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Early Complex Society and Ceremonialism on the Peruvian North Coast

THOMAS POZORSKI

University of Texas-Pan American

SHELIA POZORSKI

University of Texas-Pan American

Introduction

The task of exploring the origins and development of Andean ceremonialism is a large one. This topic is addressed through an examination of archaeological data from Late Archaic and Early Formative settlements on the north coast, a geographical area extending from the Casma Valley in the south to the Lambayeque Valley in the north. This critical time in Andean prehistory saw the emergence of complex society on the coast, and tangible evidence of developing ceremonialism appears closely linked with this phenomenon.

Investigation of early ceremonialism begins with the Late Archaic or Cotton Preceramic (2200-1800 B.C.) site of Huaynuna where distinct ritual structures typical of both the coast and highlands are juxtaposed. Subsequent Early Formative innovations are also described to provide a background for discussions of sites and polities which both conform to and diverge from this pattern. Traditional evolutionary models fail to explain either societal complexity or developing ceremonialism, for there are clear examples of extinctions, divergent pathways, and variable rates of change. Distinct priorities within different sites and polities are reflected by their acceptance or rejection of certain innovations, by their differential emphasis on monumental construction vs. ceramic production, and by the degree to which religious and secular activities are united or separated. These topics are explored using archaeological data from the Pampa de las Llamas-Moxeke polity in the Casma Valley, the Caballo Muerto Complex in the Moche Valley, and additional relevant sites.

Late Archaic Developments

The Issue of Preceramic Antecedents

The origins of complex society along the Peruvian coast have traditionally been traced to Late Archaic or late Cotton Preceramic (2200-1800 B.C.) sites that appeared uncharacteristically large and complicated for their time period. Within the north coast area considered here, Alto Salaverry in the Moche Valley and Salinas de Chao in the Chao Valley have often been cited as examples of such sites because

they were believed to be precursors of immediately later ceramic sites of substantially greater complexity (Feldman 1983:307; Moseley 1985:43–45; S. Pozorski and T. Pozorski 1979a:372; Williams 1985:237).

Although these sites indeed lack ceramics, new radiocarbon evidence necessitates their reevaluation. Both are now more appropriately viewed as aceramic on the basis of absolute dates which make them contemporary with more complex early ceramic sites in the same area (S. Pozorski and T. Pozorski 1990). Therefore, rather than being interpreted as precocious developments that fostered subsequent complex societies, Alto Salaverry and Salinas de Chao are better viewed as anachronisms (discussed below).

This reassessment leaves few sites along the north and central coasts with radiocarbon determinations that document truly late preceramic components: Huaca Prieta (Bird and Hyslop 1985:51–58), Huaynuná (T. Pozorski and S. Pozorski 1990), Aspero (Feldman 1985), Bandurria (Fung 1988:77, 95), and Rio Seco (Engel 1966:82). Only two of these, Huaca Prieta and Huaynuná, lie within the area discussed here. Although Huaca Prieta apparently lacks preceramic nondomestic architecture, the site yielded elaborate textiles and other portable artifacts adorned by depictions of potential mythical figures or deities—including humans, snakes, crabs, birds (condors, parrots, etc.), and felines (possibly jaguars) (Bird 1963; Bird and Hyslop 1985). In contrast, Huaynuná contains substantial nonresidential architecture that provides tangible evidence of both incipient monumentality and probable ritual activity.

Ventilated Hearth and Hillside Structures at Huaynuná

Located on Huaynuná Bay, some 13 km north of the Casma Valley mouth, the prepottery component of Huaynuná covers an area of 8 ha. Deep refuse and stone footings of domestic structures surround two nonresidential constructions: a ventilated hearth structure and a hillside structure (T. Pozorski and S. Pozorski 1990).

The ventilated hearth structure was built on top of a low mound of midden that had been modified into a rectangular shape and faced with boulders and cobbles. Stone wall footings 40–50 cm high formed a small rectangular enclosure measuring about 3 m east-west by 2.5 m north-south. Perishable materials probably once formed the upper wall segments and roof. The only entrance is in the north wall, and a ventilation trough 45 cm wide, 140 cm long, and 8–17 cm deep leads through this entrance to a central hearth (T. Pozorski and S. Pozorski 1990:19, fig. 3).

The Huaynuná ventilated hearth is the only preceramic coastal example documented, and therefore represents the earliest known occurrence of this phenomenon there. However, a radiocarbon date of 1860 ± 50 B.C. indicates that it is generally contemporary with analogous highland examples at La Galgada, Huaricoto, Kotosh, Piruru, and Shillacoto (Bonnier 1988a, 1988b; Bonnier and Rozenberg 1988; Burger and Salazar-Burger 1980, 1985, 1986; Grieder et al. 1988: 68–72; Izumi and Terada 1972:129–176). As part of a religious complex defined

as the Kotosh Religious Tradition (Burger 1985:277; Burger and Salazar-Burger 1980:27-32, 1985:134, 1986:65; Grieder and Bueno 1985:97, 106-109), these ventilated hearth structures are believed to have housed ritual activities involving burnt offerings.

A hillside structure located at the western edge of the site dominates the prepottery component of Huaynuná. Radiocarbon dates suggest sequential construction and use episodes, beginning with a circular depression hewn into hillside bedrock some 8 m above the surrounding terrain. Subsequently, a larger terraced structure was built, incorporating the earlier bedrock depression. In its final form, the hillside structure consisted of four artificial stone-faced terraces divided by a central staircase. However, the result was balanced rather than precisely symmetrical because individual terraces are irregular and adjusted to the hillside, and a small circular platform on one of the eastern terraces is not duplicated west of the staircase.

Within the Huaynuná hillside structure, the beginnings of monumentality and early public-oriented activities (possibly ceremonialism) appear closely linked. This structure is the largest and most complex construction in the Casma Valley area known to date prior to 1600 B.C. It exhibits a balanced arrangement of terraces flanking a central staircase, all of which are oriented toward an open "plaza" area at its base some 500 m² in area. This combination of traits suggests that the Huaynuná hillside structure is a clear forerunner of later U-shaped mound/plaza complexes of the Early Formative; however, it is only a fraction of the size of most subsequent constructions within Casma and other north coast valleys.

The Huaynuná hillside structure was also apparently a place from which one or a few prominent individuals conducted public-oriented gatherings, possibly religious or ceremonial in nature, for the benefit of sizeable crowds congregated in the associated "plaza" area. Clever use of the hill spur's increasing elevation raised these activities some 8 m into the air, thereby augmenting their impact while avoiding the labor expenditure of truly monumental construction. The existence of an alternate route to the summit via the structure's east side suggests that the element of surprise may have been important in impressing the audience. Persons using it would have been able to appear suddenly, as if from nowhere, upon the mound summit.

The public architecture of Huaynuná has been described in considerable detail because it represents the juxtaposition —on the coast and at a very early date— of what are often regarded as two distinct "religious" traditions. More typical of the coast is the tradition represented by the hillside structure, an elevated mound/plaza complex designed to house public activities oriented toward large numbers of people assembled in a plaza. In contrast to this, the tradition more commonly documented at highland sites is represented by the much-smaller ventilated hearth structure where spatial constraints restrict activities to relatively few participants in more private ceremonies. Both of these architectural configurations continue into the Early Formative or Initial Period (1800-900 B.C.).

Early Formative Innovations

Commonalities and Differences

During the Early Formative, the north coast saw a proliferation of mound/plaza complexes, whereas the ventilated hearth assumed a subsidiary role. Major developments marked this transition. Perhaps most significant is the advent of irrigation agriculture—an innovation that spread rapidly through valleys along much of the Peruvian coast via extant communication networks (S. Pozorski and T. Pozorski 1987:42). This technological breakthrough is marked by the establishment of major sites well inland, often near locations particularly well-suited for canal intakes. Concurrently with this move inland, coastal settlements diminished significantly in number and magnitude, effecting a settlement pattern change that provides archaeologically visible evidence of the importance of irrigation. Such change indicates that a majority of the population had become engaged in irrigation agriculture, a seasonal subsistence pursuit that contrasts markedly with the earlier focus on perennial marine products.

Communication among Early Formative coastal settlements is indicated by important commonalities. Truly monumental architecture makes its first appearance during the Early Formative, and sites which reflect this phenomenon share other important traits. All have as their largest structure(s) one or more large platform mounds which are consistently bilaterally symmetrical and usually U-shaped. Commonly associated with these mounds are one or more rectangular and/or circular plazas, and the resultant mound/plaza layout frequently results in a linear plan for the site—the site axis coinciding with the centerline of a major mound. Many of the major U-shaped mounds face up-valley, with the open end of their “U” oriented toward the source(s) of rivers and irrigation water (S. Pozorski and T. Pozorski 1987:43; Williams 1985:230). In addition to monumental construction, iconographic representations appear closely linked to the sudden proliferation of inland sites and, by extension, to the adoption of irrigation agriculture.

The many decorated monumental structures known have sculpted mud friezes which are usually painted, and additional examples certainly await discovery. Such monumental iconography first appeared during the Early Formative, and north coast examples are known from the Jequetepeque to Casma Valleys whereas additional examples have been described as far south as the Lurin Valley (S. Pozorski and T. Pozorski 1991:363, 364). Subjects depicted in monumental friezes usually include anthropomorphic heads and full figures or animal representations; and virtually all recognizable major animal depictions on north coast mounds are felines, probably jaguars.

Early Formative corporate-labor mounds are traditionally interpreted as temples or religious structures, and their associated friezes are viewed as representing deities (Donnan ed. 1985). Based on this scenario, leadership within such polities would have consisted of one or few elite who personified a combination of religious ideology and secular power—interrelated aspects indistinguishable to the support

population.

A second option has recently been proposed, based on evidence from the Casma Valley (S. Pozorski and T. Pozorski 1986:400, 401, 1991:367, 368). This alternate pathway for early Andean polity emergence is characterized by a greater separation of religious and secular activities, a distinction evident in dual facilities and potentially in separate personnel and separate responsibilities. These two options are discussed more fully below during comparisons of the Moche Valley mound complex of Caballo Muerto and the Casma Valley polity center of Pampa de las Llamas-Moxeke.

On a less monumental level, Early Formative sites share additional traits suggestive of inter-valley communication. Larger constructions frequently employ conical adobes and/or fill encased in loose cane bags, and most sites contain significant examples of structures with rounded corners, pilasters, and raised thresholds. Ceramic technology commonly stresses plastic decoration applied to neckless ollas, yet designs and specific techniques vary among major sites. Similarly, Early Formative "art" has a consistency of content, execution, materials, and style that gives it an "early" feel. However, again, there is much variation. Close examination of architecture, iconography, and artifacts at individual Early Formative settlements makes it clear that, whereas considerable communication can be documented, pan-coastal unity does not appear to have existed. Instead, localized differences suggest numerous distinct polities with distinct priorities.

Formative Developments: Alternate Pathways and Extinctions

As more excavation data are becoming available, details of complex society development are becoming increasingly clear. Many of these results question or contradict prevailing theories of societal development and suggest more appropriate ways of theoretically modeling both the coalescence of complex societies and less successful alternatives. More specifically, it is becoming increasingly evident that traditional evolutionary models are inadequate to describe societal development on the north coast. Instead, the scenario has proven to be much more complicated, necessitating more of a "punctuated equilibrium" model—one that can account for variable rates and divergent pathways as well as extinctions.

Alto Salaverry and Salinas de Chao: Evidence of Cultural Extinctions ?

Earlier in this paper, the north coast sites of Alto Salaverry and Salinas de Chao were introduced and quickly dismissed as potential complex precursors to even more complex subsequent developments. The same radiocarbon determinations which effected this banishment firmly place these sites within the Early Formative and argue for their contemporaneity with ceramic-bearing inland sites of greater complexity (S. Pozorski and T. Pozorski 1990). Their lack of ceramics coupled with their Early Formative date make it most appropriate to designate such sites as aceramic.

Alto Salaverry and Salinas de Chao, along with a later component of

Huaynuná, appear to have selectively resisted and accepted critical Early Formative period innovations. All three have been defined as aceramic because of their rejection of (or lack of interest in) ceramics. The continued coastal location of all three also suggests that their inhabitants eschewed irrigation agriculture, resisting the prevailing tendency to relocate well inland and take advantage of this new technology. The people of aceramic Huaynuná most strongly avoided virtually all the Early Formative had to offer. In fact, the presence of aceramic refuse totally covering the hillside temple suggests possible desecration.

An examination of traits adopted by one or more of these sites is also instructive. Salinas de Chao is by far the most elaborate, following numerous Early Formative canons through its incorporation of U-shaped mounds, rectangular and circular plazas aligned with major mounds, and mound decoration in the form of a painted frieze (Alva 1986:fig. 12). Alto Salaverry contains two small platforms, but neither qualifies as a typical Early Formative mound. However, the site does contain an isolated example of a circular plaza, an architectural element usually associated with substantial mounds. It is also the only known Moche Valley example. Such structures are common further south, however, suggesting that intersite communication was stronger in that direction.

There is no archaeological evidence that these aceramic components continued after the Early Formative. Each represents a lifestyle selectively lacking in key traits that proved increasingly important to contemporary and subsequent coastal Andean societies. This rejection of "progress" apparently soon led to the extinction of their respective lifeways. Most other Early Formative communities survived, and many thrived; however, there is strong evidence of divergent developments among them.

Caballo Muerto and Pampa de las Llamas-Moxeke: Two Distinct Trajectories

The following section discusses two different trajectories of societal development evident when the Casma Valley is compared to the Moche Valley. Despite certain commonalities between each of the areas, sufficient data exist to hypothesize that each area featured a distinct governing system that emphasized different aspects of social, economic, political, and religious life. The Moche Valley discussion will emphasize the Caballo Muerto Complex and its principal site of Huaca de los Reyes. The discussion of the Casma Valley will focus primarily on the well-known site of Pampa de las Llamas-Moxeke. Occasional references will also be made to the less well-known Sechin Alto Complex and other sites when appropriate. Sechin Alto Complex sites formed the core of a second, even larger polity centered in the north branch of the Casma river system. Within this branch, the major sites of Sechin Alto, Sechin Bajo, Taukachi-Konkan, and Cerro Sechin share traits which suggest they were once part of a single site group covering some 10.5 km² in area (S. Pozorski and T. Pozorski 1987:82).

Early Formative Developments in the Casma Valley

The site of Pampa de las Llamas-Moxeke, located on the south branch of the Casma Valley, was the center of a substantial early polity (Fig. 1) (S. Pozorski and T. Pozorski 1986:401, 1991:342). Covering some 220 ha of area, Pampa de las Llamas-Moxeke is dominated by Moxeke and Huaca A, two large mounds which face each other across a series of plazas and thereby establish the central axis of the site (Fig. 2). Rows of aligned intermediate-sized mounds and compounds flank the central axis, and much intervening space is filled by hundreds of residential structures. Complementary aspects of Moxeke and Huaca A argue for a clear spatial separation of major religious and secular activities, although it is possible that the same corps of elite may have controlled both.

The mound of Moxeke, measuring $160\text{ m} \times 170\text{ m} \times 30\text{ m}$ high, has a large, U-shaped configuration. Its northeast face was once adorned by huge mud friezes (Tello 1956:60–66). Their content was limited and consistent with ideas of generalized creator deities: huge heads measuring 2.4 m in width and standing humanlike

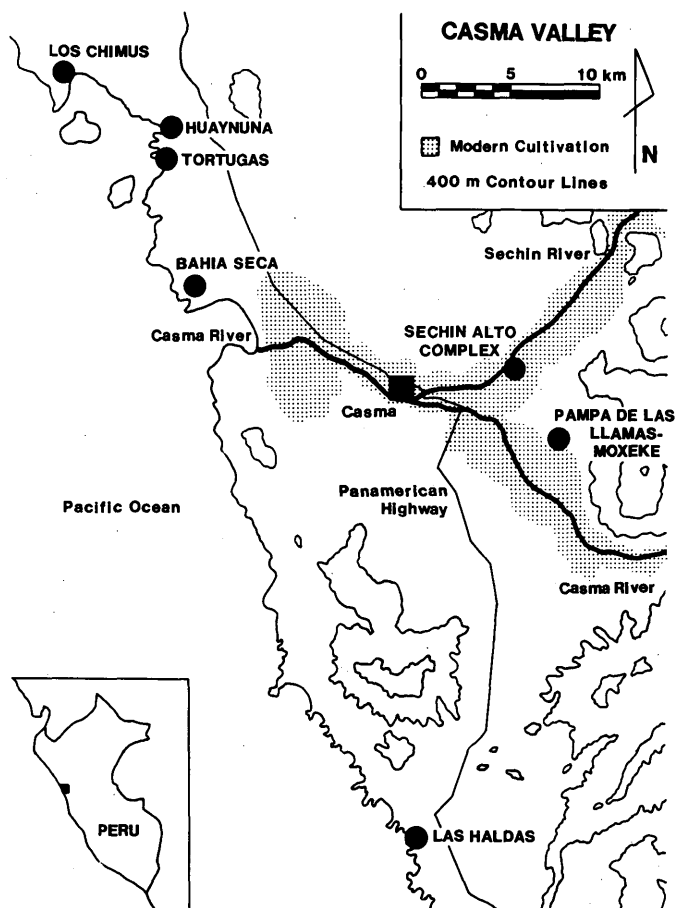


Fig. 1 Location of early sites in the Casma Valley area.

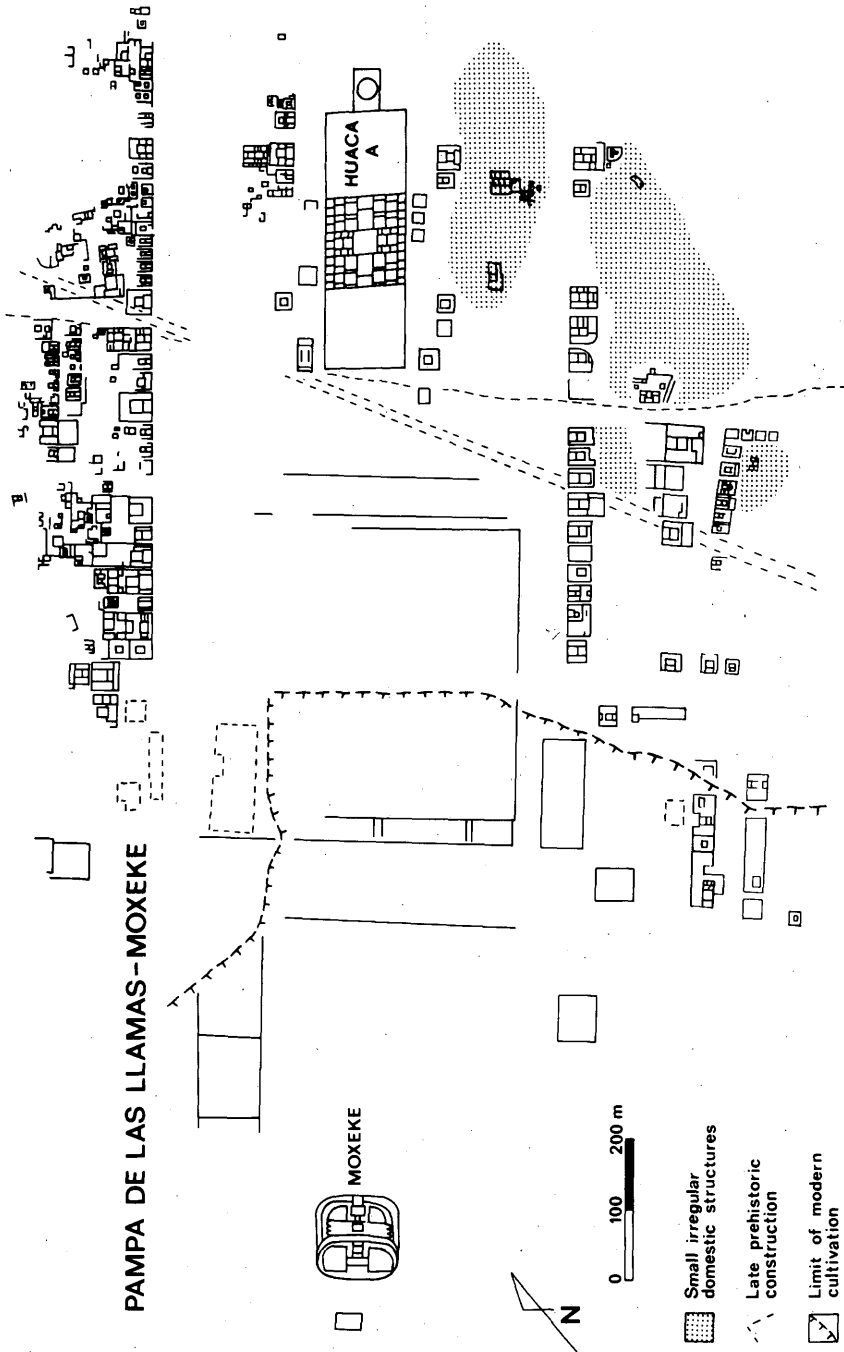


Fig. 2 Plan of Pampa de las Llamas-Moxeke showing the two major mounds, dozens of intermediate-sized structures, and domestic architecture.

figures that probably once exceeded 3.0 m in height. Placement of the Moxeke friezes along the mound front and curving around the front corners stresses maximum visibility to the general public. The Moxeke friezes looked out over enormous plazas capable of holding thousands of people. The two plazas nearest Moxeke are some 245,000 m² in area. Within the total series of four plazas northeast of Moxeke, there was ample room for processions and other large-scale religious celebrations. These data argue strongly that Moxeke was the main religious structure at the site.

Separated from Moxeke by a distance of 1,270 m is Huaca A, a comparably-sized mound associated with two rectangular plazas and one circular plaza, an architectural feature common at Formative sites in coastal valleys from Chao to Lurin. The summit of Huaca A has a unique highly symmetrical architectural layout (Fig. 3). The key element of its construction is the square-room unit, an essentially square

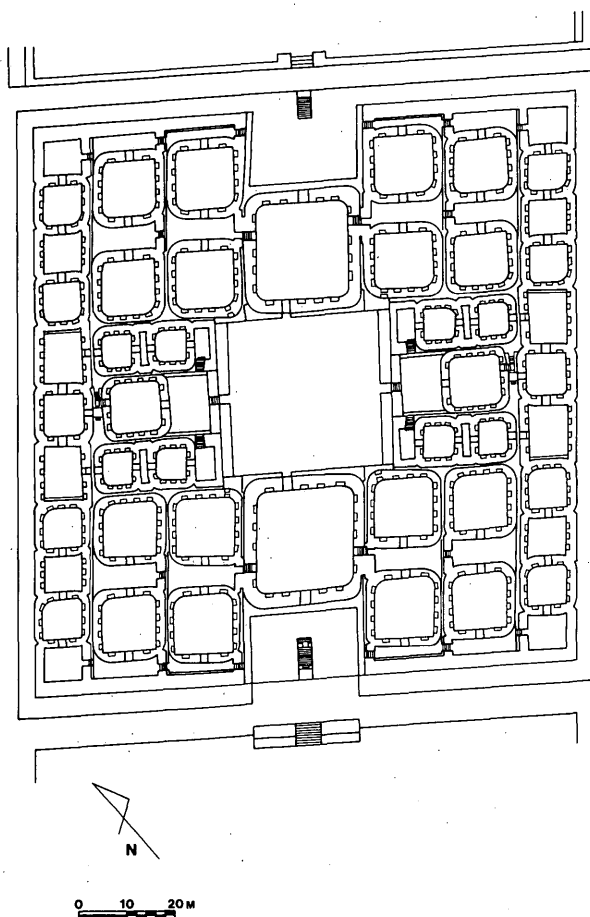


Fig. 3 Plan of the summit of Huaca A. The arrangement of 38 square room units and 39 "negative rooms" results in 4-way symmetry.

room with rounded exterior corners, wall niches, raised thresholds (S. Pozorski and T. Pozorski 1989). This construction unit bears a certain resemblance to similar rooms at the Late Archaic highland site of La Galgada (Grieder and Bueno 1981, 1985; Grieder et al. 1988:19–67). However, the examples at Pampa de las Llamas-Moxeke are considerably larger, lack central hearths, and are believed to have functioned very differently.

Within the various square-room units at Pampa de las Llamas-Moxeke, abundant evidence for secular activities involving storage of food and valuable commodities was uncovered by extensive excavation (S. Pozorski and T. Pozorski 1986, 1991). This evidence consists of 1) the repetitive configuration of its summit architecture which is dominated by rooms with niches; 2) systematic restriction of access to all rooms on the summit, accomplished by narrow entrances containing wooden bar closures; 3) pollen evidence of peanuts, cotton, beans, potato, avocado, and sweet potato recovered from niches and room floors; and 4) thousands of rodent bones recovered from floors and niches, indicating an endemic pest problem because of stored comestibles. The estimated storage capacity of these square-room units and other rooms believed to have held commodities is 4,400 m³. Strict control of access to this vast storage building is evidenced by narrow entrances containing wooden bar closures. The resultant commodity control gave the elite leaders of Pampa de las Llamas-Moxeke a powerful hold over a majority of the polity's people who needed these products. The square-room unit so fundamental to the construction of Huaca A also served as the central architectural unit for over 110 intermediate-sized or aligned mounds that apparently served as foci for administrative activities involving the collection and distribution of food and precious commodities.

This is not to say that activities associated with Huaca A or the intermediate-sized mounds were exclusively secular. A carved stone that may have formed part of a small altar, was discovered in the southwest atrium of Huaca A along with possible food offerings. These data indicate that some ritual may have been involved with entering and exiting the mound (T. Pozorski and S. Pozorski 1988). Nevertheless, most activity associated with Huaca A appears to have been predominantly secular.

One might question such an interpretation because of the large friezes that adorn the two atria of Huaca A's summit. The better-preserved example is on the back wall of the northeast atrium (Fig. 4). This frieze depicts two profile felines (probably jaguars) with serpent-head tails that face each other and flank the main northeast entrance into the mound summit. Immediately in front of each jaguar is a geometric circular design containing four squares (S. Pozorski and T. Pozorski 1986:fig. 5). This symbol is identical to examples on some of the clubs wielded by warrior figures on the stone facade of the generally contemporaneous site of Cerro Sechin, located only a few kilometers away (Tello 1956:147, 148, 178–182).

Each feline is 10 m long and was originally about 5.5 m high; and given such a large size, this frieze might traditionally be viewed as yet another example of monumental depiction of deities—an interpretation heavy with religious overtones. However, arguing against this point of view are the content and placement of the



Fig. 4 Large friezes on the southwest wall of the northeast atrium of Huaca A.

frieze. Unlike examples at Moxeke, the Huaca A friezes are located on the back walls of the atria rather than on the mound fronts where they would be much more visible to a crowd gathered in the nearby plazas. Although the jaguar may have been a mythical being, perhaps part of the local pantheon, the choice of this feline to adorn Huaca A may more appropriately reflect close ties among water, agriculture, the products of agriculture, and elite control of these products. The jaguar, a feline unique because of its association with water, is an especially appropriate symbol because control of water within irrigation canals is vital to agriculture and agricultural production, and the control of irrigation apparently gave the elite rulers potential control over the food supply. The location of this frieze on one face of the central storage facility for the site is also appropriate because of the expanded control the elite may have had over both the distribution of food and the production and distribution of other valuable commodities (S. Pozorski and T. Pozorski 1991). The associated geometric design most likely also symbolized some aspect of this concentration of power.

The frieze on the back wall of the southwest atrium is poorly preserved (Fig. 5). However, enough is present to indicate that it incorporated abstract squarish designs that may be variations of the geometric "power" symbol so prominent on the northeast atrium frieze.

The well-known stone carvings at the site of Cerro Sechin provide tantalizing clues concerning the geometric symbol identified at Pampa de las Llamas-Moxeke. As mentioned previously, this circular design containing four squares is prominent in depictions at Cerro Sechin where it appears on the distal ends of club-like weapons held by at least four of the individuals who are commonly identified as war-

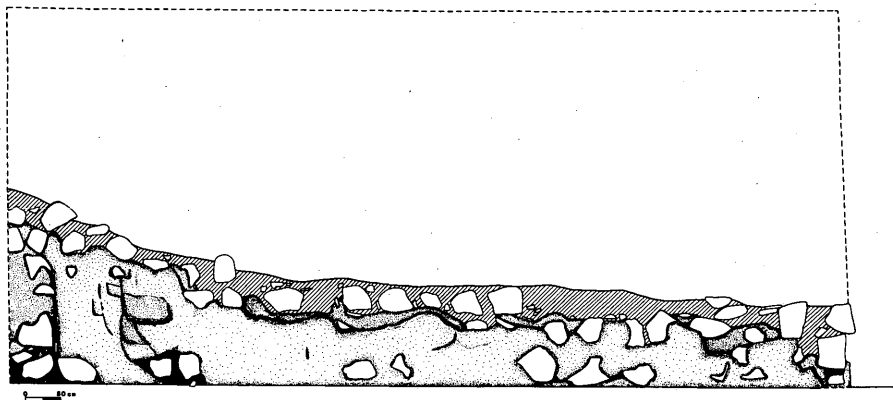
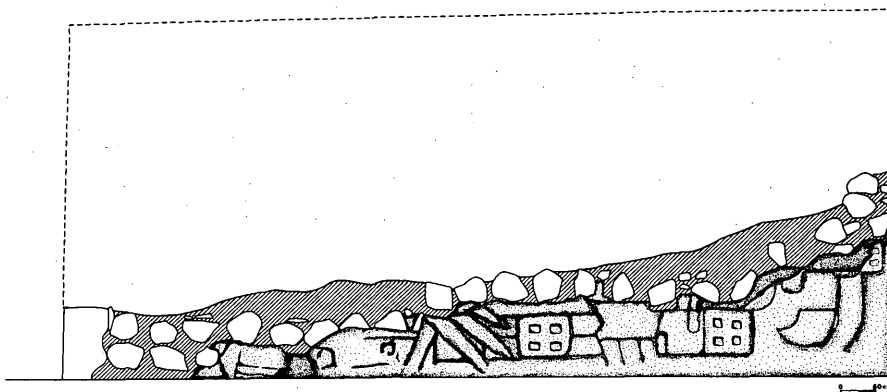


Fig. 5-1 Remnants of the large mud frieze located on the back wall of the southwest atrium of Huaca A. The predominant features of the frieze are abstract squarish designs that may represent power symbols.

riors (Tello 1956:figs. 54, 72, 95, 96, 104). It is also significant that the Cerro Sechin carved figures commonly identified as victims because of their distressed and dismembered state wear clothing that is strikingly similar to that of the full-figure anthropomorphic depictions among the Moxeke friezes (S. Pozorski 1987; Roe 1974:34). These data suggest that the Cerro Sechin carvings commemorate the defeat and slaughter of high-ranking members of the Pampa de las Llamas-Moxeke polity (S. Pozorski 1987:27). Within this scenario, incorporation of the geometric design as part of the accouterments of the Cerro Sechin warriors may further symbolize conquest and possibly the annexation of the Pampa de las Llamas-Moxeke polity.

Despite commonalities the square-room unit has with contemporary architecture in other areas of Peru (round corners, raised thresholds, pilasters), square-room units had special meaning for the people of Pampa de las Llamas-Moxeke who built and used them. The unit was intimately associated with secular activities involving administration and storage. Thirty-eight examples of the square-room unit are present on Huaca A and over 115 occur within the intermediate-sized architecture at Pampa de las Llamas-Moxeke as well as at Bahia Seca, a coastal satellite of Pampa de las Llamas-Moxeke. At Bahia Seca, a single intermediate-sized mound apparently served as an administrative outpost for controlling the exchange of marine products from the coastal sites of Bahia Seca, Tortugas, and Huaynuná for agricultural products grown by people living in and near Pampa de las Llamas-Moxeke (S. Pozorski and T. Pozorski 1991:352, 353).

In addition to the mounds and plazas that comprise most of the nonresidential architecture of the Pampa de las Llamas-Moxeke, a structure was recently excavated there that is unique to the Andean area. Located some 80 m south of Huaca A, this building is an I-shaped court that closely resembles the ballcourts that are very common features at archaeological sites in Mesoamerica (Fig. 6). The interior

**Fig. 5-2**

is delineated by two rectangular end mounds and two rectangular side mounds that form an I-shaped court measuring 35×17.5 m. The inner faces of the lateral mounds have a concave slope toward the central stem of the "I." Each end mound has a staircase sunken into each of its short ends, thereby providing access to the top of the mound. A low wall or bench running the length of the end mounds likely provided seating for a limited number of spectators, and peanut shells recovered from behind the northeast mound indicate that it was so used. Where mounds are not present, the walls bounding the "I" are low, but have no clear entrances. This precludes active traffic flow into or through the structure and suggests, instead, that

**Fig. 6** View from the northeast of the I-shaped "ballcourt" located 80 m south of Huaca A.

its users stepped over the low walls and performed some activity wholly within its confines. The presence of such a court is both surprising and perplexing because it is about 2,500 km south of the southernmost ballcourt known in Mesoamerica and some 700 years earlier than the earliest dated example there. Given its unique location and chronological placement, one must be cautious about its functional interpretation and especially claims for possible long-distance direct connections with Mesoamerica. At this time it seems imprudent to make claims for extensive communication over such long distances.

Apart from the activities that took place within and near monumental constructions, there is also evidence of more private religious or ritual activity within Casma Valley sites. Such activity is indicated by the presence of small stone structures containing central ventilated hearths. These structures are present at Huaynuná (1 example), Pampa de las Llamas-Moxeke (3 examples), and Bahía Seca (1 example), as well as Taukachi-Konkan (3 examples), in the north branch of the Casma Valley. At one time, most of these structures had walls and roofs made of cane and/or wood plastered with silty clay that enclosed the hearth area, forming a kind of ritual sweathouse. As previously mentioned, the example at Huaynuná is a rectangular building dating near the end of the Late Archaic. The examples from Pampa de las Llamas-Moxeke and Bahía Seca all date to the Early Formative, whereas those recently discovered at Taukachi-Konkan appear to date to the end of the Early Formative.

At Pampa de las Llamas-Moxeke, there are three ventilated hearth structures — each a distinct type. One type consists of a small (2.55×2.45 m) square room with rounded corners containing a deep circular central hearth. A single open ventilation trough leads northwest from the hearth to the structure entrance. This type is similar to the earlier preceramic example uncovered at Huaynuná. The second type is formed by a circular room 3.2 m in diameter that rests on a larger rectangular platform (Fig. 7). The circular central hearth has four subfloor ventilation shafts, equally spaced around the hearth's perimeter and leading to the exterior faces of the rectangular platform upon which the circular room rests. This second type of ventilated hearth has also been discovered at Bahía Seca, and its presence, along with the administrative mound at that site, argue for close ties between Bahía Seca and Pampa de las Llamas-Moxeke.

The third ventilated hearth structure at Pampa de las Llamas-Moxeke is unusual because it was not originally constructed with that function in mind. This unique example is larger than the others, measuring 7.0×7.0 m. Its size is attributable to the fact that it was initially constructed as a square-room unit within an administrative mound complex. Subsequently, this room was modified by the sealing of the entrances and construction of the central hearth which has a round central area surrounded by a trapezoidal depression. No ventilation shaft is present, however, perhaps because the room was relatively large, making it less necessary. Installation of ventilators was also not feasible because the original function of this square-room unit left it surrounded by other rooms, thereby precluding easy

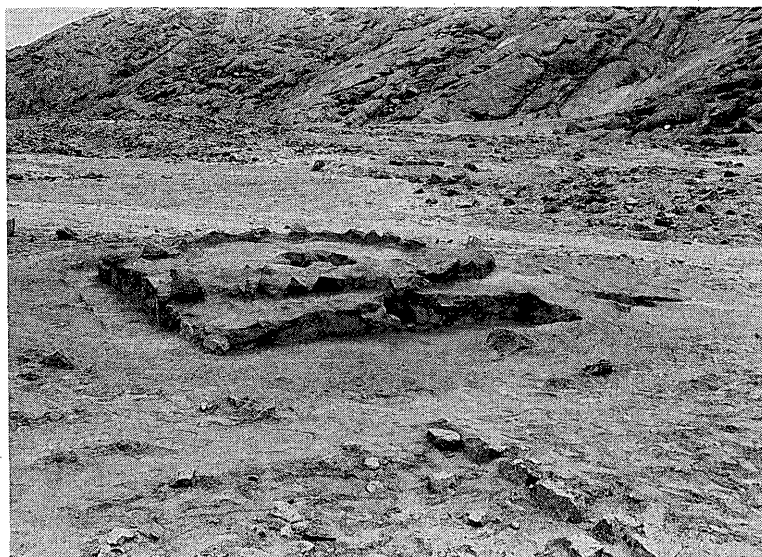


Fig. 7 View from the northeast of the circular ventilated hearth structure located on the west side of Pampa de las Llamas-Moxeke.

access to the outside.

Three additional circular ventilated hearths have been uncovered at Taukachi-Konkan. All are circular, and two rest on rectangular platforms that each contain four ventilation shafts. Thus they are very similar to examples at both Pampa de las Llamas-Moxeke and Bahia Seca. The third example at Taukachi-Konkan, which also rests on a rectangular platform, contains a circular central hearth ventilated by a single open trough that leads northwest through the only entrance of the structure. This third hearth combines the circular form of examples that normally have four subfloor ventilation shafts with the single open ventilation shaft that is normally associated with a squarish room.

It is unclear whether the considerable variation in ventilated hearth structures indicates that different activities occurred within them. Nevertheless, it seems probable that all were special structures used by small groups of people for relatively private ritual purposes. The distinctiveness of the structures themselves; the nature of their central, ventilated hearths; and the clear evidence that their users were deliberately exposed to intense heat and smoke support this hypothesis. The idea of using ventilated hearth structures for private ritual may have originated in the central or north-central highlands as part of the Kotosh Religious Tradition (Burger and Salazar-Burger 1980, 1985, 1986). However, data from Pampa de las Llamas-Moxeke and Bahia Seca reveal that a distinct circular coastal variant emerged early in the Early Formative. Outside the Casma Valley area, one additional coastal example exists at the site of Monte Grande in the Jequetepeque Valley (Tellenbach 1986:lam. 144). It is also circular, but with only a single subfloor ventilation shaft. This suggests that the circular coastal variant may have become relatively wide

spread as coastal peoples modified the basic concept to coincide with their own architectural traditions and cultural milieu.

A rich and varied architectural tradition is reflected in the early sites of the Casma Valley area, however, the same cannot be said about their associated ceramics. At Pampa de las Llamas-Moxeke as well as contemporary components of Bahia Seca, Tortugas, and Huaynuná, the ceramic assemblages are limited in terms of both vessel form and decoration. The predominant form is the neckless olla; only infrequently are fragments of shallow bowls, short-neck jars, and bottles encountered. Decoration is limited to a series of large gouges and, rarely, a few incisions along the shoulders of neckless ollas. A more elaborate ceramic tradition is present at Las Haldas where neckless ollas, short-neck jars, and bottles have been found, and decoration consists of punctation, zoned punctation, incised lines, and graphite zoning (Fung 1969:66-96; Grieder 1975:105, 112). Compared to contemporary areas such as the Moche Valley (described below), the early Casma Valley ceramics pale by comparison. It would seem that the early people of the Casma Valley area placed a much higher priority on creating the rich and complex architectural tradition that housed their many and varied activities.

Early Formative Developments in the Moche Valley

As noted above, there are numerous architectural similarities between the early sites in the Casma and Moche Valleys. Similar subsistence systems seem to have operated in both valleys. These were based on irrigation agriculture which provided plant food and a coastal-inland exchange network that provided animal protein in the form of fish and shellfish (S. Pozorski and T. Pozorski 1979b, 1987:115). Despite these similarities among sites in the two valleys, there are significant differences in architecture and ceramics that reflect the pursuit of different trajectories of complex societal development.

For example, although the area of the Caballo Muerto Complex is comparable to that of Pampa de las Llamas-Moxeke, their overall plans differ. Within the Caballo Muerto Complex, the layouts of individual mounds, especially Huaca de los Reyes, are clearly well-planned and symmetrical (Fig. 8). The overall placement of the eight mounds within the complex, however, does not seem to reflect careful integrated planning of the type present at Pampa de las Llamas-Moxeke.

This apparent lack of general planning might be attributable to the 500+ year time span over which the Early Formative Caballo Muerto Complex mounds were constructed. It should be noted, however, that the overall planning at Pampa de las Llamas-Moxeke was maintained for at least 400 years, during which time aligned mounds were constructed in precise, predetermined locations. Such long-term overall planning represents a higher plane of architectural conception that may also reflect a greater centralization of elite power. A similar case for centralized planning can be made for the 10.5 km² Sechin Alto Complex (S. Pozorski and T. Pozorski 1987:82, 114-117).

There is also a difference in the magnitude of construction at the Caballo Muerto

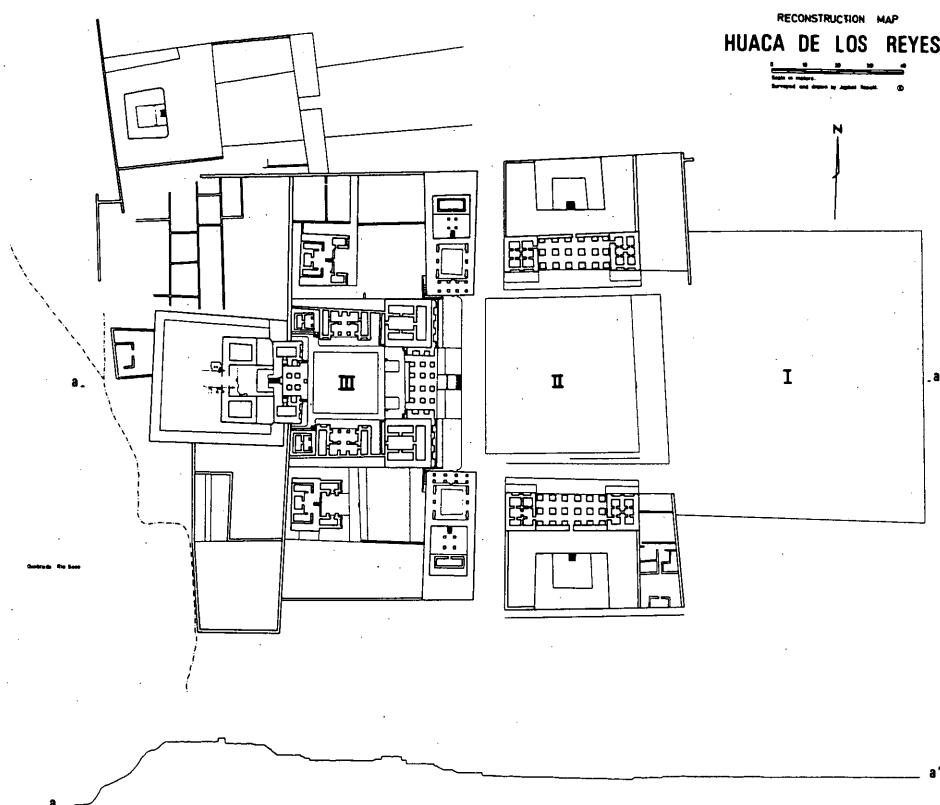


Fig. 8 Plan of Huaca de los Reyes.

Complex compared with that of Pampa de las Llamas-Moxeke or the even larger Sechin Alto Complex. The estimated volume of material (stone and silty clay) used for the six Early Formative Caballo Muerto Complex mounds is about 510,000 m³ and construction took place over a period of about 500 years. During a shorter period of some 400 years, the people supporting Pampa de las Llamas-Moxeke raised monumental and intermediate-sized constructions having a total estimated volume of approximately 945,500 m³. Within the Sechin Alto Complex, construction volume totalled about 3,193,000 m³, amassed over a period of perhaps 500 years or less. These data reflect very different priorities; clearly the Casma Valley elite stressed monumental construction as an avenue to physically express their power (Trigger 1990).

More detailed comparisons of the architecture of Huaca de los Reyes with that of Pampa de las Llamas-Moxeke reveals probable functional differences. Huaca de los Reyes is characterized by a general decrease in plaza size as one penetrates the mound complex more deeply. This decrease in plaza area is positively correlated with 1) increasingly restricted access to inner plazas and associated rooms as well as 2) increasingly complex iconography depicted in mud friezes that adorn the plaza

sides (T. Pozorski 1980, 1982). These data strongly suggest that the function of Huaca de los Reyes was primarily religious. Someone approaching the site would enter large open plazas dominated by massive repetitive friezes representing a few major deities and/or cultural heroes. The placement and content of these friezes indicate that they were designed to be accessible to and to inspire large groups of common people. Smaller, less accessible, plazas adorned with complex, individualized frieze designs served as areas of meditation or worship for more elite groups of people who were privy to special knowledge that enabled them to fully appreciate the messages contained in the frieze designs (T. Pozorski 1980:109, 1982:250, 251).

Despite the overtly religious orientation of Huaca de los Reyes, it must be remembered that over 50 rooms were built on top of the various mound structures that comprise the site. Some rooms undoubtedly housed ritual activities or preparatory activities for rituals; nevertheless, it is unlikely that *all* of them functioned as such. Given that complex societies require a firm economic foundation to support nonsubsistence activities, it seems probable that some of the rooms in Huaca de los Reyes served in an administrative and/or storage capacity. In other words, Huaca de los Reyes stressed religious activities, but probably housed *both* religious and more secular activities—all probably controlled by the ruling elite. This scenario appears to have been typical of most other early mound complexes along the Peruvian coast.

Huaca de los Reyes and the other Caballo Muerto mounds generally lack a distinctive architectural unit comparable to the square-room unit present in early Casma Valley sites. The closest parallel is the presence at Huaca de los Reyes of U-shaped building configurations associated with colonnades. However, their repetitive use represents more of an interplay of architectural elements to create somewhat similar layouts rather than an effort to plan and construct architecture centered around one very standardized unit. A possible exception to this is the Hall of the Niches, located just south of Huaca Cortada (T. Pozorski 1976:fig. 7). This partially excavated structure resembles a square-room unit. Presumably, it is an isolated building, but this is not certain. A central ventilated hearth may also be present, but further excavation within the room center is needed to determine this. Based on present information, this building is best-interpreted as an acknowledgment of a specific form of architecture that was much more prevalent in areas outside the Moche Valley.

The friezes of Huaca de los Reyes are both similar to and different from Casma Valley monumental art. At Huaca de los Reyes, two themes dominate: large feline anthropomorphic heads and full-bodied bipedal human figures (T. Pozorski 1975, 1980, 1982). The large heads, probably representing a major deity, occur exclusively on the front of the main mound overlooking the large main plaza. Bipedal human figures, perhaps representing a culture hero or deified ancestor, are much more numerous. These beings were integral to the mythology of various groups within the society that constructed and maintained the site. Broad parallels to these themes, both in their content and in their prominent context, can be seen in the

large heads and human figures on the front of Moxeke. The human figures usually designated as warriors on the stone facade of Cerro Sechin may be analogous to the bipedal figures at Huaca de los Reyes, however, other humans depicted at Cerro Sechin are clearly victims (Tello 1956:146-243).

Felines or jaguars with serpent-head tails are also present at Huaca de los Reyes. In content, these friezes are similar to the Huaca A feline friezes at Pampa de las Llamas-Moxeke. However, the Huaca de los Reyes felines are much smaller, barely two meters across and only one-fifth the size of the Huaca A examples. Moreover, the Huaca de los Reyes felines also seem to have been less important because they are situated in two side courts with very restricted access. This suggests that they were viewed by only a few select individuals to whom this symbolism was meaningful.

Despite their secondary importance, feline representations at Huaca de los Reyes are significant because of what they reveal about the relationship between the Casma Valley and Moche Valley polities and their respective priorities. Two examples of such similar representations used so similarly suggest Early Formative communication along the north coast. However, the magnitude of the feline friezes and, by extension, what they represent varies greatly between the two areas. Perhaps the feline and associated symbolism were alien to the Moche Valley, yet came to be adopted as an effort to "cover all the angles." This might have been encouraged by the jaguar/water association—a union that would have appealed to early agriculturalists. Alternatively, the felines' presence at both Pampa de las Llamas-Moxeke and Huaca de los Reyes may be used to argue for greater communication, resulting in similar complexes or pantheons containing generalized creator deities in association with culture heroes or ancestor spirits and feline mythical beings or deities. In this latter scenario, the differences between the two areas may reflect a differential emphasis on the jaguar component of the complex as well as the agriculture-related activities which it is believed to represent. Huaca A exemplifies the feline aspect carried to the extreme, resulting in a situation where its associated elite apparently controlled irrigation, and by extension, agriculture, agricultural production, and product distribution.

The later Middle Formative site of Chavin de Huantar is also known for depictions of profile felines. Examples there line a sunken circular court in front of what Rowe (1967:fig. 2) described as the Old Temple (Lumbreras 1977:lams. IX-XIV). Both the Old Temple and its circular court were most likely at least partially contemporaneous with the adjacent, larger New Temple and its associated rectangular plaza (T. Pozorski and S. Pozorski 1987:38-41). Based on their location, the Chavin de Huantar felines also appear to have had a secondary role. Given that the Chavin phenomenon appears to be an amalgamation of traits, it seems most likely that the felines there and their accompanying symbolism were adopted because of their prior importance within major coastal polities.

The ceramics associated with the Early Formative mounds of Caballo Muerto are generally finer in quality and certainly more varied in form and decoration than

ceramics from Pampa de las Llamas-Moxeke. In contrast to Pampa de las Llamas-Moxeke where neckless ollas overwhelmingly predominate, the Caballo Muerto mounds yielded a wide variety of neckless ollas, short-neck jars, shallow bowls, and numerous examples of thin stirrup-spout vessel fragments. These stirrup-spout vessels, totally unknown at Pampa de las Llamas-Moxeke, have rectangular or trapezoidal profiles similar to Cupisnique stirrup-spout vessels described by Larco (1948:17). Whereas ceramic decoration at Pampa de las Llamas-Moxeke was extremely limited, decorative techniques at Caballo Muerto commonly include punctation, zoned punctation, incision, incisions filled with graphite, graphite zoning, raised bands with incisions, and combing as well as various rare decorations such as appliqué and rim incision (T. Pozorski 1976:101-107, 1983:10-29). It is clear that the Caballo Muerto inhabitants dedicated much more effort to ceramic production than the people of Pampa de las Llamas-Moxeke.

The content of the Caballo Muerto ceramic assemblage suggests general ties with areas further north, both on the coast and in the highlands (Larco 1948:17; Rosas and Shady 1970:7-9, figs. 4, 5, 1974:23, fig. 17; Terada and Onuki 1982:pls. 21d, 22, 73, 74, 82-84). Ceramic similarities between the Casma and Moche Valleys are more demonstrable when comparing the Caballo Muerto ceramics with collections from the Early Formative occupation at Las Haldas where punctation, zoned punctation, incision, and graphite zoning occur (Fung 1969:66-96; Grieder 1975:105, 112; S. Pozorski and T. Pozorski 1987:23-25). This "connection" is not especially close, however, because the Las Haldas assemblage, like that of Pampa de las Llamas-Moxeke, also lacks stirrup-spout vessels, a form that is central to the Caballo Muerto assemblage.

Conclusions

Archaeological data from the north coast reveal that the emergence of both complex society and accompanying ceremonialism was a complicated process. As the histories of sites and polities are fleshed out in greater detail, it is increasingly clear that simplistic evolutionary models are no longer adequate. This chapter has traced the development through time of two distinct structures commonly believed to be ritual or ceremonial: the ventilated hearth and the U-shaped mound. Both have a long and complicated history on the north coast. The coastal ventilated hearth form showed great variation from the highland prototypes that were its probable inspiration. Similarly, the monumental mounds more typical of coastal sites exhibited considerable variation indicative of increasingly specialized function.

Significant commonalities make it possible to discuss pervasive Late Archaic and Early Formative developments. Nevertheless, equally significant contradictions reveal that early sites and polities were distinct entities with distinct priorities. The net result is a paradox. Clearly, a well-developed communication network existed. How else can the many shared traits and the rapid spread of irrigation be explained? Yet there are also strong isolationist tendencies. These are evident in the rejection of critical innovations by the inhabitants of Alto Salaverry and Salinas de Chao as well

as in the differential treatment of the feline at Pampa de las Llamas-Moxeke, Huaca de los Reyes, and Chavin de Huantar. Consequently, new models dealing with both complex society and ceremonialism in the Andes must necessarily take into account seemingly incongruous scenario involving interaction tempered by regionalism.

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