I have suggested elsewhere that the sacrifice of captives functioned to affirm the religious and political power of major centers like the Pyramids of Moche, El Brujo Complex, San José de Moro, and Sipán (Verano 2001). To what degree Moche combat was “real” warfare or simply ritual performance will probably continue to be debated. As is noted in the introduction to this volume and in several of the contributed chapters, all warfare has ritual elements, and any attempt to dichotomize “ritual” versus “real” combat is a futile exercise. My own view is that the archaeological and osteological evidence simply does not support a scenario in which members of the Moche elite from a single site fought one another in bouts of one-on-one ritual combat. In fact, the Moche practice of killing captives, denying them proper burial, and collecting their body parts as trophies is strikingly similar to the way enemies were treated in other warlike societies (Andrushko et al. 2010; Otterbein 2000; Webster 2000), including the Inca (Ogburn 2007; Rowe 1946; Verano 1995; see also Tung 2012, this volume). I find it difficult to imagine that elite members of Moche society volunteered to participate in orchestrated ritual fights where the losers faced humiliation, violent death, and the denial of a proper burial.

If the Moche were not fighting competitors from their own ceremonial centers, with whom
were they fighting? Were prisoners sacrificed at the Pyramid of the Moon taken in territorial conquests? The model of Moche as an expansive conquest state with its capital at the Pyramids of the Moche—first suggested by settlement pattern studies conducted by the Virú Valley Project and later by Brian Billman (1996), David Wilson (1988), and others—has lost some of its popularity over the years, although variants of the model still have their proponents (see Quilter and Castillo 2010 for differing perspectives). Recent archaeological excavations in the northern Moche domain, particularly in the Jequetepeque and Lambayeque Valleys, provide greater support for models of independent Moche polities that shared religious ideology but perhaps had competing political agendas (Alva and Donnan 1993; Castillo Butters 2010, this volume). Regardless of the degree of political unification, it would not be surprising if conflicts over water, land, and other resources led to occasional hostilities within and between coastal valleys, particularly during times of flooding, drought, or other environmental degradation (Moseley et al. 2008; Sandweiss and Quilter 2008). Site surveys in the Moche, Jequetepeque, and Zaña Valleys have documented a dramatic increase in fortified hilltop sites during certain periods (Billman 1997; Castillo Butters 2010, this volume; Dillehay 2001), suggesting times of heightened conflict or at least insecurity. The Late Moche period, in particular, was a time of significant settlement pattern shifts, site abandonment, and the construction of fortified hilltop sites. Perhaps not coincidentally, captive sacrifice flourished at the Pyramids of Moche during this time period.

It remains to be seen whether the sacrifice of captives played an important role in ritual activities at other Moche ceremonial complexes such as El Brujo, San José de Moro, or Sipán. Iconographic evidence from these sites includes depictions of combat and the taking of prisoners in ceramics, metalwork, and in some cases polychrome friezes. Elite tombs at Sipán and San José de Moro contain individuals with items of dress and adornment that correspond to mythical figures in Moche sacrifice scenes (Alva and Donnan 1993; Donnan and Castillo 1994). However, unlike at the Pyramids of Moche, little or no archaeological evidence of the sacrifice of captives has been found at these sites.

Perhaps evidence of prisoner sacrifice at these sites exists but has not been discovered. The Cuarto de los Cráneos at the site of Dos Cabezas, which contained the severed heads of eighteen adult males (Cordy-Collins 2001), suggests that sacrificial victims and war trophies may be awaiting discovery at sites that have had only limited excavation. Alternatively, there may be a real distinction between the Pyramids of Moche and other major centers. In this volume, Luis Castillo Butters argues that San José de Moro functioned as an important burial site that was shared by multiple competing Moche polities in the Jequetepeque Valley. As a “neutral ground,” it may not have been an appropriate location for the display and execution of captives. Castillo Butters also notes that the Moche River valley has much less arable land than its neighbors to the north and thus may have had a greater need to acquire resources from neighboring valleys, whether through alliances or conquest. Continued excavations at major Moche centers may shed additional light on these questions.

Acknowledgments

I would like to thank the directors of the Huaca de la Luna Project, Santiago Uceda and Ricardo Morales, and my codirector of excavations in Plaza 3C, Moisés Tufinio. Thanks to a dedicated team of graduate and undergraduate students from Tulane University who participated in the excavation of Plaza 3C and the analysis of osteological material during the 2000 and 2001 field seasons: Laurel Hamilton, Cathy Gaither, Lori Jahnke, Anne Titelbaum, Ginesse Listi, Stan Serafin, Mary Sawyer, and Teresa Gotay. I am also grateful to Florencia Bracamonte and Moisés Rivero of the Universidad Nacional de Trujillo, Mellisa Lund of the Universidad Nacional Mayor de San Marcos, and Melissa Murphy of the University of Pennsylvania for their participation in excavation and laboratory analysis. Thanks also to
Tulane anthropology students Heather Backo, Julia Drapkin, Helen Rich, and Kris Krowicki, who assisted with excavation and analysis of skeletons during the 1999 excavations of Plaza 3C under the direction of Moisés Tufino. José Armas analyzed the ceramic material found in Plaza 3C. Study of the Plaza 3A osteological material was possible thanks to Steve Bourget, who first invited me to analyze the material in 1995. Heather Backo and I are grateful to the Huaca de la Luna Project for allowing us to study the osteological material from Platform III.

Funding for the 2000–2001 Plaza 3C excavations was provided by grants 6784-0 and 7024-01 from the National Geographic Society’s Committee for Research and from the Huaca de la Luna Project. The Roger Thayer Stone Center for Latin American Studies at Tulane University kindly provided multiple summer research grants for me, as well as for graduate students. Julia Drapkin and Teresa Gotay received travel funding from the Kenneth J. Opat Fund, Department of Anthropology, Tulane University.

NOTE

1 While a number of Moche depictions of human sacrifice and punishment show vultures feeding on human bodies, physical evidence of vulture scavenging is difficult to identify in skeletal remains. New World vulture species have relatively small beaks that would probably not leave marks on bone, and they feed preferentially on soft body parts (Rea 1986). A recent experimental study of black vulture scavenging of human cadavers identified scratches on a few bones (Reeve 2009), but these may have been caused by the trampling and dragging of remains rather than by vulture beaks.

REFERENCES CITED


Backo, Heather C.


Benson, Elizabeth P. (editor)


Billman, Brian R.


Bourget, Steve


Castillo Butters, Luis Jaime


Chacon, Richard J., and David H. Dye


Chauchat, Claude, and Belkys Gutiérrez


Cordy-Collins, Alana

Davis, Whitney  

Delabarde, Tania  

Dillehay, Tom D.  

Donnan, Christopher B.  


2004 Moche Portraits from Ancient Peru. University of Texas Press, Austin.


Donnan, Christopher B., and Luis Jaime Castillo  

Donnan, Christopher B., and Donna McClelland  

Franco, Régulo, César Galvez, and Segundo Vasquez  

Hamilton, Laurel S.  
2005 Cut Marks as Evidence of Precolombian Human Sacrifice and Postmortem Bone Modification on the North Coast of Peru. Ph.D. dissertation, Department of Anthropology, Tulane University, New Orleans.

Härke, Heinrich  

Hocquenghem, Anne-Marie  


Judd, Margaret A.  

Larco Hoyle, Rafael  
Lau, George F.

Makowski, Krzysztof, Miłosz Giersz, and Patrycja Prządka-Giersz

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Reeve, Nicole M.

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Shimada, Izumi

Shimada, Izumi, Ken-ichi Shinoda, Walter Alva, Steve Bourget, Claude Chapdelaine, and Santiago Uceda

Shimada, Izumi, Ken-ichi Shinoda, Steve Bourget, Walter Alva, and Santiago Uceda


Sutter, Richard C.

Sutter, Richard C., and Rosi Cortez

Sutter, Richard C., and John W. Verano

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Topic, John R., and Theresa L. Topic
Toyne, J. Marla, Christine D. White, John W. Verano, Santiago Uceda, Barbara R. Hewitt, and Fred J. Longstaffe
2010 Using Oxygen Stable Isotopes to Explore Residential Histories at Huacas de Moche, Peru. Paper presented at the Canadian Association for Physical Anthropology, Saskatoon.
Tung, Tiffiny A.
Uceda, Santiago
Uceda, Santiago, Claude Chapdelaine, and John W. Verano
Uceda, Santiago, Moisés Tufánio, and Elías Mujica B.
Umberger, Emily
Urton, Gary
Verano, John W.
Verano, John W., and Heather C. Backo
Verano, John W., Moisés Tufinio, and Mellisa Lund Valle

Verano, John W., Santiago Uceda, Claude Chapdelaine, Ricardo Tello, Maria Isabel Paredes, and Victor Pimentel
1999 Modified Human Skulls from the Urban Sector of the Pyramids of Moche, Northern Peru. Latin American Antiquity 10(1):59–70.

Walker, Phillip L.

Webster, David

Williams, Sloan R., Napoleon A. Chagnon, and Richard S. Spielman

Wilson, David J.