Multiple sources of evidence indicate that conflicts on both local and regional scales played integral roles in the rise and fall of complex societies in pre-Hispanic Andean South America. These sources include ethnohistoric accounts of warfare from late prehistory (Rostworowski de Diez Canseco 1999; Rowe 1946), archaeological evidence of fortified sites and intrusive administrative centers (Arkush and Stanish 2005;
Billman 1996; Dillehay 2001; Isbell and McEwan 1991; Proulx 1985; Wilson 1987), and osteological evidence and iconographic depictions of warfare and the sacrifice of prisoners (Proulx 2001; Verano 1995, 2001b). While evidence of armed conflict is often difficult to identify in the archaeological record (Arkush and Stanish 2005; Redmond 1994; Topic and Topic 1987), some convincing cases have been documented by recent field research in Peru.

Osteological collections can provide direct physical evidence of conflict in the form of healed and unhealed skeletal trauma, which can support hypotheses suggested by archaeological data. However, recent studies of Andean skeletal collections have documented substantial regional and temporal variation in the evidence for violent injury (Stan den and Arriaza 2000; Verano 1997, 2003), indicating that the frequency and intensity of armed conflict varied significantly across space and time.

**HISTORIC AND ETHNOHISTORIC DATA**

When Francisco Pizarro and his small contingent of Spanish soldiers reached Cajamarca in 1532, they came upon a massive military force encamped on the valley floor and surrounding hills (Pizarro 1986). These troops, who reportedly numbered in the tens of thousands, were accompanying the Inca emperor Atahualpa on his triumphant march back to Cuzco following the defeat of his half-brother Huascar in a bloody civil war. Eyewitness descriptions by the Spanish invaders of their encounter with the Inca army at Cajamarca, and during the subsequent campaign to complete the conquest of the empire, provide direct evidence of the military might of Andean South America's last indigenous empire (Hemming 1970). In the years following the Spanish invasion, chroniclers, priests, and native writers such as Guaman Poma and Garcilaso de la Vega would record Inca accounts of their dominion over numerous peoples of the Andean highlands and coast, and of the armed conflicts involved with groups such as the Chanca, Chachapoya, and Chimú, who actively resisted Inca expansion, but were conquered nonetheless and incorporated into the empire (Rostworowski de Diez Canseco 1999).
Further back in time, beyond the range of direct ethnohistoric accounts of the Inca and the peoples they conquered, the evidence for warfare and conquest becomes more cloudy, as it relies primarily on the interpretation of archaeological evidence. John and Teresa Topic provide an excellent review of the challenges involved in identifying evidence for Andean warfare (Topic and Topic 1987), in which they note that warfare does not always leave easily recognizable physical evidence. A good example of an ethnohistorically known military campaign that has left no archaeological trace is the Inca conquest of Cajamarca and the powerful Chimú state of northern coastal Peru. Although native accounts describe determined armed resistance by the Chimú and their allies (Rostworowski de Diez Canseco 1999; Rowe 1948), no archaeological evidence has been found to document the battles that culminated in their defeat. While the presence of fortified sites suggests a need for defense, Topic and Topic (1987) emphasize that high walls and hilltop locations for architecture do not necessarily indicate strictly defensive functions. However, a recent review of the archaeological evidence for Andean warfare by Elizabeth Arkush and Charles Stanish (2005) presents a convincing argument that evidence of warfare is in fact widespread but has been overlooked or downplayed by some Andean scholars.

Osteological Evidence of Warfare

Osteological evidence, such as healed or unhealed injuries to bone suggestive of violent encounters, constitutes another important source of information—particularly when found in a well-controlled archaeological context. Early studies of Andean skeletal material by anthropologists such as Aleš Hrdlička and Julio C. Tello noted high frequencies of skull fractures produced by sling stones and clubs (fig. 6.1) in collections they made from the central and southern highlands of Peru (Hrdlička 1914; Tello 1913). Unfortunately, these collections, which consisted of material gathered from the surface of disturbed cemeteries and burial caves, lack detailed information on provenience and dating and thus are of limited research potential. In recent decades, however, several mass burials with good archaeological context have been discovered at
archaeological sites on the northern coast of Peru. These discoveries are important in that they provide detailed evidence for the killing of prisoners in pre-Hispanic Peru. I excavated two of these deposits (at the sites of Pacatnamú and the Pyramid of the Moon) of the northern coast and have studied the skeletal material from a third (Punta Lobos) (fig. 6.2).

**The Pacatnamú Mass Burial**

The first is a mass burial of sacrificed captives from the site of Pacatnamú in the Jequetepeque River valley (fig. 6.3), found in 1984 in the bottom of a 3-meter-deep defensive trench (Verano 1986). The fourteen victims—all adolescent and adult males—were killed by a variety of methods, including stabbing, blows to the head, decapitation, and cutting open of the chest. Their bodies were not buried but were left to decompose in the bottom of the trench. Excavation revealed the skeletons of two black vultures and masses of fly pupa cases, indicating that the bodies had been accessible to scavengers (Faulkner 1986; Rea 1986). Traces of rope around ankles and wrists, as well as wound patterns, confirmed that they were captives and not individuals killed in combat. Moreover, the presence of numerous healed fractures on their skeletons suggested previous combat experience (Verano 1986). Stable isotope analysis of bone collagen revealed that more than half of the victims had a dietary signature distinct from that of the local Pacatnamú population, suggesting that they were not locals (Verano and DeNiro 1993). Radiocarbon dating and architectural context place the Pacatnamú mass burial in the Late Intermediate period, circa AD 1100–1200. Although the identities of the victims and the circumstances surrounding their deaths are unknown, ethnohistoric and archaeological data indicate that the Jequetepeque Valley was conquered by the Chimú in the twelfth century (Topic 1990); the mass burial victims may be captives taken during battles between Pacatnamú and invaders from the Chimú homeland.

**Pyramid of the Moon**

The second example of prisoner sacrifice comes from two nearby plazas at the Pyramid of the Moon in the Moche River valley, discovered
in 1995 and 1996 (Bourget 1997, 1998; Orbegoso 1998; Uceda and Proyecto Arqueologico Huacas del Sol y de la Luna 1998; Verano 1998). The two plazas date to different construction phases of the pyramid and represent temporally distinct episodes, but both contain the remains of captives executed by the Moche between the third and seventh centuries AD. The victims total over one hundred individuals; as at Pacatnamú, they are all adolescent and adult males. Most were dispatched by having their throat slit (fig. 6.4), as indicated by cut marks on the bodies and transverse processes of their cervical vertebrae (Verano 1998, 2001b). Some individuals had broken ribs, shoulder blades, and “parry” fractures (forearm fracture resulting from an attempt to parry a blow) that were in the early stages of healing at the time of death, suggesting that these were wounds incurred in battle or shortly following capture. Their presence
6.2 The study area.
indicates that victims were not killed immediately following capture but after a period of at least several weeks (Verano 1998, 2001b). Similar to what was found at Pacatnamú, the Pyramid of the Moon victims showed numerous examples of healed injuries suggesting prior combat experience.

Of some assistance in interpreting the context for Moche prisoner sacrifice is the rich representational art style of the Moche, who depicted in detail scenes of combat and the capture and sacrifice of captives (Alva and Donnan 1993; Donnan 1978; Kutscher 1955; Shimada 1994). Not until 1995 could these depictions be compared with actual osteological evidence, but we can now confirm that Moche combat and sacrifice scenes depict events that actually occurred. Debate continues, however, as to whether Moche combat was largely ritual or secular, and whether Moche artists depicted combat in a realistic fashion or in a simplified and stylized manner (Alva and Donnan 1993; Donnan 1997; Topic and Topic 1997; Verano 2001b). Unfortunately, the subsequent Late Intermediate period north coast cultures (Lambayeque, Chimú)
did not share the Moche interest in depicting combat scenes, although artistic representations of captives and trophy heads are known (Lapiner 1976; Jackson 2004; Uceda 1999; Verano 1986).

**Archaeological Context**

A common feature shared by the Pacatnamú mass burial and the Moche sacrificial deposits at the Pyramid of the Moon is the treatment of the victims' bodies. At Pacatnamú and in Plaza 3a of the Pyramid of the Moon, bodies were not buried but left on the surface to decompose. In Plaza 3c, they were either left exposed or incorporated into the architectural fill of the plaza as it was being constructed. In Plaza 3c, many of the bodies were defleshed (as indicated by cut marks throughout the skeleton), and only partial remains were found in many cases. Clearly, these remains were not returned to family or kin groups for proper burial. Denial of burial and desecration of the body through exposure to scavengers was recorded as a punishment for serious crimes in the Inca Empire (Verano 1986), and depictions of bound captives being devoured by vultures are known in Moche and Chimú art (Donnan 1978; Lapiner 1976). Concern for the proper treatment of the dead has deep roots in the Andean area (Dillehay 1995). It is likely, therefore, that the exposure of victims' bodies at Pacatnamú and the Pyramid of the Moon had real significance both for the sacrificers and for their victims.

**Punta Lobos**

The third and most recently discovered sample is a mass burial found at Punta Lobos in the Huarmey River valley (Walde 1998). It dates to the Late Intermediate period and may be associated with the southward military expansion of the Chimú state during the late thirteenth or early fourteenth century (Mackey and Klymyshyn 1990; Walde 1998). Two radiocarbon determinations from ropes used to bind the victims produced calibrated dates of between AD 1250 and 1300 (Verano and Walde 2004), which corresponds temporally with the early Chimú southern expansion into the Casma valley (Mackey and Klymyshyn 1990).

The Punta Lobos mass burial is unusual for its size—nearly two
hundred victims—and for its location and context. The site is located on a coastal promontory facing the Pacific Ocean and has no associated architecture or other evidence of human activity in the immediate vicinity. The only possible associated feature is an offering of simple ceramic and gourd vessels, a fish net, and other textiles buried on an adjacent hillside, possibly by relatives of the victims (Walde 1998). The victims are predominantly adult males and teenagers, but boys as young as seven to nine years old (identified as male by their loincloths and short hair) are present as well. The remains are very well preserved: most individuals have mummified feet and legs; a few have mummified hands, arms, and heads as well. Rope and cloth bindings of the ankles and wrists, as well as cloth blindfolds, were found still in place on most individuals. Laboratory analysis revealed cut marks on neck vertebrae, first ribs, and clavicles consistent with slitting of the throat (Verano and Walde 2004). The bodies at Punta Lobos appear to have been left where they died, face down in the sand. All were found quite close to the surface, suggesting that only a minimal attempt was made to cover them.

The Punta Lobos massacre is unlike the Pacatnamú and Pyramid of the Moon sacrifices in that the event took place in a remote area unassociated with architecture of any kind. There is no clear evidence of any ritual behavior associated with this mass execution—victims seem to have been tied up and blindfolded, led to the site, and summarily executed. The age distribution of the Punta Lobos victims is also distinctive. Whereas the Pacatnamú and Moche victims were all adolescents or young adults (men of fighting age), the Punta Lobos sample includes men over the age of fifty as well as boys clearly too young to be combatants. Overall, my impression of Punta Lobos is one of a reprisal killing, perhaps following a rebellion or resistance to external conquest. Mass executions of rebellious groups occurred during the expansion of the Inca Empire (Rostworowski de Diez Canseco 1999); Punta Lobos may represent an example of similar behavior by the Chimú. However, Héctor Walde does not rule out the possibility that the killing also served a ritual purpose as an offering to the Chimú sea god Ni, in celebration of the conquest of the Huarmey Valley.
6.4 Cut marks on upper thoracic vertebrae, Punta Lobos.

INTERPRETATION OF MASS BURIALS

Human skeletal remains, and the archaeological contexts in which they are found, constitute a unique source of information for reconstructing evidence of conflict in ancient Andean societies. The examples described here clearly document the killing of captives, although reconstructing the events that led to such killings is more complex. There is continued debate among Moche specialists, for example, about whether Moche warfare was purely ritual, largely secular, or some combination of the two. It is also reasonable to ask whether mass killings such as that of Punta Lobos should be considered ritual human sacrifice or simply the summary execution of captives. The common way in which bodies were treated in these three cases (exposure to scavengers rather than considerate burial) suggests that captives sacrificed at Pacatnamú and at the Pyramid of the Moon were not members of the elite involved in some form of ritual combat, as has been suggested for the Moche by some authors (Donnan 1997). The fact that captives were executed
and denied proper burial likewise does not support the hypothesis that Moche combat was similar to ritual battles (tinku or juego de pucará) still enacted in some areas of highland Ecuador, Peru, and Bolivia today (Topic and Topic 1997). In ritual battles such as tinku (see chap. 7, this vol.), physical injury is common and occasionally deaths occur, but participants are not captured, killed, and left exposed for scavengers to feed on. Likewise, the treatment of the Pacatnamú, Moche, and Punta Lobos victims is very different from that seen in ritual offerings such as the high-altitude child sacrifices associated with the Inca sacrificial cycles of Capa Cocha, in which children are buried with fine textiles and objects of gold, silver, and Spondylus shell (Ceruti 2003). As I have argued elsewhere, these carefully prepared human sacrifices are quite different from mass burials of executed captives and served very different purposes (Verano 1995).

Debates over the interpretation of mass burials such as those described in this chapter will continue as scholars attempt to better contextualize the evidence of human sacrifice in the Andean archaeological record. Careful examination of the archaeological context of these deposits, and details such as the manner in which victims were killed and the treatment of their remains, will aid in interpretation. Terms commonly used in both scholarly and popular writing to describe these discoveries, such as ritual “sacrifice” and “offerings,” should be used with caution, since they imply motivations that may not be supportable by archaeological evidence alone.

In a recent cross-cultural review of ethnographic data on warfare, Keith Otterbein notes that the killing of captives is a common practice in many warring societies (Otterbein 2000b). The mass burials at Pacatnamú, Moche, and Punta Lobos provide archaeological evidence of such practices among ancient societies of northern coastal Peru.

**Acknowledgments**

Field and laboratory research was supported by funding from the National Geographic Society (Research Grants 6784-0, 7024-01), the Roger Thayer Stone Center for Latin American Studies, Tulane University, and Engel Brothers Media.